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ADVANCE SHEET HEADNOTE

May 31, 2011

AS MODIFIED June 20, 2011

No. 09SA133, Burlington Ditch, Reservoir and Land Co. v. Englewood - Determination of Historical Consumptive Use of Water Rights - § 37-92-305, C.R.S. (2010) - Unlawful Enlargement of Water Rights - The "One Fill" Rule - Preclusive Effect of Prior Water Court Orders and Decrees - New Structures and Points of Diversion

Appellants -- Burlington Ditch, Reservoir and Land Company ("Burlington"), Farmers Reservoir and Irrigation Company ("FRICO"), United Water and Sanitation District ("United"), Henrylyn Irrigation District ("Henrylyn"), and East Cherry Creek Valley Water and Sanitation District ("ECCV") -- challenge the order and decree of the water court regarding its determination of historical consumptive use of water rights, the effect of prior decrees and new structures related to the Burlington Canal, the application of the one-fill rule, and the impact of these decisions on appellants' senior rights to use the waters of the South Platte River.

The case below arose from two applications seeking changes in points of diversion and storage of water rights, as well as change from irrigation to municipal use for Burlington and FRICO water rights with 1885, 1908 and 1909 priority dates. These

changes were precipitated by the United-ECCV Water Supply Project, aimed at providing a renewable source of water to replace Denver Basin groundwater upon which ECCV previously relied.

In order to prevent an unlawful enlargement of the Burlington-FRICO water rights, the water court limited the Companies' 1885 Burlington direct flow water right to 200 cfs historically diverted and used for irrigation above Barr Lake. Likewise, the 1885 Burlington storage right was limited to annual average reservoir releases of 5,456 acre-feet. The water court further determined that seepage gains into the Beebe Canal, water collected through the Barr Lake toe drains, as well as diversions at the Metro Pumps could not be given credit in the calculation of historical consumptive use. The court determined that historical releases from Barr Lake rather than a pro rata share of the "one fill rule" constitute the proper measure of storage rights. The water court concluded that its system-wide analysis of historical consumptive use was not precluded by the orders and decrees issued in Cases Nos. 54658 and 87CW107. The court imposed conditions to prevent injury to other water rights by the heretofore undecreed diversions via the Globeville Project.

The Supreme Court upholds the water court's judgment and decree.

<p>SUPREME COURT, STATE OF COLORADO 101 West Colfax Avenue, Suite 800 Denver, Colorado 80202</p> <p>Appeal from the District Court Water Division 1, Case No. 02CW403 Honorable Roger A. Klein, Judge</p>	<p>Case No. 09SA133</p>
<p>Applicant-Appellants:</p> <p>Burlington Ditch Reservoir and Land Company; Farmers Reservoir and Irrigation Company; United Water and Sanitation District; Henrylyn Irrigation District; and East Cherry Creek Valley Water and Sanitation District,</p> <p>and</p> <p>Opposers-Appellants:</p> <p>City of Thornton; City of Brighton; and City and County of Denver, acting by and through its Board of Water Commissioners,</p> <p>Opposer-Appellant/Opposer-Appellee:</p> <p>City of Englewood,</p> <p>v.</p> <p>Opposers-Appellees:</p> <p>Metro Wastewater Reclamation District; Public Service Company of Colorado, d/b/a Xcel Energy, Inc.; Town of Lochbuie; Platte Valley Irrigation Company; City of Aurora; Golf Course Heritage Todd Creek; Todd Creek Farms Metro District; Centennial Water & Sanitation District; City of Boulder; Harmony Ditch Company; Irrigationists' Association; State Board of Land Commissioners; Colorado Division of Wildlife; City of Black Hawk; City and County of Broomfield; Lower Latham Reservoir Company; Aggregate Industries-WCR, Inc.; Albert Frei & Sons, Inc.; Henderson Aggregate, Ltd.; HP Farms, Inc.; PV Water Holdings, LLC; Adams County Board of Commissioners; Riverside Irrigation District;</p>	

Riverside Land Company; Brighton Ditch Company; Parker Water and Sanitation District; Platteville Irrigating & Milling Company; Central Colorado Water Conservancy District; South Adams County Water & Sanitation District; Rangeview Metropolitan District; Equus Farms, Inc.; State Water Engineer; Fulton Irrigation Ditch Company; City of Greeley; Northern Colorado Water Conservancy District; Bijou Irrigation District; City of Commerce City; David DeChant; Consolidated Ditches Company of District No. 2; City of Sterling; and Arapahoe County Water & Wastewater,

Appellee Pursuant to C.A.R. 1(e):

James Hall, Division Engineer for Water Division No. 1.

JUDGMENT AFFIRMED

EN BANC

May 31, 2011

Opinion modified, and as modified, petitions for rehearing DENIED.

EN BANC

June 20, 2011

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Justice HOBBS delivered the Opinion of the Court.

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In this appeal from a judgment of the District Court for Water Division No. 1, applicant-appellants, Farmers Reservoir and Irrigation Company ("FRICO"), Burlington Ditch, Reservoir and Land Company ("Burlington"), Henrylyn Irrigation District ("Henrylyn") -- collectively "Companies" -- and the United Water and Sanitation District ("United"), and East Cherry Creek Valley Water and Sanitation District ("ECCV") challenge the water court's decisions regarding historical consumptive use, the effect of prior decrees, the effect of new structures, the water court's one-fill rule analysis, and the impact of these determinations on appellants' rights to use the waters of the South Platte River.¹ The Opposer-Appellants -- parties who

¹ Appellants phrase the issues on appeal as follows:

- A. Effect of final water court decrees and orders:
 - 1. Did the water court improperly interpret the decree in Case No. 11200 with respect to the original scope of the absolute Burlington 1885 water rights?
 - 2. Does Case No. 54658 preclude reconsideration of the decreed amounts of the 1885 Burlington water rights?
 - 3. Do Case No. 87CW107 and other Burlington change cases preclude reconsideration of the diversion rate for the Burlington 1885 direct flow right and the use of the Metro Pumps?
 - 4. Did the water court improperly limit Henrylyn's water rights, contrary to the stipulation and order approving the stipulation?
 - 5. Did the water court wrongfully collaterally attack existing decrees and limit existing rights?
- B. Determination of Historical Consumptive Use ["HCU"]:
 - 1. Did the water court err in finding an unlawful expansion unsupported by the evidence and based on a mistake of fact in HCU analysis of the Burlington direct

opposed the initial application but also take issue with the water court's decree include the City of Thornton ("Thornton"), the City of Englewood ("Englewood"), the City of Brighton ("Brighton"), and the City and County of Denver ("Denver"). Opposer-Appellees include the State Engineer and Division Engineer for Water Division No. 1 ("State Engineer"), the City of Aurora ("Aurora"), the Central Colorado Water Conservancy District ("Central"), and Public Service Company of Colorado ("Public Service" d/b/a Xcel Energy). Because of the broad scope of the water court's determinations, the parties are not uniformly aligned, but rather have argued for their particular interests issue by issue.

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- flow and storage rights, and further err by restricting the direct flow rights to use on lands above Barr Lake?
2. Did the water court apply improper study periods in defining the HCU of the 1885 Burlington water rights?
 3. Did the water court improperly exclude seepage through the Barr Lake toe drains and seepage gains into the Beebe Canal in computing HCU?
- C. Effect of New Structures on the Burlington Canal:
1. Did the water court improperly limit HCU that was based on use of water from the Metro Pumps?
 2. Did the water court err in finding that the Metro Pumps constitute an unlawful change in point of diversion, and in imposing terms and conditions on the use of the Metro Pumps which resulted in a windfall to PSCo [Public Service]?
 3. Did the water court err by treating the Globeville Flood Control Works as a new point of diversion?
 4. Did the water court err by imposing terms and conditions for measurements at the Globeville flood control dam?
- D. Did the water court wrongly overturn the One-Fill Rule?
- E. Did the water court wrongly limit water rights that were not presented to it for change?

Based upon the record in this change of water rights proceeding, we uphold the findings of fact, conclusions of law, judgment and decree of the water court, including these: in order to prevent an unlawful enlargement of the Burlington and FRICO water rights, the Companies' 1885 Burlington direct flow water right is limited to 200 cfs historically diverted and used for irrigation above Barr Lake; the 1885 Burlington storage water right is limited to annual average reservoir releases of 5,456 acre-feet historically used on lands under the Hudson and Burlington Extension laterals as they existed in 1909; seepage gains into the Beebe Canal, as well as water collected through the Barr Lake toe drains, cannot be counted towards the Companies' historical consumptive use under the 1885 Burlington and 1908 and 1909 FRICO water rights; historical releases from Barr Lake rather than operation of the "one-fill rule" constitute the proper measure of Companies' storage rights in this change of water rights proceeding; the water court's system-wide analysis of historical consumptive use is not barred by claim or issue preclusion due to the orders and decrees issued in Cases Nos. 54658 and 87CW107; the Metro Pumps are a heretofore undecreed point of diversion for which prior diversions cannot be given credit in calculating historical consumptive use; the Globeville Project is also a previously undecreed point of diversion, subject to the water court's

imposition of terms and conditions to prevent injury to other water right holders; the water court's judgment and decree do not exceed the scope of its jurisdiction; and the decree contains appropriate conditions to prevent injury to other water rights resulting from the change of water rights.

Accordingly, we uphold the water court's judgment and decree.

I.

The United-ECCV Water Supply Project ("project") is a multi-million dollar effort to provide a renewable source of water to replace the Denver Basin nontributary groundwater upon which ECCV has previously relied for use in its service area. ECCV serves about 50,000 customers in the southeastern Denver metropolitan area within Arapahoe County. Current demand for water in ECCV's service area is about 9,000 acre-feet per year, but ECCV projects that, within the next twenty years, it will serve 70,000 customers with an annual water demand of 14,000 acre-feet.

In 2003, ECCV entered into an agreement with FRICO and United to implement the project. Water supplies contemplated as part of the project include shares diverted from the South Platte River under the 1885 Burlington water rights and the 1908 and 1909 FRICO water rights for beneficial use on farms located north of Denver and Arapahoe Counties.

United is a special district. It owns several facilities, including the United Reservoir and the Beebe Draw pipeline from United Reservoir to Barr Lake. The United/ECCV well field gathers water in Beebe Draw north of Barr Lake. Water pumped from the well field is hydrologically connected to the South Platte River. The changed water rights will augment well field depletions, as well as being capable of use by direct delivery into ECCV's system. Water pumped from the well field will be delivered through the ECCV pipeline, traveling thirty-one miles to ECCV's storage tanks near Smoky Hill Road and Highway E-470 for use in ECCV's service area in Arapahoe County.

In pursuit of this project, applicants sought changes of the 1885 Burlington and 1908 and 1909 FRICO water rights historically utilized for irrigation on farms by means of gravity flow ditches below Barr Lake in order to make municipal-related uses in the future. The augmentation plan necessary for the project is part of this case, but is not being addressed in this appeal.

Issues we address in this appeal result from several consolidated cases before the water court, in which applicants sought decrees confirming conditional water rights and exchanges, changes of points of diversion and storage, and changes of use for senior water rights. They include Case Nos. 02CW105 and 04CW362. In Case No. 02CW105, the Companies made

various claims to change decreed water rights on the South Platte River including a change in point of diversion and place of storage for the Burlington and FRICO water rights.²

In Case No. 04CW362, FRICO, United and ECCV sought a change from irrigation to municipal use of the 1885 Burlington and 1908 and 1909 FRICO water rights historically utilized below Barr Lake, and approval of the augmentation plan involving ECCV's well field and pipeline. Resume notice in the case describes applicants as seeking "a change of water right for the Shares premised upon a 'ditch-wide' methodology in accord with the principles recognized by the Colorado Supreme Court in Williams v. Midway Ranches"

Cases 02CW105 and 04CW362 were consolidated into Case No. 02CW403, at issue in this appeal. The water court held a sixteen-day trial and entered its Findings of Fact, Conclusions of Law, and Order ("Order") on September 5, 2008. On May 11, 2009, the court entered its Findings of Fact, Conclusions of Law, and Decree ("Decree"), fully incorporating its previous Order. The court made numerous factual and legal findings.

For purposes of this appeal, the water court's significant determinations include reducing the Burlington 1885 direct flow water right from 350 to 200 cubic feet per second ("cfs") and

² The conditional rights and exchanges associated with this case are not at issue in this appeal.

restricting its use to lands above Barr Lake, based on the legal historical use of Burlington shares during a study period of 1885 to 1909. The court also limited releases from Barr Lake under the Burlington 1885 storage right to lands under the Hudson and Burlington Extension laterals, irrigated prior to FRICO's 1909 involvement in the system at an annual average of 5,456 acre-feet per year; the court employed a study period of 1927 to 2004 in making this analysis.

In making historical consumptive use determinations, the water court disallowed credit for water collected through Barr Lake toe drains, seepage gains into the Beebe Canal, and diversions previously made by the Metro Pumps, an undecreed point of diversion. It ordered diversions by the Metro Pumps in the future to be limited to the amount of water physically and legally available for diversion at the Burlington headgate. Likewise, the court found that the Globeville Flood Control Project constituted a previously undecreed point of diversion and included conditions preventing an enlargement.

A. The Burlington-Barr Lake System

The present day Burlington-Barr Lake system consists of the Little Burlington Canal (which was the original Burlington canal), the newer, enlarged Burlington-O'Brian Canal ("Burlington Canal"), and the enlarged Barr Lake (formerly the Barr and Oasis reservoirs). Both canals divert from the South

Platte River at the Burlington headgate in proximity to the Denver-Adams County line.³ These two canals overlap for several miles, running northeastwardly from the headgate. After their separation, the Little Burlington runs just north of the Burlington Canal, delivering water into the Little Burlington system above Barr Lake. The Burlington Canal runs towards Barr Lake -- a large reservoir formed from the two original Burlington Company reservoirs, Barr Lake and Oasis reservoirs. Before the Burlington Canal terminates at Barr Lake, the Denver-Hudson Canal takes water that it then delivers into the Henrylyn system.

Numerous lateral ditches carry water out of Barr Lake. The East and West Burlington Extension canals were the primary canals delivering stored water to lands below Barr Lake prior to FRICO's involvement in 1909. The present system includes these canals and in addition, the Speer and Neres Canals -- formerly the East and West Hudson laterals, which were in a state of disrepair and rarely used before FRICO improved and expanded them. These canals irrigate additional acreage below Barr Lake due to FRICO's involvement.

Under a 1921 agreement, the Companies (FRICO, Burlington and Henrylyn) share water within the Burlington-Barr Lake

³ The water collection and diversion system associated with the Burlington headgate was changed significantly by the Globeville Project, discussed in sections I.G. and II.D.2.b below.

system.⁴ FRICO operates the Burlington-Barr Lake system. Based on the testimony of FRICO's general manager Mr. Montoya, the water court found that shareholders in the Little Burlington system have a right to receive the first 200 cfs of flow attributable to the 1885 Burlington direct flow above Barr Lake. After the Little Burlington system is satisfied, FRICO allocates to Henrylyn one-half of the direct flow water in the Burlington Canal that reaches the Denver-Hudson bifurcation point.

A 2003 Agreement between ECCV, FRICO and United made United responsible for acquiring water rights and constructing facilities for ECCV's Northern Water Supply Project. United was required to acquire and change Burlington and FRICO shares to municipal and augmentation uses.⁵ This contractual agreement precipitated this case.

⁴ The greater FRICO system consists of four reservoir divisions: Standley Lake and Marshall Lake are west of the South Platte River, while Barr Lake and Milton Lake are east of the South Platte. The Barr Lake division is at issue in this appeal. There are 2,759 FRICO shares allocated for delivery in the Barr Lake division, and FRICO owns 1,257 of the 2,111 Burlington shares allocated for delivery at or below Barr Lake in the Burlington-Barr Lake system. The Little Burlington system is a subdivision of shareholders within the Burlington-Barr Lake system.

⁵ In related agreements, FRICO, Burlington and Henrylyn obtained the right to use the United Diversion Facility No. 3, the United Reservoir, and the Beebe Pipeline, and United and FRICO entered into a mutual water carriage and storage agreement.

B. Burlington 1885 Water Rights Under Case No. 11200

Burlington began constructing the original Burlington diversion works in November of 1885 and applied for a decree in 1893. In Case No. 11200, the district court issued a decree for the canal with a priority date of November 25, 1885, for (1) a direct flow right for 350 cfs from the South Platte River and (2) a storage right in Barr Lake and Oasis Reservoir to be filled at 350 cfs from the South Platte River. In issuing its decree in 1893, the district court adopted the findings of the referee. The abstract of testimony the referee prepared identified 12,000 acres of land for irrigation. The abstract also referred to 28,000 acres "susceptible to being irrigated" below the reservoirs:

the amount of land capable of irrigation by said ditch between the headgate and the reservoirs is 12,000 acres, and the amount of lands susceptible to being irrigated by the water of said ditch and said reservoirs lying North and North-west and North-east from said reservoirs is 28,000 acres, in addition thereto, in fact the amount is unlimited as it may continue to the eastern line of Colorado.

Construing the language of the decree for the 1885 water rights direct flow and storage rights priorities, examining the referee's documents, and the setting of the historical exercise of the Burlington appropriations prior to FRICO's involvement in the system commencing in 1909, the water court determined that the 1885 direct flow and storage

right priorities were limited to uses made under the Burlington system prior to FRICO's expansion of the system for irrigation uses below Barr Lake. Exercise of the 1885 direct flow right diverted for use above the reservoirs was limited to the 200 cfs diversion by Burlington prior to FRICO's involvement and stored water releases from Barr and Oasis Reservoirs, subsequently enlarged and combined within Barr Lake by FRICO, was limited to an annual average of 5,456 acre-feet:

The Court finds that the lawful use of the Burlington 1885 direct flow water is limited to 200 c.f.s. for use above Barr Lake. The annual average 1885 Burlington direct flow right release from Barr Lake is 0 AF, and there is no historical use credit for this water right in the change case

Reservoir releases of the Burlington 1885 storage rights from Barr Lake are limited to the lands under the Hudson and Burlington Extension laterals as they existed in 1909 The annual average 1885 Burlington storage right release from Barr Lake is 5,456 AF after adjustment of disallowed seepage, toe drain discharge and Metro Pumpage, and the cumulative total 20-year release under this right is limited to 109.120 AF. The maximum annual 1885 storage right release from Barr Lake is limited to 8,450 AF.

c. FRICO Expansion in 1909 and Case No. 54658

FRICO first contracted with Burlington in 1909. In this contract, Burlington conveyed to FRICO whatever its rights may be to water "in excess of those rights [that] entitled the Burlington Company to fill Barr/Oasis . . . and in excess of the water now obtained and used for direct irrigation." The water

court found that after the Burlington and FRICO companies entered into the 1909 contract, FRICO introduced the 150 cfs of "excess" Burlington water into the system and spread it for use on acreage below Barr Lake. In addition, FRICO enlarged a portion of the Burlington Canal, the Burlington headgate, and the original Oasis dam in constructing and operating a combined system known as FRICO's "Barr Lake Division."

In Case No. 54658, adjudicated in 1924, FRICO filed a statement of claim for a 1902 priority in the enlarged Burlington Canal, as well as for adjudication of its enlargement of Barr Lake. The district court disagreed that FRICO was entitled to a 1902 priority. In denying the claimed 1902 priority date, the court determined that the persons claiming it had been speculating on potential water use, as opposed to diligently placing the claimed water to a beneficial use. The district court recognized a priority of 1908 for a direct flow right of 600 cfs of South Platte River water, finding that the 1902 survey had not resulted in diligent pursuit of the project and there was no need for the water:

It appears that the moving spirits who up to 1909 were claiming this appropriation were men who did not live on the land under the proposed enlargement. They were speculating in land in that vicinity, expecting in an indefinite way someone would appear who would need the additional appropriation. In the meantime, they did some work to keep up the semblance of holding on to their claim. This work was not such an open physical demonstration and such steadiness of purpose

as is usual in like enterprises and was not evidenced by such diligence in work as entitles said appropriation of 600 cubic feet per second related to that survey.

If there was no immediate need for the water to be applied to a beneficial use, a dog in the manger policy supporting the filing should not be given advantage as against other projects which in the meantime had initiated other appropriations.

In addition to the canal enlargement 1908 priority, the district court granted FRICO a 1909 storage right enlargement for 900 cfs of flow into storage between the levels of 19.1 feet and 34 feet deep in Barr Lake.

In the case before us, the water court found that approximately 1,350 acres were being irrigated through reservoir releases for irrigation below Barr Lake as of 1893 -- the date the district court entered the Burlington decree in No. 11200. From 1885 to 1900, irrigation acreage ranged from several hundred acres to just under 3,000 acres.

The water court found that FRICO's involvement in the Burlington-Barr Lake system precipitated the enlargement of the Burlington Canal, the raising of the dam at Barr Lake, and the construction of the Speer, Neres, and Beebe Canals in order to greatly expand the irrigated acreage below Barr Lake:

Following FRICO's involvement in the Burlington system, the Burlington-O'Brian Canal was enlarged, the dam at Barr Lake was raised, and the Speer, Neres, and Beebe Canal outlets were constructed. The Speer, Neres, and Beebe Canals totaled around 140 miles in length. These new outlet canals in particular increased the ability to deliver water through and

from Barr Lake and permitted the 1885 Burlington water rights to be used on additional acreage. In short, additional acres could be irrigated because the ability to deliver water through and from Barr Lake greatly expanded after FRICO's involvement.

Thus, the water court found that construction of these canals provided the need for the FRICO enlargement priorities and the need for expanded use of the 1885 Burlington direct flow right to 350 cfs from the 200 cfs Burlington Company had effectuated prior to FRICO's involvement in 1909. This need did not exist when the 1885 Burlington appropriations were made.

Thus, the water court barred the Burlington and FRICO shareholders from claiming historical consumptive use credit under the 1885 Burlington priorities for the expanded acreage irrigated below Barr Lake.

