CITIZENS' WATER ADVISORY COMMITTEE (CWAC) AGENDA
February 8, 2022, 6:00 p.m.

Microsoft Teams Link:
Click here to join the meeting
https://bit.ly/3AA4tAg
Call in (audio only) - 720-388-8447
Phone Conference ID: 595 739 077#

Members: Angie Binder - Chair, Richard "Dick" Eason -Vice Chair, Jay Campbell, Tom Coker
Dennis Dechant, William Gondrez, Janet Marlow, David Patterson, Daniel Widrich

1.	Approval of Minutes – January 11, 2022	Chair	6:00 p.m.
2.	Introductions/Public Invited to be Heard	Chair	6:05 p.m.
3.	New/Old Business	Chair	6:10 p.m.
4.	Communications Update	Greg Baker	6:15 p.m.
5.	4th Quarter Financial Update	Jo Ann Giddings	6:20 p.m.
6.	Piney Creek Waterline Repair	Catherine Schumacher	6:35 p.m.
7.	Colorado Anti-Speculation Law Work Group	Alex Davis	6:50 p.m.
8.	Review Follow-Up Questions Generated at this Meeting	Chair	7:20 p.m.
9.	Confirm Next Meeting – Tuesday, March 8, 2022	Chair	7:25 p.m.
10.	Adjourn	Chair	7:30 p.m.

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Citizens' Water Advisory Committee (CWAC) Minutes
January 11, 2022, 6:00 p.m.
Held virtually via Microsoft Teams

Minutes for your review/revisions:
____ Greg
____ Marshall

Members Present:	Angie Binder – Chair, Dick Eason - Vice Chair, Jay Campbell, Tom Coker, Dennis Dechant, Bill Gondrez, Dave Patterson, Janet Marlow
Absent:	Daniel Widrich (excused)
Staff Present:	Tim York, Rory Franklin, Marshall Brown, Leiana Baker, Greg Baker
Visitors Present:	None

The meeting was called to order at 6:01 p.m.

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1. Elections – 2022 Chair and Vice-Chair
Voting for Chair and Vice Chair. Angie Binder elected as Chair. Dick Eason elected as Vice Chair.

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2. Approval of November 12, 2021 Minutes
The November 12, 2021, minutes were approved.

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3. Introductions/Public Invited to be Heard
Introductions were done by the committee and Aurora Water staff.

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4. New/Old Business
None.

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5. Communications Update
None.

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6. Non-functional Turf Update
G. Baker and T. York gave an overview of the non-functional turf update. Aurora's water conservation efforts have resulted in large and quantifiable water savings, yet about half of the city's water use is still used for outdoor irrigation. Water used in irrigation cannot be recaptured and reused. In order to meet future water needs due to climate change and population growth, increasing the amount of reusable water is a primary goal of the utility. Aurora Water staff have been closely following an effort by the Southern Nevada Water Authority (SNWA) to create a definition for "nonfunctional turf" and regulate it's use in the Las Vegas area. An SNWA advisory committee recently released a report of findings and a proposed implementation plan.

Staff is investigating a draft ordinance with a similar turf restriction for new development and are

working with the city's Planning Department and Park Recreation and Open Space (PROS) to refine any definitions for nonfunctional turf that would allow for programming areas that allow for recreational and social uses of turf. Does the committee supportive of an ordinance prohibiting the installation of nonfunctional turf in new development? The Committee is supportive of the ordinance.

D. Dechant asked, how do SNWA describes turf. T. York replied, Bermuda and Fescue grass. G. Baker added irrigated grass. A. Binder asked, will this further removal of turf? T. York replied, removal in older developments in the Las Vegas area. A. Binder asked, are we still allowing turf in similar areas? T. York gave an update on Aurora's Unified Development Ordinance requirements. D. Eason asked, would an Aurora ordinance be for new development only and are there increasing incentives for existing turf? M. Brown replied, we have done some refinements over time regarding existing turf. The ordinance is for future development and then we will look at the existing turf incentives. D. Dechant asked, how many of those have kids and how many are retired? How much reuse water is used for golf courses? M. Brown replied, we currently use reclaimed water for many city golf courses, and existing golf courses not be removed, there isn't enough water for future golf courses. All the water supplies we are looking at turning it into potable water. T. Coker asked, is Kings Point one of the considerations? M. Brown replied, yes. D. Patterson asked, what is the Aurora's Golf view on this? M. Brown replied, they feel that new golf courses are not needed at this time. B, Gondrez asked, how is this going to be affective with Aurora Highlands or any big project like that? M. Brown replied, it depends on the stage of building they are at. T. York added, the language in the ordinance addresses this. A. Binder stated, with the water conservation ordinance I would like to see a bigger push for financial incentives for turf removal.

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7. Chandler, AZ Commercial/Industrial New Use Approval

G. Baker gave an overview. Balancing the impact of water development costs with the need to support continued economic growth has proven challenging as water availability becomes more constrained. Chandler, Arizona has developed a unique approval process for determining acceptable industries that require substantial water impacts. Staff would like to present on Chandler's methodology to see if CWAC would be willing to further investigate potential adoption of a similar system to prioritize future commercial and industrial water use based on economic value to the community.

Would the committee be willing to investigate and report out on the need for similar system of approval and prioritization of commercial and industrial water use? Yes.

D. Easton stated, if a consumer exceeded their limit, they had to purchase credits on the open market. G. Baker replied, Chandler allowed them to purchase water and give it to the utility to offset their use which is not something we do here. D. Eason asked, are other Colorado municipalities looking at this? G. Baker replied, as far as we know, they are not, they are looking at us to see what we do. G. Baker recommend the committee form a group to look into this. J. Bender, J. Campbell, D. Dechant, J. Bender will form the group.

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8. Discuss CWAC Quarterly Report to WPC in January

Informational only.

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9. Review/Verification of 2021 Attendance Records
Informational only.

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10. Review Follow-up Questions Generated at this Meeting
None.

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11. Confirm Next Meeting – Tuesday, February 8, 2022

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12. Adjourn
The meeting was adjourned at 7:36 p.m.

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Angie Binder, Chair
Citizens' Water Advisory Committee

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To: **Citizens' Water Advisory Committee**

Through: **Marshall P. Brown, General Manager, Aurora Water _____**

From: **JoAnn Giddings, Deputy Director Water Financial Administration _____**

Date: **February 8, 2022**

Subject: **Quarterly Financial Report – Preliminary 2021 Year End**

Highlights

Combined operating revenues (Water, Sewer, and Stormwater) through the fourth quarter were 0.7 percent higher than plan and 1.6 percent lower than 2020. Even though revenues in the spring were below plan due to the wet spring which delayed outdoor irrigation the overall revenues at the end of the year were close to the original plan.

Combined Development revenues (Water, Sewer, and Stormwater) in 2021 were 72.0 percent higher than plan and 9.3 percent higher than 2020. This reflects strong growth within the City.

The final draw for the Fitzsimmons/Peoria Stormwater project in the amount of $15.0 million was completed in July.

Operating expenses (Water, Sewer and Stormwater combined), excluding debt service, are under plan by $9.6 million or 7.4 percent. Vehicle and equipment purchases, repair and maintenance for pumping equipment, and contracts for professional and technical services were lower than plan by $7.5 million due to timing delays and supply chain issues. Utilities were lower than anticipated for the Pueblo Reservoir Purchased Storage costs and Metro Water Recovery (formerly Metro Wastewater Reclamation District) Purchased Sewer/Storm. Credit card fees were higher than anticipated by $1.9 million primarily due to an account misclassification corrected in June 2021. Other miscellaneous expenditures were higher by $0.2 million. Operating expenses, excluding debt service, were higher than 2020 (same period) by $3.1 million or 2.6 percent.

The debt service was higher than planned due to partial refunding of the 2016 bonds originally issued for Prairie Waters which was completed with the issuance of taxable bonds in the amount of $264.0 million. This results in the financial statements showing an increase in bond proceeds received and debt payments made, netting to zero for the refunding transaction. Additional budget authority will be added to cover these debt related costs through the budget supplemental process.

Statements showing the budget to actual results and the year to year comparison can be found at the end of this memo on pages 9 and 10. Capital details can be found on pages 6 and 7.

Water, Sewer, and Stormwater as of End of Fourth Quarter					
Item	YTD Plan	2021	2020	Q4 2021 vs YTD Plan	Year Over Year Difference
Operating Revenue	$208,945,548	$210,398,755	$213,877,775	$1,453,207	($3,479,020)
Development Revenue	42,355,381	72,793,181	66,572,579	30,437,800	6,220,602
Bond Proceeds and Transfers	164,000,000	464,273,084	0	300,273,084	464,273,084
Interest Income	2,746,360	2,582,997	5,362,968	(163,363)	(2,779,971)
Total Revenue	**$418,047,289**	**$750,048,017**	**$285,813,322**	**$332,000,728**	**$464,234,695**
Operating Expense	($129,134,707)	($119,540,054)	($116,489,528)	($9,594,653)	$3,050,526
Capital Projects	(230,103,699)	(135,762,311)	(160,253,187)	(94,341,388)	(24,490,876)
Debt Service	(47,992,340)	(312,021,479)	(24,615,997)	264,029,139	287,405,482
Total Expense	**($407,230,746)**	**($567,323,844)**	**($301,358,712)**	**$160,093,098**	**$265,965,132**

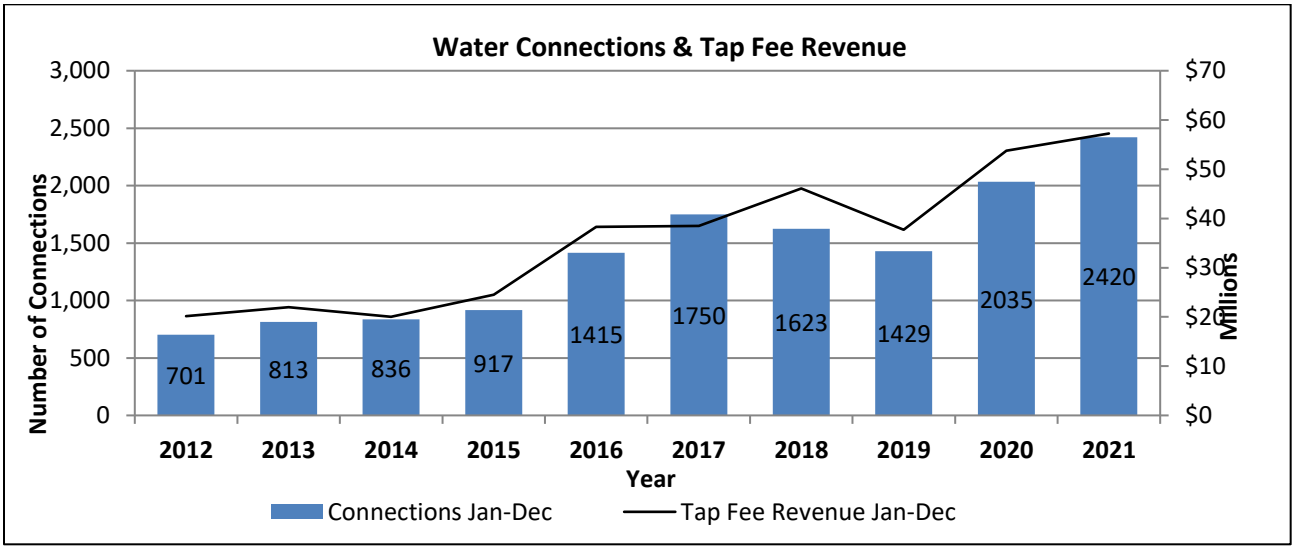
Cash Balances

Reserves detail and cash balances are shown in the table below. The debt policy reserves were updated with the 2022 debt service after the new issues and refunding.

	Water	Wastewater
Total Cash	**$320.9M**	**$143.9M**
Reserve & Commitment Type		
Debt Service Policy Reserve (next fiscal year debt payment)	$27.1M	$8.9M
Operating Reserve (25% of adopted operating budget excl debt service)	$16.9M	$13.9M
Water Resources Reserve ($20 Million)	$20.0M	
Capital Reserve (0.5% of Net Fixed assets)	$9.3M	$3.2M
Capital and Operating Encumbrances	$112.2M	$61.1M
Net Restricted Bond Proceeds for Projects	$23.5M	$2.8M
Pass-Thru Commitments (METRO and CC Basin)		$5.4M
WISE Liability to Denver Water	$5.0M	
Total Reserves and Commitments	**$214.0M**	**$95.3M**
Cash after Reserves & Commitments	**$106.9M**	**$48.6M**

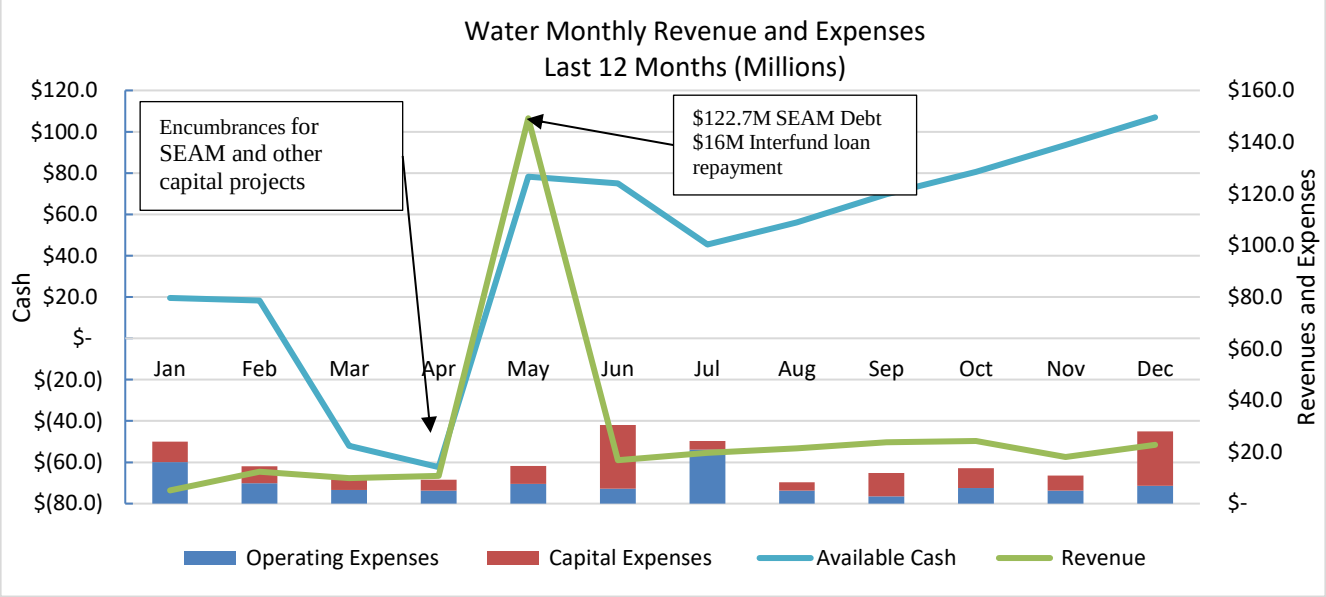
Water Connections

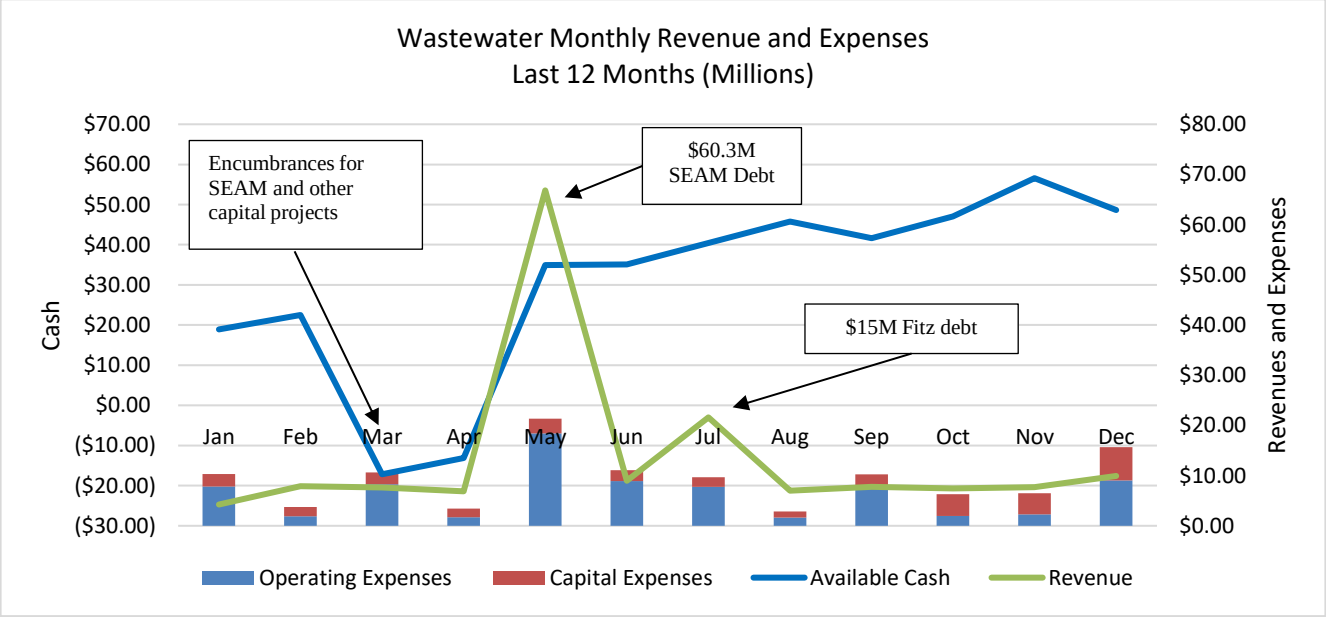
The total number of water connections (single-family, commercial, irrigation and multi-family) and the corresponding Water Connection Fee revenue for 2012-2021 are shown on the following graph. The number of water connections in 2021 increased by 385 connections or 18.9 percent compared to 2020. Total water connection fee revenues through 2021 were $3.5 million (6.5 percent) higher than in 2020. The overall growth due to development in 2021 was the highest in the last ten years in terms of revenues and connections.