D. Thornton Case No. 87CW107

In 1987, Thornton sought to change its 501.455 Burlington shares from irrigation to municipal uses. The application in Case No. 87CW107 sought to change only Thornton shares served by the Little Burlington Division of the Burlington Company:

This application does not seek to change the use of water rights represented by any of Thornton's shares served by the O'Brian Division of the Burlington Company or by any shares owned by Thornton in the Farmers Irrigation and Reservoir Company - Barr Lake Division.

The water court in Case No. 87CW107 determined that the consumptive use credit available to Thornton under the 1885

direct flow Burlington rights utilized above Barr Lake was 1,326 acre-feet annually.

In the case now before us, the water court ruled that the decree in No. 87CW107 did not preclude the water court from conducting a system-wide analysis of historical consumptive use credits available to the Burlington and FRICO shareholders for uses below Barr Lake.

E. Historical Consumptive Use Determination by the Water Court

In determining historical consumptive use, the water court limited Burlington's 1885 direct flow right to 200 cfs based on a study period from 1885 to 1909. The water court found that this period was consistent with its "determination regarding the lawful historical use of the 1885 Burlington direct flow water right." It found that no evidence existed to show that the Burlington Company intended to irrigate lands below Barr Lake with 1885 Burlington direct flow water:

The court is not persuaded that the Burlington Company or FRICO had the right to build out the Burlington System under the 1885 priorities due to the lack of evidence of any intent to irrigate the amount of lands claimed to be irrigable under Barr Lake . . . the referee's findings state that 12,000 acres of land is irrigable under the Burlington Canal and the evidence establishes that Burlington diverted up to 200 cfs to irrigate those lands. However, Applicants point to no portions of the record in Case No. 11200 or any other evidence that would indicate that the Burlington Company intended to irrigate lands below Barr Lake with 1885 Burlington direct flow water.

The water court concluded that, even if the decree in Case No. 11200 had been for a conditional water right decree giving Burlington the opportunity to build out the Burlington system to serve the 28,000 acres below Barr Lake, such a right did not mature because diversions stayed under 200 cfs for twenty-four years from 1885 until the involvement of FRICO in 1909 -- a period too long to meet the test of reasonable diligence. In finding that FRICO unlawfully enlarged the Burlington rights, the court observed, "additional acres could be irrigated because the ability to deliver water through and from Barr Lake greatly expanded after FRICO's involvement."

F. Barr Lake Toe Drains and Beebe Canal Seepage Gains

To prevent instability from water seeping into the earthen Barr Lake Dam, FRICO built a "toe drain" system. The system is built into the dam and works to drain and collect the seepage. An average of about 2 cfs of collected water is delivered into the Beebe Canal, along with water released from Barr Lake. In addition to water collected via the toe drains, the Beebe Canal also collects seepage and return flows from Barr Lake and other small reservoirs and irrigated lands within the Beebe Draw.

Thus, Beebe Canal is a "gaining ditch," because more water is delivered from the Beebe Canal than is released into it from Barr Lake. The water court found that this "seepage gain" averaged 1,200 to 1,300 acre-feet per year from 1927 to 2005.

The water court determined that neither the water collected from the toe drain system, nor the overall seepage gain into the Beebe Canal, could be counted towards the Companies' calculation of historical consumptive use of the 1885 Burlington and 1908 and 1909 FRICO water right priorities.

G. New Structures on the Burlington Canal: the Metro Pumps and the Globeville Flood Control Project

Prior to 1966, Denver's Northside Wastewater Treatment Plant ("Northside") discharged treated effluent into the South Platte River above the Burlington headgate. Northside thus provided a potential source of supply for the Companies to divert downstream at the Burlington headgate. From 1952 to 1963, Northside discharged an average of 68,000 acre-feet annually. The Companies did not establish in the water court proceedings how much of this effluent was legally and physically available to the Companies at the Burlington headgate or how much was actually diverted.⁶

In 1966, Northside was replaced by the Metro Plant, which operates about 1.5 miles downstream from the Burlington headgate, negating the possibility of Denver effluent being available for diversion at the Burlington headgate. The Companies brought an action against the Metro District in

⁶ Companies submitted data of annual discharge from Northside into the South Platte River at an average of 69,014 acre-feet from 1947 to 1966.

Metropolitan Denver Sewage Disposal District Number 1 v. Farmers Reservoir and Irrigation Company, 179 Colo. 36, 499 P.2d 1190 (1972) ("Metro"), claiming a continuing right to divert effluent despite the change in the point of return to a point downstream of the Burlington headgate.

Although we expressly did not give our "opinion on the right of the plaintiffs to the effluent," we determined that the Companies did not have a vested right to the point of return of the Northside effluent. Id. at 1192-93. The Companies, Denver, and the Metro District eventually entered an agreement outside of court in 1968 whereby Metro effluent would be discharged from the Metro Pumps directly into the Burlington Canal when the Burlington 1885 storage right was in priority. The Metro Pumps were not adjudicated as an alternate point of diversion, but from 1987 to 2007 they were utilized to deliver an average of 9,600 acre-feet of water annually to the Burlington Canal.⁷

The second significant new structure relevant to this appeal is the Globeville Area Flood Control Project ("Globeville Project"), which significantly impacts the Burlington headgate. The Globeville Project involved the construction of a number of structures designed to protect the Globeville neighborhood from

⁷ The combination of water available at the Burlington headgate on the South Platte River and water from the Metro Pumps between November and March of every year allows the Companies to send between 200 to 250 cfs to fill Barr Lake under the 1885 Burlington storage right.

a one-hundred year flood. The project also lowered significant portions of the South Platte River channel. Part of the historical elevation of the channel was maintained in order to allow the Companies to continue their diversions, and the existing Burlington diversion dam structure was removed and replaced with a new structure.

The replacement dam and SCADA headgates⁸ divert water from a location 900 feet upstream from the original Burlington headgate on the South Platte River. Water is first diverted by the dam, and then it flows through the SCADA headgates into a four-sided box culvert. The water then flows into an "approach channel," separated from the main stem of the river by a concrete wall. The approach channel parallels the river for 900 feet, carrying a maximum capacity of 1000 cfs to the original Burlington headgates. Once the water passes through the Burlington headgates, it enters the Burlington Canal.

The Burlington diversion dam replaced by the Globeville structure had been in operation since 1935, and had a maximum capacity of 700 cfs before it began to spill water back into the South Platte River. Mr. Montoya, FRICO's general manager, testified that diversions into the Burlington Canal are primarily controlled by the SCADA headgates located at the new

⁸ The new headgates are automated and controlled by FRICO's Supervisory Control and Data Acquisition ("SCADA") system, which allows greater precision in diversions and tracking.

upstream structure. The original Burlington headgates, which are still operational, are used only to prevent overflow into the Burlington Canal. Prior to the decree in this case, the new point of diversion was not adjudicated. As a condition for adjudicating this diversion, the water court limited diversions into the alternative point of diversion in order to prevent injury to other water rights.

We turn now to our decision.

II.

Based upon the record in this change of water rights proceeding, we uphold the findings of fact, conclusions of law and decree of the water court, including these: in order to prevent an unlawful enlargement of the Burlington and FRICO water rights, the Companies' 1885 Burlington direct flow water right is limited to 200 cfs historically diverted and used for irrigation above Barr Lake; the 1885 Burlington storage water right is limited to average annual reservoir releases of 5,456 acre-feet historically used on lands under the Hudson and Burlington Extension laterals as they existed in 1909; seepage gains into the Beebe Canal, as well as water collected through the Barr Lake toe drains, cannot be counted towards the Companies' historical consumptive use under the 1885 Burlington and 1908 and 1909 FRICO water rights; historical releases from Barr Lake rather than operation of the "one-fill rule"

constitute the proper measure of Companies' storage rights in this change of water rights proceeding; the water court's system-wide analysis of historical consumptive use is not barred by claim or issue preclusion due to the orders and decrees issued in Cases Nos. 54658 and 87CW107; the Metro Pumps are a heretofore undecreed point of diversion for which prior diversions cannot be given credit in calculating historical consumptive use; the Globeville Project is also a previously undecreed point of diversion, subject to the water court's imposition of terms and conditions to prevent injury to other water right holders; the water court's judgment and decree do not exceed the scope of its jurisdiction; and the decree contains appropriate conditions to prevent injury to other water rights resulting from the change of water rights.

**A.
Standard of Review**

We accept the water court's factual findings on appeal unless they are so clearly erroneous as to find no support in the record. Buffalo Park Dev. Co. v. Mountain Mut. Reservoir Co., 195 P.3d 674, 683 (Colo. 2008). The sufficiency, probative effect, weight of the evidence and the inferences drawn therefrom are for the water court to determine; we will not disturb them on appeal. Gibbs v. Wolf Land Co., 856 P.2d 798, 801 (Colo. 1993). We review the water court's decision to admit

or deny evidence for abuse of discretion. City of Englewood v. Burlington Ditch, Reservoir and Land Co., 235 P.3d 1061, 1066 (Colo. 2010).

The water court has authority to determine a prior decree's setting, intent, meaning and effect when adjudicating an application for a water use right or ascertaining the existence of an undecreed enlargement of a decreed water right. Southern Ute Indian Tribe v. King Consolidated Ditch Co., No. 09SA374, 2011 WL 873305, at *6 (Colo. 2011); In re Tonko, 154 P.3d 397, 404-05 (Colo. 2007); Cherokee Metro. Dist. v. Simpson, 148 P.3d 142, 146-47 (Colo. 2006).

We review de novo the water court's legal conclusions, including its interpretation of prior decrees. Englewood, 235 P.3d at 1066; Simpson v. Bijou Irrigation Co., 69 P.3d 50, 58 (Colo. 2003).

B.

Determination of Historical Consumptive Use

1. Applicable Law

A water right is a usufructuary right, affording its holder the right to use and enjoy the property of another without impairing its substance. Thus, one does not "own" water but owns the right to use water within the limitations of the prior appropriation doctrine. See § 37-92-103(12), C.R.S. (2010) (defining "water right" as "a right to use in accordance with

its priority a certain portion of the waters of the state by reason of the appropriation of the same"); Kobobel v. Colorado Dept. of Natural Res., 249 P.3d 1127, 1130 (Colo. 2011). All water in or tributary to surface streams is the property of the public and is subject to appropriation and use, but may not be the target of speculation in circumstances where "[t]he purported appropriator . . . does not have a specific plan and intent to divert, store, or otherwise capture, possess, and control a specific quantity of water for specific beneficial uses." § 37-92-103(3)(a)(II), C.R.S. (2010); see § 37-92-102(1)(a), C.R.S. (2010).

A Colorado prior appropriation water right arises only by application of a specified quantity of water to an actual beneficial use. Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1147 (Colo. 2001). The anti-speculation doctrine, which has existed in Colorado prior appropriation water law since its inception in Territorial and early-Statehood days, prevents unlawful enlargements, as well as curbs the appropriation of water not needed for actual beneficial use. See High Plains A&M, LLC v. Se. Colo. Water Conservancy Dist., 120 P.3d 710, 713 (Colo. 2005).

In 1907, irrigation expert Elwood Mead warned of the danger of recognizing water rights in excess of the actual need of the appropriators:

the real purpose has been to make money out of excess appropriations. The parties who have acquired surplus rights are unable to use the water themselves, and seek to sell them to some one who can The usual result is to take as much water away from one user as is supplied to another.

Elwood Mead, Irrigation Institutions 148-49 (The MacMillan Company 1907) (reprint). Mead's commentary was contemporaneous with the development of the Burlington system and FRICO's expansion of it at issue in this case. So were the provisions of the 1881 and 1903 Acts by which the General Assembly required diligence in placing water to actual beneficial use and required the courts to differentiate between the original size and carrying capacity of canals and reservoirs, and enlargements thereto, in decreeing the priorities of water use rights. See Act of Feb. 23, 1881, sec. 4, 1881 Colo. Sess. Laws 144-46; Ch. 126, sec. 6, 1903 Colo. Sess. Laws 291-292; Dallas Creek Water Co. v. Huey, 933 P.2d 27, 36-37 (Colo. 1997). The 1919 Act provided for the filing for adjudication of all previously undecreed water rights and claims to occur within two years or suffer abandonment. Ch. 147, sec. 1-2, 1919 Colo. Sess. Laws 487-89.

Colorado law requiring the quantification of historical consumptive use in change proceedings guards against speculation and waste, ensuring optimum use and reliability in the prior appropriation system. Santa Fe Trail Ranches Prop. Owners Ass'n

v. Simpson, 990 P.2d 46, 54-55 (Colo. 2005). No injury to other adjudicated water rights is a fundamental principle applicable to fashioning decrees in water cases. § 37-92-305, C.R.S. (2010). Injury involves diminution of the available water supply that a water right holder would otherwise enjoy at the time and place and in the amount of demand for beneficial use under the holder's decreed water right operating in priority. Farmer's Reservoir and Irrigation Co. v. Consolidated Mut. Water Co., 33 P.3d 799, 807 (Colo. 2001).

Change decrees are governed by the provisions of the Water Right Determination and Adjudication Act of 1969. A change of water rights will be approved only if the change will not injuriously affect other adjudicated water rights. § 37-92-305(3)(a). Terms and conditions to prevent injury may include relinquishment of part of the decree for which a change is sought "if necessary to prevent an enlargement upon the historical use or diminution of return flow to the detriment of other appropriators." § 37-92-305(4)(a)(II); see also Pueblo W. Metro Dist. v. Se. Colo. Water Conservancy Dist., 717 P.2d 955, 959 (Colo. 1986) ("once an appropriator exercises his or her privilege to change a water right . . . the appropriator runs a real risk of a requantification of the water right based on actual historical consumptive use").

An applicant seeking a change of water right decree bears the burden of showing that injury to other adjudicated water rights will not result. Weibert v. Rothe Bros., Inc., 618 P.2d 1367, 1370 (Colo. 1980). If the applicant successfully meets this burden, objectors have the burden of going forward with evidence of injury to other adjudicated water rights. City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 88 (Colo. 1996) (citations omitted). We give deference to the water court's findings based on the evidence. Id. We will not overturn the findings on appeal unless they are so clearly erroneous as to find no support in the record. Id.

The amount of water available for use under the changed right employing the original priority date, see High Plains A&M, LLC, 120 P.3d at 720, is subject to a calculation of historical beneficial consumptive use lawfully made under the decreed prior appropriation. Williams v. Midway Ranches Prop. Owners Ass'n, Inc., 938 P.2d 515, 522 (Colo. 1997). Historical consumptive use under the adjudicated water right is calculated based upon a pattern of diversion and use over a representative period of time, expressed in acre-feet of water, and is the quantitative measure of the water right. Id.; Cent. Colo. Water Conservancy Dist. v. Greeley, 147 P.3d 9, 14 (Colo. 2006) ("Jones Ditch").

The flow rate specified in a decree for a point of diversion is not equivalent to the measure of the water right,

because every decree carries with it an implied provision that diversions are limited to those sufficient for the beneficial use for which the appropriation was made. Jones Ditch at 14. Our constitution guarantees a right to appropriate, not a right to speculate. Id.; Colorado River Conservation Dist. v. Vidler Tunnel Water Co., 197 Colo. 413, 416, 594 P.2d 566, 568 (1979).

a. Unlawful Enlargement

Appropriation of water for irrigation use is limited to the acreage the appropriator intended to irrigate when the appropriation was made. A water right is perfected only by actual application of the water to beneficial use; a conditional water right operates only to hold a place in the priority system, dependent on diligent placement of the water to use. Dallas Creek, 933 P.2d at 35-36; High Plains A&M, LLC, 120 P.3d at 720. A showing of diligence is supported by continuous project-specific effort aimed at developing a conditional right. Dallas Creek, 933 P.2d at 36. Specific actions demonstrating such effort may include project plans, expenditures, design and construction. Id. A conditional water right decree contains express language identifying it, in whole or in part, as a conditional appropriation; otherwise, the decree is presumed to be for a perfected water right. See, e.g., Conley v. Dyer, 43 Colo. 22, 25, 95 P. 304, 305 (1908) (addressing decree containing language for both a perfected and a conditional

appropriation). An irrigation water right cannot be lawfully enlarged for application to acreage beyond that for which the appropriation is accomplished, despite the flow rate specified on the face of the decree, in the absence of an adjudicated priority for the enlargement. Jones Ditch, 147 P.3d at 14-15.

Change proceedings scrutinize proposed alterations to existing decreed rights that may injure other decreed water rights. Trail's End Ranch, L.L.C. v. Colorado Div. of Water Res., 91 P.3d 1058, 1063 (Colo. 2004); Empire Lodge, 39 P.3d at 1156; State Eng'r v. Bradley, 53 P.3d 1165, 1168 (Colo. 2002). The calculation of consumptive use credits allowed through a change proceeding does not include water from an undecreed enlargement, even if there has been a long period of enlarged usage. Jones Ditch, 147 P.3d at 16.

The law's prohibition against undecreed enlargements protects flows upon which other appropriators rely in order of their decreed priorities. Water Supply and Storage Co. v. Curtis, 733 P.2d 680, 682-83 (Colo. 1987). Water native to the stream system is limited to one use in that system and return flows belong to the stream system as part of the public's resource, subject to appropriation and administration. Id.

b. The One-Fill Rule

The "one-fill rule" of Colorado water law serves to prevent injury to other appropriators by prohibiting a reservoir from

making more than one fill annually based on its adjudicated priority. Windsor Reservoir & Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 223, 98 P. 729, 733 (1908) ("By necessary construction, the statute which provides for these decrees [Ch. 124, sec. 2, 1903 Colo. Sess. Laws 278] forbids the allowance of more than one filling on one priority in any one year."); see Orchard City Irrigation Dist. v. Whitten, 146 Colo. 127, 142, 361 P.2d 130, 137-38 (1961) (limiting reservoir to one annual fill from multiple sources according to the terms of the decreed capacity of the reservoir).

In Westminster v. Church, 167 Colo. 1, 13, 445 P.2d 52, 58 (1968), we recognized the danger of municipalities enlarging acquired irrigation water rights where "the city will attempt to use a continuous flow, where the city's grantor only used the water for intermittent irrigation." We overturned the trial court's imposition of historical limitations on Westminster's rights because we determined, based on the facts of that case, that the City was entitled to "whatever water is available each year to fill" its storage decree. Westminster, 167 Colo. at 14, 445 P.2d at 58. We affirmed the rule announced in Windsor Reservoir and Canal Company, that "[a] reservoir right permits one filling of the reservoir per year." Id.

In Southeastern Colorado Water Conservancy District v. Fort Lyon Canal Company, 720 P.2d 133, 146-47 (Colo. 1986), we

clarified our holding in Westminster, explaining that “diminished return flows, whether due to change in direct-flow or storage rights, must be considered when calculating the amount of injury to other appropriators.”

In North Sterling Irrigation District v. Simpson, 202 P.3d 1207 (Colo. 2009), we once again addressed application of the one-fill rule, this time in reference to an irrigation district’s challenge to the imposition of a fixed water year measuring annual diversions into storage. In that case, we held that the state engineer’s office may utilize the one-fill rule in order to curtail diversions that may unlawfully enlarge a decree. Id. at 1211. We concluded that a fixed water year is “the administrative mechanism by which the one-fill rule lawfully limits” storage rights through enforcement. Id.

Storage itself is not a beneficial use; the subsequent use of stored water, such as irrigation of lands, is the beneficial use for which water is stored. See Upper Yampa Water Conservancy Dist. v. Dequine Family L.L.C., 249 P.3d 794, 799 (Colo. 2011). In a change of water rights proceeding, the actual beneficial use made of the stored water must be ascertained and assigned its proper consumptive use credit per share in the ditch or reservoir company. See § 37-92-305(3)(a)-(4)(a)(II) (terms may be imposed to avoid injury “if necessary to prevent an enlargement upon the historical use or diminution

of return flow to the detriment of other appropriators"). The statutory definition of "change of water right" for storage is broad. "Change of water right" includes:

a change in the place of storage, a change from direct application to storage and subsequent application, a change from storage and subsequent application to direct application, a change from a fixed place of storage to alternate places of storage, a change from alternate places of storage to a fixed place of storage, or any combination of such circumstances.

§ 37-92-103(5). The one-fill rule and the no injury rule are not mutually exclusive; they work in concert to ensure that no more than one fill of a reservoir is permitted per year and that stored water when applied to beneficial use will not unlawfully enlarge the water right to the detriment of other appropriators.

2. Analysis

a. Decree in Burlington Case No. 11200 and Calculation of Historical Consumptive Use

Our first step in reviewing the water court's calculation of historical consumptive use for change of the Burlington 1885 rights is to determine if the court properly interpreted the decree in Case No. 11200. Jones Ditch, 147 P.3d at 14 (exercise of a decreed water right limited to the amount of water necessary to irrigate acreage connected to the appropriation regardless of flow rate stated in the decree).

The plain language of the 1885 decree describes a direct flow right to 350 cfs of water and a storage right of 11,000

acre-feet of water, without specifying where the water was to be applied. Applicants contend that the water court erred by refusing to count the 28,000 acres below Barr Lake described in the abstract of testimony as being "susceptible to being irrigated" within its calculation of historical consumptive use. The water court determined that this description did not evince intent to irrigate these acres, but merely described a vague potential for irrigation. We agree.

Read in context, the referee's description -- which referenced in the same sentence acreage "unlimited as it may continue to the eastern line of Colorado" -- does not meet our often-announced standard "that the use of water for irrigation is 'measured by the needs of the land for irrigation of which the water was decreed.'" Jones Ditch, 147 P.3d at 16; Enlarged Southside Irrigation Ditch Co. v. John's Flood Ditch Co., 120 Colo. 423, 429, 210 P.2d 982, 985 (1949).

The water court considered the development of the Burlington system up to 1909, the year FRICO purchased Burlington's so-called "excess water" through a 1909 agreement the two Companies executed. This agreement specifically reserves to Burlington the use of the water it had developed under the 1885 rights:

Burlington Company hereby assigns, sells, sets over, grants and conveys to the said Farmers Company all the rights of the Burlington Company to water from the

South Platte river ... belonging to or owned by or which accrued to it by virtue of any appropriation or filing heretofore made in excess of those rights entitling the said Burlington Company to fill Barr Lake and Oasis Reservoir to a level eighteen (18) inches above the floor of the head-gate of the Brighton lateral, and in excess of the water now obtained and used for direct irrigation . . .

(emphasis added).

The "excess water" is that which the Burlington shareholders had not put to beneficial use. The water court found that, in 1893, when the Burlington decree issued, the Burlington Canal terminated at Barr Lake and forty miles of outlet laterals had been constructed to utilize the waters from Barr Lake and Oasis Reservoir. The outlet laterals were described by the referee as constructed, not for the purposes of utilizing direct flow water, but for using storage water: "from said reservoir [Oasis Reservoir, now part of Barr Lake] for the purpose of taking and utilizing the waters therefrom."

The water court concluded that applicants provided no evidence demonstrating "that the Burlington Company intended to irrigate lands below Barr Lake with 1885 Burlington direct flow water." We defer to the water court's findings of fact in the absence of clear error, and affirm the court's conclusion that the 1885 Burlington direct flow right does not include irrigation of lands below Barr Lake and the 1885 storage right is limited to releases on lands below Barr Lake for irrigation

use that occurred prior to FRICO's enlargement of the diversion and distribution system.

Applying water to additional acreage, resulting in increased consumptive use above that perfected under the decreed appropriation, is unlawful. Jones Ditch, 147 P.3d at 16; Fort Lyon Canal Co. v. Chew, 33 Colo. 392, 400, 81 P. 37, 39 (1905) (appropriator cannot authorize others to enlarge a decreed appropriation). The water court found the Burlington 1885 direct flow right was not appropriated for use below Barr Lake. Instead, the evidence demonstrated that the 12,000 acres between the headgate of the Burlington Canal and Barr Lake were the lands to be served by the 350 cfs direct flow right specified in the 1893 decree. Jones Ditch, 147 P.3d at 12 (affirming trial court's limitation on decree to the specific acreage in use at the time of the application). The water court found that the structures the Burlington Company built could divert only 200 cfs before FRICO's involvement in 1909. Taking into account the vague reference to additional lands susceptible of irrigation below Barr and Oasis reservoirs, evidence in the record supports the water court's conclusion that the Burlington 1885 direct flow right historical consumptive use credit must be determined by use on lands irrigated above Barr Lake and the 1885 storage right credit by use on lands irrigated below Barr Lake prior to FRICO's enlargement of the system.

b. Unlawful Enlargement

FRICO unlawfully enlarged its use of the 1885 Burlington priorities. Appellants argue that no unlawful enlargement of the Burlington rights occurred because the decree in Case No. 11200 contains no limitation prohibiting the use of its direct flow right on lands below Barr Lake. To the contrary, the contract FRICO entered into with Burlington in 1909 supports the conclusion that an undecreed enlargement occurred. Burlington sold its "excess" rights to FRICO, not any part of the water it had put to beneficial use.

The water court found that following the 1909 agreement with Burlington, FRICO constructed 140 miles of outlet laterals below Barr Lake (the Speer and Neres laterals and the Beebe Canal). These canals enabled the Burlington and FRICO companies to deliver direct flow water diverted through Barr Lake to irrigate substantially more acreage than appropriated for irrigation under the 1885 Burlington priority. What Burlington purported to sell to FRICO were diversions Burlington did not need nor put to beneficial use on the 12,000 acres irrigated under the 1885 direct flow priority above Barr Lake. But this "excess water" belongs to the public under Colorado water law, subject to appropriation and use in order of decreed priority; any purported conveyance of water the appropriator does not

"need" or has not put to beneficial use flags an illegal enlargement.

We affirm the water court's findings of fact and its conclusions of law. A diversion flow rate specified in a decree is neither the measure of a matured water right, nor conclusive evidence of the appropriator's need for which the appropriation was originally made. Nor can diversions made at an undecreed point of diversion be credited in the calculation of historical consumptive use in fashioning a change of water rights decree. Bradley, 53 P.3d at 1169 ("[i]t is inherent in the notion of a 'change' of water right that the property right itself can only be changed and not enlarged"); Santa Fe Trail Ranches, 990 P.2d at 52 ("an undecreed change of use of a water right cannot be the basis for calculating the amount of consumable water that can be decreed for change to another use").

The water court correctly concluded that FRICO's involvement and significant expansion of the Burlington water rights, both direct flow and storage, twenty-four years after the 1885 appropriation effectuated an unlawful enlargement of the Burlington rights. FRICO made its own appropriations in 1908 and 1909, which were adjudicated in 1924. The 1885 Burlington and 1908 and 1909 FRICO appropriative rights must be administered in accordance with their distinct priorities vis-à-vis all other decreed priorities of natural stream waters, which

includes surface water and tributary groundwater. Empire Lodge, 39 P.3d at 1148.

c. Study Periods for Calculation of Historical Consumptive Use

The third step in our analysis is to consider the time period utilized by the water court to calculate historical consumptive use. We review the water court's choice of a study period under an abuse of discretion standard. Pueblo West, 717 P.2d at 960-61. The water court adopted a twenty-four year period from 1885 to 1909 to determine the Burlington Company's legal use of direct flow water under the 1885 decree. The court's study period logically follows upon its determination that FRICO unlawfully enlarged the Burlington 1885 direct flow water right beginning in 1909.⁹

The water court used a study period of 1927 to 2004 for the 1885 Burlington storage right. The storage study period represents both a substantial period of time for calculating historical consumptive use and a fair calculation because beneficial use averaged 5,456 acre-feet annually for 1927 to 2004. This amount nearly matches the annual releases from 1897

⁹ We decline to address arguments made by Appellants that the water court confused average versus maximum diversion rates. Although the court may have accidentally mixed the terms within one finding, that does not alter the validity of the court's conclusion, which was based on evidence that Burlington never averaged direct flow diversions of more than 200 cfs before 1909, and that the companies could provide no evidence of a maximum flow rate above 200 cfs.

to 1909 of 5,511 acre-feet for beneficial use from the Barr and Oasis reservoirs.¹⁰

Storage itself is not a beneficial use; the subsequent use of stored water for irrigation is the beneficial use that is determinative in this change proceeding. See Upper Yampa Water Conservancy Dist., 249 P.3d at 799. The Companies argue that the water court should not have excluded water delivered to the Speer, Neres and Beebe Canals from Barr Lake during the storage right study period. We determine that the court correctly excluded such deliveries because the canals in question were constructed following FRICO's involvement in the system and any unlawful expansion of the original 1885 priorities decreed in Case No. 11200 cannot be credited to Burlington or FRICO shares.

d. Seepage and Toe Drain Gains Relation to Historical Consumptive Use

The Companies argue that the water court improperly excluded seepage through the Barr Lake toe drains and seepage gains into the Beebe Canal in computing historical consumptive use credits per share available under the decreed appropriations. First, we address seepage collection via the Barr Lake toe drains. The water court determined that seepage collected by the toe drains should be excluded from the

¹⁰ The 1927 to 2004 period is more generous to applicants, since it includes a higher maximum annual diversion of 8,517 acre-feet compared to 6,670 acre-feet for 1897 to 1909.

calculation of consumptive use associated with the 1885 Burlington and the 1908 and 1909 FRICO water rights. The court concluded that none of the decrees adjudicated recapture of seepage, and further, that including toe drain seepage in a calculation of historical consumptive use would amount to double-counting.

Seepage of reservoir water that is tributary to a natural watercourse is part of the public's water resource, subject to appropriation under Colorado's priority system. Lamont v. Riverside Irrigation Dist., 179 Colo. 134, 138-39, 498 P.2d 1150, 1152-53 (1972). The Barr Lake toe drain system, constructed in the early 1980s, was not decreed as a point of diversion or supply in either Case No. 11200 or No. 54658. See Lamont, 179 Colo. at 139, 498 P.2d at 1153 (reservoir company had no right to seepage in the absence of separate appropriation); see also Bijou Irrigation Co., 926 P.2d at 61-62. Instead, the decree in Case No. 11200 permitted Burlington's diversion of additional water from the South Platte River to offset evaporation and seepage. We affirm the water court's conclusion that water collected by the toe drains cannot be included within the court's calculation of historical consumptive use.

Next we address whether seepage gains into the Beebe Canal should have been included in the water court's calculation of

historical consumptive use. As described above, the water court found that the Beebe Canal is a net "gaining ditch" -- that is, it gains more water from seepage into the canal than it loses from seepage or evaporation. The court relied on expert testimony revealing that 28 percent of the Canal's total deliveries come from seepage collected along the course of the Canal below Barr Lake.

Recognizing the water court's unique ability to evaluate evidence and make factual determinations in complex cases, we defer to the findings of the water court unless they are clearly erroneous. City and County of Broomfield v. Farmers Reservoir and Irrigation Co., 235 P.3d 296, 299 (Colo. 2010). The Companies argue that the Beebe Canal is a net losing ditch.¹¹ Based on the evidence in the record showing that the Beebe Canal gained an average of 1,200 to 1,300 acre-feet per year from 1927 to 2005, we affirm the water court's finding that the Beebe Canal is a gaining ditch. Because we find that the Beebe Canal is a gaining ditch, we need not reach the issue of whether as a

¹¹ Companies point to testimony by Manuel Montoya, FRICO's manager, that Beebe Canal is a "net losing ditch." However, this citation is misleading since Montoya's testimony is ambiguous at best: he states that there are some sections of Beebe that show a gain and some that show a loss. When asked whether there is a net gain in the canal before water is diverted into the East Neres, he testified "It gets pretty close to balancing out to zero. There's some -- some gain, yes."

“net losing ditch” accretions to the Beebe Canal should not have been deducted from historical consumptive use.¹²

Seepage flows into ditches cannot be allocated independent of existing priorities on the river. Ready Mixed Concrete Co. v. Farmers Reservoir & Irrigation Co., 115 P.3d 638, 644-45 (Colo. 2005). In Ready Mixed, we addressed a circumstance in which the ditch decree included irrigation use of seepage waters. Id. at 642. Despite its inclusion in the decree, we found that the decree could not operate outside of the prior appropriation system. Id. Here, the Companies do not have a decreed right to appropriate seepage water as it collects along the Beebe Canal under the Burlington or FRICO rights. The water court’s calculation of historical consumptive use properly excluded seepage into the canal.

e. Application of the One-Fill Rule

Barr Lake is capable of storing approximately 30,000 acre-feet of water. Every year, the reservoir carries over about 11,000 acre-feet, or one third of its total capacity. Under the one-fill rule, Barr Lake can store water up to the reservoir’s capacity. Whitten, 146 Colo. at 142, 361 P.2d at 137. Because

¹² In City and County of Broomfield v. Farmers Reservoir and Irrigation Co., we did not address whether accretions to a net-losing ditch should be subtracted from historical consumptive use, since in that case FRICO did not present adequate grounds for an appeal of the water court’s determination that accretions to a net-losing ditch should not be subtracted from historical consumptive use. 235 P.3d at 302.

storage of water itself is not a beneficial use, the amount of water released from the reservoir and used consumptively for irrigation over a representative period of time determines the amount of consumptive use water credited to shares of the storage right. Midway Ranches, 938 P.2d at 522. The water court therefore imposed volumetric limitations based on historical use in order to prevent injury. See § 37-92-305.

The water court based its findings on evidence that, without limits based on historical use, Appellants would be allowed to consume more water than was historically released from the reservoir, resulting in increased diversions from the South Platte River to fulfill higher demand. Appellants presented no evidence to the contrary to meet their burden of showing that such a change would not injure junior appropriators. Weibert, 618 P.2d at 1371.

We affirm the water court, and hold that in order to prevent injury, historical releases from Barr Lake for irrigation, rather than a pro rata share of a full fill are the proper measure for change of storage rights in this proceeding. As discussed above, the one-fill rule is but one tool available within Colorado water law to set and administer diversion limitations on storage rights to prevent unlawful enlargement

and injury to junior appropriators.¹³ Contrary to Appellants' arguments that the water court below necessarily abrogated the one-fill rule, we conclude that the water court's ruling honors the one-fill rule.

In Westminster, we held that "[a] reservoir right permits one filling of the reservoir per year." 167 Colo. at 14, 445 P.2d at 58. That rule applies today, and applies to diversions to fill Barr Lake. For example, if drought conditions in one year reduced the amount of water available for carry over into the next from the normal 11,000 acre-feet to only 5,000 acre-feet, Barr Lake would be entitled to water when available under its decreed priority -- up to the full amount of its decreed storage rights -- to recover that difference.

Because a reservoir's diversions may vary from year to year depending on carry-over and availability of water in priority, the one-fill rule accounts for these variances, but does not enable the enlargement that the Companies seek. In Westminster, id., we explicitly cautioned against such an enlargement: "[t]o protect against the possibility of such extended use of the water rights, the courts will impose conditions upon the change

¹³ Storage and delivery issues involving an interstate compact may be examined by the water court in a change of storage right proceeding when particular facts and the interstate compact implicated are at issue in the case.

of use and point of diversion sufficient to protect the rights of other appropriators.” (citations omitted).

The water court’s imposition of volumetric limitations based on historical use protects other adjudicated water rights against injury. Id. Terms and conditions to prevent enlargement upon historical use and prevent injury to other appropriators have legislative authorization under section 37-92-305(4) (a) (II). The no injury rule applies to changes in storage rights, just as it applies to all change cases, and enables the water courts to shape decrees that prevent injury to other appropriators. Se. Colo. Water Conservancy Dist., 720 P.2d at 145-46.

C.

Effect of Prior Water Court Decrees and Orders in FRICO Case No. 54658 and Thornton Case No. 87CW107

In our analysis above, we interpreted Burlington’s 1893 decree in Case No. 11200. We now turn to the effect of FRICO’s 1924 decree in Case No. 54658 and Thornton’s 1987 decree in Case No. 87CW107 upon the water rights at issue in this matter. The water court concluded that neither issue nor claim preclusion under previous decrees barred its system-wide determination of allowable historical consumptive use credits from direct flow gravity irrigation made on farms below Barr Lake. We agree.

1. Applicable Law

Claim and issue preclusion promote finality and efficiency in judicial decision-making by preventing relitigation of matters already considered and decided by the courts. Lobato v. Taylor, 70 P.3d 1152, 1165-66 (Colo. 2003). Reconsideration of a claim in a second judicial proceeding is barred by a previous judgment if (1) the first judgment is final, (2) there is identity of subject matter, (3) there is identity of claims for relief, and (4) there are identical parties or there is privity between parties to the two actions. Argus Real Estate, Inc. v. E-470 Public Highway Auth., 109 P.3d 604, 608 (Colo. 2005).

Issue preclusion similarly bars relitigation of an issue where,

(1) the issue sought to be precluded is identical to an issue actually and necessarily determined in a prior proceeding; (2) the party against whom estoppel is asserted was a party to or is in privity with a party to the prior proceeding; (3) there was a final judgment on the merits in the prior proceeding; and (4) the party against whom the doctrine is asserted had a full and fair opportunity to litigate the issue in the prior proceeding.

In re Tonko, 154 P.3d at 405 (citations omitted).

In Orr v. Arapahoe Water and Sanitation District, applicants sought to change their water rights from irrigation to municipal uses. 753 P.2d 1217 (Colo. 1988). They claimed that a prior decree changing their points of diversion also confirmed their historical consumptive use of 682 acre-feet annually. Id. at 1225. Our review of the decree revealed that

the water court's inquiry was limited to a review of whether the new points of diversion would injure other appropriators. Id. at 1226. Thus, the decreed change for the points of diversion was subject to a limitation that "the quantity of water to be used at the new points would not exceed the amount of water decreed to and historically used at the original points of diversion." Id. However, we found no evidence that the decision approved of what the water court later determined to be the applicants' expanded consumptive use. Id. Because there had been no determination of historical consumptive use in the prior proceeding, we found that res judicata did not bar the water court from "considering and determining the actual extent of historical use at the original points of diversion in order to properly determine the nature and extent of the applicants' water rights under the 1969 decree." Id.

In Midway Ranches, 938 P.2d at 525, we ruled that res judicata did not operate to bar the water court from determining historical consumptive use in a change, augmentation, or expanded use injury case when it had not been determined in a previous proceeding. To determine what was at issue and decided in a prior water case, we examine the resume notice, resulting court judgment, and the decree in the prior proceeding. Id. Res judicata does not bar a subsequent historical consumptive use analysis of the larger system when resume notice of an

application for a ditch-wide analysis is given. Jones Ditch, 147 P.3d at 18.

2. Analysis

First, we address the potential preclusive effect of the decree in Case No. 54658, a general adjudication which determined the relative priorities of FRICO and Henrylyn to direct flow in the Burlington Canal. The threshold inquiry under both claim and issue preclusion is whether the issue or claim to be precluded is identical to a prior issue or claim. Argus Real Estate, Inc., 109 P.3d at 608; In re Tonko, 154 P.3d at 405. As a corollary, the issue or claim in question must have been actually and necessarily determined in a prior proceeding. Id.

Appellants concede that historical consumptive use was not determined in Case No. 54658, but argue that the diversion rate and storage volume determined in that case should have a preclusive effect on the water court's calculation of historical consumptive use. We decline to hamstring the decision-making of our water courts by inferring preclusion where issues are not identical and determinative. Doing so could result in injury to other appropriators resulting from a change of water rights.

In 54658, the referee found that the capacity of the enlarged Burlington Canal was 1250 cfs. Of this, 350 cfs was decreed to the 1885 Burlington direct flow right. Likewise, the

1909 enlarged Barr Lake storage right was determined by the water court in Case No. 54658 to be the "amount it will hold between the storage depths of 19.1 and 34 feet." Appellants argue that the court implicitly recognized that the first 19.1 feet of storage in Barr Lake was dedicated to the 1885 Burlington storage right, amounting to 11,081 acre-feet.

While the court in 54658 may have looked to the decree in Case No. 11200 and made certain assumptions favorable to Appellants' position, Appellants point to no evidence indicating that the parties litigated or that the court determined the central issue of historical consumptive use of the 1885 Burlington rights on average below Barr Lake at issue in the case before us. See Orr, 753 P.2d at 1226 (restricting change in point of diversion to historic use did not preclude calculation of historical consumptive use in later proceeding). Our review of the record reveals no such analysis by the court in the prior decrees. Therefore, we affirm the water court's determination that the decree in Case No. 54658 does not preclude consideration of historical consumptive use in the present case.

Next, we consider the possible preclusive effect of Thornton's 1987 change of water rights application and the resulting decree in Case No. 87CW107. The water court below concluded that the historical use determinations in 87CW107 were

limited to Thornton's rights in the Little Burlington system, and thus did not bar the system-wide analysis of historical consumptive use properly attributable to the 1885 Burlington direct flow right for gravity irrigation below Barr Lake.

In 87CW107, the water court found that Thornton's Burlington shares made up 12.5% of the total outstanding Burlington Company shares. The subject matter of the case and the resulting decree was explicitly limited to Thornton's shares in the Little Burlington Division. The application recited that "[t]his application does not seek to change the use of water rights represented by any of Thornton's Burlington shares served by the O'Brian Division of the Burlington Company or by any shares owned by Thornton in the Farmers Irrigation and Reservoir Company- Barr Lake Division."¹⁴ The court in 87CW107 used a 1950 through 1972 study period to review diversions at the Burlington headgate, and concluded that Thornton had a right to 1,346 acre-feet annually under the 1885 Burlington direct flow water right utilized above Barr Lake. The court also determined that Thornton's pro-rata share of the 1885 Burlington direct flow

¹⁴ Henrylyn, who objected to Thornton's change application, stipulated that the decree in 87CW107 did not change the use of water rights represented by Thornton's Burlington shares served by the Burlington Company's O'Brian and FRICO-Barr Lake divisions.

right was 27.1% or 54.2 cfs of the 200 cfs in the Little Burlington system.

Thornton argues that the 1885 Burlington direct flow right is a single, indivisible priority, and that its Little Burlington shares cannot therefore be separated from the larger system. However, FRICO's manager testified before the water court that half of the overall shares in the Burlington system are held in the Little Burlington and that none of these Little Burlington shareholders receive their water below Barr Lake. Moreover, under FRICO's operation of the system, Little Burlington shareholders are entitled to first priority in use of the 1885 Burlington 200 cfs direct flow right. This evidence, coupled with the fact that Thornton's own application in 87CW107 was to change only its Little Burlington shares, supports the conclusion that the Little Burlington system is distinct and that the decree in 87CW107 only addressed Thornton's shares in that system and did not make a consumptive use determination applicable to lands irrigated below Barr Lake.

In Jones Ditch, we reversed a water court decision applying res judicata to bar reconsideration of historical use in reference to a prior decree. 147 P.3d at 19. The prior decree proceeding did not involve a ditch-wide analysis of the Jones Ditch water right, "such that it would resolve all subsequent questions as to lawful historical use." Id. Here, while the

decree in 87CW107 may have determined Thornton's historical use within the Little Burlington system under the 1885 Burlington direct flow right, it was not a ditch-wide analysis of historical use of the 1885 priority throughout the Burlington system. Significant portions of the 1885 Burlington direct flow right -- specifically the O'Brian and FRICO-Barr Lake Divisions -- were expressly excluded from the court's determination in 87CW107. In contrast, this case does involve lawful water use under those divisions.

Nonetheless, Thornton and FRICO claim that, because the water court in 87CW107 included in its calculation of historical consumptive use an assumption that the full 350 cfs under the original No. 11200 decree was available under the 1885 right, the issue of historical use was determined in that proceeding. Such assumptions do not meet the test for preclusion, which requires an actual and necessary determination by a water court. See In re Tonko, 154 P.3d at 405. Prior proceedings have a preclusive effect only if "historical consumptive use was calculated and relied upon in the formation of the earlier decree." Farmers High Line Canal and Reservoir Co. v. City of Golden, 975 P.2d 189, 201 (Colo. 1999).