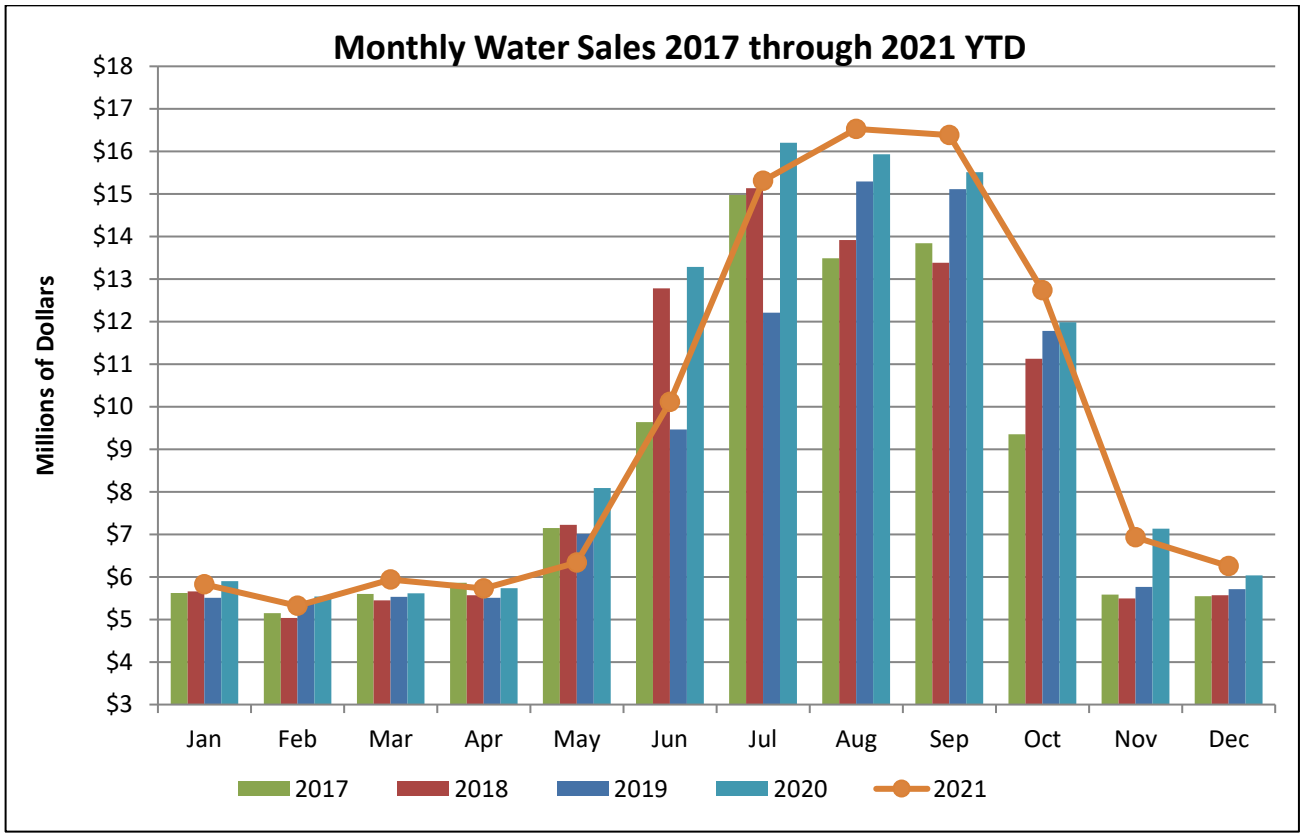


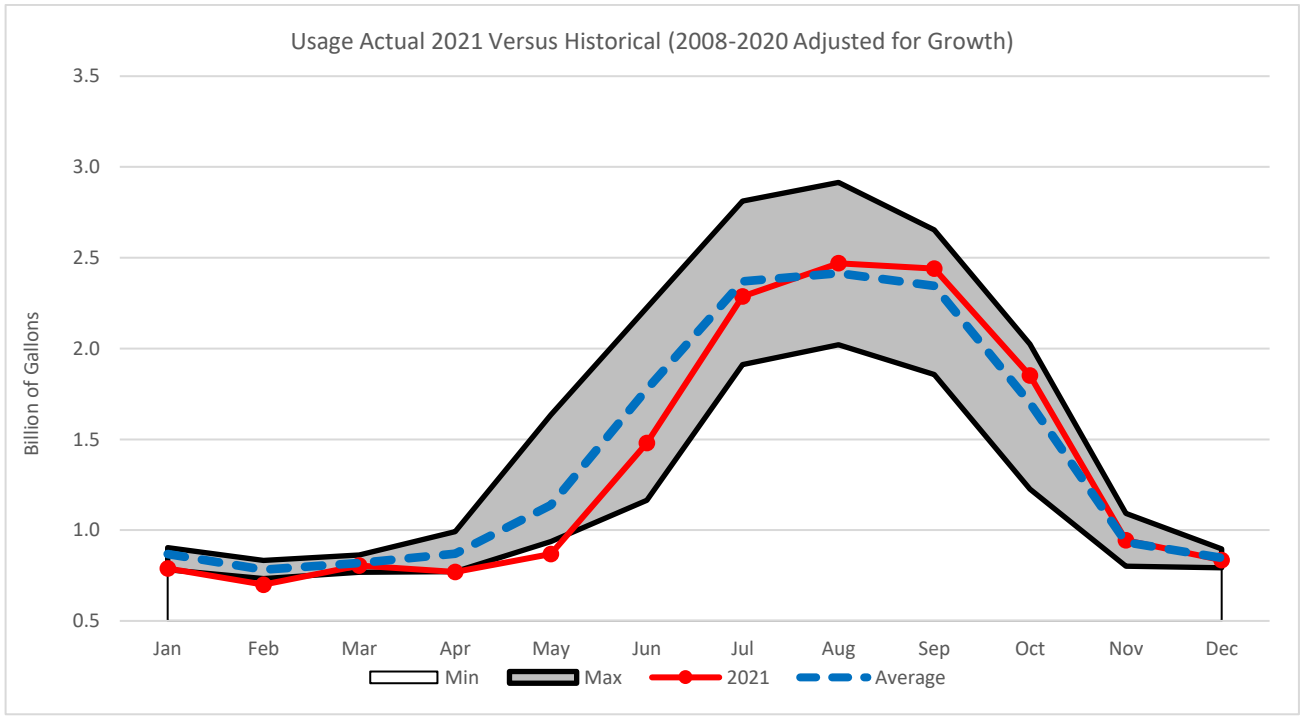
2021 Revenue, Expenses and Cash Flow

The following graphs present a summary of the last 12 months of monthly revenues, expenses, and cash flow.






Monthly Water Sales 2017 through 2021 YTD
Millions of Dollars
$18
$17
$16
$15
$14
$13
$12
$11
$10
$9
$8
$7
$6
$5
$4
$3
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
2017
2018
2019
2020
2021


Usage Actual 2021 Versus Historical (2008-2020 Adjusted for Growth)
Billion of Gallons
3.5
3.0
2.5
2.0
1.5
1.0
0.5
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Min
Max
2021
Average

Overall Capital Plan

Capital Projects Spending as of 12/31/2021				
Program	**Working Budget***	**YTD Spending Plan**	**YTD Actual Spend**	**Encumbered****
Water CIP				
Operations & General Management	93,426,820	30,202,906	19,281,958	66,790,651
Pumping	5,545,383	2,149,948	1,822,122	2,607,915
SOS Other	48,526,089	16,529,186	3,970,268	3,637,476
SOS Storage	32,008,338	16,554,532	5,516,098	8,174,258
SOS Water	35,933,508	48,748,116	47,736,540	4,877,590
Transmission & Distribution	36,793,119	24,202,787	14,523,480	14,658,605
Treatment	41,496,533	21,758,449	10,872,405	8,037,205
Water Total	**293,729,790**	**160,145,924**	**$103,722,871**	**108,783,700**
Sewer CIP				
Collection	38,261,034	20,535,571	5,634,414	13,584,487
Operations & General Management	43,988,797	16,575,773	9,442,089	25,959,278
Sewer Total	**$82,249,831**	**$37,111,345**	**$15,076,503**	**39,543,765**
Stormwater CIP				
Stormwater	33,791,299	14,915,861	12,939,487	4,903,461
Operations & General Management	19,943,556	17,930,570	4,023,450	15,034,589
Stormwater Total	**53,734,855**	**$32,846,431**	**$16,962,937**	**$19,938,050**
Wastewater Total	**135,984,686**	**$69,957,775**	**$32,039,440**	**$59,481,815**
Water & Wastewater Total	**$429,714,476**	**$230,103,699**	**$135,762,311**	**$168,265,515**

*Working budget includes adopted budget, carryforward, transfers, lapsed appropriations, and supplementals.
**Encumbered amounts are PO contracts that may carry multiple years.

Capital Projects Spending

Several factors contributed to project delays including the current economic conditions affecting the supply chain and labor force, changing development plans impacting utility corridors, and increased permitting timelines. The majority of the Senac Creek Interceptor has also been delayed due to unusually high responses to a request for bid. Management has made the decision to delay the majority of this project, re-evaluate the timing and pursue developer partnerships for project funding.

Total capital spending in the Water Fund through the Fourth quarter was $103.7 million, which was $56.4 million less than the year-to-date spending plan of $160.1 million. This is due to timing differences in anticipated spending. The variance can primarily be attributed to permitting delays at the

South East Area Maintenance Facility (SEAM), Wild Horse Reservoir (SOS Storage), and Well Field Land Acquisition (SOS Storage). Additional delays due to delayed geotechnical/surveying efforts were also experienced at the Solids Handing System Improvements project (Treatment). The SOS Water program came in over budget and close to plan due to several land acquisitions and water rights purchases. Johns Ranch land and water rights purchase occurred in the fourth quarter. Many of the projects in the Water Fund are encumbered for a total of $108.8 million.

Through the Fourth quarter, total capital spending in the Wastewater Fund was $32.0 million, which was $38.0 million less than the spending plan of $70.0 million. There are also timing differences of anticipated spending in the Wastewater Fund. The South East Area Maintenance Facility (SEAM) is $17.9 million less than plan due to delays caused by permitting. In the Collection program, the Senac Creek Interceptor project is $6.9 million less than plan due to project re-evaluation and pursuit of developer partnerships for funding. In the Stormwater program, the Peninsula Townhomes Construction project is $1.2 million less than plan due to contracting issues. In addition, the Hutchinson Channel & Central Recreation Center Redesign is $2.0 million less than plan. Many of the projects in the Wastewater Fund are encumbered for a total amount of $59.5 million.

Capital Improvement Project of the Quarter
Robertsdale Tank Solar Project

Aurora Water (AW) is seeking opportunities to reduce energy operating expenses and carbon footprint (due to the direct impact of climate change on water supply) through renewable energy projects. Preliminary screening assessments were performed at several Aurora Water locations that led to the selection of Tank #1 for the first solar project at the Robertsdale Pumping Station as the first location for system implementation.

The Robertsdale Pumping Station Tank #1, built in 2010, is a 10-million-gallon underground concrete water storage tank with a flat tank cap that is less than 2' above the ground's surface. The 236' diameter tank roof is flat, low to the ground, and free of obstructions.

Robertsdale Pumping Station is served by Xcel Energy's Commercial & Industrial Secondary General (SG) Service. The site consumes approximately 2,330,000 kWh/year. The annual electric spend is approximately $220,000. The current system size is approximately 470 kW DC of solar PV capacity and will generate power to offset about 31% (737,728 kWh) electricity needs at Robertsdale Pumping station. AW is pursuing the Xcel Energy Solar*Rewards® Medium incentivize program which will provide approximately $27,000/year for 20 years of solar incentives. AW is anticipating approval for a rate switch under Xcel Energy's Secondary Photovoltaic Time-of-Use Service ("SPVTOU") for additional cost savings. With the Solar incentives, rate switch, and energy offset, the expected payback period is less than 12 years and about $60,000 annual savings thereafter.

Structural evaluation of the tank was performed by several structural engineers and was confirmed to accommodate the solar panels as well as other external loading, such as snow and wind. Solar panels were installed in Q4 of 2021 and are anticipated to start energy production in Q1-2022. The panels are anchored using concrete blocks and racks, which resulted in no surface penetration of any kind to the tank.

In addition to the financial benefits, the installation of solar panels helps preserve the tank with a reduction of direct sunlight on the tank surface and less water pooling resulting in less water stains on the tank. The current system is anticipated to offset 523 metric tons of Carbon emissions ever year, which is equivalent to taking 114 gas powered passenger vehicles off the road, planting 8,645 trees, or powering 95 residential homes with clean renewable energy.

2021 Financial Comparison

The following table presents a comparison of budget to revenues and expenses through the Fourth quarter for the year 2021.

WATER as of 12/31/2021				
Revenues & Expenses	**Working Budget***	**YTD Plan**	**YTD Actual (Accrual Basis)**	**% Actual to Plan**
Operating Revenue	$134,055,574	$134,055,574	$135,782,437	1%
Development Revenue	34,892,631	34,892,631	58,234,845	67%
Bond Proceeds and Transfers	120,000,000	120,000,000	403,990,000	237%
Interest Income	1,900,000	1,900,000	1,885,085	-1%
Total Revenue	**$290,848,205**	**$290,848,205**	**$599,892,367**	**106%**
Operating Expense	($72,847,296)	($72,847,296)	($67,778,349)	-7%
Capital Projects	(293,729,790)	(160,145,924)	(103,722,871)	-35%
Debt Service	(26,418,668)	(26,418,668)	(290,831,395)	1001%
Total Expense	**($392,995,754)**	**($259,411,888)**	**($462,332,615)**	**78%**
Net Revenue & Expense	**($102,147,549)**	**$31,436,317**	**$137,559,752**	
SEWER as of 12/31/2021				
Operating Revenue	$51,239,954	$51,239,954	$50,712,963	-1%
Development Revenue	5,762,750	5,762,750	10,569,641	83%
Bond Proceeds and Transfers	44,000,000	44,000,000	43,283,084	-2%
Interest Income	526,360	526,360	304,406	-42%
Total Revenue	**$101,529,064**	**$101,529,064**	**$104,870,094**	**3%**
Operating Expense	($42,603,237)	($42,603,237)	($40,595,042)	-5%
Capital Projects	(82,249,831)	(37,111,345)	(15,076,503)	-59%
Debt Service	(12,800,146)	(12,800,146)	(12,650,204)	-1%
Total Expense	**($137,653,214)**	**($92,514,728)**	**($68,321,749)**	**-26%**
Net Revenue & Expense	**($36,124,150)**	**$9,014,336**	**$36,548,345**	
STORMWATER as of 12/31/2021				
Operating Revenue	$23,650,020	$23,650,020	$23,903,355	1%
Development Revenue	1,700,000	1,700,000	3,988,695	135%
Bond Proceeds and Transfers	-	-	17,000,000	0%
Interest Income	320,000	320,000	393,506	23%
Total Revenue	**$25,670,020**	**$25,670,020**	**$45,285,556**	**76%**
Operating Expense	($13,684,174)	($13,684,174)	($11,166,663)	-18%
Capital Projects	(53,734,855)	(32,846,431)	(16,962,937)	-48%
Debt Service	(8,773,526)	(8,773,526)	(8,539,880)	-3%
Total Expense	**($76,192,555)**	**($55,304,131)**	**($36,669,480)**	**-34%**
Net Revenue & Expense	**($50,522,535)**	**($29,634,111)**	**$8,616,076**	

*Working budget includes adopted budget, carryforward, transfers, lapsed appropriations, and supplementals.

Year-to-date Comparison to Prior Year (Water, Sewer and Stormwater)

The following table presents a comparison of revenues and expenses through the Fourth quarter for years 2021 and 2020.

WATER Fourth Quarter Comparison			
Revenues & Expenses	**2021**	**2020**	% Change
Operating Revenue	$135,782,437	$139,702,145	-3%
Development Revenue	58,234,845	54,692,630	6%
Bond Proceeds and Transfers	403,990,000	0	0%
Interest Income	1,885,085	3,856,000	-51%
Total Revenue	**$599,892,367**	**$198,250,775**	**203%**
Operating Expense	($67,778,349)	($63,882,331)	6%
Capital Projects	(103,722,871)	(124,789,950)	-17%
Debt Service	(290,831,395)	($20,925,326)	1290%
Total Expense	**($462,332,615)**	**($209,597,607)**	**121%**
Net Revenue & Expense	**$137,559,752**	**($11,346,832)**	
SEWER Fourth Quarter Comparison			
Operating Revenue	$50,712,963	$50,122,478	1%
Development Revenue	10,569,641	9,945,053	6%
Bond Proceeds and Transfers	43,283,084	0	0%
Interest Income	304,406	907,717	-66%
Total Revenue	**$104,870,094**	**$60,975,248**	**72%**
Operating Expense	($40,595,042)	($41,458,673)	-2%
Capital Projects	(15,076,503)	(12,840,825)	17%
Debt Service	(12,650,204)	($2,520,902)	402%
Total Expense	**($68,321,749)**	**($56,820,400)**	**20%**
Net Revenue & Expense	**$36,548,345**	**$4,154,848**	
STORMWATER Fourth Quarter Comparison			
Operating Revenue	$23,903,355	$24,053,152	-1%
Development Revenue	3,988,695	1,934,896	106%
Bond Proceeds and Transfers	17,000,000	0	0%
Interest Income	393,506	599,251	-34%
Total Revenue	**$45,285,556**	**$26,587,299**	**70%**
Operating Expense	($11,166,663)	($11,148,524)	0%
Capital Projects	(16,962,937)	(22,622,412)	-25%
Debt Service	(8,539,880)	($1,169,769)	630%
Total Expense	**($36,669,480)**	**($34,940,705)**	**5%**
Net Revenue & Expense	**$8,616,076**	**($8,353,406)**	

MEMORANDUM

City of Aurora

Worth Discovering • auroragov.org

TO: **Citizens' Water Advisory Committee**

THROUGH: **Marshall Brown, General Manager of Water**
Sarah Young, Deputy Director of Planning & Engineering

FROM: **Catherine Schumacher, Project Engineer, Aurora Water**

DATE: **February 8, 2022**

SUBJECT: **Capital Improvement Project - Piney Creek Waterline Repair Project**

Purpose:
This memorandum is to provide support for an informational presentation regarding the Piney Creek Waterline Repair Project completed by Aurora Water Project Delivery Services group.

Presentation Summary:
Aurora Water Operations and Maintenance Team located a leak in the pressurized 12-inch potable DIP located near Saddle Rock Golf Course crossing underneath Piney Creek. Aurora Water's Project Delivery Services (PDS) was asked to help develop a solution to restore water services and redundancy to our system.

Dewberry was contracted to complete a design that included an alternative pipeline route development, field investigations, environmental services, agency and Aurora Coordination, geotechnical analysis and reporting, and the replacement pipeline design using horizontal directional drilling (HDD) methods. Additionally, the design included elements of open trench and cure-in-place pipe (CIPP). In parallel with the design phase stakeholder engagement was completed to pave the way for construction.

Blackeagle Energy Solutions was contracted to construct the project. Construction phase highlights included a two-month construction schedule, supplemental equipment staging at Saddle Rock Golf Maintenance Yard, scheduled trail closures and pedestrian rerouting, groundwater permitting, and open space restoration. This project was fortunate that no procurement delays affected the schedule.

The project overview and highlights include:

- Installed 280-ft of pipeline using Open Trench methods
- Installed 300-ft of pipeline using HDD methods
- Installed 90-ft of pipeline using Pressurized CIPP methods
- Completed construction 1-week before planned substantial completion date
- 5% under design budget and 8% under construction budget
- Change orders covered within approved budget

The successful completion of this project benefits Aurora as follows:

- Reinstated redundancy to the potable water distribution system for customers
- Used new technologies and gained expertise for Aurora Water
- Delivered a project on-time and under budget
- Robust restoration in Open Space
- No safety incidents
- No stakeholder concerns

Question:
Informational item only. No action required.

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Piney Creek Waterline Repair Project

Citizens' Water Advisory Committee Meeting

02/08/2022

Catherine Schumacher – cschumac@auroragov.org

AURORA WATER

1

Presentation Outline

- Introductions
- Project Background and Objectives
- Stakeholder Engagement
- Project Overview and Highlights
- Benefits to Aurora

AURORA WATER

2

Introductions

- The Project Team
  - Aurora Water
    - Operations – Gary Edwards
    - PDS Principal – Dean Bedford
    - PDS Project Engineer – Catherine Schumacher
  - Design Consultant - Dewberry
  - Contractor – Blackeagle Energy Solutions
  - Other Stakeholders
    - Public and Residents
    - PROS and Golf
    - Regulatory Agencies

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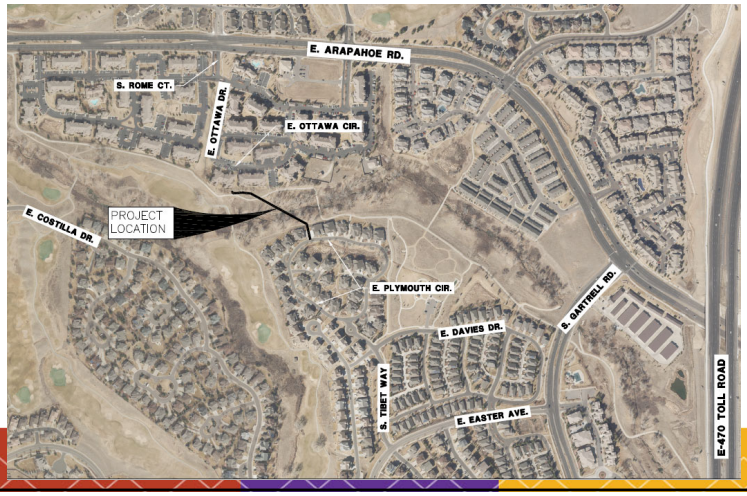
3

Project Background and Objectives

- Aurora Water O&M team located a leak in the pressurized 12-inch potable DIP located near Saddle Rock Golf Course crossing underneath Piney Creek.



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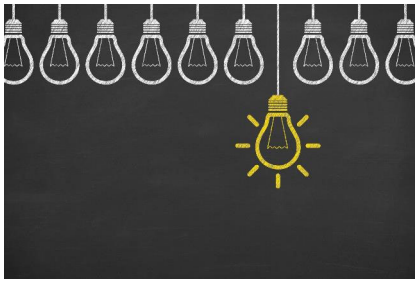
4

Project Background and Objectives

- Project Delivery Services (PDS) asked to help develop a solution to restore water services.
- Redundancy in our system is KEY!!