The water court's determination does not impact the decree in No. 87CW107. That decision is not inconsistent with the water court's determination that the 1885 Burlington direct flow

appropriation is limited to 200 cfs for use above Barr Lake. As to the Little Burlington system operating above Barr Lake, Thornton's legal use of the 1885 Burlington direct flow right should remain unaffected.¹⁵

Finally, we address whether the decree in Thornton's Case No. 87CW107 is preclusive as to the legality of the Metro Pumps diversion. The water court found that there was no determination in Case No. 87CW107 confirming the Metro Pumps as a lawful alternate point of diversion. We agree. It is undisputed that the decree in Case No. 87CW107 references the Metro Pumps as a source of supply to the Burlington Ditch. However, the decree merely describes the "Metro Pump Station" as an "undecreed alternate point of diversion." Significantly, the case did not decree the Metro Pumps as a new point of diversion. As discussed above, Case No. 87CW107 was a change of water rights application. Although the court noted that the Metro Pumps were an undecreed source of supply, the application did not seek to decree the Metro Pumps as an alternate point of diversion. The legality of diversions by means of the Pumps for purposes of a change proceeding's calculation of allowable historical consumptive use was not raised nor litigated. See E-470 Public Highway Auth., 109 P.3d at 608 (claim preclusion); In

¹⁵ At oral argument, counsel for Aurora conceded that Thornton's use of its legal right to direct flow water in the Little Burlington system above Barr Lake could continue.

re Tonko, 154 P.3d at 405 (issue preclusion). In the application in this case, Companies filed for a change in point of diversion for the Metro Pumps.¹⁶

**D.
New Structures and Points of Diversion
Related to the Burlington Canal**

1. Applicable Law

Water rights are decreed to structures and points of diversion, not to owners and users. Dallas Creek, 933 P. 2d at 39. Although incident to every water right is the right to change the point of diversion, "such a change constitutes a change of the water right itself." Trail's End Ranch, 91 P.3d at 1061; Bradley, 53 P.3d at 1168-69; § 37-92-103(5)).

As discussed above, Colorado has a well-developed no injury standard which requires that a change of water right will be approved only if such change will not injuriously affect the owners of vested or conditional water rights. § 37-92-305(3) (a), C.R.S. (2010); see Trail's End Ranch, L.L.C., 91 P.3d at 1062 ("diverting water from a natural stream at a point other than one decreed to an existing water right, at least in the

¹⁶ In Metro, 179 Colo. 36, 499 P.2d 1190, we held that downstream appropriators such as FRICO did not have a vested right in the maintenance of the same point of return of effluent. However, we did not affirm the Metro Pumps as a decreed point of diversion -- instead, the Companies entered into an agreement with Metro in 1968 to discharge effluent from the Metro Pumps directly into the Burlington Canal when the 1885 storage right is in priority.

absence of a specific statutory exception, constitutes an out-of-priority diversion, justifying an order to cease further diversion, for the protection of existing adjudicated rights").

In Pueblo West, we clarified that the measurement of historical use for the purposes of changing a point of diversion does not include "out-of-priority diversions at undecreed points of diversion." 717 P.2d at 959. Likewise, in Orr, we discussed changes in diversions as they relate to enlargement:

the right to change a point of diversion is limited in quantity by historical use at the original decreed point of diversion . . . [t]hus a senior appropriator is not entitled to enlarge the historical use of a water right by changing the point of diversion and then diverting from the new location the full amount of water decreed to the original point of diversion, even though the historical use at the original point of diversion might have been less than the decreed rate of diversion.

753 P.2d at 1223-24.

In Santa Fe Trail Ranches, applicants sought to change their water rights from manufacturing to municipal uses, and attempted to claim historical use for irrigation diversions made pursuant to the water right. 990 P.2d at 51. We determined that an undecreed change of use of a water right could not be the basis for a calculation of historical consumptive use for purposes of a water right change decree. Id. at 52.

2. Analysis

a. Metro Pumps

The water court below determined that there was no factual or legal basis upon which it could recognize the Metro Pumps in its calculation of credits for historical consumptive use. Consequently, the water court ordered the Companies to reduce the amount diverted under the Burlington decrees by 9,600 acre-feet per year. The practical result of the court's determination is that diversions at the Metro Pumps as an alternate point of diversion for the Burlington decrees have been limited to the amount of water physically and legally available at the Burlington headgate.

The water court's key findings of fact supporting these orders concerned the claims of injury argued by opposing parties. Englewood and Denver both claim that they will be adversely affected by the water court's orders because, without the Metro Pumps source of supply, it will take longer for the Companies to fill their reservoirs, thus delaying the cities' satisfaction of their junior rights. However, Public Service Company objects to the continued delivery of water from the Metro Pumps into the Burlington Canal. It claims that its water rights downstream of the Metro Plant are injured because the undecreed change causes an increased draft upon the River,

reducing the amount of water available for Public Service Company's industrial water use.

The water court determined that there was no cognizable legal injury to Denver and Englewood if the Companies' request for inclusion of the historical supply from the Metro Pumps is denied. The court reasoned that, although junior appropriators may have a right to the maintenance of stream conditions, those rights cannot rely on undecreed diversions. The water court concluded that confirmation of the operation of the Metro Pumps without conditions would injure vested water rights including Public Service Company's junior and senior water rights downstream of Burlington on the South Platte River. Key to this conclusion was the water court's associated finding that the pumping of Metro effluent into the Burlington Canal unlawfully enlarges the water rights decreed to the Burlington headgate.

Appellants posit several theories including the State Engineer's acquiescence to pumping directly into the Burlington Canal, the 1968 agreement between Denver and the Companies, and the claim that diversions from the Metro Pumps merely replicated pre-1968 diversions of Northside effluent at the Burlington headgate. None of these arguments avail; the record contains evidence sufficient to support the water court's findings of injury, which we will not disturb on appeal. Bijou Irrigation

Co., 926 P.2d at 88 (factual findings of water court entitled to deference unless there is no support in the record).

In addition to failing to prove no injury to other appropriators, Appellants failed to prove that operation of the Metro Pumps as they propose would not unlawfully enlarge their lawful use. In Santa Fe Trail Ranches, we made it clear that an "appropriator of native water may not enlarge the appropriation. In order to reuse or make successive use of return flows, all of the elements of an independent appropriation must be established and decreed as a separate water right." 990 P.2d at 54 (citing Bijou Irrigation Co., 926 P.2d at 65; Curtis, 733 P.2d at 682-83). The same principle applies to effluent from the use of water native to the basin, to which there is no automatic right to capture or reuse the water. Bijou Irrigation Co., 926 P.2d at 65; see Curtis, 733 P.2d at 682.

No prior proceedings have adjudicated the Metro Pumps as a point of diversion.¹⁷ Despite the Appellants' arguments

¹⁷ Englewood argues under a theory of "force majeure" that a change in point of diversion should be retroactively granted because the original change resulted from an event which was beyond its control -- namely the development of the Metro Plant and the shifting of Denver's effluent outlet to a location downstream of the Burlington headgate. Englewood relies on our decision in Flasche v. Westcolo Co., 112 Colo. 387, 149 P.2d 817 (1944), which involved a flood that wiped out a ditch owner's flume. Englewood's argument is unavailing since Companies have had more than fifty years to seek a change of water right, and moreover, in contrast to the facts of Flasche -- where there were no diversions between the old and the proposed new point of

regarding their 1968 agreement and the acquiescence of the state engineer to their operations, changes of water rights cannot be effected in any manner other than through judicial approval or, if authorized by the General Assembly, administrative means, following statutorily authorized procedures. Fort Lyon Canal Co. v. Catlin Canal Co., 642 P.2d 501, 506 (Colo. 1982); Whitten, 146 Colo. at 137-38, 361 P.2d at 133 (enlargement of water rights beyond scope of decree cannot be conferred merely because state engineer permitted diversions of water exceeding decree). We therefore agree with the water court, that undecreed diversions at the Metro Pumps cannot be included in the credits allowed for historical consumptive use. We also affirm the water court's adjudication of the Metro Pumps in this case as an alternate point of diversion, limited to the amount of water legally and physically available for diversion at the Burlington headgate on the South Platte River.

b. Globeville Project

The water court below determined that the Globeville Project also constitutes a previously undecreed point of diversion. The water court's decree now recognizes the Globeville structure as a point of diversion and has placed

diversion -- the water court in the present matter made a finding of injury to other appropriators on the South Platte River. See 112 Colo. at 393, 149 P.2d at 820. We decline to create a poorly reasoned loophole to grandfather in unadjudicated and undecreed changes in water rights.

conditions in the decree to protect against injury to other water rights in operating this diversion.¹⁸ The no injury standard applies to protect other appropriators on the stream. § 37-92-305(3)(a); Trail's End Ranch, L.L.C., 91 P.3d at 1062.

On appeal, the threshold question regarding the Globeville Project is whether the new structure meets the statutory definition of a change in the point of diversion. If the Globeville Project is a change in the point of diversion, applicants must show that the change produces no injury to other decreed water rights. Section 37-92-103(7), C.R.S. (2010) defines diversions as follows: "removing water from its natural course or location, or controlling water in its natural course or location, by means of a control structure, ditch, canal, flume, reservoir, bypass, pipeline, conduit, well, pump, or other structure or device."

The undisputed evidence concerning the makeup of the Globeville Project -- its replacement dam, technologically superior SCADA headgates, and the 900-foot long concrete approach channel, which is separate and parallel to the South Platte River, all support the water court's finding that the project constitutes a change in point of diversion under the

¹⁸ The water court also required that excess flows be returned at the sand out gate at the original Burlington headgates rather than at the Sand Creek turnout two miles downstream, and that the Companies should bypass water in order to replicate historical flows at the 64th Avenue gauge.

plain language of the statute. The water court found that the water diverted from the river is controlled in an artificial structure hydrologically disconnected from the River at all times. This determination is entitled to deference, and we will not disturb it on appeal because it is based on evidence in the record. Bijou Irrigation Co., 926 P.2d at 88.

The Companies argue that our decision in Downing v. Copeland, 126 Colo. 373, 249 P.2d 539 (1952) controls the outcome here. In Downing, we concluded that the new channel constructed in that case did not constitute a change because the point of diversion "was and continued to be the point at which the water was diverted from the bed of the stream at the headgate of plaintiff's ditch." 126 Colo. at 375, 249 P.2d at 540. Despite similarities between the two matters concerning new instream diversion facilities, Downing is distinguishable on both the facts and the law. The most significant factual distinction concerns the key question of what structure actually controls diversions. In Downing, water continued to be diverted at the original headgate. Here, the original, manually-operated Burlington headgates are rarely if ever utilized, and function only to prevent overflow into the Canal in certain circumstances, such as a storm surge. Instead, the upstream, SCADA-operated headgates actually control diversions into the Burlington Canal. The new Globeville Project is able to

efficiently divert up to 1000 cfs whereas the original manual system began to overtop the original dam when diversions reached 700 cfs.

Alternatively, Lochbuie argues that the Globeville project did not require approval for a change in point of diversion because it was merely a permissible extension of the head of a ditch upstream in order to maintain diversions. The right of a ditch owner to maintain flow by modification is codified in section 37-86-111, C.R.S. (2010):

In case the channel of any natural stream becomes so cut out, lowered, turned aside, or otherwise changed from any cause, as to prevent any ditch, canal, or feeder of any reservoir from receiving the proper inflow of water to which it may be entitled from such natural stream, the owners of such ditch, canal, or feeder have the right to extend the head of such ditch, canal, or feeder to such distance up the stream which supplies the same as may be necessary for securing a sufficient flow of water into the same. . . . The priority of right to take water from such stream through such ditch, canal, or feeder as to any such ditch, canal, or feeder shall remain unaffected in any respect by reason of such extension; but no such extension shall interfere with the complete use or enjoyment of any ditch, canal, or feeder.

(emphasis added). While it is true that the extension of the head of a ditch is permissible, both under our decision in Downing and under the statute, Companies and Lochbuie fail to effectively rebut the key principle underlying our system of appropriation: no injury to other water rights. Indeed, section 37-86-111's approval of ditch extension includes a critical

caveat: that no extension shall interfere with another appropriator's system.

The water court determined that the Globeville Project's structures will enable larger and more effective diversions, thereby injuring vested water rights on the already over-appropriated South Platte River. We uphold the water court's determination because its findings accord with the statutory requirements for a change of water rights. See § 37-92-105(3) (change of water right approved if it will not injure other vested or conditional water rights); § 37-92-103(5) (a change of water right includes a change in the point of diversion). Companies failed to prove that the increased capacity and efficiency of the new Globeville Project will not result in an increase in extraction from the South Platte in comparison to the old headgate's historical take.

The water court properly imposed protective operational terms and conditions on the newly decreed diversion created by the Globeville Project. The court decreed that "[t]he new point of diversion for the Burlington Headgate is decreed for the requantified water rights found in paragraph 22 [Burlington-Barr and FRICO-Barr Water rights]."

E.

Resume Notice and the Scope of the Water Court's Decision

1. Applicable Law

Water court proceedings for the determination of water rights are in rem, taking into account the relative priorities of all water rights on a stream system. S. Ute Indian Tribe, No. 09SA374, 2011 WL 873305, at *6-7 (citing Well Augmentation Subdistrict v. City of Aurora, 221 P.3d 399, 408-09 (Colo. 2009)). The water court obtains jurisdiction over persons and property affected by an application for a change or other adjudication of water rights via the resume notice and newspaper publication provisions of section 37-92-302(3), C.R.S. (2010), and C.R.C.P. 90. Id. The purpose of section 37-92-302(3), which requires the water clerk to prepare a resume of all applications in the water division filed in the preceding month and publication in newspapers circulated within every county affected, is to alert all water users whose rights may be affected by the application. Bijou Irrigation Co., 926 P.2d at 24-25.

Compliance with statutory notice provisions is evaluated on the particular facts of the case. Id. Based on these facts, the reasonableness of notice is determined by an "inquiry standard -- whether the notice is sufficient to reveal to potential parties the nature of the claim being made, so that

such parties can determine whether to conduct further inquiry into the full extent of those claims so a determination can be made whether to participate in the proceedings.” Park Cnty. Water Pres. Coal. v. Columbine Assocs., 993 P.2d 483, 489-90 (Colo. 2000). The consequence of insufficient resume notice is that a water court cannot consider those matters not included within the application at issue and the resume notice issued pursuant to that application. Danielson v. Jones, 698 P.2d 240, 244 (Colo. 1985).

2. Analysis

The water court’s decree quantified historical consumptive use of the Burlington and FRICO rights originally put at issue in the application for various changes of water rights in Case No. 04CW362. As early as the 2003 agreement between FRICO, United, and ECCV, the Companies indicated their intent to pursue a “ditch-wide” or “system-wide” adjudication:

It is understood and consented to by FRICO that, consistent with the principles stated in Williams v. Midway Ranches Property Owners Ass’n., 938 P.2d 5151 (Colo. 1997), the adjudications conducted in the Barr-Milton Changes Cases shall result in a ‘ditch-wide’ determination of the historic consumptive use credit (on an Annual basis) attributable to the water rights of the Barr Lake Division, the Milton Lake Division, and the Burlington Company decree under Barr Lake.

Later, applicants United, FRICO and ECCV requested a “system-wide” basis of accounting in their application. The court’s decree requantified Burlington-Barr and FRICO-Barr Water rights,

limiting amongst other items, the 1885 Burlington direct flow right to 200 cfs for use above Barr Lake and restricting reservoir releases of Burlington 1885 storage rights from Barr Lake to the lands under the Hudson and Burlington Extension laterals as they existed in 1909. In its decree the water court stated that its system-wide analysis for changing the FRICO and Burlington water rights "applies only to those shares that have been used on farms that have gravity-based application and no other water supply" Decree provision 22.1 sets forth the "Use and Volumetric Limitation on the Water Rights" for the 1885 Burlington rights and the 1908 and 1909 FRICO rights.

On appeal, Henrylyn, Brighton and Thornton claim that the water court unlawfully overstepped its jurisdiction by requantifying shares that were never identified nor properly before the court for change. Instead, the parties contend that they would only be bound by the water court's system-wide requantification if and when they decide to change their Burlington and FRICO shares in the future.

A change of water right proceeding precipitates quantification based on actual historical consumptive use, in order to protect other appropriators. Midway Ranches, 938 P.2d at 523. The changes sought in the applications at issue before us include changes in use from irrigation to municipal purposes, changes in points of diversion and storage, and changes in

places of storage and use. The water court's determinations regarding the unlawful enlargement of the rights at issue in this case necessarily imposed limitations on those rights in order to prevent injury to other appropriators. See Santa Fe Trail Ranches Prop. Owners Ass'n, 990 P.2d at 52 (undecreed enlargement cannot be the basis for change decree); Bradley, 53 P.3d at 1169.

The parties do not contest the fact that resume notice was properly published for the applications in Case Nos. 02CW105 and 04CW362. The resume in both cases was sufficient to place parties¹⁹ on notice: they contained detailed information on the water rights at issue, the location of the structures to which those water rights were decreed, and the scope and impact of the decree sought. See Dallas Creek, 933 P.2d at 38. Specifically, the resume in 04CW362 contemplated the future acquisition of additional FRICO-Barr and Burlington-Barr shares to support the ECCV project, and therefore requested:

a determination that additional shares in the Barr Lake and Milton Reservoir divisions of FRICO and the Barr Lake division of Burlington may be included within the terms and conditions of this application, and that the quantification of consumptive use and return flows attributable to such shares that are required to maintain the historic regimen of the stream shall be determined in this proceeding.

¹⁹ In response to the applications and resume notice published in both cases, Thornton, Henrylyn, and Brighton filed statements of opposition and participated in the trial before the water court, including presenting evidence, and commenting on the Decree.

Likewise, the resume in 02CW105 gave broad notice that applicants sought changes in the point of diversion and use for Burlington and FRICO direct flow water rights historically utilized on lands below Barr Lake. Upon publication of these notices, the water court obtained in rem jurisdiction over the Burlington and FRICO water rights at issue in the applications. See S. Ute Indian Tribe, 2011 WL 873305, at *7.

In Well Augmentation Subdistrict of the Central Colorado Water Conservancy District v. City of Aurora, 221 P.3d 399, 409 (Colo. 2009), we determined that, because water rights are decreed to points of diversion or storage, "the terms and conditions decreed by the water court attach to the water right and follow it regardless of who may own or operate the right." In the instant matter, the same rule applies: the water court below obtained in rem jurisdiction over the water rights clearly put at issue by the parties' change applications and properly noticed under section 37-92-302(3).

Henrylyn argues that, even if the water court had proper jurisdiction, it improperly limited Henrylyn's water rights contrary to a stipulation it signed with Aurora, Central and Englewood. Henrylyn relies upon language in the stipulation, approved by the court prior to the final Decree that "any determination . . . of historical usage, expanded use, yield per

share, or terms and conditions required to change the use of the FRICO or Burlington water rights shall not apply to, nor change the use of Henrylyn's 560 FRICO or its 123 Burlington shares." Henrylyn posits that the court's earlier order approving the stipulation was the law of the case, and therefore the court erred by refusing to incorporate it into the later Decree.

Stipulations are contracts, binding upon their signatory parties, and interpreted under contract law principles. USI Props. E., Inc. v. Simpson, 938 P.2d 168, 173 (Colo. 1997). The incorporation of a stipulation into a decree precludes signatory parties from "advancing legal contentions contrary to the plain and unambiguous terms" of the stipulation. Id. Stipulations also serve as binding judicial admissions as to their signatory parties, but they do not bind those who do not sign them. Id. at 175 (citations omitted); Midway Ranches, 938 P.2d at 527.

In Colorado River Water Conservation District v. Bar Forty Seven Co., 195 Colo. 478, 481, 579 P.2d 636, 638 (1978), we determined that a court cannot refuse to give effect to a stipulation of parties settling the terms of a change in water rights without providing reasons for such a refusal. In Bar Forty Seven Co., the water court denied a party's motion to amend a previously entered decree. 195 Colo. at 480, 579 P.2d at 637. The court gave no reason for the denial, but erroneously stated that the purpose of the stipulation could be

achieved by recording in the office of the county clerk and recorder. 195 Colo. at 481, 579 P.2d at 638. Henrylyn relies heavily upon our finding in Bar Forty Seven Co. for its argument that the water court below erroneously refused to incorporate the terms of the stipulation it approved of between Henrylyn, Aurora, Central, and Englewood.

Henrylyn's argument fails on several counts. First, the stipulation in Bar Forty Seven Co. was entered after the referee in that case entered findings and a ruling. In the present matter, the stipulation was approved by the court on May 13, 2008, well before the Court's findings and orders were entered on September 5, 2008, and nearly a year before the court's final decree was entered on May 11, 2009. In fact, the water court below explicitly rejected Henrylyn's motion for reconsideration of the court's order and decree, stating that the applicants "failed to present any arguments that would justify reconsideration or reversal of the comprehensive findings of fact and conclusions of law made by the court in this case."

The water court's decision was not erroneous, capricious, or arbitrary. Instead, the court was well within its discretion to reject Henrylyn's arguments and refuse to incorporate the terms of the parties' stipulation into its final Orders and Decree. The opinion Henrylyn relies upon, Bar Forty Seven Co. itself affirms this principle: under "section 37-92-301(3),

administration of water rights in this state is under water court decrees, not stipulations." 195 Colo. at 481, 579 P.2d at 638. We will not disturb the water court's decision not to incorporate the parties' stipulation in its final judgment and decree.

The water court did not err in its conclusions of law; its factual findings are supported by the evidence.

III.

Accordingly, we affirm the water court's judgment and decree.

Opinions of the Colorado Supreme Court are available to the public and can be accessed through the Court's homepage at <http://www.courts.state.co.us/supct/supctcaseannctsindex.htm>. Opinions are also posted on the Colorado Bar Association homepage at www.cobar.org.

ADVANCE SHEET HEADNOTE

May 31, 2011

AS MODIFIED June 20, 2011

No. 09SA133, Burlington Ditch, Reservoir and Land Co. v. Englewood - Determination of Historical Consumptive Use of Water Rights - § 37-92-305, C.R.S. (2010) - Unlawful Enlargement of Water Rights - The "One Fill" Rule - Preclusive Effect of Prior Water Court Orders and Decrees - New Structures and Points of Diversion

Appellants -- Burlington Ditch, Reservoir and Land Company ("Burlington"), Farmers Reservoir and Irrigation Company ("FRICO"), United Water and Sanitation District ("United"), Henrylyn Irrigation District ("Henrylyn"), and East Cherry Creek Valley Water and Sanitation District ("ECCV") -- challenge the order and decree of the water court regarding its determination of historical consumptive use of water rights, the effect of prior decrees and new structures related to the Burlington Canal, the application of the one-fill rule, and the impact of these decisions on appellants' senior rights to use the waters of the South Platte River.

The case below arose from two applications seeking changes in points of diversion and storage of water rights, as well as change from irrigation to municipal use for Burlington and FRICO water rights with 1885, 1908 and 1909 priority dates. These

changes were precipitated by the United-ECCV Water Supply Project, aimed at providing a renewable source of water to replace Denver Basin groundwater upon which ECCV previously relied.

In order to prevent an unlawful enlargement of the Burlington-FRICO water rights, the water court limited the Companies' 1885 Burlington direct flow water right to 200 cfs historically diverted and used for irrigation above Barr Lake. Likewise, the 1885 Burlington storage right was limited to annual average reservoir releases of 5,456 acre-feet. The water court further determined that seepage gains into the Beebe Canal, water collected through the Barr Lake toe drains, as well as diversions at the Metro Pumps could not be given credit in the calculation of historical consumptive use. The court determined that historical releases from Barr Lake rather than a pro rata share of the "one fill rule" constitute the proper measure of storage rights. The water court concluded that its system-wide analysis of historical consumptive use was not precluded by the orders and decrees issued in Cases Nos. 54658 and 87CW107. The court imposed conditions to prevent injury to other water rights by the heretofore undecreed diversions via the Globeville Project.

The Supreme Court upholds the water court's judgment and decree.

<p>SUPREME COURT, STATE OF COLORADO 101 West Colfax Avenue, Suite 800 Denver, Colorado 80202</p> <p>Appeal from the District Court Water Division 1, Case No. 02CW403 Honorable Roger A. Klein, Judge</p>	<p>Case No. 09SA133</p>
<p>Applicant-Appellants:</p> <p>Burlington Ditch Reservoir and Land Company; Farmers Reservoir and Irrigation Company; United Water and Sanitation District; Henrylyn Irrigation District; and East Cherry Creek Valley Water and Sanitation District,</p> <p>and</p> <p>Opposers-Appellants:</p> <p>City of Thornton; City of Brighton; and City and County of Denver, acting by and through its Board of Water Commissioners,</p> <p>Opposer-Appellant/Opposer-Appellee:</p> <p>City of Englewood,</p> <p>v.</p> <p>Opposers-Appellees:</p> <p>Metro Wastewater Reclamation District; Public Service Company of Colorado, d/b/a Xcel Energy, Inc.; Town of Lochbuie; Platte Valley Irrigation Company; City of Aurora; Golf Course Heritage Todd Creek; Todd Creek Farms Metro District; Centennial Water & Sanitation District; City of Boulder; Harmony Ditch Company; Irrigationists' Association; State Board of Land Commissioners; Colorado Division of Wildlife; City of Black Hawk; City and County of Broomfield; Lower Latham Reservoir Company; Aggregate Industries-WCR, Inc.; Albert Frei & Sons, Inc.; Henderson Aggregate, Ltd.; HP Farms, Inc.; PV Water Holdings, LLC; Adams County Board of Commissioners; Riverside Irrigation District; Riverside Land Company; Brighton Ditch Company; Parker Water and Sanitation District; Platteville Irrigating & Milling Company;</p>	

Central Colorado Water Conservancy District; South Adams County Water & Sanitation District; Rangeview Metropolitan District; Equus Farms, Inc.; State Water Engineer; Fulton Irrigation Ditch Company; City of Greeley; Northern Colorado Water Conservancy District; Bijou Irrigation District; City of Commerce City; David DeChant; Consolidated Ditches Company of District No. 2; City of Sterling; and Arapahoe County Water & Wastewater,

Appellee Pursuant to C.A.R. 1(e):

James Hall, Division Engineer for Water Division No. 1.

JUDGMENT AFFIRMED
EN BANC
May 31, 2011

Modified Opinion. Marked revisions shown.

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Justice HOBBS delivered the Opinion of the Court.

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In this appeal from a judgment of the District Court for Water Division No. 1, applicant-appellants, Farmers Reservoir and Irrigation Company ("FRICO"), Burlington Ditch, Reservoir and Land Company ("Burlington"), Henrylyn Irrigation District ("Henrylyn") -- collectively "Companies" -- and the United Water and Sanitation District ("United"), and East Cherry Creek Valley Water and Sanitation District ("ECCV") challenge the water court's decisions regarding historical consumptive use, the effect of prior decrees, the effect of new structures, the water court's one-fill rule analysis, and the impact of these determinations on appellants' rights to use the waters of the South Platte River.²⁰ The Opposer-Appellants -- parties who

²⁰ Appellants phrase the issues on appeal as follows:

- A. Effect of final water court decrees and orders:
 - 1. Did the water court improperly interpret the decree in Case No. 11200 with respect to the original scope of the absolute Burlington 1885 water rights?
 - 2. Does Case No. 54658 preclude reconsideration of the decreed amounts of the 1885 Burlington water rights?
 - 3. Do Case No. 87CW107 and other Burlington change cases preclude reconsideration of the diversion rate for the Burlington 1885 direct flow right and the use of the Metro Pumps?
 - 4. Did the water court improperly limit Henrylyn's water rights, contrary to the stipulation and order approving the stipulation?
 - 5. Did the water court wrongfully collaterally attack existing decrees and limit existing rights?
- B. Determination of Historical Consumptive Use ["HCU"]:
 - 1. Did the water court err in finding an unlawful expansion unsupported by the evidence and based on a mistake of fact in HCU analysis of the Burlington direct

opposed the initial application but also take issue with the water court's decree include the City of Thornton ("Thornton"), the City of Englewood ("Englewood"), the City of Brighton ("Brighton"), and the City and County of Denver ("Denver"). Opposer-Appellees include the State Engineer and Division Engineer for Water Division No. 1 ("State Engineer"), the City of Aurora ("Aurora"), the Central Colorado Water Conservancy District ("Central"), and Public Service Company of Colorado ("Public Service" d/b/a Xcel Energy). Because of the broad scope of the water court's determinations, the parties are not uniformly aligned, but rather have argued for their particular interests issue by issue.

-
- flow and storage rights, and further err by restricting the direct flow rights to use on lands above Barr Lake?
2. Did the water court apply improper study periods in defining the HCU of the 1885 Burlington water rights?
 3. Did the water court improperly exclude seepage through the Barr Lake toe drains and seepage gains into the Beebe Canal in computing HCU?
- C. Effect of New Structures on the Burlington Canal:
1. Did the water court improperly limit HCU that was based on use of water from the Metro Pumps?
 2. Did the water court err in finding that the Metro Pumps constitute an unlawful change in point of diversion, and in imposing terms and conditions on the use of the Metro Pumps which resulted in a windfall to PSCo [Public Service]?
 3. Did the water court err by treating the Globeville Flood Control Works as a new point of diversion?
 4. Did the water court err by imposing terms and conditions for measurements at the Globeville flood control dam?
- D. Did the water court wrongly overturn the One-Fill Rule?
- E. Did the water court wrongly limit water rights that were not presented to it for change?

Based upon the record in this change of water rights proceeding, we uphold the findings of fact, conclusions of law, judgment and decree of the water court, including these: in order to prevent an unlawful enlargement of the Burlington and FRICO water rights, the Companies' 1885 Burlington direct flow water right is limited to 200 cfs historically diverted and used for irrigation above Barr Lake; the 1885 Burlington storage water right is limited to annual average reservoir releases of 5,456 acre-feet historically used on lands under the Hudson and Burlington Extension laterals as they existed in 1909; seepage gains into the Beebe Canal, as well as water collected through the Barr Lake toe drains, cannot be counted towards the Companies' historical consumptive use under the 1885 Burlington and 1908 and 1909 FRICO water rights; historical releases from Barr Lake rather than operation of the "one-fill rule" constitute the proper measure of Companies' storage rights in this change of water rights proceeding; the water court's system-wide analysis of historical consumptive use is not barred by claim or issue preclusion due to the orders and decrees issued in Cases Nos. 54658 and 87CW107; the Metro Pumps are a heretofore undecreed point of diversion for which prior diversions cannot be given credit in calculating historical consumptive use; the Globeville Project is also a previously undecreed point of diversion, subject to the water court's

imposition of terms and conditions to prevent injury to other water right holders; the water court's judgment and decree do not exceed the scope of its jurisdiction; and the decree contains appropriate conditions to prevent injury to other water rights resulting from the change of water rights.

Accordingly, we uphold the water court's judgment and decree.

I.

The United-ECCV Water Supply Project ("project") is a multi-million dollar effort to provide a renewable source of water to replace the Denver Basin nontributary groundwater upon which ECCV has previously relied for use in its service area. ECCV serves about 50,000 customers in the southeastern Denver metropolitan area within Arapahoe County. Current demand for water in ECCV's service area is about 9,000 acre-feet per year, but ECCV projects that, within the next twenty years, it will serve 70,000 customers with an annual water demand of 14,000 acre-feet.

In 2003, ECCV entered into an agreement with FRICO and United to implement the project. Water supplies contemplated as part of the project include shares diverted from the South Platte River under the 1885 Burlington water rights and the 1908 and 1909 FRICO water rights for beneficial use on farms located north of Denver and Arapahoe Counties.

United is a special district. It owns several facilities, including the United Reservoir and the Beebe Draw pipeline from United Reservoir to Barr Lake. The United/ECCV well field gathers water in Beebe Draw north of Barr Lake. Water pumped from the well field is hydrologically connected to the South Platte River. The changed water rights will augment well field depletions, as well as being capable of use by direct delivery into ECCV's system. Water pumped from the well field will be delivered through the ECCV pipeline, traveling thirty-one miles to ECCV's storage tanks near Smoky Hill Road and Highway E-470 for use in ECCV's service area in Arapahoe County.

In pursuit of this project, applicants sought changes of the 1885 Burlington and 1908 and 1909 FRICO water rights historically utilized for irrigation on farms by means of gravity flow ditches below Barr Lake in order to make municipal-related uses in the future. The augmentation plan necessary for the project is part of this case, but is not being addressed in this appeal.

Issues we address in this appeal result from several consolidated cases before the water court, in which applicants sought decrees confirming conditional water rights and exchanges, changes of points of diversion and storage, and changes of use for senior water rights. They include Case Nos. 02CW105 and 04CW362. In Case No. 02CW105, the Companies made

various claims to change decreed water rights on the South Platte River including a change in point of diversion and place of storage for the Burlington and FRICO water rights.²¹

In Case No. 04CW362, FRICO, United and ECCV sought a change from irrigation to municipal use of the 1885 Burlington and 1908 and 1909 FRICO water rights historically utilized below Barr Lake, and approval of the augmentation plan involving ECCV's well field and pipeline. Resume notice in the case describes applicants as seeking "a change of water right for the Shares premised upon a 'ditch-wide' methodology in accord with the principles recognized by the Colorado Supreme Court in Williams v. Midway Ranches"

Cases 02CW105 and 04CW362 were consolidated into Case No. 02CW403, at issue in this appeal. The water court held a sixteen-day trial and entered its Findings of Fact, Conclusions of Law, and Order ("Order") on September 5, 2008. On May 11, 2009, the court entered its Findings of Fact, Conclusions of Law, and Decree ("Decree"), fully incorporating its previous Order. The court made numerous factual and legal findings.

For purposes of this appeal, the water court's significant determinations include reducing the Burlington 1885 direct flow water right from 350 to 200 cubic feet per second ("cfs") and

²¹ The conditional rights and exchanges associated with this case are not at issue in this appeal.

restricting its use to lands above Barr Lake, based on the legal historical use of Burlington shares during a study period of 1885 to 1909. The court also limited releases from Barr Lake under the Burlington 1885 storage right to lands under the Hudson and Burlington Extension laterals, irrigated prior to FRICO's 1909 involvement in the system at an annual average of 5,456 acre-feet per year; the court employed a study period of 1927 to 2004 in making this analysis.

In making historical consumptive use determinations, the water court disallowed credit for water collected through Barr Lake toe drains, seepage gains into the Beebe Canal, and diversions previously made by the Metro Pumps, an undecreed point of diversion. It ordered diversions by the Metro Pumps in the future to be limited to the amount of water physically and legally available for diversion at the Burlington headgate. Likewise, the court found that the Globeville Flood Control Project constituted a previously undecreed point of diversion and included conditions preventing an enlargement.

A. The Burlington-Barr Lake System

The present day Burlington-Barr Lake system consists of the Little Burlington Canal (which was the original Burlington canal), the newer, enlarged Burlington-O'Brian Canal ("Burlington Canal"), and the enlarged Barr Lake (formerly the Barr and Oasis reservoirs). Both canals divert from the South

Platte River at the Burlington headgate in proximity to the Denver-Adams County line.²² These two canals overlap for several miles, running northeastwardly from the headgate. After their separation, the Little Burlington runs just north of the Burlington Canal, delivering water into the Little Burlington system above Barr Lake. The Burlington Canal runs towards Barr Lake -- a large reservoir formed from the two original Burlington Company reservoirs, Barr Lake and Oasis reservoirs. Before the Burlington Canal terminates at Barr Lake, the Denver-Hudson Canal takes water that it then delivers into the Henrylyn system.

Numerous lateral ditches carry water out of Barr Lake. The East and West Burlington Extension canals were ~~part of the early Burlington system prior to the involvement of FRICO in 1909;~~ these the primary canals delivering stored water to lands below Barr Lake prior to FRICO's involvement in 1909. The present system includes these canals and in addition, the Speer and Neres Canals -- ~~(formerly the East and West Hudson laterals)~~, which were in a state of disrepair and rarely used before FRICO improved and expanded ~~by FRICO beginning in 1909~~them. These canals irrigate additional acreage below Barr Lake due to FRICO's involvement.

²² The water collection and diversion system associated with the Burlington headgate was changed significantly by the Globeville Project, discussed in sections I.G. and II.D.2.b below.

Under a 1921 agreement, the Companies (FRICO, Burlington and Henrylyn) share water within the Burlington-Barr Lake system.²³ FRICO operates the Burlington-Barr Lake system. Based on the testimony of FRICO's general manager Mr. Montoya, the water court found that shareholders in the Little Burlington system have a right to receive the first 200 cfs of flow attributable to the 1885 Burlington direct flow above Barr Lake. After the Little Burlington system is satisfied, FRICO allocates to Henrylyn one-half of the direct flow water in the Burlington Canal that reaches the Denver-Hudson bifurcation point.

A 2003 Agreement between ECCV, FRICO and United made United responsible for acquiring water rights and constructing facilities for ECCV's Northern Water Supply Project. United was required to acquire and change Burlington and FRICO shares to municipal and augmentation uses.²⁴ This contractual agreement precipitated this case.

²³ The greater FRICO system consists of four reservoir divisions: Standley Lake and Marshall Lake are west of the South Platte River, while Barr Lake and Milton Lake are east of the South Platte. The Barr Lake division is at issue in this appeal. There are 2,759 FRICO shares allocated for delivery in the Barr Lake division, and FRICO owns 1,257 of the 2,111 Burlington shares allocated for delivery at or below Barr Lake in the Burlington-Barr Lake system. The Little Burlington system is a subdivision of shareholders within the Burlington-Barr Lake system.

²⁴ In related agreements, FRICO, Burlington and Henrylyn obtained the right to use the United Diversion Facility No. 3, the United Reservoir, and the Beebe Pipeline, and United and FRICO entered into a mutual water carriage and storage agreement.

B. Burlington 1885 Water Rights Under Case No. 11200

Burlington began constructing the original Burlington diversion works in November of 1885 and applied for a decree in 1893. In Case No. 11200, the district court issued a decree for the canal with a priority date of November 25, 1885, for (1) a direct flow right for 350 cfs from the South Platte River and (2) a storage right in Barr Lake and Oasis Reservoir to be filled at 350 cfs from the South Platte River. In issuing its decree in 1893, the district court adopted the findings of the referee. The abstract of testimony the referee prepared identified 12,000 acres of land for irrigation. The abstract also referred to 28,000 acres "susceptible to being irrigated" below the reservoirs:

the amount of land capable of irrigation by said ditch between the headgate and the reservoirs is 12,000 acres, and the amount of lands susceptible to being irrigated by the water of said ditch and said reservoirs lying North and North-west and North-east from said reservoirs is 28,000 acres, in addition thereto, in fact the amount is unlimited as it may continue to the eastern line of Colorado.

Construing the language of the decree for the 1885 water rights direct flow and storage rights priorities, examining the referee's documents, and the setting of the historical exercise of the Burlington appropriations prior to FRICO's

involvement in the system commencing in 1909, the water court determined that the 1885 direct flow and storage right priorities were limited to uses made under the Burlington system prior to FRICO's expansion of the system for irrigation uses below Barr Lake. Exercise of the 1885 direct flow right diverted for use above the reservoirs was limited to the 200 cfs diversion by Burlington prior to FRICO's involvement and stored water releases from Barr and Oasis Reservoirs, subsequently enlarged and combined within Barr Lake by FRICO, was limited to an annual average of 5,456 acre-feet:

The Court finds that the lawful use of the Burlington 1885 direct flow water is limited to 200 c.f.s. for use above Barr Lake. The annual average 1885 Burlington direct flow right release from Barr Lake is 0 AF, and there is no historical use credit for this water right in the change case

Reservoir releases of the Burlington 1885 storage rights from Barr Lake are limited to the lands under the Hudson and Burlington Extension laterals as they existed in 1909 The annual average 1885 Burlington storage right release from Barr Lake is 5,456 AF after adjustment of disallowed seepage, toe drain discharge and Metro Pumpage, and the cumulative total 20-year release under this right is limited to 109,120 AF. The maximum annual 1885 storage right release from Barr Lake is limited to 8,450 AF.

c. FRICO Expansion in 1909 and Case No. 54658

FRICO first contracted with Burlington in 1909. In this contract, Burlington conveyed to FRICO whatever its rights may be to water "in excess of those rights [that] entitled the

Burlington Company to fill Barr/Oasis . . . and in excess of the water now obtained and used for direct irrigation." The water court found that after the Burlington and FRICO companies entered into the 1909 contract, FRICO introduced the 150 cfs of "excess" Burlington water into the system and spread it for use on acreage below Barr Lake. In addition, FRICO enlarged a portion of the Burlington Canal, the Burlington headgate, and the original Oasis dam in constructing and operating a combined system known as FRICO's "Barr Lake Division."

In Case No. 54658, adjudicated in 1924, FRICO filed a statement of claim for a 1902 priority in the enlarged Burlington Canal, as well as for adjudication of its enlargement of Barr Lake. The district court disagreed that FRICO was entitled to a 1902 priority. In denying the claimed 1902 priority date, the court determined that the persons claiming it had been speculating on potential water use, as opposed to diligently placing the claimed water to a beneficial use. The district court recognized a priority of 1908 for a direct flow right of 600 cfs of South Platte River water, finding that the 1902 survey had not resulted in diligent pursuit of the project and there was no need for the water:

It appears that the moving spirits who up to 1909 were claiming this appropriation were men who did not live on the land under the proposed enlargement. They were speculating in land in that vicinity, expecting in an indefinite way someone would appear who would

need the additional appropriation. In the meantime, they did some work to keep up the semblance of holding on to their claim. This work was not such an open physical demonstration and such steadiness of purpose as is usual in like enterprises and was not evidenced by such diligence in work as entitles said appropriation of 600 cubic feet per second related to that survey.

If there was no immediate need for the water to be applied to a beneficial use, a dog in the manger policy supporting the filing should not be given advantage as against other projects which in the meantime had initiated other appropriations.

In addition to the canal enlargement 1908 priority, the district court granted FRICO a 1909 storage right enlargement for 900 cfs of flow into storage between the levels of 19.1 feet and 34 feet deep in Barr Lake.

In the case before us, the water court found that approximately 1,350 acres were being irrigated through reservoir releases for irrigation below Barr Lake as of 1893 -- the date the district court entered the Burlington decree in No. 11200. From 1885 to 1900, irrigation acreage ranged from several hundred acres to just under 3,000 acres.

The water court found that FRICO's involvement in the Burlington-Barr Lake system precipitated the enlargement of the Burlington Canal, the raising of the dam at Barr Lake, and the construction of the Speer, Neres, and Beebe Canals in order to greatly expand the irrigated acreage below Barr Lake:

Following FRICO's involvement in the Burlington system, the Burlington-O'Brian Canal was enlarged, the dam at Barr Lake was raised, and the Speer, Neres, and

Beebe Canal outlets were constructed. The Speer, Neres, and Beebe Canals totaled around 140 miles in length. These new outlet canals in particular increased the ability to deliver water through and from Barr Lake and permitted the 1885 Burlington water rights to be used on additional acreage. In short, additional acres could be irrigated because the ability to deliver water through and from Barr Lake greatly expanded after FRICO's involvement.

Thus, the water court found that construction of these canals provided the need for the FRICO enlargement priorities and the need for expanded use of the 1885 Burlington direct flow right to 350 cfs from the 200 cfs Burlington Company had effectuated prior to FRICO's involvement in 1909. This need did not exist when the 1885 Burlington appropriations were made.

Thus, the water court barred the Burlington and FRICO shareholders from claiming historical consumptive use credit under the 1885 Burlington priorities for the expanded acreage irrigated below Barr Lake.