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5

Project Background and Objectives

- Due Diligence on Alternative Construction Method

	Pressure Cure in Place Pipe (CIPP)	Horizontal Directional Drilling (HDD)	Open Trench
Pros	• Minimal surface impacts • Fast installation	• Minimal surface impacts • Fast installation	• Alignment can be customized
Cons	• Difficult to line through bends • Re-installing taps	• Fluid management	• Extensive surface impacts • Slow installation • Fluid management

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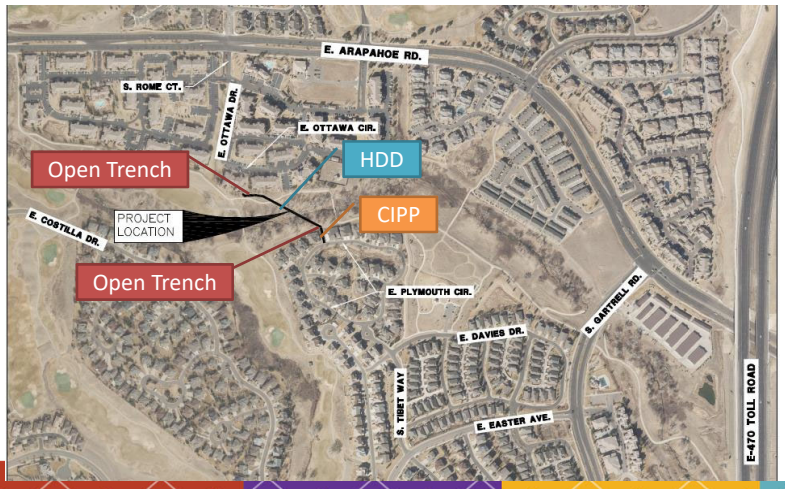
6

Project Background and Objectives

- One solution wouldn't cut it; need a combination of all these solutions



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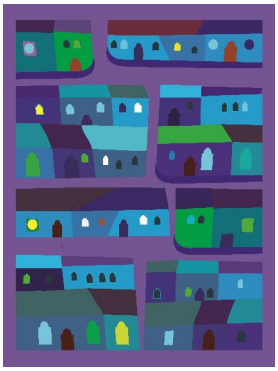
Stakeholder Engagement

- Identify Stakeholders
- Started Early
- Communicated at Major Milestones
- Tree Trimming
- No complaints or calls were received



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8

Project Overview and Highlights

- Design Phase Highlights
  - Route Development
  - Field Investigations
  - Environmental Services
  - Agency and Aurora Coordination
  - Geotechnical Analysis and Reporting
  - HDD Design

AURORA WATER

9

Project Overview and Highlights

- Construction Phase Highlights
  - Two months construction schedule
  - Supplemental Equipment Staging at Saddle Rock Golf Maintenance Yard
  - Scheduled Trails Closures and Pedestrian Rerouting
  - Groundwater permitting
  - No procurement delays
  - Restoration

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10

Project Overview and Highlights

- 280 LF - Open Trench
- 300 LF - HDD
- 90 LF - Pressurized CIPP
- Completed 1-week before planned date
- 5% under design budget
- 8% under construction budget
- Change orders covered within budget
- **Within Budget and On-time!!**

AURORA WATER

11

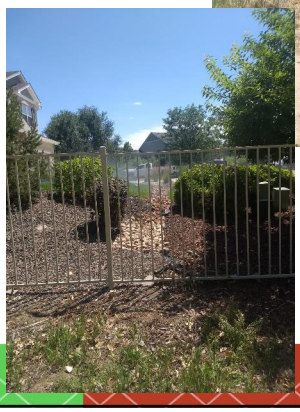
Benefits to Aurora

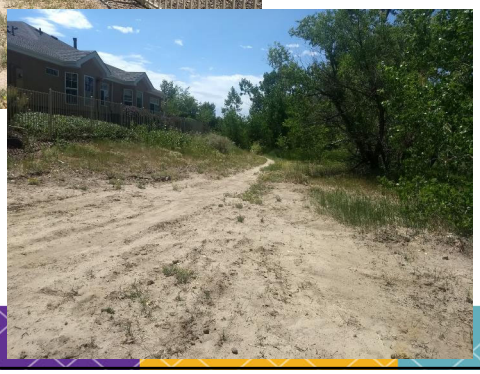
- Reinstated redundancy to the potable water distribution system for customers
- Used new technologies and gained expertise for Aurora Water
- Delivered a project on-time and under budget
- Robust restoration in Open Space
- No safety incidents
- No stakeholder concerns

AURORA WATER

12

Project Photos – Pre-Construction – South Side





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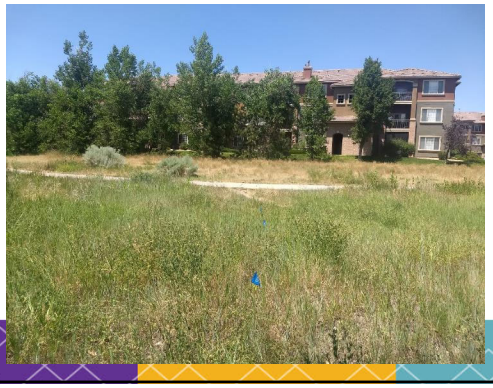
Project Photos – Pre-Construction – North Side



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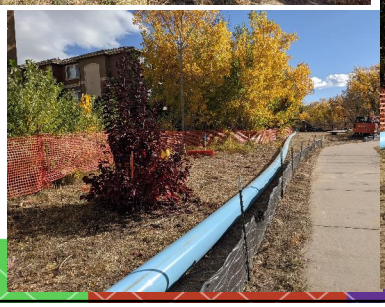
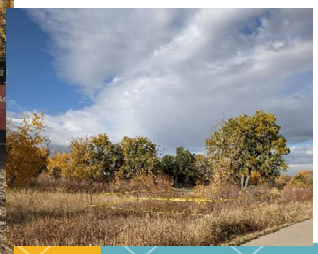
14

Project Photos – HDD





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Project Photos – HDD Pull Back

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Project Photos – CIPP

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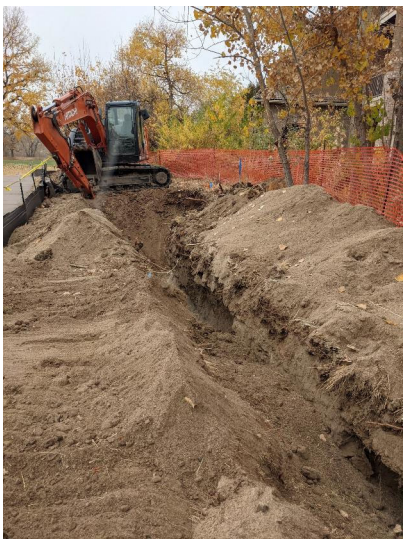
Project Photos – Open Trench



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Project Photos – Post Construction & Restoration

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Questions

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MEMORANDUM

City of Aurora

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To: **Citizens' Water Advisory Committee**

Through: **Marshall Brown, General Manager, Aurora Water**

From: **Alexandra Davis, Deputy Director for Water Resources, Aurora Water**

Date: **February 8, 2022**

Subject: **Colorado Anti-Speculation Law Workgroup overview**

Purpose:
The General Assembly has become increasingly concerned that private investors were and are seeking to acquire water rights solely to realize significant profit. Thus, in 2020, the General Assembly passed SB 20-048 establishing a group of water experts charged with exploring ways to strengthen existing water anti-speculation law. Alexandra Davis, Aurora Water's Deputy Director for Water Resources, was a member of that workgroup and will detail the challenges faced by the workgroup, the report submitted and any potential legislation that may result from this review.

Background:
At the January 11, 2022 CWAC meeting, a request was made for a presentation from staff on the Anti-Speculation Law Workgroup.

Action required:
Informational item only. No action is required.

Attached:

Paper presented to the Rocky Mountain Mineral Law Foundations' Water Law Conference
Final Report from the Anti-Speculation Law Workgroup

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Citizens' Water Advisory Committee

Anti-what?

Anti-speculation

Alexandra L. Davis
Deputy Director Water Resources, Aurora Water
February 8, 2022

AURORA WATER

1

Colorado's Anti-Speculation Doctrine

The water of every natural stream, not heretofore appropriated, within the state of Colorado, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided.

Colo. Const. art. XVI, § 5.

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2

Two important policy principles underlie Prior Appropriation

Maximum Utilization

- The public's water is subject a doctrine intended to make water available for as many decreed uses as there is available supply
- maximum utilization encourages maximum water use

Anti-speculation

- The public's water is subject to a doctrine is to "preserve[e] unappropriated water for users with legitimate, documentable needs.

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3

Maximum Utilization & Anti-Speculation

The Colorado Doctrine formed "a way of limiting speculation and concentration of wealth in water and encouraging its wide distribution . . . by limiting the amount that could be acquired by any one [user] to the amount actually needed … at the time of appropriation.

The anti-speculation doctrine is designed to prevent the hoarding of water rights to the detriment of other water users

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4

Current status

In Colorado, the courts have continuously applied and the Legislature has continued to support the application of the Anti-Speculation Doctrine.

- The current law prohibiting speculation is robust and reaches many aspects of water allocation and water rights,
- However, there are transactions where the profit is realized that are not subject to review by water court or any other regulatory entity.
- There is currently no clear mechanism to enforce the anti-speculation doctrine in the context of the purchase and sale of water rights by private investors in Colorado even though because their primary motivation of profit, the transaction would ostensibly be prohibited by the anti-speculation doctrine.

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Legislatively mandated Anti-Speculation Workgroup

- Created by SB 20-048
- Met throughout 2020
- 22 members, including people affiliated with the agricultural community, environmental and recreational interests, and municipal water providers, as well as attorneys with a variety of backgrounds in water law
- 19 Potential actions for the State Legislature
- Issued *Senate Bill 20-048 Report of the Work Group to Explore Ways to Strengthen Current Water Anti-Speculation Law*

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6

Workgroup Defined:

Traditional Water Speculation

- seeking to appropriate, change, or continue a water right without a specific plan and intent to put the water right to its claimed beneficial use, or without a vested interest in the facilities or place to be served by the water

Investment Water Speculation

- the appropriation or purchase of water rights followed by the use of those water rights, where the appropriator or purchaser's primary purpose is profiting from increased value of the water in a subsequent transaction such as sale, lease, or payment for non-diversion. The profit is derived solely from forces of supply and demand, and not from any added value

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7

Legislatively mandated Anti-Speculation Workgroup

Identified common values

- Coloradans value water for its beneficial use. **Water should not be traded as a commodity for profit.**
- Coloradans value irrigated lands, safe and reliable drinking water, and the environmental, recreational, and community benefits derived from our water resources.
- Coloradans value property rights in the beneficial use of water and the protection of these property rights.

Significant areas of disagreement

- Care for asset (belief that individual owner will care more than investors and take care of farms differently)
- Possible outcomes of Investment Speculation, may be perceived differently by various sectors and water users (rural communities, state partners, farmers, water providers).
- One group may perceive a risk here another group does not. Sellers may welcome hedge fund buyers; ultimate buyers may not.
- Concerns about unintended consequences: what were they would they really happen

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8

Anti-Speculation Workgroup Continued

The biggest tension was that between the community and the individual:

Under Colorado's constitution, water is a public resource owned by the State to be used for the well-being of the people. Colorado's water plan underscores the fact that Colorado views its water as a public resource and it is managed as a public resource. Not as a commodity to be traded for financial gain.

The other end of the spectrum is that water rights are usufructary property rights that have been sold regularly. There were strong opinions wanting to protect value of the ultimate asset for when it was sold.

9

Legislative action

SB22-029 Investment Water Speculation Prohibition

Sen Donovan & Sen Coram will be revising

Stakeholder meetings TBD

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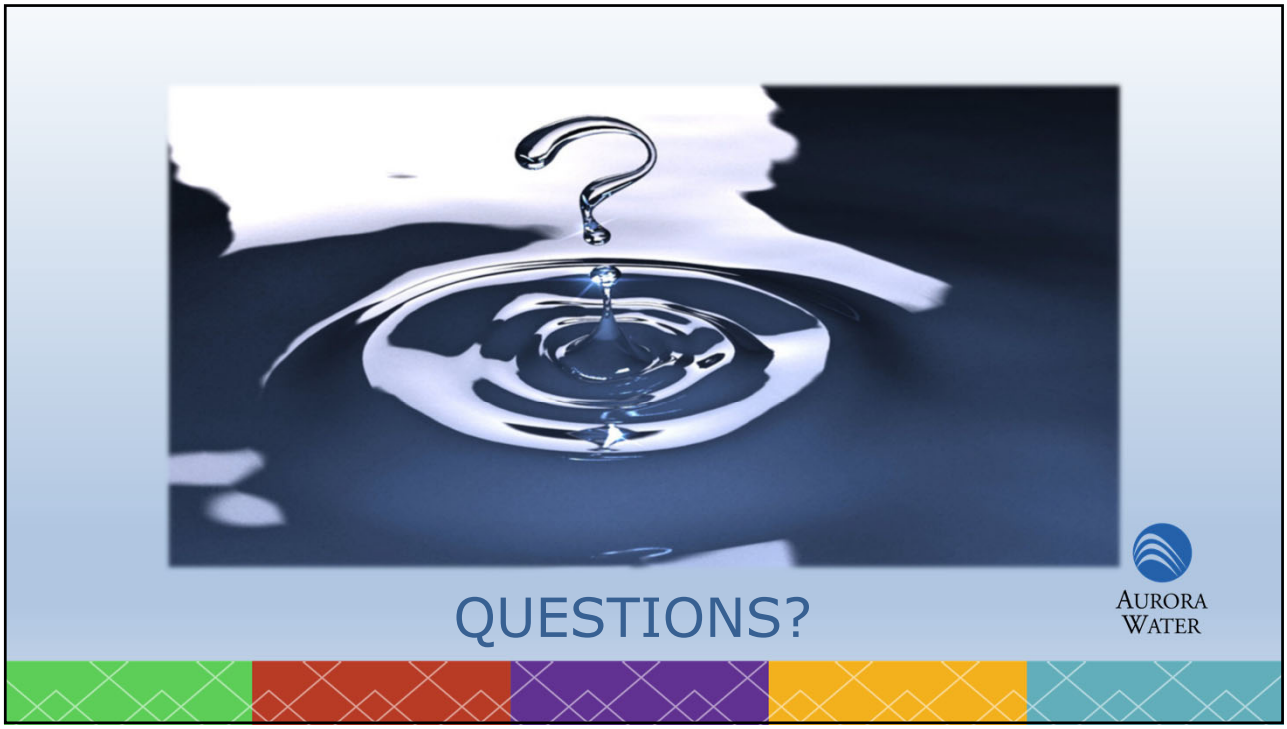

11

Private investment or speculation? Are they the same and does it matter?

Prepared for the November 5, 2021 Rocky Mountain Mineral Law Foundations' Water Law Conference.

By Alexandra Davis[1] (with significant help from the Colorado Work Group to Explore Ways to Strengthen Current Water Anti-Speculation Law)

Much of this paper is pulled from the SB 20-048 - Report of the Work Group to Explore Ways to Strengthen Current Water Anti-Speculation Law submitted by that Work Group on August 13, 2021 to the Interim Water Resources Review Committee of the Colorado General Assembly. I was a member of the Work Group and participated in the creation and drafting of the report. The Work Group did an excellent job reviewing the historical context of anti-speculation law in Colorado and whether it would apply to what we termed *Investment Water Speculation*. Rather than try to paraphrase or redo work already done, I choose to reuse the excellent work done and give credit to all the members of that group,[2] with special credit to the legal subcommittee of the Work Group who produced the section on anti-speculation history and law used herein. Those authors are Scott Steinbrecher, Steve Leonhardt, Peter Fleming, Peggy Montano, Adam Reeves, Drew Peternell and Justice Greg Hobbes.

The General Assembly has become increasingly concerned that private investors were and are seeking to acquire water rights solely to realize significant profit. Thus, in 2020, the General Assembly passed SB 20-048 establishing a group of water experts charged with exploring ways to strengthen existing water anti-speculation law.[3] Some may question the need for such exploration finding that there is no harm in seeking to profit from water rights. Others are concerned for a variety of reasons including the fact that water is a critical resource. In the West, it is a scarce critical resource. You, I, all life must have it <u>every</u> day. And there is no substitute. As such, there is an inherent unease with the idea that water could be controlled by a few wealthy people. Good governance requires that such a resource be accessible to everyone on as equal terms as possible.

Moreover, utilities that provide drinking water are what economists call natural monopolies. Water treatment and distribution systems are expensive. Start-up costs associated with establishing utilities are substantial and thus a strong deterrent for potential competitors.4 Unlike other consumer goods, any particular business or home can be served by only one water provider. And the consumer does not have choice in who their water provider is. Thus, whether the profit is realized through the sale of water to a water provider or by being a water provider, the money creating the profit margin the private investor seeks comes from the citizens of the communities, who end up paying a higher price for their drinking water.[5] The concerns may be summed up as, "should citizens pay an increased cost for a critical resource that is owned by the State, <u>by the public</u>, solely to allow a small group or individual to profit?"

[1] Any and all opinions expressed herein are solely mine. They are not positions or opinions of anyone else including and especially Aurora Water or the Anti-Speculation Work Group.

[2] Members of the Work Group are listed on page 10 of *SB 20-048 - Report of the Work Group to Explore Ways to Strengthen Current Water Anti-Speculation Law*

[3] *SB 20-048 - Anti-Speculation Work Group Report,* Page 6; C.R.S. § 37-98-103(8)(a).

[4] https://www.investopedia.com/terms/n/natural_monopoly.asp

[5] While there are exceptions, generally the transaction (in Colorado) where profit is realized is through the sale of agricultural water rights to municipal water providers. Most municipal water providers are not 'for profit' entities and operate at cost. Increased costs are borne by citizens served by the water provider.

Colorado Courts and the Colorado General Assembly have time and again determined that citizens should not pay that increased cost. The history of Colorado's Anti-Speculation Doctrine demonstrates that in Colorado the idea of acquiring water rights solely to profit from the further sale of the water rights (and not the activity which comes from using the water) has always been anathema. The Work Group set forth this history:

> *The Colorado Constitution provides that, "[T]he water of every natural stream, not heretofore appropriated, within the state of Colorado, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided." [6] Stated simply, in Colorado, water flowing in natural streams is the property of the public, subject to appropriation for beneficial use.[7]*
>
> [Colorado has, since the late 1880's, used the Prior Appropriation Doctrine to allocate its water resources.] *"The doctrine of prior appropriation is a rule of scarcity, not of plenty."[8] Under the prior appropriation doctrine, a water right confers not ownership of water, but rather the right to place water to a beneficial use.*
>
> *Scarcity of water led not only to Colorado's prior appropriation system of water allocation, but also to several policy principles that underlie Colorado water law, among them maximum utilization and anti-speculation. In Colorado, the public's water is subject to the policy of maximum utilization, "a doctrine intended to make water available for as many decreed uses as there is available supply."[9]*
>
> *The other side of the maximum utilization coin is anti-speculation. While maximum utilization encourages maximum water use, the purpose of Colorado's anti-speculation doctrine is to "preserve[e] unappropriated water for users with legitimate, documentable needs."[10] The roots of anti-speculation "reside in the agrarian populist efforts of miners and farmers to resist speculative investment that would corner the water resource to the exclusion of actual users settling into the territory and state."[11]*
>
> *By requiring maximum utilization and beneficial use, the Colorado Doctrine formed "a way of limiting speculation and concentration of wealth in water and encouraging its wide distribution . . . by limiting the amount that could be acquired by any one irrigator to the amount actually needed to water his or her crops at the time of appropriation."[12] [Emphasis added]. The anti-speculation doctrine is*

[6] *SB 20-048 - Anti-Speculation Work Group Report, p. 11; Colo. Const. art. XVI, § 5.*

[7] *SB 20-048 - Anti-Speculation Work Group Report, p.11 Pagosa Area Water and Sanitation Dist. v. Trout Unlimited, 170 P.3d 307, 313 (Colo. 2007).*

[8] *SB 20-048 - Anti-Speculation Work Group Report, p. 11; Gregory J. Hobbs, Jr., Reviving the Public Ownership, Anti Speculation, and Beneficial Use Moorings of Prior Appropriation Water Law, 84 U. Colo. L. Rev. 97, 111 (2013).*

[9] *SB 20-048 - Anti-Speculation Work Group Report, p. 12; Pagosa, 170 P.3d at 313.*

[10] *SB 20-048 - Anti-Speculation Work Group Report, p. 12; City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 51 (Colo. 1996) ("Bijou").*

[11] *SB 20-048 - Anti-Speculation Work Group Report, p. 12; High Plains A & M, LLC v. Southeastern Water Conservancy District, 120 P.3d 710, 719 (Colo.2005) (citing David B. Schorr, Appropriation As Agrarianism: Distributive Justice in the Creation of Property Rights, 32 Ecology L.Q. 3, 33, 41, 55–56 (2005)).*

[12] *SB 20-048 - Anti-Speculation Work Group Report, p. 12; David B. Schorr, The Colorado Doctrine: Water Rights, Corporations, and Distributive Justice on the American Frontier 44 (2012) [Emphasis added].*

designed to prevent the hoarding of water rights to the detriment of other water users.[13]

The principle that water, a critical irreplaceable resource, needs to be used for a legitimate purpose was intended to prevent wealthy investors from dominating water rights in a manner solely aimed at profit. This is a fundamental aspect of Colorado's anti-speculation doctrine.

Acquiring water for future profit, rather than beneficial use, is at the heart of water speculation. The mere desire to profit is not a legitimate use of the public's water resource in Colorado. Indeed, the Colorado Supreme Court has identified profit motive as the heart of water speculation.[14] *The Court has explained that:*

> *Our constitution guarantees a right to appropriate, not a right to speculate. The right to appropriate is for use, not merely for profit. As we read our constitution and statutes, they give no one the right to preempt the development potential of water for the anticipated future use of others not in privity of contract, or in any agency relationship, with the developer regarding that use. To recognize conditional decrees grounded on no interest beyond a desire to obtain water for sale would as a practical matter discourage those who have need and use for the water from developing it. Moreover, such a rule would encourage those with vast monetary resources to monopolize, for personal profit rather than for beneficial use, whatever unappropriated water remains.*[15]

"Over-appropriation" describes stream conditions when demand for water exceeds the amount of water available. In Colorado, the Arkansas, South Platte and Rio Grande Rivers and their tributaries are now over-appropriated most of the time. When there were fewer demands and more water available for appropriation, the anti-speculation focus and concern was articulated in the context of new water right appropriations such as in the case of the Vidler Water Company (whereby a private water company sought to appropriate water that was not then needed for actual beneficial use).[16] Later as over-appropriated status become more of the norm, the importance and value of senior water rights increased and the anti-speculation doctrine was held to apply to 'change of water right' cases.[17] It applies to groundwater.[18] Now the focus is shifting again; private investors understand that often with water, the profit is secured through the sale of existing (usually agricultural) rights to other water users (usually municipal) and to accomplish this, the investor does not need to be the one to adjudicate the change of water rights. Thus, by not changing the use, the investor may avoid judicial or agency scrutiny on the question of speculation. The Work Group recognized this:

[13] *SB 20-048 - Anti-Speculation Work Group Report, p. 12; Id. at 45.*

[14] *SB 20-048 - Anti-Speculation Work Group Report, p.13*

[15] *SB 20-048 - Anti-Speculation Work Group Report, p.13 citing Colorado River Water Conservation District v. Vidler Water Company, 594 P.2d 566, 568 (Colo. 1979) ("Vidler").*

[16] *Colorado River Water Conservation District v. Vidler Water Company, 594 P.2d 566 (Colo. 1979).*

[17] *In High Plains A & M, LLC v. Southeastern Colorado Water Conservancy District, in 2005, the Colorado Supreme Court first confirmed application of the Anti-Speculation Doctrine to a change of absolute water rights application. High Plains A & M, LLC v. Southeastern Water Conservancy District, 120 P.3d 710 (Colo. 2005). SB 20-048 - Anti-Speculation Work Group Report, p. 15.*

[18] *SB 20-048 - Anti-Speculation Work Group Report, p.17.*

> *Speculation as prohibited under existing law is generally subject to review by water courts only when a water right is appropriated, changed, or a claim for diligence is made for a conditional water right. Conveyances or purchases of water rights are not normally subject to review by the courts. That type of speculation that is prohibited under existing law essentially refers to the concept of trying to secure the right to use water but without a specific plan and intent to put the water to beneficial use. Colorado's legal definition of "speculation" thus generally does not expressly cover the sorts of appropriations and purchases of water rights that provided the impetus for SB 20-048.*[19]
>
> *[T]he acquisition of absolute water rights for speculative purposes is likely to avoid judicial review, at least until the purchaser "reopens" the rights by filing in water court to change the type of use, place of use, or point of diversion of the water rights. Avoidance of public notice and water court review is even more likely if the purchaser is able to secure the speculative profit without needing to secure a change of water rights.*[20]

To assist in understanding today's problem, the Work Group articulated the difference between "Traditional Water Speculation" (activity that clearly falls within Colorado's existing legal definition of speculation) and "Investment Water Speculation" (investing in water with profit as primary motivation). The Work Group defined Traditional Water Speculation as:

> *seeking to appropriate, change, or continue a water right without a specific plan and intent to put the water right to its claimed beneficial use, or without a vested interest in the facilities or place to be served by the water.*[21]

The Work Group defined Investment Water Speculation as:

> *the appropriation or purchase of water rights followed by the use of those water rights, where the appropriator or purchaser's primary purpose is profiting from increased value of the water in a subsequent transaction such as sale, lease, or payment for non-diversion. The profit is derived solely from forces of supply and demand, and not from any added value.*[22]

As the Report concludes, Investment Water Speculation

> "*violates the intent of Colorado's anti-speculation doctrine because the investor's primary goal is profit from the water value rather than beneficial use of the water (and the profit that comes from the use).*"[23] *None of the current statutorily required water court proceedings apply to the conveyance of water rights in a situation where the purchaser has a speculative intent (i.e. Investment Water Speculation, …). This does not necessarily mean that the anti-speculation doctrine does not apply to the speculative acquisition of water rights. As discussed above, the doctrine is rooted in the constitutional edict that the appropriation of water is for beneficial use—not for speculative profit. Thus, the anti-*

[19] *SB 20-048 - Anti-Speculation Work Group Report, page 6.*

[20] *See High Plains, supra, 120 P.3d at 720. SB 20-048 - Anti-Speculation Work Group Report, page 21; citing See High Plains, supra, 120 P.3d at 720.*

[21] *SB 20-048 - Anti-Speculation Work Group Report, page 30.*

[22] *Id. The mere purchase or sale does not trigger water court review if the investor continues to use the water for its decreed beneficial use.*

[23] *SB 20-048 - Anti-Speculation Work Group Report, page 30.*

speculation doctrine actually applies at all times – it is never permissible to hoard water solely for speculative purposes.[24]

The current law prohibiting speculation is robust and reaches many aspects of water allocation and water rights, but because the speculative transaction is where the profit is realized, and such transactions are not currently subject to review by water court or any other regulatory entity , these transactions are not scrutinized in a way to prevent the speculation that current law prohibits. There is currently no clear mechanism to enforce the anti-speculation doctrine in the context of the purchase and sale of water rights by private investors in Colorado even though because their primary motivation of profit, the transaction would ostensibly be prohibited by the anti-speculation doctrine.

The Colorado General Assembly and courts have consistently affirmed the principles underlying the anti-speculation doctrine and sought to protect the public's access to water, in accordance with the Prior Appropriation Doctrine, for those activities that directly benefit the people of the state and not for those seeking just to profit. Legislators are currently working on several proposals to address Investment Water Speculation. The question in front of the Colorado General Assembly appears to be not whether such a mechanism is necessary, but just what the mechanism is.

[24] *SB 20-048 - Anti-Speculation Work Group Report, page 21*

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SB 20-048 - Report of the Work Group to Explore Ways to Strengthen Current Water Anti-Speculation Law

August 13, 2021

Submitted to the Interim Water Resources Review Committee of the Colorado General Assembly as required by Section 37-98-103, C.R.S.

TABLE OF CONTENTS

Acknowledgements

This report was only possible because of the extraordinary efforts of the Work Group Members, each of whom volunteered countless hours to this important task. Their dedication was matched only by the diversity of their experience and perspectives. Each member's contribution was critical in the effort to develop a comprehensive final report, just as each citizen's contribution is critical to the success of our State.

1. Executive Summary

This *Senate Bill 20-048 Report of the Work Group to Explore Ways to Strengthen Current Water Anti-Speculation Law* ("Report") was developed by the SB 20-048 Work Group and is submitted to the Water Resources Review Committee ("Committee") in fulfillment of the provisions of SB 20-048. In SB 20-048 the General Assembly directed the Executive Director of the Department of Natural Resources ("Executive Director") to convene a Work Group to explore ways to strengthen current water anti-speculation law.[1] SB 20-048 directed the Work Group to submit a written report regarding any recommended changes to the Committee by August 15, 2021.[2]

The Work Group has 22 members, including people affiliated with the agricultural community, environmental and recreational interests, and municipal water providers, as well as attorneys with a variety of backgrounds in water law. In addition, the Work Group includes members of the State Engineer's Office, Colorado Water Conservation Board, Attorney General's Office, and the Judicial Department. Work Group members were invited to apply their unique expertise to this effort with no expectation that they participate on behalf of a particular entity. The composition of the Work Group embodies the Executive Director's objective of creating a Work Group with diverse interests and perspectives.

Through its work, the Work Group found it important to distinguish two different types of speculation: Traditional Water Speculation and Investment Water Speculation, both of which are later defined in the Report.[3] The distinction is important. The Work Group understood that, at least in part, SB 20-048 grew out of concerns by Colorado water users that businesses, including some outside of Colorado, were appropriating or purchasing water rights with the primary motivation of profiting from a later transaction such as sale, lease, or payment for non-diversion of those rights - even if they have a current plan to beneficially use the water rights . Some people perceived those businesses to be more concerned with generating a profit based on changes in the market value of water rights than with using the water, and hence described those purchases as "speculative." That terminology could be confusing because "speculation" is also a term of art in Colorado water law. Speculation as prohibited under existing law is generally subject to review by water courts only when a water right is appropriated, changed, or a claim for diligence is made for a conditional water right. Conveyances or purchases of water rights are not normally subject to review by the courts. That type of speculation that is prohibited under existing law essentially refers to the concept of trying to secure the right to use water but without a specific plan and intent to put the water to beneficial use. Colorado's legal definition of "speculation" thus generally does not expressly cover the sorts of appropriations and purchases of water rights that provided the impetus for SB 20-048. This Report refers to activity within Colorado's existing legal definition of speculation as "Traditional Water Speculation." Speculation defined relative to profit as primary motivation is referred to as "Investment Water Speculation." Section 4 of this Report contains more detailed definitions of both terms.

[1] C.R.S. § 37-98-103(8)(a).
[2] C.R.S. § 37-98-103(8)(b).
[3] Full definitions are provided in Section 4 of this report.

The legal prohibition against Traditional Water Speculation is founded on the concept that the waters of our natural streams belong to the people and should be available to those with actual needs. A corollary is that water should not be hoarded by those without legitimate needs. These ideas are embedded in Colorado's Constitution. For example, Section 5 of Article XVI says:

> The water of every natural stream, not heretofore appropriated, within the state of Colorado, is hereby declared to be the property of the public, and the same is ***dedicated to the use*** of the people of the state, subject to appropriation as hereinafter provided. (emphasis added)

and Section 6 of Article XVI declares:

> The right to divert the unappropriated waters of any natural stream ***to beneficial uses*** shall never be denied. (emphasis added)

The legal foundations of Traditional Water Speculation are further detailed in Section 3.a of the Report: Factual and Historical Background of Colorado's Anti-Speculation Doctrine ("Legal Background"). The Legal Background describes existing tools to prevent Traditional Water Speculation. The Legal Background also states that water right conveyances without a change of water right are unlikely to be reviewed for Investment Water Speculation using existing tools.

Sections 4, 5, and 6 move from analysis of existing law and and policy to more forward-looking analysis. They are designed to be understood separately from Section 3, although the legal and factual detail in Section 3 helps inform the analysis throughout.

In order to formulate a set of concepts for addressing speculation, the Work Group wanted to first understand the risks associated with Traditional and Investment Water Speculation and the potential negative outcomes that might result from either. Section 4 describes those risks and negative outcomes. Some of those outcomes are not unique to Traditional or Investment Water Speculation and could occur under various water right transactions. Through its discussion of these risks and outcomes, the Work Group identified common values that were shared among its members:

- Coloradans value water for its beneficial use. Water should not be traded as a commodity for profit.
- Coloradans value irrigated lands, safe and reliable drinking water, and the environmental, recreational, and community benefits derived from our water resources.
- Coloradans value property rights in the beneficial use of water and the protection of these property rights.

Having identified risks and negative outcomes, the Work Group then brainstormed potential concepts to address them. Section 5 includes all of the concepts that the Work Group evaluated from the brainstorming effort and details the pros and cons of each concept. Finally, in Section 6, the Work Group presents a select group of concepts

for the Committee's consideration. Each concept presented in Section 6 meets the criteria that the Work Group understands were intended by the General Assembly in SB 20-048: (1) it is a change in law and (2) it has the potential to effectively reduce Investment Water Speculation on a large scale, rather than just in certain limited situations.

Due in part to the drawbacks that the Work Group identified for each of the brainstormed concepts in Section 5, and a lack of consensus, the Work Group does not recommend any of the concepts for implementation. Nevertheless, as a collective body, the Work Group believes it has a responsibility to present concepts to the Committee for consideration, as long as the concepts meet the two criteria above. That will allow the Committee to consider the concepts, including their benefits and drawbacks, and determine whether to further pursue a concept. The Work Group recommends that the General Assembly gather additional feedback from multiple and diverse stakeholders within Colorado for any change in law considered.

The following eight concepts that meet the statutory criteria are described in greater detail, with a focus on the potential drawbacks, in Section 6.

- Concept E: Prohibit or penalize compensated non-diversion.

  The receipt of payment for non-diversion would be made illegal or penalized, unless that payment occurs pursuant to an exception allowed by law. Potential penalties for receiving payment for non-diversion include abandonment of the water right. The primary focus of this concept would be to address speculation near the state line.

- Concept G: Fund and/or create a right of first refusal for the purchase of water rights for long-term irrigation use for public benefit.

  This concept would provide funds for a public entity to purchase irrigation rights to keep those rights in irrigation use. Alternatively or in combination, the state or other entities would be granted a right of first refusal to purchase irrigation water rights before those rights can be sold to an Investment Water Speculator.

- Concept H: Eliminate or reduce the agricultural tax benefit for lands from which water is removed.

  This concept would reduce the benefit for lands converted from irrigated agriculture to non-irrigated agriculture land use types.

- Concept I: Unless irrigated land is going to be changed to a new land use, require water to be tied to the land

  This concept would impose stringent limits on when water rights currently used for irrigation use can be changed to other uses. To be effective in reducing Investment Water Speculation, the concept would need to be applied to a broad swath of lands and water rights, as otherwise the concept might simply increase speculative pressure on water rights for which changes of use are permitted.

- Concept J: Create a statewide process to identify and prohibit Investment Water Speculation.

  This concept would create a statewide process through the water courts, a state agency, or another government body by which water rights purchases would be reviewed for speculative intent and blocked if speculative intent is found.

- Concept K: Encourage local governments to police Investment Water Speculation through their 1041 powers.

  Counties already have some powers to regulate water projects under 1041 permitting projects. This concept would significantly expand the reach and usage of these powers by modifying the statutory language governing 1041 powers to explicitly cover review of water rights sales for speculative intent and providing state funding to counties to develop and implement 1041 regulations under the new designation.

- Concept L: Tax the profit derived from sale or lease of water rights previously purchased for Investment Water Speculation purposes.

  This concept is similar to Concept J and would require a similar process to review the intent of a water right purchase. However, instead of outright preventing transactions identified as Investment Water Speculation, this Concept would merely disincentivize the transactions by imposing a tax. The tax would apply to all subsequent payments to the purchasing entity involving the water right, at a rate that would make Investment Water Speculation less attractive.

- Concept P: Establish maximum rate of water right price increase and impose higher taxes when the rate is exceeded.

  This concept would establish a water right price increase rate, above which a high tax rate would need to be paid on water right transactions.

Common drawbacks include a high cost to implement the concept or impacts to the time and cost of water transactions for all water users, even those who are not speculative investors. Further, the Work Group recognizes that concepts that reduce the sale price of water rights, and therefore, their value as property, present a risk to the current owners of irrigation water rights.

The Committee should be aware that there are several concepts discussed in Section 5 that do not meet the two criteria listed above, but might otherwise be beneficial to Colorado and, therefore, may be worthy of consideration by the Committee and the Colorado water community in other contexts.

2. Introduction

2.a Senate Bill 20-048

In Senate Bill 20-048 the General Assembly directed the Executive Director of the Department of Natural Resources ("Executive Director") to convene a Work Group to explore ways to strengthen current water anti-speculation law.[4] SB 20-048 directed the Work Group to submit a written report regarding any recommended changes to the Committee by August 15, 2021.[5] This *Senate Bill 20-048 Report of the Work Group to Explore Ways to Strengthen Current Water Anti-Speculation Law* ("Report") was developed by the SB 20-048 Work Group and is submitted to the Water Resources Review Committee ("Committee") in fulfillment of the provisions of SB 20-048.

2.b Work Group Member Acknowledgement

Thank you to the members of the Work Group, who represent a broad range of Colorado water interests and backgrounds, for your diligent efforts in completing this report:

Amy Moyer	Lauren Ris
Joseph Bernal	Erin Light
Amy Ostdiek	Kate Ryan
Peter Fleming	Scott Steinbrecher
Joe Frank	Alexandra Davis
Steve Leonhardt	Tracy Kosloff
Alex Funk	Kevin Rein
Daris Jutten	Peggy Montaño
Greg Hobbs	Adam Reeves
Drew Peternell	Larry Clever
Kelly Romero-Heaney	Julian Manasse-Boetani

[4] C.R.S. § 37-98-103(8)(a).
[5] C.R.S. § 37-98-103(8)(b).

3. Background

This section contains discussion of three distinct topics to provide background information relevant to this report. The three topics are: factual and historical background of Colorado's anti-speculation doctrine, water markets, and relevant laws and recent speculation issues in other states.

3.a Factual and Historical Background of Colorado's Anti-Speculation Doctrine

i. Anti-Speculation Law is Founded in the Constitution and is a Product of Colorado's Climate

The Colorado Constitution provides that, "[T]he water of every natural stream, not heretofore appropriated, within the state of Colorado, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided."[6] Stated simply, in Colorado, water flowing in natural streams is the property of the public, subject to appropriation for beneficial use.[7]

As a semi-arid state with limited water resources, Colorado—like the other states west of the 100th meridian—uses a system of prior appropriation for allocating water rights and water resources. The prior appropriation system of water law was born in Colorado and is often referred to across the West as the "Colorado Doctrine." "The doctrine of prior appropriation is a rule of scarcity, not of plenty."[8] "The premise that birthed prior appropriation water law is that water users in a water-scarce region undergoing a population increase must need the water for an actual and continuing beneficial use in order to obtain and retain a share of the public's water resource."[9]

Under the prior appropriation doctrine, a water right confers not ownership of water, but rather the right to place water to a beneficial use. The framers of Colorado's Constitution sought to qualify the right to divert water by enacting section 6 of Article XVI, which states: "[t]he right to divert the unappropriated waters of any natural stream to beneficial use shall never be denied."[10] The "beneficial use" qualification established that any party diverting water from Colorado's streams must put that water to a specified beneficial use.

Further, under prior appropriation, water rights are allocated according to the "first in time, first in right" principle. With the "first in time, first in right" principle, the priority date of the water right is critically important. When the quantity of water available is insufficient to meet the needs of all those with a right to it, newer ("junior") rights are curtailed for the benefit of older ("senior") rights.

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[6] Colo. Const. art. XVI, § 5.
[7] *Pagosa Area Water and Sanitation Dist. v. Trout Unlimited*, 170 P.3d 307, 313 (Colo. 2007).
[8] Gregory J. Hobbs, Jr., *Reviving the Public Ownership, Antispeculation, and Beneficial Use Moorings of Prior Appropriation Water Law,* 84 U. Colo. L. Rev. 97, 111 (2013).
[9] *Id.* at 105.
[10] Colo. Const. art. XVI, § 6.