D. Thornton Case No. 87CW107

In 1987, Thornton sought to change its 501.455 Burlington shares from irrigation to municipal uses. The application in Case No. 87CW107 sought to change only Thornton shares served by the Little Burlington Division of the Burlington Company:

This application does not seek to change the use of water rights represented by any of Thornton's shares served by the O'Brian Division of the Burlington Company or by any shares owned by Thornton in the Farmers Irrigation and Reservoir Company - Barr Lake Division.

The water court in Case No. 87CW107 determined that the consumptive use credit available to Thornton under the 1885 direct flow Burlington rights utilized above Barr Lake was 1,326 acre-feet annually.

In the case now before us, the water court ruled that the decree in No. 87CW107 did not preclude the water court from conducting a system-wide analysis of historical consumptive use credits available to the Burlington and FRICO shareholders for uses below Barr Lake.

E. Historical Consumptive Use Determination by the Water Court

In determining historical consumptive use, the water court limited Burlington's 1885 direct flow right to 200 cfs based on a study period from 1885 to 1909. The water court found that this period was consistent with its "determination regarding the lawful historical use of the 1885 Burlington direct flow water right." It found that no evidence existed to show that the Burlington Company intended to irrigate lands below Barr Lake with 1885 Burlington direct flow water:

The court is not persuaded that the Burlington Company or FRICO had the right to build out the Burlington System under the 1885 priorities due to the lack of evidence of any intent to irrigate the amount of lands claimed to be irrigable under Barr Lake . . . the referee's findings state that 12,000 acres of land is irrigable under the Burlington Canal and the evidence establishes that Burlington diverted up to 200 cfs to irrigate those lands. However, Applicants point to no portions of the record in Case No. 11200 or any other

evidence that would indicate that the Burlington Company intended to irrigate lands below Barr Lake with 1885 Burlington direct flow water.

The water court concluded that, even if the decree in Case No. 11200 had been for a conditional water right decree giving Burlington the opportunity to build out the Burlington system to serve the 28,000 acres below Barr Lake, such a right did not mature because diversions stayed under 200 cfs for twenty-four years from 1885 until the involvement of FRICO in 1909 -- a period too long to meet the test of reasonable diligence. In finding that FRICO unlawfully enlarged the Burlington rights, the court observed, "additional acres could be irrigated because the ability to deliver water through and from Barr Lake greatly expanded after FRICO's involvement."

F. Barr Lake Toe Drains and Beebe Canal Seepage Gains

To prevent instability from water seeping into the earthen Barr Lake Dam, FRICO built a "toe drain" system. The system is built into the dam and works to drain and collect the seepage. An average of about 2 cfs of collected water is delivered into the Beebe Canal, along with water released from Barr Lake. In addition to water collected via the toe drains, the Beebe Canal also collects seepage and return flows from Barr Lake and other small reservoirs and irrigated lands within the Beebe Draw.

Thus, Beebe Canal is a "gaining ditch," because more water is delivered from the Beebe Canal than is released into it from

Barr Lake. The water court found that this "seepage gain" averaged 1,200 to 1,300 acre-feet per year from 1927 to 2005.

The water court determined that neither the water collected from the toe drain system, nor the overall seepage gain into the Beebe Canal, could be counted towards the Companies' calculation of historical consumptive use of the 1885 Burlington and 1908 and 1909 FRICO water right priorities.

G. New Structures on the Burlington Canal: the Metro Pumps and the Globeville Flood Control Project

Prior to 1966, Denver's Northside Wastewater Treatment Plant ("Northside") discharged treated effluent into the South Platte River above the Burlington headgate. Northside thus provided a potential source of supply for the Companies to divert downstream at the Burlington headgate. From 1952 to 1963, Northside discharged an average of 68,000 acre-feet annually. The Companies did not establish in the water court proceedings how much of this effluent was legally and physically available to the Companies at the Burlington headgate or how much was actually diverted.²⁵

In 1966, Northside was replaced by the Metro Plant, which operates about 1.5 miles downstream from the Burlington headgate, negating the possibility of Denver effluent being

²⁵ Companies submitted data of annual discharge from Northside into the South Platte River at an average of 69,014 acre-feet from 1947 to 1966.

available for diversion at the Burlington headgate. The Companies brought an action against the Metro District in Metropolitan Denver Sewage Disposal District Number 1 v. Farmers Reservoir and Irrigation Company, 179 Colo. 36, 499 P.2d 1190 (1972) ("Metro"), claiming a continuing right to divert effluent despite the change in the point of return to a point downstream of the Burlington headgate.

Although we expressly did not give our "opinion on the right of the plaintiffs to the effluent," we determined that the Companies did not have a vested right to the point of return of the Northside effluent. Id. at 1192-93. The Companies, Denver, and the Metro District eventually entered an agreement outside of court in 1968 whereby Metro effluent would be discharged from the Metro Pumps directly into the Burlington Canal when the Burlington 1885 storage right was in priority. The Metro Pumps were not adjudicated as an alternate point of diversion, but from 1987 to 2007 they were utilized to deliver an average of 9,600 acre-feet of water annually to the Burlington Canal.²⁶

The second significant new structure relevant to this appeal is the Globeville Area Flood Control Project ("Globeville Project"), which significantly impacts the Burlington headgate.

²⁶ The combination of water available at the Burlington headgate on the South Platte River and water from the Metro Pumps between November and March of every year allows the Companies to send between 200 to 250 cfs to fill Barr Lake under the 1885 Burlington storage right.

The Globeville Project involved the construction of a number of structures designed to protect the Globeville neighborhood from a one-hundred year flood. The project also lowered significant portions of the South Platte River channel. Part of the historical elevation of the channel was maintained in order to allow the Companies to continue their diversions, and the existing Burlington diversion dam structure was removed and replaced with a new structure.

The replacement dam and SCADA headgates²⁷ divert water from a location 900 feet upstream from the original Burlington headgate on the South Platte River. Water is first diverted by the dam, and then it flows through the SCADA headgates into a four-sided box culvert. The water then flows into an "approach channel," separated from the main stem of the river by a concrete wall. The approach channel parallels the river for 900 feet, carrying a maximum capacity of 1000 cfs to the original Burlington headgates. Once the water passes through the Burlington headgates, it enters the Burlington Canal.

The Burlington diversion dam replaced by the Globeville structure had been in operation since 1935, and had a maximum capacity of 700 cfs before it began to spill water back into the South Platte River. Mr. Montoya, FRICO's general manager,

²⁷ The new headgates are automated and controlled by FRICO's Supervisory Control and Data Acquisition ("SCADA") system, which allows greater precision in diversions and tracking.

testified that diversions into the Burlington Canal are primarily controlled by the SCADA headgates located at the new upstream structure. The original Burlington headgates, which are still operational, are used only to prevent overflow into the Burlington Canal. Prior to the decree in this case, the new point of diversion was not adjudicated. As a condition for adjudicating this diversion, the water court limited diversions into the alternative point of diversion in order to prevent injury to other water rights.

We turn now to our decision.

II.

Based upon the record in this change of water rights proceeding, we uphold the findings of fact, conclusions of law and decree of the water court, including these: in order to prevent an unlawful enlargement of the Burlington and FRICO water rights, the Companies' 1885 Burlington direct flow water right is limited to 200 cfs historically diverted and used for irrigation above Barr Lake; the 1885 Burlington storage water right is limited to average annual reservoir releases of 5,456 acre-feet historically used on lands under the Hudson and Burlington Extension laterals as they existed in 1909; seepage gains into the Beebe Canal, as well as water collected through the Barr Lake toe drains, cannot be counted towards the Companies' historical consumptive use under the 1885 Burlington

and 1908 and 1909 FRICO water rights; historical releases from Barr Lake rather than operation of the "one-fill rule" constitute the proper measure of Companies' storage rights in this change of water rights proceeding; the water court's system-wide analysis of historical consumptive use is not barred by claim or issue preclusion due to the orders and decrees issued in Cases Nos. 54658 and 87CW107; the Metro Pumps are a heretofore undecreed point of diversion for which prior diversions cannot be given credit in calculating historical consumptive use; the Globeville Project is also a previously undecreed point of diversion, subject to the water court's imposition of terms and conditions to prevent injury to other water right holders; the water court's judgment and decree do not exceed the scope of its jurisdiction; and the decree contains appropriate conditions to prevent injury to other water rights resulting from the change of water rights.

**A.
Standard of Review**

We accept the water court's factual findings on appeal unless they are so clearly erroneous as to find no support in the record. Buffalo Park Dev. Co. v. Mountain Mut. Reservoir Co., 195 P.3d 674, 683 (Colo. 2008). The sufficiency, probative effect, weight of the evidence and the inferences drawn therefrom are for the water court to determine; we will not

disturb them on appeal. Gibbs v. Wolf Land Co., 856 P.2d 798, 801 (Colo. 1993). We review the water court's decision to admit or deny evidence for abuse of discretion. City of Englewood v. Burlington Ditch, Reservoir and Land Co., 235 P.3d 1061, 1066 (Colo. 2010).

The water court has authority to determine a prior decree's setting, intent, meaning and effect when adjudicating an application for a water use right or ascertaining the existence of an undecreed enlargement of a decreed water right. Southern Ute Indian Tribe v. King Consolidated Ditch Co., No. 09SA374, 2011 WL 873305, at *6 (Colo. 2011); In re Tonko, 154 P.3d 397, 404-05 (Colo. 2007); Cherokee Metro. Dist. v. Simpson, 148 P.3d 142, 146-47 (Colo. 2006).

We review de novo the water court's legal conclusions, including its interpretation of prior decrees. Englewood, 235 P.3d at 1066; Simpson v. Bijou Irrigation Co., 69 P.3d 50, 58 (Colo. 2003).

B. Determination of Historical Consumptive Use

1. Applicable Law

A water right is a usufructuary right, affording its holder the right to use and enjoy the property of another without impairing its substance. Thus, one does not "own" water but owns the right to use water within the limitations of the prior

appropriation doctrine. See § 37-92-103(12), C.R.S. (2010) (defining "water right" as "a right to use in accordance with its priority a certain portion of the waters of the state by reason of the appropriation of the same"); Kobobel v. Colorado Dept. of Natural Res., 249 P.3d 1127, 1130 (Colo. 2011). All water in or tributary to surface streams is the property of the public and is subject to appropriation and use, but may not be the target of speculation in circumstances where "[t]he purported appropriator . . . does not have a specific plan and intent to divert, store, or otherwise capture, possess, and control a specific quantity of water for specific beneficial uses." § 37-92-103(3)(a)(II), C.R.S. (2010); see § 37-92-102(1)(a), C.R.S. (2010).

A Colorado prior appropriation water right arises only by application of a specified quantity of water to an actual beneficial use. Empire Lodge Homeowners' Ass'n v. Moyer, 39 P.3d 1139, 1147 (Colo. 2001). The anti-speculation doctrine, which has existed in Colorado prior appropriation water law since its inception in Territorial and early-Statehood days, prevents unlawful enlargements, as well as curbs the appropriation of water not needed for actual beneficial use. See High Plains A&M, LLC v. Se. Colo. Water Conservancy Dist., 120 P.3d 710, 713 (Colo. 2005).

In 1907, irrigation expert Elwood Mead warned of the danger of recognizing water rights in excess of the actual need of the appropriators:

the real purpose has been to make money out of excess appropriations. The parties who have acquired surplus rights are unable to use the water themselves, and seek to sell them to some one who can . . . The usual result is to take as much water away from one user as is supplied to another.

Elwood Mead, Irrigation Institutions 148-49 (The MacMillan Company 1907) (reprint). Mead's commentary was contemporaneous with the development of the Burlington system and FRICO's expansion of it at issue in this case. So were the provisions of the 1881 and 1903 Acts by which the General Assembly required diligence in placing water to actual beneficial use and required the courts to differentiate between the original size and carrying capacity of canals and reservoirs, and enlargements thereto, in decreeing the priorities of water use rights. See Act of Feb. 23, 1881, sec. 4, 1881 Colo. Sess. Laws 144-46; Ch. 126, sec. 6, 1903 Colo. Sess. Laws 291-292; Dallas Creek Water Co. v. Huey, 933 P.2d 27, 36-37 (Colo. 1997). The 1919 Act provided for the filing for adjudication of all previously undecreed water rights and claims to occur within two years or suffer abandonment. Ch. 147, sec. 1-2, 1919 Colo. Sess. Laws 487-89.

Colorado law requiring the quantification of historical consumptive use in change proceedings guards against speculation and waste, ensuring optimum use and reliability in the prior appropriation system. Santa Fe Trail Ranches Prop. Owners Ass'n v. Simpson, 990 P.2d 46, 54-55 (Colo. 2005). No injury to other adjudicated water rights is a fundamental principle applicable to fashioning decrees in water cases. § 37-92-305, C.R.S. (2010). Injury involves diminution of the available water supply that a water right holder would otherwise enjoy at the time and place and in the amount of demand for beneficial use under the holder's decreed water right operating in priority. Farmer's Reservoir and Irrigation Co. v. Consolidated Mut. Water Co., 33 P.3d 799, 807 (Colo. 2001).

Change decrees are governed by the provisions of the Water Right Determination and Adjudication Act of 1969. A change of water rights will be approved only if the change will not injuriously affect other adjudicated water rights. § 37-92-305(3)(a). Terms and conditions to prevent injury may include relinquishment of part of the decree for which a change is sought "if necessary to prevent an enlargement upon the historical use or diminution of return flow to the detriment of other appropriators." § 37-92-305(4)(a)(II); see also Pueblo W. Metro Dist. v. Se. Colo. Water Conservancy Dist., 717 P.2d 955, 959 (Colo. 1986) ("once an appropriator exercises his or her

privilege to change a water right . . . the appropriator runs a real risk of a requantification of the water right based on actual historical consumptive use").

An applicant seeking a change of water right decree bears the burden of showing that injury to other adjudicated water rights will not result. Weibert v. Rothe Bros., Inc., 618 P.2d 1367, 1370 (Colo. 1980). If the applicant successfully meets this burden, objectors have the burden of going forward with evidence of injury to other adjudicated water rights. City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 88 (Colo. 1996) (citations omitted). We give deference to the water court's findings based on the evidence. Id. We will not overturn the findings on appeal unless they are so clearly erroneous as to find no support in the record. Id.

The amount of water available for use under the changed right employing the original priority date, see High Plains A&M, LLC, 120 P.3d at 720, is subject to a calculation of historical beneficial consumptive use lawfully made under the decreed prior appropriation. Williams v. Midway Ranches Prop. Owners Ass'n, Inc., 938 P.2d 515, 522 (Colo. 1997). Historical consumptive use under the adjudicated water right is calculated based upon a pattern of diversion and use over a representative period of time, expressed in acre-feet of water, and is the quantitative

measure of the water right. Id.; Cent. Colo. Water Conservancy Dist. v. Greeley, 147 P.3d 9, 14 (Colo. 2006) ("Jones Ditch").

The flow rate specified in a decree for a point of diversion is not equivalent to the measure of the water right, because every decree carries with it an implied provision that diversions are limited to those sufficient for the beneficial use for which the appropriation was made. Jones Ditch at 14. Our constitution guarantees a right to appropriate, not a right to speculate. Id.; Colorado River Conservation Dist. v. Vidler Tunnel Water Co., 197 Colo. 413, 416, 594 P.2d 566, 568 (1979).

a. Unlawful Enlargement

Appropriation of water for irrigation use is limited to the acreage the appropriator intended to irrigate when the appropriation was made. A water right is perfected only by actual application of the water to beneficial use; a conditional water right operates only to hold a place in the priority system, dependent on diligent placement of the water to use. Dallas Creek, 933 P.2d at 35-36; High Plains A&M, LLC, 120 P.3d at 720. A showing of diligence is supported by continuous project-specific effort aimed at developing a conditional right. Dallas Creek, 933 P.2d at 36. Specific actions demonstrating such effort may include project plans, expenditures, design and construction. Id. A conditional water right decree contains express language identifying it, in whole or in part, as a

conditional appropriation; otherwise, the decree is presumed to be for a perfected water right. See, e.g., Conley v. Dyer, 43 Colo. 22, 25, 95 P. 304, 305 (1908) (addressing decree containing language for both a perfected and a conditional appropriation). An irrigation water right cannot be lawfully enlarged for application to acreage beyond that for which the appropriation is accomplished, despite the flow rate specified on the face of the decree, in the absence of an adjudicated priority for the enlargement. Jones Ditch, 147 P.3d at 14-15.

Change proceedings scrutinize proposed alterations to existing decreed rights that may injure other decreed water rights. Trail's End Ranch, L.L.C. v. Colorado Div. of Water Res., 91 P.3d 1058, 1063 (Colo. 2004); Empire Lodge, 39 P.3d at 1156; State Eng'r v. Bradley, 53 P.3d 1165, 1168 (Colo. 2002). The calculation of consumptive use credits allowed through a change proceeding does not include water from an undecreed enlargement, even if there has been a long period of enlarged usage. Jones Ditch, 147 P.3d at 16.

The law's prohibition against undecreed enlargements protects flows upon which other appropriators rely in order of their decreed priorities. Water Supply and Storage Co. v. Curtis, 733 P.2d 680, 682-83 (Colo. 1987). Water native to the stream system is limited to one use in that system and return

flows belong to the stream system as part of the public's resource, subject to appropriation and administration. Id.

b. The One-Fill Rule

The "one-fill rule" of Colorado water law serves to prevent injury to other appropriators by prohibiting a reservoir from making more than one fill annually based on its adjudicated priority. Windsor Reservoir & Canal Co. v. Lake Supply Ditch Co., 44 Colo. 214, 223, 98 P. 729, 733 (1908) ("By necessary construction, the statute which provides for these decrees [Ch. 124, sec. 2, 1903 Colo. Sess. Laws 278] forbids the allowance of more than one filling on one priority in any one year."); see Orchard City Irrigation Dist. v. Whitten, 146 Colo. 127, 142, 361 P.2d 130, 137-38 (1961) (limiting reservoir to one annual fill from multiple sources according to the terms of the decreed capacity of the reservoir).

In Westminster v. Church, 167 Colo. 1, 13, 445 P.2d 52, 58 (1968), we recognized the danger of municipalities enlarging acquired irrigation water rights where "the city will attempt to use a continuous flow, where the city's grantor only used the water for intermittent irrigation." We overturned the trial court's imposition of historical limitations on Westminster's rights because we determined, based on the facts of that case, that the City was entitled to "whatever water is available each year to fill" its storage decree. Westminster, 167 Colo. at 14,

445 P.2d at 58. We affirmed the rule announced in Windsor Reservoir and Canal Company, that “[a] reservoir right permits one filling of the reservoir per year.” Id.

In Southeastern Colorado Water Conservancy District v. Fort Lyon Canal Company, 720 P.2d 133, 146-47 (Colo. 1986), we clarified our holding in Westminster, explaining that “diminished return flows, whether due to change in direct-flow or storage rights, must be considered when calculating the amount of injury to other appropriators.”

In North Sterling Irrigation District v. Simpson, 202 P.3d 1207 (Colo. 2009), we once again addressed application of the one-fill rule, this time in reference to an irrigation district’s challenge to the imposition of a fixed water year measuring annual diversions into storage. In that case, we held that the state engineer’s office may utilize the one-fill rule in order to curtail diversions that may unlawfully enlarge a decree. Id. at 1211. We concluded that a fixed water year is “the administrative mechanism by which the one-fill rule lawfully limits” storage rights through enforcement. Id.

Storage itself is not a beneficial use; the subsequent use of stored water, such as irrigation of lands, is the beneficial use for which water is stored. See Upper Yampa Water Conservancy Dist. v. Dequine Family L.L.C., 249 P.3d 794, 799 (Colo. 2011). In a change of water rights proceeding, the

actual beneficial use made of the stored water must be ascertained and assigned its proper consumptive use credit per share in the ditch or reservoir company. See § 37-92-305(3)(a)-(4)(a)(II) (terms may be imposed to avoid injury "if necessary to prevent an enlargement upon the historical use or diminution of return flow to the detriment of other appropriators"). The statutory definition of "change of water right" for storage is broad. "Change of water right" includes:

a change in the place of storage, a change from direct application to storage and subsequent application, a change from storage and subsequent application to direct application, a change from a fixed place of storage to alternate places of storage, a change from alternate places of storage to a fixed place of storage, or any combination of such circumstances.

§ 37-92-103(5). The one-fill rule and the no injury rule are not mutually exclusive; they work in concert to ensure that no more than one fill of a reservoir is permitted per year and that stored water when applied to beneficial use will not unlawfully enlarge the water right to the detriment of other appropriators.

2. Analysis

a. Decree in Burlington Case No. 11200 and Calculation of Historical Consumptive Use

Our first step in reviewing the water court's calculation of historical consumptive use for change of the Burlington 1885 rights is to determine if the court properly interpreted the decree in Case No. 11200. Jones Ditch, 147 P.3d at 14 (exercise

of a decreed water right limited to the amount of water necessary to irrigate acreage connected to the appropriation regardless of flow rate stated in the decree).

The plain language of the 1885 decree describes a direct flow right to 350 cfs of water and a storage right of 11,000 acre-feet of water, without specifying where the water was to be applied. Applicants contend that the water court erred by refusing to count the 28,000 acres below Barr Lake described in the abstract of testimony as being "susceptible to being irrigated" within its calculation of historical consumptive use. The water court determined that this description did not evince intent to irrigate these acres, but merely described a vague potential for irrigation. We agree.

Read in context, the referee's description -- which referenced in the same sentence acreage "unlimited as it may continue to the eastern line of Colorado" -- does not meet our often-announced standard "that the use of water for irrigation is 'measured by the needs of the land for irrigation of which the water was decreed.'" Jones Ditch, 147 P.3d at 16; Enlarged Southside Irrigation Ditch Co. v. John's Flood Ditch Co., 120 Colo. 423, 429, 210 P.2d 982, 985 (1949).

The water court considered the development of the Burlington system up to 1909, the year FRICO purchased Burlington's so-called "excess water" through a 1909 agreement

the two Companies executed. This agreement specifically reserves to Burlington the use of the water it had developed under the 1885 rights:

Burlington Company hereby assigns, sells, sets over, grants and conveys to the said Farmers Company all the rights of the Burlington Company to water from the South Platte river ... belonging to or owned by or which accrued to it by virtue of any appropriation or filing heretofore made in excess of those rights entitling the said Burlington Company to fill Barr Lake and Oasis Reservoir to a level eighteen (18) inches above the floor of the head-gate of the Brighton lateral, and in excess of the water now obtained and used for direct irrigation . . .

(emphasis added).

The "excess water" is that which the Burlington shareholders had not put to beneficial use. The water court found that, in 1893, when the Burlington decree issued, the Burlington Canal terminated at Barr Lake and forty miles of outlet laterals had been constructed to utilize the waters from Barr Lake and Oasis Reservoir. The outlet laterals were described by the referee as constructed, not for the purposes of utilizing direct flow water, but for using storage water: "from said reservoir [Oasis Reservoir, now part of Barr Lake] for the purpose of taking and utilizing the waters therefrom."

The water court concluded that applicants provided no evidence demonstrating "that the Burlington Company intended to irrigate lands below Barr Lake with 1885 Burlington direct flow water." We defer to the water court's findings of fact in the

absence of clear error, and affirm the court's conclusion that the 1885 Burlington direct flow right does not include irrigation of lands below Barr Lake and the 1885 storage right is limited to releases on lands below Barr Lake for irrigation use that occurred prior to FRICO's enlargement of the diversion and distribution system.

Applying water to additional acreage, resulting in increased consumptive use above that perfected under ~~outside of the acreage originally contemplated by the~~ decree appropriation, is unlawful. Jones Ditch, 147 P.3d at 16; Fort Lyon Canal Co. v. Chew, 33 Colo. 392, 400, 81 P. 37, 39 (1905) (appropriator cannot authorize others to enlarge a decreed appropriation). The water court found the Burlington 1885 direct flow right was not appropriated for use below Barr Lake. Instead, the evidence demonstrated that the 12,000 acres between the headgate of the Burlington Canal and Barr Lake were the lands to be served by the 350 cfs direct flow right specified in the 1893 decree. Jones Ditch, 147 P.3d at 12 (affirming trial court's limitation on decree to the specific acreage in use at the time of the application). The water court found that the structures the Burlington Company built could divert only 200 cfs before FRICO's involvement in 1909. Taking into account the vague reference to additional lands susceptible of irrigation below Barr and Oasis reservoirs, evidence in the record supports

the water court's conclusion that the Burlington 1885 direct flow right historical consumptive use credit must be determined by use on lands irrigated above Barr Lake and the 1885 storage right credit by use on lands irrigated below Barr Lake prior to FRICO's enlargement of the system.

b. Unlawful Enlargement

FRICO unlawfully enlarged its use of the 1885 Burlington priorities. Appellants argue that no unlawful enlargement of the Burlington rights occurred because the decree in Case No. 11200 contains no limitation prohibiting the use of its direct flow right on lands below Barr Lake. To the contrary, the contract FRICO entered into with Burlington in 1909 supports the conclusion that an undecreed enlargement occurred. Burlington sold its "excess" rights to FRICO, not any part of the water it had put to beneficial use.

The water court found that following the 1909 agreement with Burlington, FRICO constructed 140 miles of outlet laterals below Barr Lake (the Speer and Neres laterals and the Beebe Canal). These canals enabled the Burlington and FRICO companies to deliver direct flow water diverted through Barr Lake to irrigate substantially more acreage than appropriated for irrigation under the 1885 Burlington priority. What Burlington purported to sell to FRICO were diversions Burlington did not need nor put to beneficial use on the 12,000 acres irrigated

under the 1885 direct flow priority above Barr Lake. But this "excess water" belongs to the public under Colorado water law, subject to appropriation and use in order of decreed priority; any purported conveyance of water the appropriator does not "need" or has not put to beneficial use flags an illegal enlargement.

We affirm the water court's findings of fact and its conclusions of law. A diversion flow rate specified in a decree is neither the measure of a matured water right, nor conclusive evidence of the appropriator's need for which the appropriation was originally made. Nor can diversions made at an undecreed point of diversion be credited in the calculation of historical consumptive use in fashioning a change of water rights decree. Bradley, 53 P.3d at 1169 ("[i]t is inherent in the notion of a 'change' of water right that the property right itself can only be changed and not enlarged"); Santa Fe Trail Ranches, 990 P.2d at 52 ("an undecreed change of use of a water right cannot be the basis for calculating the amount of consumable water that can be decreed for change to another use").

The water court correctly concluded that FRICO's involvement and significant expansion of the Burlington water rights, both direct flow and storage, twenty-four years after the 1885 appropriation effectuated an unlawful enlargement of the Burlington rights. FRICO made its own appropriations in

1908 and 1909, which were adjudicated in 1924. The 1885 Burlington and 1908 and 1909 FRICO appropriative rights must be administered in accordance with their distinct priorities vis-à-vis all other decreed priorities of natural stream waters, which includes surface water and tributary groundwater. Empire Lodge, 39 P.3d at 1148.

c. Study Periods for Calculation of Historical Consumptive Use

The third step in our analysis is to consider the time period utilized by the water court to calculate historical consumptive use. We review the water court's choice of a study period under an abuse of discretion standard. Pueblo West, 717 P.2d at 960-61. The water court adopted a twenty-four year period from 1885 to 1909 to determine the Burlington Company's legal use of direct flow water under the 1885 decree. The court's study period logically follows upon its determination that FRICO unlawfully enlarged the Burlington 1885 direct flow water right beginning in 1909.²⁸

The water court used a study period of 1927 to 2004 for the 1885 Burlington storage right. The storage study period

²⁸ We decline to address arguments made by Appellants that the water court confused average versus maximum diversion rates. Although the court may have accidentally mixed the terms within one finding, that does not alter the validity of the court's conclusion, which was based on evidence that Burlington never averaged direct flow diversions of more than 200 cfs before 1909, and that the companies could provide no evidence of a maximum flow rate above 200 cfs.

represents both a substantial period of time for calculating historical consumptive use and a fair calculation because beneficial use averaged 5,456 acre-feet annually for 1927 to 2004. This amount nearly matches the annual releases from 1897 to 1909 of 5,511 acre-feet for beneficial use from the Barr and Oasis reservoirs.²⁹

Storage itself is not a beneficial use; the subsequent use of stored water for irrigation is the beneficial use that is determinative in this change proceeding. See Upper Yampa Water Conservancy Dist., 249 P.3d at 799. The Companies argue that the water court should not have excluded water delivered to the Speer, Neres and Beebe Canals from Barr Lake during the storage right study period. We determine that the court correctly excluded such deliveries because the canals in question were constructed following FRICO's involvement in the system and any unlawful expansion of the original 1885 priorities decreed in Case No. 11200 cannot be credited to Burlington or FRICO shares.

d. Seepage and Toe Drain Gains Relation to Historical Consumptive Use

The Companies argue that the water court improperly excluded seepage through the Barr Lake toe drains and seepage gains into the Beebe Canal in computing historical consumptive

²⁹ The 1927 to 2004 period is more generous to applicants, since it includes a higher maximum annual diversion of 8,517 acre-feet compared to 6,670 acre-feet for 1897 to 1909.

use credits per share available under the decreed appropriations. First, we address seepage collection via the Barr Lake toe drains. The water court determined that seepage collected by the toe drains should be excluded from the calculation of consumptive use associated with the 1885 Burlington and the 1908 and 1909 FRICO water rights. The court concluded that none of the decrees adjudicated recapture of seepage, and further, that including toe drain seepage in a calculation of historical consumptive use would amount to double-counting.

Seepage of reservoir water that is tributary to a natural watercourse is part of the public's water resource, subject to appropriation under Colorado's priority system. Lamont v. Riverside Irrigation Dist., 179 Colo. 134, 138-39, 498 P.2d 1150, 1152-53 (1972). The Barr Lake toe drain system, constructed in the early 1980s, was not decreed as a point of diversion or supply in either Case No. 11200 or No. 54658. See Lamont, 179 Colo. at 139, 498 P.2d at 1153 (reservoir company had no right to seepage in the absence of separate appropriation); see also Bijou Irrigation Co., 926 P.2d at 61-62. Instead, the decree in Case No. 11200 permitted Burlington's diversion of additional water from the South Platte River to offset evaporation and seepage. We affirm the water court's conclusion that water collected by the toe drains cannot

be included within the court's calculation of historical consumptive use.

Next we address whether seepage gains into the Beebe Canal should have been included in the water court's calculation of historical consumptive use. As described above, the water court found that the Beebe Canal is a net "gaining ditch" -- that is, it gains more water from seepage into the canal than it loses from seepage or evaporation. The court relied on expert testimony revealing that 28 percent of the Canal's total deliveries come from seepage collected along the course of the Canal below Barr Lake.

Recognizing the water court's unique ability to evaluate evidence and make factual determinations in complex cases, we defer to the findings of the water court unless they are clearly erroneous. City and County of Broomfield v. Farmers Reservoir and Irrigation Co., 235 P.3d 296, 299 (Colo. 2010). The Companies argue that the Beebe Canal is a net losing ditch.³⁰ Based on the evidence in the record showing that the Beebe Canal gained an average of 1,200 to 1,300 acre-feet per year from 1927

³⁰ Companies point to testimony by Manuel Montoya, FRICO's manager, that Beebe Canal is a "net losing ditch." However, this citation is misleading since Montoya's testimony is ambiguous at best: he states that there are some sections of Beebe that show a gain and some that show a loss. When asked whether there is a net gain in the canal before water is diverted into the East Neres, he testified "It gets pretty close to balancing out to zero. There's some -- some gain, yes."

to 2005, we affirm the water court's finding that the Beebe Canal is a gaining ditch. Because we find that the Beebe Canal is a gaining ditch, we need not reach the issue of whether as a "net losing ditch" accretions to the Beebe Canal should not have been deducted from historical consumptive use.³¹

Seepage flows into ditches cannot be allocated independent of existing priorities on the river. Ready Mixed Concrete Co. v. Farmers Reservoir & Irrigation Co., 115 P.3d 638, 644-45 (Colo. 2005). In Ready Mixed, we addressed a circumstance in which the ditch decree included irrigation use of seepage waters. Id. at 642. Despite its inclusion in the decree, we found that the decree could not operate outside of the prior appropriation system. Id. Here, the Companies do not have a decreed right to appropriate seepage water as it collects along the Beebe Canal under the Burlington or FRICO rights. The water court's calculation of historical consumptive use properly excluded seepage into the canal.

e. Application of the One-Fill Rule

Barr Lake is capable of storing approximately 30,000 acre-feet of water. Every year, the reservoir carries over about

³¹ In City and County of Broomfield v. Farmers Reservoir and Irrigation Co., we did not address whether accretions to a net-losing ditch should be subtracted from historical consumptive use, since in that case FRICO did not present adequate grounds for an appeal of the water court's determination that accretions to a net-losing ditch should not be subtracted from historical consumptive use. 235 P.3d at 302.

11,000 acre-feet, or one third of its total capacity. Under the one-fill rule, Barr Lake can store water up to the reservoir's capacity. Whitten, 146 Colo. at 142, 361 P.2d at 137. Because storage of water itself is not a beneficial use, the amount of water released from the reservoir and used consumptively for irrigation over a representative period of time determines the amount of consumptive use water credited to shares of the storage right. Midway Ranches, 938 P.2d at 522. The water court therefore imposed volumetric limitations based on historical use in order to prevent injury. See § 37-92-305.

The water court based its findings on evidence that, without limits based on historical use, Appellants would be allowed to consume more water than was historically released from the reservoir, resulting in increased diversions from the South Platte River to fulfill higher demand. Appellants presented no evidence to the contrary to meet their burden of showing that such a change would not injure junior appropriators. Weibert, 618 P.2d at 1371.

We affirm the water court, and hold that in order to prevent injury, historical releases from Barr Lake for irrigation, rather than a pro rata share of a full fill are the proper measure for change of storage rights in this proceeding. As discussed above, the one-fill rule is but one tool available within Colorado water law to set and administer diversion

limitations on storage rights to prevent unlawful enlargement and injury to junior appropriators.³² Contrary to Appellants' arguments that the water court below necessarily abrogated the one-fill rule, we conclude that the water court's ruling honors the one-fill rule.

In Westminster, we held that "[a] reservoir right permits one filling of the reservoir per year." 167 Colo. at 14, 445 P.2d at 58. That rule applies today, and applies to diversions to fill Barr Lake. For example, if drought conditions in one year reduced the amount of water available for carry over into the next from the normal 11,000 acre-feet to only 5,000 acre-feet, Barr Lake would be entitled to water when available under its decreed priority -- up to the full amount of its decreed storage rights -- to recover that difference.

Because a reservoir's diversions may vary from year to year depending on carry-over and availability of water in priority, the one-fill rule accounts for these variances, but does not enable the enlargement that the Companies seek. In Westminster, id., we explicitly cautioned against such an enlargement: "[t]o protect against the possibility of such extended use of the water rights, the courts will impose conditions upon the change

³² Storage and delivery issues involving an interstate compact may be examined by the water court in a change of storage right proceeding when particular facts and the interstate compact implicated are at issue in the case.

of use and point of diversion sufficient to protect the rights of other appropriators.” (citations omitted).

The water court’s imposition of volumetric limitations based on historical use protects other adjudicated water rights against injury. Id. Terms and conditions to prevent enlargement upon historical use and prevent injury to other appropriators have legislative authorization under section 37-92-305(4) (a) (II). The no injury rule applies to changes in storage rights, just as it applies to all change cases, and enables the water courts to shape decrees that prevent injury to other appropriators. Se. Colo. Water Conservancy Dist., 720 P.2d at 145-46.

C.

Effect of Prior Water Court Decrees and Orders in FRICO Case No. 54658 and Thornton Case No. 87CW107

In our analysis above, we interpreted Burlington’s 1893 decree in Case No. 11200. We now turn to the effect of FRICO’s 1924 decree in Case No. 54658 and Thornton’s 1987 decree in Case No. 87CW107 upon the water rights at issue in this matter. The water court concluded that neither issue nor claim preclusion under previous decrees barred its system-wide determination of allowable historical consumptive use credits from direct flow gravity irrigation made on farms below Barr Lake. We agree.

1. Applicable Law

Claim and issue preclusion promote finality and efficiency in judicial decision-making by preventing relitigation of matters already considered and decided by the courts. Lobato v. Taylor, 70 P.3d 1152, 1165-66 (Colo. 2003). Reconsideration of a claim in a second judicial proceeding is barred by a previous judgment if (1) the first judgment is final, (2) there is identity of subject matter, (3) there is identity of claims for relief, and (4) there are identical parties or there is privity between parties to the two actions. Argus Real Estate, Inc. v. E-470 Public Highway Auth., 109 P.3d 604, 608 (Colo. 2005).

Issue preclusion similarly bars relitigation of an issue where,

(1) the issue sought to be precluded is identical to an issue actually and necessarily determined in a prior proceeding; (2) the party against whom estoppel is asserted was a party to or is in privity with a party to the prior proceeding; (3) there was a final judgment on the merits in the prior proceeding; and (4) the party against whom the doctrine is asserted had a full and fair opportunity to litigate the issue in the prior proceeding.

In re Tonko, 154 P.3d at 405 (citations omitted).

In Orr v. Arapahoe Water and Sanitation District, applicants sought to change their water rights from irrigation to municipal uses. 753 P.2d 1217 (Colo. 1988). They claimed that a prior decree changing their points of diversion also confirmed their historical consumptive use of 682 acre-feet annually. Id. at 1225. Our review of the decree revealed that

the water court's inquiry was limited to a review of whether the new points of diversion would injure other appropriators. Id. at 1226. Thus, the decreed change for the points of diversion was subject to a limitation that "the quantity of water to be used at the new points would not exceed the amount of water decreed to and historically used at the original points of diversion." Id. However, we found no evidence that the decision approved of what the water court later determined to be the applicants' expanded consumptive use. Id. Because there had been no determination of historical consumptive use in the prior proceeding, we found that res judicata did not bar the water court from "considering and determining the actual extent of historical use at the original points of diversion in order to properly determine the nature and extent of the applicants' water rights under the 1969 decree." Id.

In Midway Ranches, 938 P.2d at 525, we ruled that res judicata did not operate to bar the water court from determining historical consumptive use in a change, augmentation, or expanded use injury case when it had not been determined in a previous proceeding. To determine what was at issue and decided in a prior water case, we examine the resume notice, resulting court judgment, and the decree in the prior proceeding. Id. Res judicata does not bar a subsequent historical consumptive use analysis of the larger system when resume notice of an

application for a ditch-wide analysis is given. Jones Ditch, 147 P.3d at 18.

2. Analysis

First, we address the potential preclusive effect of the decree in Case No. 54658, a general adjudication which determined the relative priorities of FRICO and Henrylyn to direct flow in the Burlington Canal. The threshold inquiry under both claim and issue preclusion is whether the issue or claim to be precluded is identical to a prior issue or claim. Argus Real Estate, Inc., 109 P.3d at 608; In re Tonko, 154 P.3d at 405. As a corollary, the issue or claim in question must have been actually and necessarily determined in a prior proceeding. Id.

Appellants concede that historical consumptive use was not determined in Case No. 54658, but argue that the diversion rate and storage volume determined in that case should have a preclusive effect on the water court's calculation of historical consumptive use. We decline to hamstring the decision-making of our water courts by inferring preclusion where issues are not identical and determinative. Doing so could result in injury to other appropriators resulting from a change of water rights.

In 54658, the referee found that the capacity of the enlarged Burlington Canal was 1250 cfs. Of this, 350 cfs was decreed to the 1885 Burlington direct flow right. Likewise, the

1909 enlarged Barr Lake storage right was determined by the water court in Case No. 54658 to be the "amount it will hold between the storage depths of 19.1 and 34 feet." Appellants argue that the court implicitly recognized that the first 19.1 feet of storage in Barr Lake was dedicated to the 1885 Burlington storage right, amounting to 11,081 acre-feet.

While the court in 54658 may have looked to the decree in Case No. 11200 and made certain assumptions favorable to Appellants' position, Appellants point to no evidence indicating that the parties litigated or that the court determined the central issue of historical consumptive use of the 1885 Burlington rights on average below Barr Lake at issue in the case before us. See Orr, 753 P.2d at 1226 (restricting change in point of diversion to historic use did not preclude calculation of historical consumptive use in later proceeding). Our review of the record reveals no such analysis by the court in the prior decrees. Therefore, we affirm the water court's determination that the decree in Case No. 54658 does not preclude consideration of historical consumptive use in the present case.

Next, we consider the possible preclusive effect of Thornton's 1987 change of water rights application and the resulting decree in Case No. 87CW107. The water court below concluded that the historical use determinations in 87CW107 were

limited to Thornton's rights in the Little Burlington system, and thus did not bar the system-wide analysis of historical consumptive use properly attributable to the 1885 Burlington direct flow right for gravity irrigation below Barr Lake.

In 87CW107, the water court found that Thornton's Burlington shares made up 12.5% of the total outstanding Burlington Company shares. The subject matter of the case and the resulting decree was explicitly limited to Thornton's shares in the Little Burlington Division. The application recited that "[t]his application does not seek to change the use of water rights represented by any of Thornton's Burlington shares served by the O'Brian Division of the Burlington Company or by any shares owned by Thornton in the Farmers Irrigation and Reservoir Company- Barr Lake Division."³³ The court in 87CW107 used a 1950 through 1972 study period to review diversions at the Burlington headgate, and concluded that Thornton had a right to 1,346 acre-feet annually under the 1885 Burlington direct flow water right utilized above Barr Lake. The court also determined that Thornton's pro-rata share of the 1885 Burlington direct flow

³³ Henrylyn, who objected to Thornton's change application, stipulated that the decree in 87CW107 did not change the use of water rights represented by Thornton's Burlington shares served by the Burlington Company's O'Brian and FRICO-Barr Lake divisions.

right was 27.1% or 54.2 cfs of the 200 cfs in the Little Burlington system.

Thornton argues that the 1885 Burlington direct flow right is a single, indivisible priority, and that its Little Burlington shares cannot therefore be separated from the larger system. However, FRICO's manager testified before the water court that half of the overall shares in the Burlington system are held in the Little Burlington and that none of these Little Burlington shareholders receive their water below Barr Lake. Moreover, under FRICO's operation of the system, Little Burlington shareholders are entitled to first priority in use of the 1885 Burlington 200 cfs direct flow right. This evidence, coupled with the fact that Thornton's own application in 87CW107 was to change only its Little Burlington shares, supports the conclusion that the Little Burlington system is distinct and that the decree in 87CW107 only addressed Thornton's shares in that system and did not make a consumptive use determination applicable to lands irrigated below Barr Lake.

In Jones Ditch, we reversed a water court decision applying res judicata to bar reconsideration of historical use in reference to a prior decree. 147 P.3d at 19. The prior decree proceeding did not involve a ditch-wide analysis of the Jones Ditch water right, "such that it would resolve all subsequent questions as to lawful historical use." Id. Here, while the

decree in 87CW107 may have determined Thornton's historical use within the Little Burlington system under the 1885 Burlington direct flow right, it was not a ditch-wide analysis of historical use of the 1885 priority throughout the Burlington system. Significant portions of the 1885 Burlington direct flow right -- specifically the O'Brian and FRICO-Barr Lake Divisions -- were expressly excluded from the court's determination in 87CW107. In contrast, this case does involve lawful water use under those divisions.