Scarcity of water led not only to Colorado's prior appropriation system of water allocation, but also to several policy principles that underlie Colorado water law, among them maximum utilization and anti-speculation. In Colorado, the public's water is subject to the policy of maximum utilization, "a doctrine intended to make water available for as many decreed uses as there is available supply."[11] The Colorado Supreme Court has stated that maximum utilization involves, "maximizing the use of Colorado's limited water supply for as many decreed uses as possible consistent with meeting the state's interstate delivery obligations under United States Supreme Court equitable apportionment decrees and congressionally approved interstate compacts."[12]

The other side of the maximum utilization coin is anti-speculation. While maximum utilization encourages maximum water use, the purpose of Colorado's anti-speculation doctrine is to "preserv[e] unappropriated water for users with legitimate, documentable needs."[13] The roots of anti-speculation "reside in the agrarian populist efforts of miners and farmers to resist speculative investment that would corner the water resource to the exclusion of actual users settling into the territory and state."[14] By requiring maximum utilization and beneficial use, the Colorado Doctrine formed " a way of limiting speculation and concentration of wealth in water and encouraging its wide distribution . . . by limiting the amount that could be acquired by any one irrigator to the amount actually needed to water his or her crops at the time of appropriation."[15]

The anti-speculation doctrine is designed to prevent the hoarding of water rights to the detriment of other water users.[16] "[T]he anti-speculation doctrine is rooted in the requirement that an appropriation of Colorado's water resource must be for an actual beneficial use."[17] The actual beneficial use requirement means "the right of any landowner to appropriate water . . . could only arise if the appropriator meant to use the water, not just hoard it for later resale."[18] In other words, one claiming a water right must demonstrate a specific beneficial use before being granted "the privilege of diversion."[19]

The concept underlying the anti-speculation doctrine is that, in a dry climate, it is critical that water resources be allocated to those with actual water needs and legitimate beneficial uses.

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[11] *Pagosa*, 170 P.3d at 313.
[12] *Empire Lodge Homeowners' Ass'n v. Moyer*, 39 P.3d 1139, 1150 (Colo. 2001).
[13] *City of Thornton v. Bijou Irrigation Co.*, 926 P.2d 1, 51 (Colo. 1996) ("*Bijou*").
[14] *High Plains A & M, LLC v. Southeastern Water Conservancy District*, 120 P.3d 710, 719 (Colo. 2005) (*citing* David B. Schorr, *Appropriation As Agrarianism: Distributive Justice in the Creation of Property Rights*, 32 Ecology L.Q. 3, 33, 41, 55–56 (2005)).
[15] David B. Schorr, *The Colorado Doctrine: Water Rights, Corporations, and Distributive Justice on the American Frontier* 44 (2012).
[16] *Id*. at 45.
[17] *High Plains*, 120 P.3d at 714.
[18] Schorr, 32 Ecology L.Q. at 47.
[19] *Combs v. Agric. Ditch Co.*, 28 P. 966, 968 (Colo. 1892).

ii. Acquiring Water for Future Profit, Rather Than Beneficial Use, is at the Heart of Water Speculation

The mere desire to profit is not a legitimate use of the public's water resource in Colorado. Indeed, the Colorado Supreme Court has identified profit motive as the heart of water speculation. The Court has explained that:

> Our constitution guarantees a right to appropriate, not a right to speculate. The right to appropriate is for use, not merely for profit. As we read our constitution and statutes, they give no one the right to preempt the development potential of water for the anticipated future use of others not in privity of contract, or in any agency relationship, with the developer regarding that use. To recognize conditional decrees grounded on no interest beyond a desire to obtain water for sale would as a practical matter discourage those who have need and use for the water from developing it. Moreover, such a rule would encourage those with vast monetary resources to monopolize, for personal profit rather than for beneficial use, whatever unappropriated water remains.[20]

An intent to profit through the sale of water to others amounts to speculation. To combat profit motive, *Vidler* requires that an applicant demonstrate non-speculative intent to use the water itself or that it has a firm commitment or agency relationship with the prospective ultimate user of the water.[21]

iii. Statutory and Case Law Further Explain the Anti-Speculation Doctrine as it Applies in Water Court Proceedings

A. The Anti-Speculation Doctrine Applies to New Conditional and Absolute Water Rights Claims

The Colorado General Assembly codified the Supreme Court's holding in *Vidler* at Section 37-92-103(3)(a), C.R.S. The statute provides:

> "Appropriation" means the application of a specified portion of the waters of the state to a beneficial use pursuant to the procedures prescribed by law; but no appropriation of water, either absolute or conditional, shall be held to occur when the proposed appropriation is based upon the speculative sale or transfer of the appropriative right to persons not parties to the proposed appropriation, as evidenced by either of the following:

[20] *Colorado River Water Conservation District v. Vidler Water Company*, 594 P.2d 566, 568 (Colo. 1979) ("*Vidler*").
[21] *Bijou*, 926 P.2d at 37, 42.

(I) The purported appropriator of record does not have either a legally vested interest or a reasonable expectation of procuring such interest in the lands or facilities to be served by such appropriation, unless such appropriator is a governmental agency or an agent in fact for the persons proposed to be benefited by such appropriation.

(II) The purported appropriator of record 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.[22]

Because the General Assembly defined speculation in the context of an appropriation, it is clear that anti-speculation principles apply to claims for new absolute or conditional water rights. Either of the factors identified in C.R.S. § 37-92-103(3)(a) can demonstrate speculation and defeat a claim for a new absolute or conditional water right.[23]

B. The Anti-Speculation Doctrine Applies to Hexennial Claims for Diligence

The anti-speculation doctrine is applicable not only to new claims for conditional water rights, but also to an application for a finding of reasonable diligence in the development of conditional water rights.[24] **"**The existence of a plan, capability, and need for the water is examined periodically by the water court, at the close of each diligence period, to determine whether the applicant is entitled to retain the antedated priority.**"**[25]

C. The Anti-Speculation Doctrine Applies to Applications to Change Water Rights

Today, courts also apply the anti-speculation doctrine to applications to change water rights, both conditional and absolute. An "absolute water right" is a vested property right perfected by the diversion of water for a specific beneficial use, and confirmed by a water court decree that specifies a point of diversion, an amount of water, a date of priority, and the time and place of use. For both absolute and conditional rights, the decree sets the limits of the owner's right to divert and use water.

Municipalities often seek to expand their water resources by buying absolute water rights originally decreed for irrigation use and filing in water court for a "change of water right" to change the decreed rights to municipal use. If approved, the municipality obtains the right to divert and use the formerly agricultural water in its municipal water supply, on conditions that will prevent injury to other water rights. Relatedly, third parties may also attempt to change water rights and then sell them to municipalities. Anti-speculation doctrine has been applied when a third party attempts

[22] C.R.S. § 37-92-103(3)(a).
[23] *Dallas Creek Water Co. v. Huey.*, 933 P.2d 27, 37 (Colo. 1992).
[24] *Municipal Subdist., Northern Colo. Water Conservancy Dist., OXY*, 990 P.2d 701, 708 (Colo. 1999) ("[H]exennial diligence applications are subject to the anti-speculation doctrine.").
[25] *Dallas Creek Water Co.*, 933 P.2d at 36.

to change an absolute water right it has bought to municipal use so it may sell the water to a municipality, before contracting with a municipal buyer for the water.

The Colorado Supreme Court first confirmed application of the anti-speculation doctrine to a change of absolute water rights in its 2005 decision *High Plains A & M, LLC v. Southeastern Colorado Water Conservancy District*. In that case, High Plains, a private water investment company, bought about 30% of the shares in the Fort Lyon Canal Co., a large mutual ditch company in southeastern Colorado's Arkansas River valley.[26] High Plains then applied to change the use of the water from agricultural to municipal so it could sell the water to municipalities on the Front Range.[27] The company listed twenty-eight counties as potential locations of use, but had no evidence of any actual contracts with municipalities agreeing to buy the water.[28] The water court dismissed the application.[29]

High Plains appealed the dismissal to the Colorado Supreme Court, which affirmed the water court's finding that the change application violated the anti-speculation doctrine because the company had no confirmed beneficial use for the changed water right.[30] High Plains clearly was attempting to change the use in anticipation of profitable future sales to growing Front Range cities. The court examined the definitions of "appropriation" and "beneficial use" in Colorado's water statutes, explaining these definitions "reinforce each other to the end that an appropriator of the public's water resource will put a specific amount of that water to an actual beneficial use at an identified location within Colorado."[31] The statute implements the constitutional beneficial use requirement of Article XVI, the court reasoned. Because an absolute water right is perfected based on demonstrating a beneficial use, to change that right a party must similarly specify and demonstrate a new beneficial use.[32] The court noted that an absolute water right "is reopened by virtue of a change application,"[33] and explained:

> [T]he anti-speculation doctrine is rooted in the requirement that an appropriation of Colorado's water resource must be for an actual beneficial use.
>
> We hold that, in defining '[c]hange of water right' to include 'a change in the type, *place*, or time of *use* ' and "a change in the point of diversion' in section 37-92-103(5), . . . and in defining 'appropriation' in section 37-92-103(3)(a)(I) and (II), the 1969 Colorado Water Right Determination and Administration Act . . . anticipates, as a basic predicate of an application for a decree

[26] *High Plains*, 120 P.3d at 714–15.
[27] *Id.* at 715.
[28] *Id.* at 716.
[29] *Id.*
[30] *Id.* at 724.
[31] *Id.* at 718.
[32] *Id.* at 720.
[33] *Id.*

> changing the type and place of use, that the applicant will sufficiently demonstrate an actual beneficial use to be made at an identified location or locations under the change decree, if issued.[34]

High Plains could not show any agreements with municipalities demonstrating a specific and concrete use for the changed water right, only the potential for a future use. The court stated a "guess that a transferred priority might eventually be put to beneficial use is not what the Colorado Constitution or the General Assembly envisioned as the triggering predicate for continuing an appropriation under a change of water right decree."[35] Thus, the Colorado Supreme Court affirmed the dismissal of the application.

To confirm a water right in Colorado, an applicant must prove to the water court that the water will be diverted for a beneficial and non-speculative use. The *High Plains* decision confirms that changes of absolute water rights are encompassed within the statutory anti-speculation doctrine. Because an absolute water right requires a beneficial use, any change of that right is predicated on continued beneficial use when the water is diverted somewhere else.

The definition of "change of water right" includes "changes of conditional water rights" as well as absolute water rights.[36] The anti-speculation doctrine applies to both, so an applicant seeking to change a conditional right must also show that the change is not speculative.[37] Because conditional rights are similarly predicated on beneficial use, an applicant must demonstrate an actual beneficial use for any new or changed use of the conditional right.

Changes in the decreed use of conditional rights may trigger scrutiny, similar to changes of absolute rights, particularly if the changed use is more profitable or less costly and the change appears to be driven by a desire to profit. The General Assembly addressed one such suspect type of change in 1994, in legislation that was introduced to prevent speculators from taking advantage of the opportunity to acquire conditional water rights and use their decreed senior priorities for uses much different from those that were originally decreed. The sponsor amended the 1994 bill to narrow this broad goal as it moved through the legislative process, and the final version only impacted the Colorado Water Conservation Board's instream flow program. The statute says the CWCB "may not acquire conditional water rights or change conditional water rights to instream flow uses."[38] The statute's main purpose is to prevent speculators from adjudicating a conditional water right for a use they will never perfect, then selling the right to the CWCB for a profit based on the "contemplated draft" from the stream system[39] for a structure that will never be built.

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[34] *Id.* at 714.
[35] *Id.* at 721.
[36] C.R.S. § 37-92-103(5)(b).
[37] *See* C.R.S. § 37-92-103(3)(a).
[38] C.R.S. § 37-92-102(3)(c.5); Senate Bill 94-054 (amended by House Bill 00-1438).
[39] "Contemplated draft" is the measure of a conditional right in a change case. *See Twin Lakes Reservoir & Canal Co. v. City of Aspen,* 568 P.2d 45, 49 (Colo. 1977). Senate Bill 94-054 was

Under *High Plains*, the constitutional requirement of a demonstrated beneficial use is maintained through a change of use proceeding. In such a case, the owner of an absolute or conditional water right must demonstrate that the water will continue to be diverted for decreed beneficial use and will not be held from the public to be sold for a higher profit in the future.

D. The Anti-Speculation Doctrine Applies to Groundwater

Although Colorado has several distinct allocation mechanisms for ground water of various types, each mechanism applies the anti-speculation doctrine in some form.

Designated groundwater is administered under a "modified" version of the prior appropriation doctrine, to protect prior groundwater appropriations based on beneficial use.[40] Even though designated groundwater is managed differently than tributary groundwater, the Colorado Supreme Court has held that the anti-speculation doctrine applies to tributary groundwater and to all designated groundwater. The Court denied an appropriation of designated groundwater on grounds of speculation where a developer intended future sales of the water without any contractual commitment for purchase.[41] The Court has also applied anti-speculation doctrine in a case involving designated groundwater within the Denver Basin aquifers.[42]

Unlike tributary and designated groundwater, which are subject to forms of appropriation, nontributary groundwater outside the designated basins is allocated based on ownership of overlying land.[43] The landowner may seek either a water court decree or a well permit to confirm the right to use the nontributary groundwater beneath their land. The decree defines the amount of water available for withdrawal each year, but does not obligate the landowner to construct a well or withdraw or use the water. The anti-speculation doctrine does not apply to the court decree process, which simply determines the amount of available nontributary groundwater.[44] However, in seeking a well permit to withdraw nontributary ground water, the applicant must show a non-speculative, beneficial use before the permit may be issued.[45] Similarly, the anti-speculation doctrine is applied to well permit applications for pumping tributary ground water, requiring the user to identify the beneficial use for the water, and, after the well is drilled, demonstrate the beneficial use through a sworn statement.[46]

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enacted to dissuade speculation that could also injure junior water rights by changing senior conditional water rights to instream flow use.

[40] *Colo. Groundwater Comm'n v. N. Kiowa-Bijou Groundwater Management Dist.*, 77 P.3d 62, 70 (Colo. 2003).

[41] *Jaeger v. Colo. Ground Water Comm'n*, 746 P.2d 515, 520-22 (Colo. 1987).

[42] *See N. Kiowa-Bijou*, 77 P.3d at 80–81.

[43] C.R.S. § 37-90-102(2).

[44] *East Cherry Creek Valley Water and Sanitation Dist. v. Rangeview Metro. Dist.*, 109 P.3d 154, 158 (Colo. 2005).

[45] *Id.*.

[46] *See Danielson v. Milne*, 765 P.2d 572 (Colo. 1988).

E. Public Water Providers Are Afforded Greater Flexibility Under the Anti-Speculation Doctrine Than Private Appropriators

Because public water providers have a responsibility to provide their constituents with a reliable water supply, they are afforded greater flexibility under the anti-speculation doctrine than private parties claiming water rights. However, this flexibility for public entities is not unbounded. The Colorado Supreme Court has held that:

> [A] municipality may be decreed conditional water rights based solely on its projected future needs, and without firm contractual commitments or agency relationships, but a municipality's entitlement to such a decree is subject to the water court's determination that the amount conditionally appropriated is consistent with the municipality's reasonably anticipated requirements based on substantiated projections of future growth.[47]

The Supreme Court has further held that, to satisfy the anti-speculation doctrine, a public water supply entity must demonstrate three elements: the reasonable planning period; the substantiated population projection for that period; and the amount of water reasonably necessary to serve the population for the period.[48] Allowing public water providers to obtain conditional water rights to satisfy population growth into the indefinite future would undermine Colorado's policy of maximum utilization.

The limited government agency exception to the anti-speculation doctrine "applies only where a government agency is seeking to appropriate water on behalf of end users with whom it has a governmental agency relationship."[49] The Colorado Supreme Court confirmed this principle as recently as November of 2020 in *United Water & Sanitation District v. Burlington Ditch Reservoir & Land Co.*[50] The court found that United did not qualify for the governmental planning exception to the anti-speculation doctrine because it had no governmental agency relationship with the end users, and under the facts presented, United was acting as a water broker, not a provider to its own municipal customers.[51] United has an approved statewide service area. Its actual district territory, however, is a single acre in Elbert County, and its water service plan states that it does not intend to provide water directly to individual end users. When a government agency is acting as a water supplier on the open market, rather than as a governmental entity seeking to supply water to its citizens, the exception does not apply, and the entity must satisfy the full requirements of the anti-speculation doctrine.[52] The court found that United failed to demonstrate a non-speculative intent for its claimed conditional water storage right in a reservoir because it did not have a binding contract or agency relationship with the water users.

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[47] *Bijou*, 926 P.2d at 39.
[48] *Pagosa*, 170 P.3d at 309-10.
[49] *United Water and Sanitation Dist. v. Burlington Ditch Reservoir and Land Co.*, 476 P.3d 341, 349 (Colo. Nov. 23, 2020).
[50] *Id.*
[51] *Id.*
[52] *Id.*

F. Water Rights May be Abandoned if Unused

Abandonment incidentally helps prevent speculation by creating the possibility that unused water rights will be abandoned. But it does not address situations where a water right is being used with the intent of increasing its value for sale.

"Abandonment of a water right" is "the termination of a water right in whole or in part as a result of the intent of the owner thereof to discontinue permanently the use of all or part of the water available thereunder."[53] When a water right is abandoned, the water previously decreed to the right becomes available for use by others.[54] Abandonment "requires a concurrence of nonuse and intent to abandon."[55] Under current Colorado law, a rebuttable presumption that an owner intends to abandon a water right arises when the owner fails to use the water right for a period of ten years.[56] As such, current abandonment law incidentally helps prevent speculation in the form of holding water rights for future benefit or profit without using them by creating a risk that the unused rights will be abandoned. However, abandonment cannot address the nearly parallel scenario where the same water user has the same intent to hold water for benefit or profit but is putting the water to its decreed beneficial use.

Any person may seek a determination that a water right has been abandoned by filing an application for a determination of abandonment with a water court or by opposing a water court application on the grounds that the subject water right has been abandoned.[57] In addition, every ten years, the Division Engineers in charge of administering water rights in Colorado's seven water divisions are required to prepare a list of all absolute water rights in their respective divisions that they have determined to have been abandoned, and these abandonment lists are eventually approved or modified by the water court.[58]

While abandonment law creates a risk that unused water rights will be terminated, nonuse alone does not guarantee abandonment. First, the Colorado General Assembly has provided that nonuse due to participation in certain approved programs—including approved water conservation programs and temporary provision of water to the Colorado Water Conservation Board for instream flow use—cannot result in abandonment.[59] Second, the presumption of intent to abandon that arises from nonuse is rebuttable.[60] To rebut the presumption, an owner must provide "proof of some affirmative act" showing ongoing intent to utilize the water right in question,[61] or proof of circumstances that prevented the owner from exercising the right in spite of an

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[53] C.R.S. § 37-92-103(2).
[54] *Se. Colo. Water Conservancy Dist. v. Twin Lakes Assocs., Inc.*, 770 P.2d 1231, 1238 (Colo. 1989).
[55] *Beaver Park Water, Inc. v. City of Victor*, 649 P.2d 300, 302 (Colo. 1982).
[56] C.R.S. § 37-92-402(11); *McKenna v. Witte*, 346 P.3d 35, 43 (Colo. 2015).
[57] *Gardner v. State*, 614 P.2d 357, 362 (Colo. 1980).
[58] C.R.S. §§ 37-92-401(1)(a) to -401(8).
[59] C.R.S. § 37-92-103(2).
[60] C.R.S. § 37-92-402(11); *McKenna*, 346 P.3d at 43.
[61] *McKenna*, 346 P.3d at 43.

intent to do so.[62] Acts that "may be enough to rebut a presumption of abandonment" include, without limitation, repair and maintenance of diversion structures, attempts to put water to beneficial use, filing documents to protect, change, or preserve the water right, leasing the water right, and diligent efforts to sell the right.[63]

In its current form, the abandonment law does not present a strong barrier to speculation in the form of acquiring or holding water rights with the intent to profit from their future sale. An owner that acquires water rights with the primary intent to profit from their future sale may lose the water rights to abandonment if it does not use them for an extended period. However, the same owner can avoid all risk of abandonment by using or leasing the rights while it waits for the right time to realize its anticipated profits.