Nonetheless, Thornton and FRICO claim that, because the water court in 87CW107 included in its calculation of historical consumptive use an assumption that the full 350 cfs under the original No. 11200 decree was available under the 1885 right, the issue of historical use was determined in that proceeding. Such assumptions do not meet the test for preclusion, which requires an actual and necessary determination by a water court. See In re Tonko, 154 P.3d at 405. Prior proceedings have a preclusive effect only if "historical consumptive use was calculated and relied upon in the formation of the earlier decree." Farmers High Line Canal and Reservoir Co. v. City of Golden, 975 P.2d 189, 201 (Colo. 1999).

The water court's determination does not impact the decree in No. 87CW107. That decision is not inconsistent with the water court's determination that the 1885 Burlington direct flow

appropriation is limited to 200 cfs for use above Barr Lake. As to the Little Burlington system operating above Barr Lake, Thornton's legal use of the 1885 Burlington direct flow right should remain unaffected.³⁴

Finally, we address whether the decree in Thornton's Case No. 87CW107 is preclusive as to the legality of the Metro Pumps diversion. The water court found that there was no determination in Case No. 87CW107 confirming the Metro Pumps as a lawful alternate point of diversion. We agree. It is undisputed that the decree in Case No. 87CW107 references the Metro Pumps as a source of supply to the Burlington Ditch. However, the decree merely describes the "Metro Pump Station" as an "undecreed alternate point of diversion." Significantly, the case did not decree the Metro Pumps as a new point of diversion. As discussed above, Case No. 87CW107 was a change of water rights application. Although the court noted that the Metro Pumps were an undecreed source of supply, the application did not seek to decree the Metro Pumps as an alternate point of diversion. The legality of diversions by means of the Pumps for purposes of a change proceeding's calculation of allowable historical consumptive use was not raised nor litigated. See E-470 Public Highway Auth., 109 P.3d at 608 (claim preclusion); In

³⁴ At oral argument, counsel for Aurora conceded that Thornton's use of its legal right to direct flow water in the Little Burlington system above Barr Lake could continue.

re Tonko, 154 P.3d at 405 (issue preclusion). In the application in this case, Companies filed for a change in point of diversion for the Metro Pumps.³⁵

**D.
New Structures and Points of Diversion
Related to the Burlington Canal**

1. Applicable Law

Water rights are decreed to structures and points of diversion, not to owners and users. Dallas Creek, 933 P. 2d at 39. Although incident to every water right is the right to change the point of diversion, "such a change constitutes a change of the water right itself." Trail's End Ranch, 91 P.3d at 1061; Bradley, 53 P.3d at 1168-69; § 37-92-103(5)).

As discussed above, Colorado has a well-developed no injury standard which requires that a change of water right will be approved only if such change will not injuriously affect the owners of vested or conditional water rights. § 37-92-305(3) (a), C.R.S. (2010); see Trail's End Ranch, L.L.C., 91 P.3d at 1062 ("diverting water from a natural stream at a point other than one decreed to an existing water right, at least in the

³⁵ In Metro, 179 Colo. 36, 499 P.2d 1190, we held that downstream appropriators such as FRICO did not have a vested right in the maintenance of the same point of return of effluent. However, we did not affirm the Metro Pumps as a decreed point of diversion -- instead, the Companies entered into an agreement with Metro in 1968 to discharge effluent from the Metro Pumps directly into the Burlington Canal when the 1885 storage right is in priority.

absence of a specific statutory exception, constitutes an out-of-priority diversion, justifying an order to cease further diversion, for the protection of existing adjudicated rights").

In Pueblo West, we clarified that the measurement of historical use for the purposes of changing a point of diversion does not include "out-of-priority diversions at undecreed points of diversion." 717 P.2d at 959. Likewise, in Orr, we discussed changes in diversions as they relate to enlargement:

the right to change a point of diversion is limited in quantity by historical use at the original decreed point of diversion . . . [t]hus a senior appropriator is not entitled to enlarge the historical use of a water right by changing the point of diversion and then diverting from the new location the full amount of water decreed to the original point of diversion, even though the historical use at the original point of diversion might have been less than the decreed rate of diversion.

753 P.2d at 1223-24.

In Santa Fe Trail Ranches, applicants sought to change their water rights from manufacturing to municipal uses, and attempted to claim historical use for irrigation diversions made pursuant to the water right. 990 P.2d at 51. We determined that an undecreed change of use of a water right could not be the basis for a calculation of historical consumptive use for purposes of a water right change decree. Id. at 52.

2. Analysis

a. Metro Pumps

The water court below determined that there was no factual or legal basis upon which it could recognize the Metro Pumps in its calculation of credits for historical consumptive use. Consequently, the water court ordered the Companies to reduce the amount diverted under the Burlington decrees by 9,600 acre-feet per year. The practical result of the court's determination is that diversions at the Metro Pumps as an alternate point of diversion for the Burlington decrees have been limited to the amount of water physically and legally available at the Burlington headgate.

The water court's key findings of fact supporting these orders concerned the claims of injury argued by opposing parties. Englewood and Denver both claim that they will be adversely affected by the water court's orders because, without the Metro Pumps source of supply, it will take longer for the Companies to fill their reservoirs, thus delaying the cities' satisfaction of their junior rights. However, Public Service Company objects to the continued delivery of water from the Metro Pumps into the Burlington Canal. It claims that its water rights downstream of the Metro Plant are injured because the undecreed change causes an increased draft upon the River,

reducing the amount of water available for Public Service Company's industrial water use.

The water court determined that there was no cognizable legal injury to Denver and Englewood if the Companies' request for inclusion of the historical supply from the Metro Pumps is denied. The court reasoned that, although junior appropriators may have a right to the maintenance of stream conditions, those rights cannot rely on undecreed diversions. The water court concluded that confirmation of the operation of the Metro Pumps without conditions would injure vested water rights including Public Service Company's junior and senior water rights downstream of Burlington on the South Platte River. Key to this conclusion was the water court's associated finding that the pumping of Metro effluent into the Burlington Canal unlawfully enlarges the water rights decreed to the Burlington headgate.

Appellants posit several theories including the State Engineer's acquiescence to pumping directly into the Burlington Canal, the 1968 agreement between Denver and the Companies, and the claim that diversions from the Metro Pumps merely replicated pre-1968 diversions of Northside effluent at the Burlington headgate. None of these arguments avail; the record contains evidence sufficient to support the water court's findings of injury, which we will not disturb on appeal. Bijou Irrigation

Co., 926 P.2d at 88 (factual findings of water court entitled to deference unless there is no support in the record).

In addition to failing to prove no injury to other appropriators, Appellants failed to prove that operation of the Metro Pumps as they propose would not unlawfully enlarge their lawful use. In Santa Fe Trail Ranches, we made it clear that an "appropriator of native water may not enlarge the appropriation. In order to reuse or make successive use of return flows, all of the elements of an independent appropriation must be established and decreed as a separate water right." 990 P.2d at 54 (citing Bijou Irrigation Co., 926 P.2d at 65; Curtis, 733 P.2d at 682-83). The same principle applies to effluent from the use of water native to the basin, to which there is no automatic right to capture or reuse the water. Bijou Irrigation Co., 926 P.2d at 65; see Curtis, 733 P.2d at 682.

No prior proceedings have adjudicated the Metro Pumps as a point of diversion.³⁶ Despite the Appellants' arguments

³⁶ Englewood argues under a theory of "force majeure" that a change in point of diversion should be retroactively granted because the original change resulted from an event which was beyond its control -- namely the development of the Metro Plant and the shifting of Denver's effluent outlet to a location downstream of the Burlington headgate. Englewood relies on our decision in Flasche v. Westcolo Co., 112 Colo. 387, 149 P.2d 817 (1944), which involved a flood that wiped out a ditch owner's flume. Englewood's argument is unavailing since Companies have had more than fifty years to seek a change of water right, and moreover, in contrast to the facts of Flasche -- where there were no diversions between the old and the proposed new point of

regarding their 1968 agreement and the acquiescence of the state engineer to their operations, changes of water rights cannot be effected in any manner other than through judicial approval or, if authorized by the General Assembly, administrative means, following statutorily authorized procedures. Fort Lyon Canal Co. v. Catlin Canal Co., 642 P.2d 501, 506 (Colo. 1982); Whitten, 146 Colo. at 137-38, 361 P.2d at 133 (enlargement of water rights beyond scope of decree cannot be conferred merely because state engineer permitted diversions of water exceeding decree). We therefore agree with the water court, that undecreed diversions at the Metro Pumps cannot be included in the credits allowed for historical consumptive use. We also affirm the water court's adjudication of the Metro Pumps in this case as an alternate point of diversion, limited to the amount of water legally and physically available for diversion at the Burlington headgate on the South Platte River.

b. Globeville Project

The water court below determined that the Globeville Project also constitutes a previously undecreed point of diversion. The water court's decree now recognizes the Globeville structure as a point of diversion and has placed

diversion -- the water court in the present matter made a finding of injury to other appropriators on the South Platte River. See 112 Colo. at 393, 149 P.2d at 820. We decline to create a poorly reasoned loophole to grandfather in unadjudicated and undecreed changes in water rights.

conditions in the decree to protect against injury to other water rights in operating this diversion.³⁷ The no injury standard applies to protect other appropriators on the stream. § 37-92-305(3)(a); Trail's End Ranch, L.L.C., 91 P.3d at 1062.

On appeal, the threshold question regarding the Globeville Project is whether the new structure meets the statutory definition of a change in the point of diversion. If the Globeville Project is a change in the point of diversion, applicants must show that the change produces no injury to other decreed water rights. Section 37-92-103(7), C.R.S. (2010) defines diversions as follows: "removing water from its natural course or location, or controlling water in its natural course or location, by means of a control structure, ditch, canal, flume, reservoir, bypass, pipeline, conduit, well, pump, or other structure or device."

The undisputed evidence concerning the makeup of the Globeville Project -- its replacement dam, technologically superior SCADA headgates, and the 900-foot long concrete approach channel, which is separate and parallel to the South Platte River, all support the water court's finding that the project constitutes a change in point of diversion under the

³⁷ The water court also required that excess flows be returned at the sand out gate at the original Burlington headgates rather than at the Sand Creek turnout two miles downstream, and that the Companies should bypass water in order to replicate historical flows at the 64th Avenue gauge.

plain language of the statute. The water court found that the water diverted from the river is controlled in an artificial structure hydrologically disconnected from the River at all times. This determination is entitled to deference, and we will not disturb it on appeal because it is based on evidence in the record. Bijou Irrigation Co., 926 P.2d at 88.

The Companies argue that our decision in Downing v. Copeland, 126 Colo. 373, 249 P.2d 539 (1952) controls the outcome here. In Downing, we concluded that the new channel constructed in that case did not constitute a change because the point of diversion "was and continued to be the point at which the water was diverted from the bed of the stream at the headgate of plaintiff's ditch." 126 Colo. at 375, 249 P.2d at 540. Despite similarities between the two matters concerning new instream diversion facilities, Downing is distinguishable on both the facts and the law. The most significant factual distinction concerns the key question of what structure actually controls diversions. In Downing, water continued to be diverted at the original headgate. Here, the original, manually-operated Burlington headgates are rarely if ever utilized, and function only to prevent overflow into the Canal in certain circumstances, such as a storm surge. Instead, the upstream, SCADA-operated headgates actually control diversions into the Burlington Canal. The new Globeville Project is able to

efficiently divert up to 1000 cfs whereas the original manual system began to overtop the original dam when diversions reached 700 cfs.

Alternatively, Lochbuie argues that the Globeville project did not require approval for a change in point of diversion because it was merely a permissible extension of the head of a ditch upstream in order to maintain diversions. The right of a ditch owner to maintain flow by modification is codified in section 37-86-111, C.R.S. (2010):

In case the channel of any natural stream becomes so cut out, lowered, turned aside, or otherwise changed from any cause, as to prevent any ditch, canal, or feeder of any reservoir from receiving the proper inflow of water to which it may be entitled from such natural stream, the owners of such ditch, canal, or feeder have the right to extend the head of such ditch, canal, or feeder to such distance up the stream which supplies the same as may be necessary for securing a sufficient flow of water into the same. . . . The priority of right to take water from such stream through such ditch, canal, or feeder as to any such ditch, canal, or feeder shall remain unaffected in any respect by reason of such extension; but no such extension shall interfere with the complete use or enjoyment of any ditch, canal, or feeder.

(emphasis added). While it is true that the extension of the head of a ditch is permissible, both under our decision in Downing and under the statute, Companies and Lochbuie fail to effectively rebut the key principle underlying our system of appropriation: no injury to other water rights. Indeed, section 37-86-111's approval of ditch extension includes a critical

caveat: that no extension shall interfere with another appropriator's system.

The water court determined that the Globeville Project's structures will enable larger and more effective diversions, thereby injuring vested water rights on the already over-appropriated South Platte River. We uphold the water court's determination because its findings accord with the statutory requirements for a change of water rights. See § 37-92-105(3) (change of water right approved if it will not injure other vested or conditional water rights); § 37-92-103(5) (a change of water right includes a change in the point of diversion). Companies failed to prove that the increased capacity and efficiency of the new Globeville Project will not result in an increase in extraction from the South Platte in comparison to the old headgate's historical take.

The water court properly imposed protective operational terms and conditions on the newly decreed diversion created by the Globeville Project. The court decreed that "[t]he new point of diversion for the Burlington Headgate is decreed for the requantified water rights found in paragraph 22 [Burlington-Barr and FRICO-Barr Water rights]."

E.

Resume Notice and the Scope of the Water Court's Decision

1. Applicable Law

Water court proceedings for the determination of water rights are in rem, taking into account the relative priorities of all water rights on a stream system. S. Ute Indian Tribe, No. 09SA374, 2011 WL 873305, at *6-7 (citing Well Augmentation Subdistrict v. City of Aurora, 221 P.3d 399, 408-09 (Colo. 2009)). The water court obtains jurisdiction over persons and property affected by an application for a change or other adjudication of water rights via the resume notice and newspaper publication provisions of section 37-92-302(3), C.R.S. (2010), and C.R.C.P. 90. Id. The purpose of section 37-92-302(3), which requires the water clerk to prepare a resume of all applications in the water division filed in the preceding month and publication in newspapers circulated within every county affected, is to alert all water users whose rights may be affected by the application. Bijou Irrigation Co., 926 P.2d at 24-25.

Compliance with statutory notice provisions is evaluated on the particular facts of the case. Id. Based on these facts, the reasonableness of notice is determined by an "inquiry standard -- whether the notice is sufficient to reveal to potential parties the nature of the claim being made, so that

such parties can determine whether to conduct further inquiry into the full extent of those claims so a determination can be made whether to participate in the proceedings.” Park Cnty. Water Pres. Coal. v. Columbine Assocs., 993 P.2d 483, 489-90 (Colo. 2000). The consequence of insufficient resume notice is that a water court cannot consider those matters not included within the application at issue and the resume notice issued pursuant to that application. Danielson v. Jones, 698 P.2d 240, 244 (Colo. 1985).

2. Analysis

The water court’s decree quantified historical consumptive use of the Burlington and FRICO rights originally put at issue in the application for various changes of water rights in Case No. 04CW362. As early as the 2003 agreement between FRICO, United, and ECCV, the Companies indicated their intent to pursue a “ditch-wide” or “system-wide” adjudication:

It is understood and consented to by FRICO that, consistent with the principles stated in Williams v. Midway Ranches Property Owners Ass’n., 938 P.2d 5151 (Colo. 1997), the adjudications conducted in the Barr-Milton Changes Cases shall result in a ‘ditch-wide’ determination of the historic consumptive use credit (on an Annual basis) attributable to the water rights of the Barr Lake Division, the Milton Lake Division, and the Burlington Company decree under Barr Lake.

Later, applicants United, FRICO and ECCV requested a “system-wide” basis of accounting in their application. The court’s decree requantified Burlington-Barr and FRICO-Barr Water rights,

limiting amongst other items, the 1885 Burlington direct flow right to 200 cfs for use above Barr Lake and restricting reservoir releases of Burlington 1885 storage rights from Barr Lake to the lands under the Hudson and Burlington Extension laterals as they existed in 1909. In its decree the water court stated that its system-wide analysis for changing the FRICO and Burlington water rights "applies only to those shares that have been used on farms that have gravity-based application and no other water supply" Decree provision 22.1 sets forth the "Use and Volumetric Limitation on the Water Rights" for the 1885 Burlington rights and the 1908 and 1909 FRICO rights.

On appeal, Henrylyn, Brighton and Thornton claim that the water court unlawfully overstepped its jurisdiction by requantifying shares that were never identified nor properly before the court for change. Instead, the parties contend that they would only be bound by the water court's system-wide requantification if and when they decide to change their Burlington and FRICO shares in the future.

A change of water right proceeding precipitates quantification based on actual historical consumptive use, in order to protect other appropriators. Midway Ranches, 938 P.2d at 523. The changes sought in the applications at issue before us include changes in use from irrigation to municipal purposes, changes in points of diversion and storage, and changes in

places of storage and use. The water court's determinations regarding the unlawful enlargement of the rights at issue in this case necessarily imposed limitations on those rights in order to prevent injury to other appropriators. See Santa Fe Trail Ranches Prop. Owners Ass'n, 990 P.2d at 52 (undecreed enlargement cannot be the basis for change decree); Bradley, 53 P.3d at 1169.

The parties do not contest the fact that resume notice was properly published for the applications in Case Nos. 02CW105 and 04CW362. The resume in both cases was sufficient to place parties³⁸ on notice: they contained detailed information on the water rights at issue, the location of the structures to which those water rights were decreed, and the scope and impact of the decree sought. See Dallas Creek, 933 P.2d at 38. Specifically, the resume in 04CW362 contemplated the future acquisition of additional FRICO-Barr and Burlington-Barr shares to support the ECCV project, and therefore requested:

a determination that additional shares in the Barr Lake and Milton Reservoir divisions of FRICO and the Barr Lake division of Burlington may be included within the terms and conditions of this application, and that the quantification of consumptive use and return flows attributable to such shares that are required to maintain the historic regimen of the stream shall be determined in this proceeding.

³⁸ In response to the applications and resume notice published in both cases, Thornton, Henrylyn, and Brighton filed statements of opposition and participated in the trial before the water court, including presenting evidence, and commenting on the Decree.

Likewise, the resume in 02CW105 gave broad notice that applicants sought changes in the point of diversion and use for Burlington and FRICO direct flow water rights historically utilized on lands below Barr Lake. Upon publication of these notices, the water court obtained in rem jurisdiction over the Burlington and FRICO water rights at issue in the applications. See S. Ute Indian Tribe, 2011 WL 873305, at *7.

In Well Augmentation Subdistrict of the Central Colorado Water Conservancy District v. City of Aurora, 221 P.3d 399, 409 (Colo. 2009), we determined that, because water rights are decreed to points of diversion or storage, "the terms and conditions decreed by the water court attach to the water right and follow it regardless of who may own or operate the right." In the instant matter, the same rule applies: the water court below obtained in rem jurisdiction over the water rights clearly put at issue by the parties' change applications and properly noticed under section 37-92-302(3).

Henrylyn argues that, even if the water court had proper jurisdiction, it improperly limited Henrylyn's water rights contrary to a stipulation it signed with Aurora, Central and Englewood. Henrylyn relies upon language in the stipulation, approved by the court prior to the final Decree that "any determination . . . of historical usage, expanded use, yield per

share, or terms and conditions required to change the use of the FRICO or Burlington water rights shall not apply to, nor change the use of Henrylyn's 560 FRICO or its 123 Burlington shares." Henrylyn posits that the court's earlier order approving the stipulation was the law of the case, and therefore the court erred by refusing to incorporate it into the later Decree.

Stipulations are contracts, binding upon their signatory parties, and interpreted under contract law principles. USI Props. E., Inc. v. Simpson, 938 P.2d 168, 173 (Colo. 1997). The incorporation of a stipulation into a decree precludes signatory parties from "advancing legal contentions contrary to the plain and unambiguous terms" of the stipulation. Id. Stipulations also serve as binding judicial admissions as to their signatory parties, but they do not bind those who do not sign them. Id. at 175 (citations omitted); Midway Ranches, 938 P.2d at 527.

In Colorado River Water Conservation District v. Bar Forty Seven Co., 195 Colo. 478, 481, 579 P.2d 636, 638 (1978), we determined that a court cannot refuse to give effect to a stipulation of parties settling the terms of a change in water rights without providing reasons for such a refusal. In Bar Forty Seven Co., the water court denied a party's motion to amend a previously entered decree. 195 Colo. at 480, 579 P.2d at 637. The court gave no reason for the denial, but erroneously stated that the purpose of the stipulation could be

achieved by recording in the office of the county clerk and recorder. 195 Colo. at 481, 579 P.2d at 638. Henrylyn relies heavily upon our finding in Bar Forty Seven Co. for its argument that the water court below erroneously refused to incorporate the terms of the stipulation it approved of between Henrylyn, Aurora, Central, and Englewood.

Henrylyn's argument fails on several counts. First, the stipulation in Bar Forty Seven Co. was entered after the referee in that case entered findings and a ruling. In the present matter, the stipulation was approved by the court on May 13, 2008, well before the Court's findings and orders were entered on September 5, 2008, and nearly a year before the court's final decree was entered on May 11, 2009. In fact, the water court below explicitly rejected Henrylyn's motion for reconsideration of the court's order and decree, stating that the applicants "failed to present any arguments that would justify reconsideration or reversal of the comprehensive findings of fact and conclusions of law made by the court in this case."

The water court's decision was not erroneous, capricious, or arbitrary. Instead, the court was well within its discretion to reject Henrylyn's arguments and refuse to incorporate the terms of the parties' stipulation into its final Orders and Decree. The opinion Henrylyn relies upon, Bar Forty Seven Co. itself affirms this principle: under "section 37-92-301(3),

administration of water rights in this state is under water court decrees, not stipulations." 195 Colo. at 481, 579 P.2d at 638. We will not disturb the water court's decision not to incorporate the parties' stipulation in its final judgment and decree.

The water court did not err in its conclusions of law; its factual findings are supported by the evidence.

III.

Accordingly, we affirm the water court's judgment and decree.