In addition, Colorado Supreme Court precedent suggests that an intent to sell water rights, if demonstrated by acts, may be enough to overcome the presumption of abandonment created by nonuse, such that water rights may be maintained by marketing them as well as by using them. In the 1950s, the Court held that an owner cannot overcome a presumption of abandonment by showing that it has sought to sell a water right because "[s]peculation on the market, or sale expectancy, is wholly foreign to the principle of keeping life in a proprietary right and is no excuse for failure to perform that which the law requires."[64] However, in two more-recent cases, the Court held that evidence of diligent efforts to sell water rights can overcome a presumption of abandonment, even where an owner's statements or actions show that its sole reason for holding the water rights was to sell them.[65] Notably, in each of the recent cases, three justices dissented based in part on concerns that the Court's decisions would encourage speculation.[66] The dissent in one case noted, "[t]o allow evidence of sale expectancy, and nothing more, to defeat a presumption of abandonment results in encouraging nonusing owners of water rights to stockpile their interests for some future time when maximum profit can be derived from a sale, since the presumption of abandonment will be easily rebuttable by evidence of an intent and some effort to sell the water rights."[67]

iv. Water Court Approval is Not Required for Lease or Purchase of an Existing Water Right

In Colorado, a water right is a real property interest, separate and distinct from the land on which it is used, and it can be conveyed independently of the real property. (In

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[62] *Danielson v. City of Thornton*, 775 P.2d 11, 18 (Colo. 1989); *Hallenbeck v. Granby Ditch & Reservoir Co.*, 420 P.2d 419, 426 (Colo. 1966).
[63] *E. Twin Lakes Ditches & Water Works, Inc. v. Bd. of Cty. Comm'rs of Lake Cty.*, 76 P.3d 918, 922 (Colo. 2003).
[64] *Knapp v. Colo. River Water Conservation Dist.*, 279 P.2d 420, 427 (Colo. 1955).
[65] *Danielson v. City of Thornton*, 775 P.2d at 14–23; *E. Twin Lakes Ditches & Water Works, Inc.*, 76 P.3d at 919–25.
[66] *Danielson v. City of Thornton*, 775 P.2d at 23–25 (Quinn, C.J., dissenting); *E. Twin Lakes Ditches & Water Works, Inc.*, 76 P.3d at 925–26 (Hobbs, J., dissenting).
[67] *Danielson v. City of Thornton*, 775 P.2d at 24 (Quinn, C.J., dissenting).

some situations, ditch association bylaws or other covenants impose certain restrictions on the severance of a water right from real property). "It is elementary learning in Colorado that a water priority is a property right—not a mere revocable privilege; that it is not a fixed appurtenance; that the right to change its place of use and the point of diversion is an inherent property right . . ."[68] As such, it is subject to the same conveyance requirements as—and has a full, separate, and independent existence from—other real property interests. "In the conveyance of water rights . . . the same formalities shall be observed and complied with as in the conveyance of real estate."[69]

Yet, the conveyance of water rights is not required to be reviewed by the water courts under current law. In contrast, the appropriation of conditional waters, periodic filings for reasonable diligence of conditional water rights, and changes of water rights are required by statute to be reviewed by the water courts. In this way, other water users and the public at large are ensured public notice (i.e., a published water court resume of monthly water court filings in each Colorado Water Division) of any such court filing. The public then has the opportunity (due process) to oppose or contest any such filing on the basis that the water court application is speculative. Opponents also can appeal an adverse water court decision directly to the Colorado Supreme Court.

None of the current statutorily required water court proceedings apply to the conveyance of water rights in a situation where the purchaser has a speculative intent (i.e. Investment Water Speculation, as defined in Section 4). This does not necessarily mean that the anti-speculation doctrine does not apply to the speculative acquisition of water rights. As discussed above, the doctrine is rooted in the constitutional edict that the appropriation of water is for beneficial use—not for speculative profit. Thus, the anti-speculation doctrine actually applies at all times – it is never permissible to hoard water solely for speculative purposes.

The water courts have jurisdiction over all water matters arising in their respective water divisions, including claims by a third party that a water right should be abandoned because the owner does not intend to use the water for a beneficial purpose. However, it is not clear that a water court would accept jurisdiction to hear a case concerning the transfer of water rights to a purchaser in order to evaluate whether the purchaser has a speculative intent to profit from the acquisition of the subject water rights. Nor is there any statutory public notice requirement that would alert the public to the existence or proposal of any such speculative acquisition.

Thus, the acquisition of absolute water rights for speculative purposes is likely to avoid judicial review, at least until the purchaser "reopens" the rights[70] by filing in water court to change the type of use, place of use, or point of diversion of the water rights. Avoidance of public notice and water court review is even more likely if the purchaser is able to secure the speculative profit without needing to secure a change of water rights (such as profiting through the non-use of existing water rights, e.g., receiving payment to not divert the water for a period of time).

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[68] *Brighton Ditch Co. v. City of Englewood*, 237 P.2d 116, 120 (Colo. 1951).
[69] C.R.S. § 38-30-102.
[70] *See High Plains, supra*, 120 P.3d at 720.

v. SB03-115 and Protections for Significant Water Development Activity

Senate Bill 03-115 created the term "Significant Water Development Activity," which is defined as a "transfer of more than one thousand acre-feet of consumptive use water per year by a single applicant."[71] Significant Water Development Activities have additional notice requirements beyond the water court resume, including by mail to the county commissioners in the affected county. A court may impose mitigation payments from the water owner to the county if the water is transferred to a location more than 20 miles from the original location of irrigation.[72] The bill also created "Special Taxes for Water Rights," wherein counties may levy a sales tax or use tax of up to one percent to create a county water fund to fund the county's transactions in water rights.[73]

vi. There Are Limited Tools to Control Speculation Outside of the Water Courts

A. The Water Conservancy District Act Offers an Opportunity to Control Against Speculation

Water Conservancy Districts are created under the Water Conservancy Act, a state law created in 1937 and found at C.R.S §§ 37-45-101 to 153. There exist at least 24 such districts in Colorado and they are located across the state. In addition to creating water policy within their boundaries, some Water Conservancy Districts manage water supplies under contracts with the United States for numerous federal water supply projects. Water Conservancy Districts have the power to appropriate, acquire, use, and lease water and the power to make and enforce rules for the management, control, delivery and use and distribution of those waters. The Boards of those Water Conservancy Districts retain discretion in allowing the use or refusal to allow the use of the developed water supplies.

Some Water Conservancy Districts have created rules to control the use of those water supplies in various ways, including to address the issue of speculation. Some rules specify forfeit of the use of the Water Conservancy District's water as a possible sanction for violation of the rules. Additional Water Conservancy District rules provide that if a landowner sells the existing base water supply off of a parcel of land, the Water Conservancy District may not provide for new water to backfill a water supply to that land parcel. These rules are known by various terms, however, terms such as "base water supply" or "native water" rules are not uncommon. Decisions both to adopt and to apply Water Conservancy District rules are subject to judicial review.

B. The Four Water Conservation Districts in Colorado Have Powers to Control Against Speculation

[71] C.R.S. § 37-92-103(10.7).
[72] C.R.S. § 37-92-305(4.5)(b).
[73] C.R.S. § 29-2-103.7.

In addition to Water Conservancy Districts, four water conservation districts have been created by Colorado State law. Each conservation district is created by individual statute and those statutes are found in Title 37 of the Colorado Revised Statutes. Although there are important differences between water conservation districts and Water Conservancy Districts, the conservation districts have similar powers. For example, among other powers, the Colorado River Water Conservation District may adopt rules and regulations that provide for the rental of water and other services furnished by the district, adopt under the police power such reasonable rules and regulations pertaining to water services provided by the district or any facilities of others affecting the activities of the district, and exercise implied powers necessary to carry out the district's statutorily-expressed powers.[74] Water conservation districts have exercised their powers to adopt "base water supply" rules similar to rules adopted by Water Conservancy Districts.

C. Federal Reclamation Law Limits Speculation in Project Water

Federal reclamation law governs the Bureau of Reclamation's construction and operation of water projects that were designed to subsidize the irrigation of arid lands in the West. Where Reclamation has funded construction of irrigation projects, it provides project water to eligible landowners through irrigation districts or WCDs. These districts collect fees from users to repay the U.S. for the project costs. Under the Reclamation Act of 1902 and the Reclamation Reform Act of 1982, Reclamation restricts use of project water, primarily in the form of acreage limitations.[75] An individual or entity can only own land up to a maximum acreage limit within a contracting district to receive project water.[76] Any excess acreage above the limitation is not eligible for subsidized reclamation project water.[77] A district is subject to project water restrictions unless explicitly exempted by statute or until the district fully repays its construction obligations to reclamation.[78] Colorado-Big Thompson Project water is specifically exempted from acreage limitations.[79]

The Reclamation Act provides that the right to appropriate water for projects is subject to state law, meaning the Bureau of Reclamation or another entity seeking to appropriate water for a reclamation project must obtain a state water right to do so.[80] In Colorado, applicable state laws include the anti-speculation doctrine. However, Reclamation must approve any transfer or change in use of project water, following review to assure the transfer will not conflict with the interest of other project

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[74] C.R.S. § 37-46-111, 148(c), 148(d), and 107(k).
[75] 43 U.S.C. § 390dd.
[76] *Id.* The Bureau of Reclamation adopted regulations to close potential loopholes for entities by defining a qualified recipient of project water as a natural person or a "legal entity established under State or Federal law which benefits twenty-five natural persons or less." *See* 43 C.F.R. § 426.2
[77] 43 U.S.C. § 390dd.
[78] 43 U.S.C. § 390mm(a).
[79] 43 U.S.C. § 386.
[80] 43 U.S.C. § 383.

beneficiaries and will comply with reclamation law, other federal laws, and state law.[81] Transfers of irrigation project water rights remain subject to the same acreage limitations. When project water is converted to municipal use, the acreage limitation does not apply but neither does the irrigation subsidy; Reclamation establishes a new rate to account for project repayment obligations.[82] These restrictions limit the accumulation of project water for speculative purposes and discourage conversion of project water to non-irrigation uses.

D. Colorado Counties and Municipalities Have Limited and Indirect Statutory Authority to Regulate Against Speculation

In 1974, the Colorado General Assembly enacted a statute to allow local governments to regulate certain aspects of planning including particular water development matters.[83] Though these matters are of "statewide interest," the permitting authority is held by counties and municipalities. For example, a county may require a permit for development of reservoirs, pipelines, canals, and other water supply facilities located in that county to provide a water supply for use in another county. These powers are commonly referred to as "1041 powers," based on the bill number of the legislation (HB 74-1041). These 1041 powers allow local governments to identify, designate, and regulate areas, such as geologic hazard areas, and water facility activities through a local permitting process. Among the activities available for designation are water distribution systems, major facilities of a public utility and efficient utilization of municipal water projects.

Each county or municipality may select at its option the matters it chooses to regulate and develop a land use code provision setting out the regulation. Public hearings are required in the regulation adoption process. The Department of Local Affairs published a report in 2017 which documents use of 1041 powers.[84]

The utilization of such powers is not automatic and requires action by the county or municipality. The use of such powers to condition water supply facilities has been upheld in litigation following the adoption of HB 74-1041.[85] Anti-speculation is not an identified statutory purpose of 1041 powers but may indirectly be an issue raised in public hearings. No reported court cases have identified anti-speculation as a proper purpose of 1041 regulation, but some local governments address speculation concerns in regulating projects that would remove water from agricultural irrigation use.

A county also may be able to create a disincentive to speculative water right acquisitions through its taxing authority. For example, counties often tax land used for

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[81] Bureau of Reclamation, PEC P09, *Bureau of Reclamation Manual: Transfers and Conversions of Project Water* (2019) *available at* https://www.usbr.gov/recman/pec/pec-p09.pdf.
[82] Bureau of Reclamation, PEC 09-01, *Bureau of Reclamation Manual: Conversions of Project Water from Irrigation Use to Municipal and Industrial Use* (2019) *available at* https://www.usbr.gov/recman/pec/pec09-01.pdf.
[83] C.R.S. 24-65.1-101.
[84] See https://cdola.colorado.gov/1041-regulations-colorado.
[85] *See City & County of Denver v. Bd. Of County Commissioners of Grand Co.*, 782 P.2d. 753 (Colo. 1989).

agricultural purposes at a lower rate than commercial or residential land uses.[86] A county may be entitled to revoke its agricultural tax rate for lands with associated irrigation water rights if the water is removed from the land and the land is no longer used for agricultural purposes.

E. Water May Not Be Diverted for Use Outside the State Without Prior Approval

In most major river basins, limited supplies of water must meet both the demands of Colorado's citizens as well as downstream users under interstate compacts or equitable apportionment decrees.[87] Colorado's policy has been to conserve and prevent waste of its water resources, preserving supplies of water necessary to ensure the continued health, welfare, and safety of all Colorado citizens.[88] Accordingly, existing state law prohibits export of water from the state without prior approvals.[89] A person may not transport water from the state by any means, including in the natural streams, without first obtaining approval.[90] Prior to approving an application, the state engineer, ground water commission, or water judge, as the case may be, must find that:

> (a) The proposed use of water outside this state is expressly authorized by interstate compact or credited as a delivery to another state pursuant to section 37-81-103 or that the proposed use of water does not impair the ability of this state to comply with its obligations under any judicial decree or interstate compact which apportions water between this state and any other state or states;
>
> (b) The proposed use of water is not inconsistent with the reasonable conservation of the water resources of this state; and
>
> (c) The proposed use of water will not deprive the citizens of this state of the beneficial use of waters apportioned to Colorado by interstate compact or judicial decree.[91]

Any diversion of water from the state which does not comply with these requirements "shall not be recognized as a beneficial use for purposes of perfecting a water right to the extent of such unlawful diversion or use."[92]

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[86] *See* C.R.S. § 39-1-102(1.6)
[87] C.R.S. § 37-81-101(1)(a).
[88] C.R.S. § 37-81-101(1)(b).
[89] *Id.*
[90] C.R.S. § 37-81-101(2).
[91] C.R.S. § 37-81-101(3).
[92] C.R.S. § 37-81-101(4).

3.b Water Markets

i. Background

The Work Group has articulated information about anti-speculation law within and outside of Colorado, and the risks in Colorado. In the discussions regarding what "speculation" is and whether there are actions to take to reduce such speculation, the Work Group has contemplated and discussed several options that would regulate water markets or water right transactions. While all regulations such as those the Work Group has discussed are intended to promote and protect certain values or community attributes, it is important and helpful to realize and incorporate into our discussion the fact that any regulation may have unintended consequences.

Discussion is difficult if those involved in the discussion have a different idea or definition of what a "water rights market" is or is not. This Section seeks to define the term "water market" for the purposes of the Work Group's discussions, specifically to guide the Work Group's understanding of what market regulations might impact. Thus, this Section articulates several definitions of market and seeks to identify the types of water markets that exist in Colorado. This Section does not address whether any regulation, taxation or specific controls of such markets are appropriate or not.

ii. Defining a Water Market

To assist in defining a "water market", it seems useful to first define "market." The idea of a market is intuitively understood by most people because most people participate in a market economy. The following are general definitions of a market:

- A market is one of a composition of systems, institutions, procedures, social relations or infrastructures whereby parties engage in exchange. While parties may exchange goods and services by barter, most markets rely on sellers offering their goods or services (including labor power) in exchange for money from buyers.[93]
- Markets establish the prices of goods and services that are determined by supply and demand.[94]
- A market is any place where two or more parties can meet to engage in an economic transaction—even those that don't involve legal tender. A market transaction may involve goods, services, information, currency, or any combination of these that pass from one party to another.
- Markets may be represented by physical locations where transactions are made. These include retail stores and other similar businesses that sell individual items to wholesale markets selling goods to other distributors. Or they may be virtual. Internet-based stores and auction sites such as Amazon and eBay are examples of markets where transactions can take place entirely online and the parties involved never connect physically.[95]

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[93] Wikipedia, "Market (economics)," available at https://en.wikipedia.org/wiki/Market_%28economics%29.
[94] Investopedia, "Market," available at www.investopedia.com/terms/m/market.asp.
[95] Investopedia, "Market," available at www.investopedia.com/terms/m/market.asp.

Generally speaking, a market is a means, method or place to conduct trading of goods or services. A market is not only the venue where transactions occur, but also includes and informs the form of the transaction, the degree of control an entity has relative to the transaction and accessibility, ease of transactions, price, and availability (supply).

A Colorado water market may be understood as the virtual or physical space where one may lease, purchase or sell water rights and/or the act of leasing, purchasing or selling water rights or the use of water pursuant to a water right.

There is no single, or even a dominant, Colorado "water market." There is no specific physical location where the majority of such transactions occur; water right transactions can occur wherever the parties to the transaction choose. There is also no single defined water "marketplace" such as other countries or states have (e.g. Australia, California). There are multiple methods, places, and entities through which water right transactions occur. In Colorado, both water marketing and water markets exist in a number of variations. Water markets here operate with a more regional focus and significant variations. This variety in purpose, type of water, control of pricing and control of participants is important to consider in the context of any proposed regulation, oversight, or evaluation of potential negative consequences.

Water markets are not changes of water rights, appropriations of water rights, or any other type of water court adjudication. Those adjudications define the water right including type of use, amount available, and location of use. Those rights are sold or leased in a water market. Relatedly, a water market is limited to the sale or lease of water rights and does not extend to the sale of commodities derived from the beneficial use of water.

All markets are composed of willing buyers and sellers, but many of the specific existing water marketing programs have developed in response to specific needs and/or goals of the entities that created or have participated in the programs. For a number of these markets, there are specific processes and purposes that set parameters, such that water transactions and the price are not purely driven by supply and demand.

iii. Water Markets in Colorado

Below are descriptions of a variety of water markets that operate in Colorado:[96]

Individual Sales: Individual sales between willing sellers and buyers. Such transactions are similar to real property transactions and may occur anywhere. These transactions are regulated through many of the same regulations and laws that apply to the transfer of any real property asset.

For example, individual sales/transfers and leases may take the form of stock sales of a private irrigation company (for example in the Grand Valley) or real estate transactions under a federal project (such as the Grand Valley Water Users Association ("GVWUA")) which include adjudicated water rights that are tied to the property. Generally stock

[96] The list is not a result of methodical research but based instead on the subcommittee's knowledge as water professionals and water users. The intent of the list is to provide examples of the different formats for water markets in Colorado, and to demonstrate the significant variation between water markets.

sales from a private ditch company are public and the irrigation company will provide information regarding who has shares for sale.

Regional Water Marketing Programs: stored water available for long-term or annual contract purchases for a variety of uses, including augmentation, industrial, environmental and agricultural uses. For example:

Colorado River District Water Marketing Program:https://www.coloradoriverdistrict.org/water-marketing/

- Upper Yampa Water Conservancy District - Stagecoach Reservoir:

http://www.upperyampawater.com/water-storage-for-sale/

Northern Water Conservancy District, Colorado Big Thompson: https://www.northernwater.org/your-water/allottees/cbt-buyers-and-sellers

Regional Augmentation Plans: Numerous associations, conservancy districts and authorities have adjudicated blanket augmentation programs that sell or lease water to augment wells. Examples include the Central Colorado Water Conservancy District GMS and WAS; Arkansas Groundwater Users Association; Upper Gunnison River Water Conservancy District; Headwaters Association of the South Platte; Rio Grande Water Conservation District (and Subdistricts 1-6) among others.

Leasing programs: Numerous municipal and at least some industrial users lease to other water users. For example:

- The City of Boulder: https://bouldercolorado.gov/water/agricultural-and-irrigation-water-leasing
- Coors Brewing Company
- Board of Water Works of Pueblo

Conversely, the Colorado Water Trust is an example of an organization that facilitates the lease of water rights; in addition to facilitating permanent acquisitions for streamflow restoration, it works closely with the CWCB and water users to lease water in dry years.

The differences in these markets include:

- The availability and allowed use of the water. Municipal leasing programs for example are often leasing effluent that is reusable and decreed for many types of uses. The availability of effluent is fairly steady. On the other hand, a regional augmentation plan may be supplying direct diversions and may be more dependent on the particular hydrology.
- How the price is set. Some of the programs allow supply and demand to drive the price. An example is the Colorado-Big Thompson water supplied by Northern Colorado Water Conservancy District. Other entities such as the Colorado River District Board will set a price based on particular criteria.
- The amount of control a single entity exerts over a particular market.

- Whether there are other laws and regulations that apply to a transaction. For example a sale between individuals will be regulated by laws that govern real property transactions.
- Amount or impact of competition. Some programs have specific criteria for participants. If an individual does not meet that criteria, they cannot participate. Others are open to any individual or entity.

3.c Relevant laws and recent speculation issues in other states

A summary of laws and policies in other states protecting against speculation in water rights as well as recent situations in those states where speculation was an issue was prepared by the Governor's Office. The states included in his report are Washington, Arizona, Iowa, California, New Mexico, Nevada, Oregon, and Idaho. The report was discussed in the March 2021 Work Group meeting to inform potential solutions for Section 5 of this report.

4. What are the Risks to Coloradans from Speculation?

In order to discuss the risks to Coloradans from speculation, this section begins by defining two terms: Traditional Water Speculation and a related but different concept, Investment Water Speculation.

This report defines Traditional Water Speculation as seeking to appropriate, change, or continue a water right without a specific plan and intent to put the water right to its claimed beneficial use, or without a vested interest in the facilities or place to be served by the water. Without plan and intent to place the water to beneficial use, the party intends to either profit from future sale of the water right or to hoard the water right for some unidentified future use. Section 3 discusses legal standards that can protect against Traditional Water Speculation as well as limited governmental agency exceptions.

This report defines Investment Water Speculation as the appropriation or purchase of water rights followed by the use of those water rights, where the appropriator or purchaser's primary purpose is profiting from increased value of the water in a subsequent transaction such as sale, lease, or payment for non-diversion. The profit is derived solely from forces of supply and demand, and not from any added value. The initial transaction would not trigger water court review if the investor continues to beneficially use the water. Even if water court review of water right transactions were required, water courts do not currently consider whether an applicant's primary purpose is profiting from the increased value of the water. Still, Investment Water Speculation violates the intent of Colorado's anti-speculation doctrine because the investor's primary goal is profit from the water value rather than beneficial use of the water (and the profit that comes from the use). Section 5.c. contains the Work Group's ideas for how Investment Water Speculation could be objectively identified.

The distinction between these two definitions is not always clear. However, this report distinguishes the two in order to highlight unique aspects of Investment Water Speculation. It is untested whether some of the activities described as Investment Water Speculation could be covered by existing law. Because Investment Water Speculation requires a determination of intent, it is inherently difficult to identify. Members of the Work Group know of several situations where Investment Water Speculation has occurred or could potentially occur, such as:

- Water broker: an entity buys a water right and quickly sells it to a third party for profit.
- Use while waiting for appreciation or increased demand: an entity that is not typically involved in agriculture buys a water right, continues the historical irrigation use of the water right for a longer period of years with an intent to profit by:
    - selling the water right when prices have increased,
    - leasing the water right for beneficial use (or a future program that pays water users to not divert) in years when there is high demand and high water prices,
    - accepting payment to not divert the water right from a downstream entity that benefits from the non-diversion.

The examples above are based on the personal and professional experiences of the Work Group members. They are anecdotal descriptions of situations where Investment Water Speculation has occurred, rather than an exhaustive or research-based list of the possible situations. Nonetheless, the Work Group members represent perspectives from a wide spectrum of Colorado water users, both geographically and professionally, which lends credence to these observations. Based on their perspectives and recent media coverage of water issues, the Work Group members also surmise that the General Assembly crafted SB 20-048 foremost to consider regulating activities of private investment entities that the legislation presumes to be Investment Water Speculation.

Despite this focus on Investment Water Speculation, the Work Group recognizes the beneficial role that private investment played in developing Colorado's water resources and delivery systems historically. In addition, Work Group members have noted the value of on-farm improvements that have recently occured as a result of investors buying land and water rights on Colorado's western slope. In recognition of the beneficial role private investment can play, the Work Group focused on potential negative outcomes from speculation, rather than from private investment generally, in the development of this report.

This section explores potential negative outcomes from both Traditional Water Speculation (Section 4.a) and from Investment Water Speculation (Section 4.b).

4.a Potential Negative Outcomes from Traditional Water Speculation

The existing body of anti-speculation law, described in Section 3, provides legal standards intended to minimize the risk to Coloradans that Traditional Water Speculation will occur. Despite the well-developed anti-speculation laws, the enforcement of anti-speculation standards in the water court process can be inconsistent, which may allow water rights to be adjudicated when there is not an adequate plan and intent.

The possible negative outcome of Traditional Water Speculation is described below with a description of how the outcome could (or already does) happen and details of the potential results.

i. Outcome 1: Parties with legitimate beneficial uses have increased uncertainty regarding water availability, or water is only available for their use through payment to the water right holder

A. How could/does this happen?

- New appropriations, changes of water right, and diligence applications to the water court are not consistently required to completely describe their plan and meet their burden of proof, such as contracts with end users of the water, to fully show compliance with the anti-speculation doctrine.
    - Although water court applicants must describe their proposed use and place of use, the law does not require those claims to be fully investigated by either the court or another entity, and
    - Interested parties do not always object to the application or thoroughly litigate anti-speculation requirements.

- The lack of consistency may be due to:
    - Trust that water users apply for uses for which they have a plan.
    - The high cost of participating in water court to strictly hold all water users to their burden of proof under anti-speculation law.

B. This could/does result in:
    - A legal water right is appropriated, changed, or continued without a specific plan and intent to place the water to beneficial use. The existence of the rights makes water unavailable to parties with legitimate beneficial uses. The owner of the speculative water right may try to sell the use of water to others who do have a beneficial use or to hoard it for some other unidentified future use.
    - If those water rights go unused for many years, there is uncertainty of whether the use will be developed or not. If eventually developed, the use may change the historical availability of water on a stream system.
    - Additional court costs for other water users:
        - Speculative water rights that are not used need to be canceled (conditional rights) or abandoned (absolute rights) in a water court process.
        - Investors may try to change their speculative water right to a useful water right. Other water users may need to get involved in the water court case to protect their rights from injury.

4.b Potential Negative Outcomes from Investment Water Speculation

The following possible outcomes of Investment Water Speculation were discussed in varying detail by the Work Group. The Work Group did not arrive at common agreement about these outcomes. Some of the outcomes may be perceived differently by various sectors and water users (rural communities, state agencies, farmers, water providers). One group may perceive an outcome as negative, where another group may perceive it as neutral or beneficial.

The following three examples of possible outcomes (not exclusive) each include a description of how the outcome could happen and details of the potential results.

i. Outcome 1: Using ownership of a substantial amount of water rights in a local market to adversely affect Colorado Water Users

A. How could this happen?
    - Investor purchases rights to the use of a substantial amount of water in a particular region based on an expectation that there will be a need for that water by others in the near future. Investor beneficially uses the water.

B. This could result in:
    - Investor controls the price of water sales and leases within that particular area because they have control of the market or the investor is the only seller/lessor. This increases the price for other water users with a need to use the water.

    - If the eventual water user is a municipal water provider, the price increase will be passed along to customers who may have difficulty paying for their water, increasing the cost for everyone.
    - The price increase results in profit for the investor who has acted as a broker in water transactions. The non-speculative water users make less profit.
    - Smaller communities may not be able to access, lease, or otherwise acquire the necessary water resources. This may cause:
        - Increased reliance on non-renewable groundwater.
        - Growth to be pushed to unincorporated areas, increasing the burden on county resources.
        - Days when they cannot meet the needs of their citizens.
- Investor is able to exert some control over future processes involving the water. For instance:
    - Ditch company by-laws may be changed for the benefit of the investor. For example, by-laws that prevent the transfer of water from the land could be changed, resulting in additional impacts to the local community.
- Investor collaborates with out-of-state entities related to the use or non-use of the water to the detriment of Coloradans.
    - The potential use of Colorado water rights in downstream states has been raised in the media and elsewhere, but such use is a low probability outcome because the use of a Colorado water right outside of Colorado must meet the approvals regarding the "export" of water in Section 37-81-101, C.R.S.
    - There is a potential that an investor might be paid to not divert Colorado water rights that might then flow out of state. That threat is mitigated because if the water is not diverted for its decreed purpose, it would be available for diversion by other Colorado water users and may not result in an additional amount of water leaving Colorado for other states' use. Further, as a deterrent to the water right's owner, the water right would be subject to abandonment.
    - If and when a Demand Management program[97] (as contemplated in the Drought Contingency Plan) is established, investor claims more than a fair share of the benefits of the program or otherwise exerts more influence over the program than other water users, which has a detrimental effect on other water users. Concept S, discussed in Section 5, provides suggested provisions

[97] Colorado is currently investigating the feasibility of a potential Demand Management program for purposes of ensuring ongoing compliance with the Colorado River Compact. Demand Management is the concept of temporary, voluntary, and compensated reductions in the consumptive use of water in the Colorado River Basin. Each of the Upper Colorado River Basin States is conducting their own investigation to determine whether a potential program would be feasible in their state as well. All Upper Division States would need to agree that a program would be feasible before a program may be established.

for a Demand Management or similar program to help avoid this risk.

ii. Outcome 2: Increased cost of water rights for an end user who would actually put the water to beneficial use in Colorado.

A. How could this happen?
   a. Investor outbids non-speculative users on water rights for sale due to better access to funds/resources.

B. This could result in:
   a. Farmers are unable to expand their farms because they cannot afford the water.
   b. Municipalities and other water providers are forced to spend more ratepayer money to acquire water needed to serve their citizens. Because municipal water providers are not for profit entities, this results in individual homeowners and businesses paying more for their water than they otherwise would. Lower income residents may have increased difficulty paying for their water.
   c. Environmental groups have decreased purchasing power to acquire or lease water for the environment.

iii. Outcome 3: Large scale dry-up of specific parcels or varying parcels within a region that were historically irrigated, which occurs either through a change of water right or through purchase followed by non-use

A. How could this happen?
   - Investor purchases large quantities of water rights in a particular region with the intent to sell the water rights to another who might use the water for a different purpose or to stop diverting the water for any purpose.
     - The Work Group recognizes that this is not necessarily a direct result of Investment Water Speculation and that dry-up regularly occurs under non-speculative changes of water rights; and potentially for the same water rights that would be the subject of the Investment Water Speculation. However, the outcome of dry-up is documented here as a potential outcome of Investment Water Speculation.
   - Investor purchases large quantities of water in a particular region and stops diverting the water.
     - Historically, this would have been a rare outcome because the lack of diversion for decreed purposes would devalue the water and subject it to abandonment proceedings, resulting in a reduction in the water right. However, the likelihood of more regular dry-up occurring could be increased if:
       - a large-scale market develops under a future Demand Management (temporarily fallowing) or other program that would reward owners for not diverting their water rights.

It is possible that the legislature may enact new, more protective legislation that would protect water rights from the presumption of abandonment if they were not diverted for their originally decreed uses due to participation in a Demand Management Program. How the legislature might proceed is unclear. Concept S, discussed in Section 5, provides suggested provisions for a Demand Management or similar program to help avoid this risk.

        - as described above, states downstream of Colorado could encourage owners in Colorado to not divert their water rights (outside of a Demand Management program), which could result in dry-up. That threat is mitigated because if the water is not diverted for its decreed purpose, it would be available for diversion by other users or subject to abandonment.
    - In either situation, Investors could purchase water rights with an expectation of potential payment for non-diversion and, depending on the location of the subject water rights and the local stream regime, the likelihood of abandonment might not be a disincentive.
    - Some observers have mentioned that a market for existing agricultural rights on the Colorado River located in proximity to the Colorado State Line already exists, perhaps, in part, based on the purchaser's presumption that a Demand Management program or other market will develop to reward owners for not diverting their water rights.

B. This could result in:
    - Impacts to ongoing ditch operations and remaining shareholders;
    - Primary and secondary socio-economic impacts to rural economies;
    - Loss of local food, forage, and livestock production;
    - Impacts to wildlife as habitat created by irrigated agriculture is lost;
    - Reduction in the number of willing participants for alternative transfer methods (ATMs)[98] or partners with the instream flow program;
    - Loss of groundwater recharge that supports other water users (spring flow, sub-irrigation);
    - Invasive species; and
    - Loss of topsoil.

[98] An ATM usually provides the legal and administrative structure for an irrigator to retain ownership of a water right, while also allowing a transfer of some or all of the water to a different beneficial use for a period of time. The Colorado Water Conservation Board has produced a report providing a detailed definition of alternative transfer methods (ATMs). *See* Colorado Water Conservation Board, "Alternative Transfer Methods in Colorado: Status Update, Framework for Continued Support, and Recommendations for CWCB Action" (July 2020), pp. 42-44.

iii. Outcome 4: Profit provides motivation to develop new consumptive use solely for the purpose of the sale of a water right, which impacts over-appropriated status, water availability, and in some cases compact compliance.

Note: The results below can also occur as a result of appropriations that are not deemed Investment Water Speculation. However, Investment Water Speculation could potentially cause the results at an accelerated pace.

A. How could this happen?
   - There are limited areas of Colorado that are not administratively over-appropriated, where new junior water rights, particularly groundwater rights, may be appropriated and reliably used without augmentation. A new junior appropriation could be made by an investor and perfected for beneficial use. If the administrative status of the basin then changes to over-appropriated, new groundwater uses will need to be augmented as a condition of being permitted and new surface water uses may also need to be augmented in order to avoid curtailment. Perfected water rights that do not require augmentation may quickly increase in value if there are new demands for water. If the intent at the time of appropriation was to realize the increase in value, this is Investment Water Speculation.
   - A similar scenario involves an investor who purchases a senior water right that has not been used to the fullest extent of its decree limits[99]. The investor's intent is to increase the consumptive use of the water right within the decree limits to increase the amount of water transferable to a different water user, increasing the overall value of the water right.

B. This could result in:
   - New areas being designated over-appropriated. Water will be less available for appropriation by other water users and there will be an increased need to augment or replace diversions.
   - Augmentation water becoming increasingly unavailable or unaffordable.
   - For the use of groundwater, in some areas the rate of water level decline may increase, making water use less economically feasible for all water users, and there will be less non-renewable groundwater available for use. Aquifer sustainability efforts would be hindered.
   - If the consumptive use is through irrigation, the sale could result in dry-up of irrigated land.
   - Additional consumptive use could impact compact compliance.

4.c Conclusions from analysis of risks and outcomes

The Work Group considered risks and potential outcomes from Traditional Water Speculation and Investment Water Speculation that were not negative outcomes for all sectors. For instance, an irrigator may make more money from the sale of their water

[99] Note that the water right may be subject to partial abandonment of the unused portion of the water right.

right if there is Investment Water Speculation and this would benefit the irrigator. However, the Investment Water Speculation would increase the price for the end water user, potentially a municipal water supplier or Colorado's instream flow program, which is a negative outcome for large groups of Colorado citizens.

These discussions brought to light issues related to water user values and intentions that the Work Group recognizes are hard to balance when legislating, such as:

- Coloradans value water for its beneficial use. Water should not be traded as a commodity for profit.
- Coloradans value irrigated lands, safe and reliable drinking water, and the environmental, recreational, and community benefits derived from our water resources.
- Coloradans value property rights in the beneficial use of water and the protection of these property rights.

Another conclusion is that some of the negative outcomes identified are also negative outcomes from water transactions that do not include speculation. For instance, dry-up of irrigated lands occurs as a result of a change of water right from irrigation use to uses such as municipal and instream flow. Although Investment Water Speculation may accelerate dry-up or make it more difficult to mitigate dry-up, dry-up can occur as a result of transactions without any speculative element.

The Work Group discussed which of the negative outcomes should be a focus of brainstorming concepts to address speculation risks in Section 5 of this report but did not agree upon a clear area of focus. The Work Group was in agreement that many of the listed concepts carry their own risk of negative consequences as further explored in Section 5.

5. Analysis of individual anti-speculation concepts

The Work Group discussed many concepts to reduce speculation, and in particular Investment Water Speculation and its negative outcomes. This Section is intended as a guide for the Committee on the pros and cons of each concept, as well as the types of speculative activity that each concept might be capable of addressing. As the Work Group's focus was on Investment Water Speculation, the set of pros identified is not intended to be exhaustive. The pros listed in this Section center on how each concept would interact with Investment Water Speculation activity and its negative outcomes. The concepts described below may have other beneficial effects, beyond the scope of this Report.[100]

The Work Group began the process of identifying possible ways to address Investment Water Speculation by brainstorming ideas. This Section reflects those brainstormed ideas, as subsequently refined and discussed by the Work Group. Each idea for addressing speculation that was considered by the Work Group is included, although for the sake of clarity some concepts combine multiple ideas.

Although this section identifies the pros and cons of each concept, it provides no weighing of these factors. Due to the comprehensive inclusion of ideas, inclusion of a concept in this section implies nothing about the concept's desirability. Indeed, there are several concepts described in this section that no member of the Work Group would necessarily recommend. Instead, the purpose of this section is to document the full range of concepts discussed by the Work Group. By cataloguing all the ideas discussed by the Work Group, their pitfalls, and their potential, the Work Group hopes that this section will allow both (1) the avoidance of ideas that, upon consideration, would almost certainly be unworkable or ineffective and (2) the clear-eyed evaluation of concepts with potential to limit Investment Water Speculation or its negative outcomes.

The last row of each table is the filter for what concepts are presented to the Committee in Section 6. It answers the following question: Does the concept have the potential to be effective in reducing Investment Water Speculation on a large scale (and not just for certain limited situations)? If the answer to this question is yes, the Work Group also notes whether this is a change in Colorado law that could be considered by the Committee. As the last row relates only to the extent to which the concept fulfills the legislature's charge to this Work Group, the last row does not reflect any judgment on the desirability of a concept. Concepts that would not be effective legislative actions to reduce the amount of Investment Water Speculation may nevertheless be beneficial to Coloradans and worthy of attention from the water community.

[100] For example, several of the concepts described in this Section are also discussed, from a broader frame of reference, in the Colorado Water Plan. *See, e.g.*, Colorado Water Conservation Board, *Colorado Water Plan: Chapter 10: Critical Action Plan* 10-10 (2015).

The five groupings and individual concepts are as follows:

- 5.a: Concepts modifying existing proceedings or legal standards in water court
  - Concept A: Require prima facie showing of non-speculation in water court proceedings
  - Concept B: Expand the government review and approval process for changes of use of water rights that exceed some minimum threshold of rate, volume, or seniority
  - Concept C: Restrict participation of out-of-state entities in Colorado water court and Ground Water Commission proceedings
  - Concept D: Reduce expectations of investors by clarifying that water savings due to efficiency improvements cannot be sold to other users
  - Concept E: Prohibit or penalize compensated non-diversion
- 5.b: Concepts promoting the tying of water to the land
  - Concept F: Modify the conservation easement statute to incentivize tying water rights to their place of historical use
  - Concept G: Fund and/or create a right of first refusal for the purchase of water rights for long-term irrigation use for public benefit
  - Concept H: Eliminate or reduce the agricultural tax benefit for lands from which water is removed.
  - Concept I: Unless irrigated land is going to be changed to a new land use, require water to be tied to the land.
- 5.c: Concepts specifically relying on identifying Investment Water Speculation at the time of a water rights sale
  - Concept J: Create a statewide process to identify and prohibit Investment Water Speculation
  - Concept K: Encourage local governments to police Investment Water Speculation through their 1041 powers
  - Concept L: Tax the profit derived from sale or lease of water rights previously purchased for Investment Water Speculation purposes
  - Concept M: Encourage ditch companies to adopt Catlin bylaws that allow boards to impose terms and conditions on water transfers affecting shareholders
- 5.d: Concepts that would identify and impact the sale of water rights without specifically identifying Investment Water Speculation
  - Concept N: Impose time limits on turnover of ownership of water rights to discourage short-term ownership for quick profit
  - Concept O: Require public record of relevant details for sales of water rights

5.a: Concepts modifying existing proceedings or legal standards in water court

This group of concepts proposes changes to the operation of existing water court procedures or legal standards, primarily at the change of use stage. Investment Water Speculation begins with a speculator purchasing a water right, but speculators may need to pursue a change of use. Although the concepts in this group would not directly limit Investment Water Speculation purchases, the concepts aim to make Investment Water Speculation less attractive and/or to reduce the negative effects resulting from Investment Water Speculation.

Concept A: Require prima facie showing of non-speculation in water court proceedings
Description Require water court applications for new water rights, maintenance of conditional water rights (findings of reasonable diligence), and changes of use of water rights to include a description of the "specific plan and intent to put the water right to its claimed beneficial use." Although current law prohibits speculative water appropriations and changes of use, challenges on speculation grounds must be brought explicitly by litigants. The change in law could be implemented as a change to statutes or the Uniform Local Rules for the water court, requiring a prima facie showing of non-speculation with a water court application. The water court and/or Division Engineer could be required to review whether the description meets minimum requirements of specificity and intent.
Pros ● This concept would provide consistent structure to current court processes regarding Traditional Water Speculation.
Cons ● Even if reviewed by a water court, most Investment Water Speculation transactions would not be considered speculative under Traditional Water Speculation law, since Investment Water Speculation generally occurs with a new use or maintains the existing water use. Therefore, this concept does not address Investment Water

Speculation.
- There is no evidence that failure to implement Traditional Water Speculation law is a prevalent issue in Colorado. Therefore, this concept may be targeting a non-issue.
- Changes that make the water court process less efficient are likely to increase the price of water.

Effective as legislation addressing Investment Water Speculation?

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation.

Concept B: Expand the government review and approval process for changes of use of water rights that exceed some minimum threshold of rate, volume, or seniority

Description
There are already special requirements for "Significant Water Development Activities" specified in Section 37-92-305(4.5)(b), C.R.S. Significant Water Development Activities are defined in the statute as intercounty transfers involving the removal of more than one thousand acre-feet of water per year from agriculture to a non-agricultural use. This concept would modify the special requirements and/or expand the set of transfers to which the special requirements apply.

The Water Development Activities statute could be modified to require an entity seeking a change of use to fund an economic analysis of the change's effects prior to proceeding with a water court change case. The water court could review the analysis and impose additional conditions on the transfer. The general public and parties to the proceeding could also provide comment on the submitted analysis and conditions.

The Significant Water Development Activities statute could also be modified to expand the set of changes of use that are covered. For example, the threshold triggering special requirements could be changed.

Pros
- Compared to a concept that required public review of all transfers, this selective review would reduce the burdens on water courts.
- Exposing the negative economic impacts of transfers based on speculative purchases could generate media attention to the proposed transfer and mitigation requirements could make the transfer more expensive to complete. This may indirectly reduce the amount of speculative purchases.
- Economic analysis could facilitate more public participation in water transfer proceedings and could highlight potential mitigation strategies to reduce the impact of the proposed water transfer on the area of origin.

Cons
- Including public input in the process could result in the unintended consequence that certain "unpopular" beneficial uses would be caught in the review process.
- Increasing the cost of change of use proceedings may prevent socially beneficial and

non-speculative changes of use.
- The review and approval process would apply to all changes of use meeting the volumetric and other criteria, not just changes of use based on initial speculative purchases increasing transaction costs for all water users.
- The concept is aimed at change proceedings rather than the sale or lease of water rights.

Effective as legislation addressing Investment Water Speculation?

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation.

Concept C: Restrict participation of out-of-state entities in Colorado water court and Ground Water Commission proceedings

Description
This concept would be a law or water court rules change preventing out-of-state entities from participating in water court as either an applicant or as a party to a case. This would prevent out-of-state entities from appropriating new water rights, opposing beneficial use in Colorado, or changing the use of existing water rights. The out-of-state nature of an entity could be defined in various ways. A less-rigorous standard could simply be some physical presence in Colorado. A more rigorous standard could be residency or principal place of business.

A variation on this idea is to allow water court challenges to be lodged only if there is a claimed injury to a Colorado water right. This would prevent out-of-state entities objecting in a diligence or adjudication.

This limitation on changes of use for water rights would come after a transaction so it may not have a direct effect on the amount of Investment Water Speculation.

Pros
- To the extent that there is a direct relationship between out-of-state entities and Investment Water Speculation, this concept would limit Investment Water Speculation for some scenarios.

Cons
- The change of water right application is typically filed by the end user, after the Investor has already profited from sale of the water right, so this would not prevent Investment Water Speculation.
- Some water right activities that are actually beneficial to Colorado would be precluded under this limitation.
- Preventing a class of parties from participating in water right matters in Colorado, especially new appropriations, may conflict with Colorado's constitution.[101]
- The less rigorous standard could be easily evaded by entities wishing to engage in

[101] *See* Colo. Const. Art. XVI, Section 6 ("The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied.").

Investment Water Speculation.

- State laws that discriminate against out-of-state entities engaging in commercial transactions generally violate the Commerce Clause of the U.S. Constitution.[102] Laws implementing this concept are thus unlikely to be constitutional, particularly if the stronger requirements for in-state presence are applied.[103]

Effective as legislation addressing Investment Water Speculation?

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation.

Concept D: Reduce expectations of investors by clarifying that water savings due to efficiency improvements cannot be sold to other users

Description

This concept would clarify that water no longer diverted due to an increase in the efficiency of water use (the ratio of water consumed to water diverted) cannot be transferred to a new beneficial use. Work Group members noted that although sophisticated investors are unlikely to make this mistake, it is not uncommon for purchasers of small tracts of agricultural land to believe that they can easily sell off "water savings." This often creates acrimony in communities where such purchases occur.

In particular, some investors might mistakenly believe that they can purchase a water right and then:

- Increase the efficiency of water use.
    - For example, an investor might convert a field that consumes 500 acre-feet of water from flood to sprinkler irrigation. The field will still consume 500 acre-feet of water. However, less water needs to be diverted once a sprinkler is used to apply the water to the field. This may result in a change in water needed for diversion from 1000 acre-feet to 625 acre-feet.
- Sell the portion of the water right that no longer needs to be diverted due to the efficiency increase.

If the sale of the water right is for use outside of the decreed irrigated lands, it would require a change of water right application in water court. The water that is no longer diverted was never historically consumed and is not available to transfer to a new use.

The General Assembly could consider legislation that affirms or codifies the case law regarding this aspect of injury considerations in change of water right proceedings. There is also a variety of educational mechanisms that could be considered:

[102] *See Town of Southold v. Town of E. Hampton*, 477 F.3d 38, 48 (2d Cir. 2007) (summarizing Supreme Court caselaw).

[103] *Compare Lewis v. BT Inv. Managers, Inc.*, 447 U.S. 27, 37, 42–43 (1980) (state law prohibiting bank holding companies with an out-of-state principal place of business from owning businesses providing investment services violated Commerce Clause) *with Kleinsmith v. Shurtleff*, 571 F.3d 1033 (10th Cir. 2009) (insufficient evidence to conclude state law requiring that attorneys merely "maintain a place" in-state to provide certain legal services violated Commerce Clause).

- Requiring realtors to explain the basics of water law to potential purchasers of land with associated water rights.
- Discussions at various water-related organizations
- Creation of new educational publications in coordination with water education institutions, similar to the Colorado Water Center's "Use It or Lose It" publication.[104]

Pros

- Improving the clarity of this issue would not infringe on property rights.
- This concept does not require a change in the law, but potentially materials to describe the limits on changing the use of only the historically consumed water.

Cons

- This is a narrow concept targeting only a small part of the issue raised in SB 20-048.

Effective as legislation addressing Investment Water Speculation?

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation on a large scale.

Concept E: Prohibit or penalize compensated non-diversion

Description

This concept is intended to primarily target Investment Water Speculation where the speculator's intent is not to sell the actual water right for subsequent beneficial use but instead to receive a profit by selling the "non-diversion" of the water right. This concept would help to prevent scenarios where a water right that otherwise would be diverted in priority is simply bypassed so that the water flows downstream (potentially into downstream states). Although Colorado law would generally prevent a direct change of use for use within another state, non-diversion at a downstream point could result in water flowing to another state without any need for a change of use application.

The receipt of payment for non-diversion would be made illegal or penalized, unless that payment occurs pursuant to an exception allowed by law. Allowable exceptions would include enrollment in organized conservation programs or a State-approved Demand Management Program, if one is established. Non-diversion pursuant to the CWCB's instream flow acquisition program would continue to be allowed. Potential penalties for receiving payment for non-diversion include abandonment of the water right or high rates of tax on the non-diversion payments.

For the penalty of abandonment, under existing law, a 10-year period of non-use creates a rebuttable presumption of abandonment. The 10-year period could be shortened to one or two years when a payment is made to the water user to encourage or require non-use. The existing statutory exceptions to the presumption of abandonment would continue to apply

[104] Colorado Water Institute, "How Diversion and Beneficial Use of Water Affect the Value and Measure of a Water Right: Is 'Use It or Lose It' an Absolute?," Special Report No. 25 (February 2016), available at https://watercenter.colostate.edu/wp-content/uploads/sites/33/2020/03/SR25.pdf.

(e.g., no presumption of abandonment if the non-use was due to participation in an approved water conservation program or instream flow loan/lease).

Pros

- Helps resolve a potential risk that water could be bypassed that could have the effect and appearance of the export of water.
- Enforcement would not require an inquiry into a purchaser's intent (that is, essentially, a fact based analysis).

Cons

- If geographically limited, it may be difficult to enforce the provision and properly inform the water rights holders to whom the provision applies.
- It may be difficult to determine whether a water user was compensated for non-diversion.

Effective as legislation addressing Investment Water Speculation?

- This concept has the potential to be effective in reducing the amount of certain types of Investment Water Speculation on a large scale (although geographically limited to areas near state lines).

5.b: Concepts promoting the tying of water to the land

If a water right will continue to be used for its decreed use on the land for which it was decreed, the opportunity for Investment Water Speculation in that water right is limited. The Work Group understands that entities engaged in Investment Water Speculation usually seek to profit from water rights by eventually ceasing irrigation use on the historically irrigated lands, usually in favor of a different type of beneficial use. Thus, tying a water right to the land and ensuring its ongoing irrigation use greatly reduces the opportunity for Investment Water Speculation in that water right. Each of the concepts in this subsection has the objective of limiting Investment Water Speculation by increasing the set of agricultural irrigation water rights for which changes of use are legally prohibited or restricted.

Concept F: Modify the conservation easement statute to incentivize tying water rights to their place of historical use

Description

The State's conservation easement program provides tax credits to water rights owners who tie water use under the water right to the land through the permanent conveyance of an easement on their real property. The law could be changed to expand usage of this program to more potential beneficiaries. One particular change would be to grant the owners of water rights or public entities the ability to participate in the tax credit program for conveyances of easements on water rights.

The degree to which conservation easements tie water to the land is another parameter that could be modified or considered. Some conservation easement programs allow for

leasing or other temporary water transfers. While these mechanisms could make easements more attractive, and provide flexibility in water use, they could also transform easements into a mechanism for Investment Water Speculation, at least when that investment is based on temporary payments for non-diversion. See the discussion of Concept R (Encourage usage of Alternative Transfer Methods).

Pros

- Easements provide water right owners with an alternative to permanent sale. This in turn may decrease opportunities for Investment Water Speculation.
- Easements encourage continued beneficial use around the state, consistent with the Colorado Water Plan. In particular, easements may mitigate the effects of Investment Water Speculation by preventing whole areas from undergoing agricultural dry-up.
- Voluntary/compensated/combined land and water protection strategies have demonstrated appeal in Colorado.

Cons

- Voluntary conservation easements would only cover the lands and water rights of owners who opt into the program. Investment Water Speculation could still occur on all other water rights.
- There are already substantial state and federal tax credits for conservation easements based on valuation of easements as charitable gifts. It is not clear what incentives could be offered to further encourage voluntary usage of conservation easements by the current owners of water rights.
- Conservation easements may reduce the pool of water available for change to non-speculative beneficial uses.

Effective as legislation addressing Investment Water Speculation?

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation on a large scale.

Concept G: Fund and/or create a right of first refusal for the purchase of water rights for long-term irrigation use for public benefit

Description

To avoid sales of water rights that would transfer water out of irrigation, facilitate purchases of irrigation water rights for use for public benefit, including ongoing irrigation use, by:

- Establishing a funding pool to (a) preserve irrigated agriculture while still providing flexibility (such as the ability to use the water for public water supply in a minority of years); or (b) support a public buy-out option
- Creating a right of first refusal for state, local, tribal, or nonprofit entities (including mutual ditch shareholders) for proposed water sales. The right of first refusal law could potentially be set to only apply when there is a proposed purchase by certain categories of out-of-state purchasers and/or entities engaged in

Investment Water Speculation.

Pros
- If public entities purchased all water rights that came up for sale to speculator, the speculator would not be able to engage in Investment Water Speculation.
- Purchased water rights would continue to be used for irrigation, preventing long-term agricultural dry-up.

Cons
- Public purchases of water rights, at any meaningful scale, would be very expensive.
- Administering a program of public purchases would be complex.
- Granting a right of first refusal to public entities could discourage non-speculative sales of water rights for needed beneficial uses.

Effective as legislation addressing Investment Water Speculation?

- This concept has the potential to be effective in reducing the amount of Investment Water Speculation on a large scale.
- This concept proposes a change in Colorado law.

Concept H: Eliminate or reduce the agricultural tax benefit for lands from which water is removed.

Description
Counties could reduce the tax benefit for lands from which water has been removed. This could apply on a yearly basis when water rights are transferred temporarily. Exceptions could be made to continue the agricultural tax rate when the payment for non-use was made pursuant to a state-approved plan such as a water conservation program, a temporary transfer for municipal use, or an instream flow loan.

Pros
- This concept could reduce the profits from Investment Water Speculation in irrigation water rights, in turn reducing Investment Water Speculation in these rights.
- This concept could discourage one of the negative effects of Investment Water Speculation, long-term agricultural dry-up.

Cons
- This concept is not narrowly targeted at Investment Water Speculation, and could impact all owners of irrigation water rights.
- This concept would decrease flexibility in use of Colorado water rights by disincentivizing (both temporary and permanent) changes to different beneficial uses.
- Changing the tax rate may be too minor of a penalty to discourage Investment Water Speculation.

Effective as legislation addressing Investment Water Speculation?

- This concept has the potential to be effective in reducing the amount of Investment Water Speculation on a large scale.
- This concept is a change in Colorado law.

Concept I: Unless irrigated land is going to be changed to a new land use, require water to be tied to the land.

Description
In specific areas, limit the future place of use of a water right to the historically irrigated land or a location nearby.

As with Concept F, the degree to which water is tied to the land could be varied. An approach that allows leasing or other temporary water transfers would make the policy impact less harsh, but could re-open the possibility of Investment Water Speculation.

Pros

- Such water rights would not be targeted by Investment Water Speculation speculators.
- This concept could greatly reduce one of the negative effects of Investment Water Speculation, long-term agricultural dry-up.

Cons

- This concept is drastic. It would significantly devalue water rights, including a large group of water rights not associated with any Investment Water Speculation.
- This concept would greatly decrease flexibility in use of Colorado's water resources by making water rights unavailable for different beneficial uses at different locations in the future.
- To effectively prevent Investment Water Speculation, restrictions would need to be placed on a large set of land. This magnifies the cons already noted.

Effective as legislation addressing Investment Water Speculation?

- This concept has the potential to be effective in reducing the amount of Investment Water Speculation on a large scale.
- This concept is a change in Colorado law.

5.c: Concepts specifically relying on identifying Investment Water Speculation at the time of a water rights sale

Each of the concepts below requires identification of whether the purchaser of a water right is engaged in or intends to engage in Investment Water Speculation. This subsection outlines the Work Group's ideas for how such water rights purchases could be identified.

Some potential objective criteria for identifying Investment Water Speculation or intent to engage in Investment Water Speculation at the time of a water rights purchase are:

(a) The purchaser is not an entity primarily engaged in activities involving the beneficial use of water including, but not limited to: non-profits or governmental entities with an interest in environmental or recreational value, water providers/municipalities, producers of products containing water or using water for processing, and those engaged in farming.
(b) The purchase is not part of a transaction that ties the water to the land for a long period of time; reducing the likelihood that it is speculative. In addition, certain transactions in which a farmer sells a water right in return for a long-term lease back of the water right for their own irrigation use could be deemed non-speculative.
(c) Whether after the purchase, the purchaser will, in aggregate, own Colorado water rights exceeding a specified threshold. This threshold might vary based on the priority date of the water rights purchased and/or the river basin in which the purchase is made.
(d) The purchaser has raised money for the purchase in whole or in part by representing any of the following: (1) the water right will be re-sold; (2) acquisition of the water right will be profitable based on one or more temporary changes of use; or (3) acquisition of the water right will be profitable based on a permanent change of use, where that new use is not identified at the time of the transaction.
(e) The purchaser plans to own the water right for a short period.

The intent review process could be triggered for all transactions or could be applied in a more targeted fashion. For example, the process could be limited to large water rights transactions so that it does not impose a burden on small farmers seeking to sell their water rights. Alternatively, as entities engaged in Investment Water Speculation could acquire significant water rights through a series of small transactions, the process could apply only when the purchaser of water rights has or would have cumulative water rights ownership exceeding a specified threshold.

The Work Group noted several downsides to any process that requires identification of particular transactions as Investment Water Speculation:

- Developing objective standards to determine a purchaser's intent will be difficult.
- Review processes increase the time and expense required to transfer a water right. The extra time and expense could prevent some potential buyers or sellers from engaging in valuable, non-speculative transactions.
- Increased transaction costs for each transfer of water rights could encourage conglomeration of rights to cover the transaction costs. The resulting concentration of ownership in water rights could itself have negative outcomes.
- Review will require additional funding for staff of the court, agency, or other government body that conducts the review.
- If the process for identifying Investment Water Speculation depends on criteria that explicitly target an entity’s out-of-state nature or that, as the criteria listed in (a)-(e) may, apply more often to out-of-state entities than to in-state

entities, there is some risk that it would be found unconstitutional under the Commerce Clause. The Commerce Clause of the U.S. Constitution implicitly prohibits state laws that discriminate against out-of-state entities, whether on face or in effect.[105]

- If the review process identifies out-of-state entities as engaged in Investment Water Speculation much more often than in-state entities, it could be challenged under the Commerce Clause even if none of the criteria considered explicitly mentions out-of-state entities.
- None of the concepts described in this subsection that would rely on the review process are likely to be invalidated due to this concern. None of the potential example criteria identified by the Work Group explicitly discriminates against out-of-state entities. Moreover, none of the factors seems likely to have differential effects on out-of-state entities relative to similarly situated in-state entities.

Concept J: Create a statewide process to identify and prohibit Investment Water Speculation
Description First, modify statutory language to clarify that water right transactions with the primary intent of profit from the value of the water right through its sale or lease rather than the beneficial use of the water right are prohibited. Second, create new tools and processes to determine whether a water right sale or lease is Investment Water Speculation. Various possible entities could perform the review including the water court, an existing state agency, a new state agency, and county governments.
Pros ● This concept directly addresses Investment Water Speculation and prevents it. ● Water Court: ○ Well-versed in considering evidence and making findings. ● State Agency: ○ Well-versed in processing permit applications. ○ Potentially faster process than Water Court. ● County Government: ○ Some Coloradans might think the local control of this approach is beneficial, particularly given the particularized concerns created by dry-up of agricultural land.

[105] This is known as the "dormant Commerce Clause." In general, a law regulating commerce is invalid under the dormant Commerce Clause when, with respect to in-state and out-of-state entities, it is (1) facially discriminatory, (2) has a discriminatory purpose, or (3) has discriminatory effects. *See Town of Southold v. Town of E. Hampton*, 477 F.3d 38, 48 (2d Cir. 2007) (summarizing Supreme Court caselaw). In addition, a law may be invalid under the dormant Commerce Clause when "the burden imposed on [] commerce is clearly excessive in relation to the putative local benefits." *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970).

Cons

- All of the downsides identified above (Section 5.c) for any process that requires identification of particular transactions as Investment Water Speculation.
- Some water right purchases that are beneficial to Colorado could be precluded under objective standards, even if the review process is perfectly accurate in identifying speculative intent.
- Eliminating some entities from water rights purchases could decrease the value of water rights, by either reducing competition among potential purchasers or by effectively restricting changes of use.
- Water Court:
    - Further overload already full court dockets.
- County Government:
    - Could result in significant variability throughout the state. County government review is less likely to provide a common framework for Colorado water users.
    - Many county governments are less familiar with existing water laws than water courts or state agencies.

Effective as legislation addressing Investment Water Speculation?

- This concept has the potential to be effective in reducing the amount of Investment Water Speculation on a large scale.
- This concept proposes a change in Colorado law.

Concept K: Encourage local governments to police Investment Water Speculation through their 1041 powers

Description

Counties already have some power to regulate or prohibit certain water projects using their "1041 powers" (as described in Section 3.a.vi). County governments can decide whether or not to employ particular subcategories of 1041 power. The "efficient utilization of municipal and industrial water projects" subcategory[106] may cover, and has been used to address, concerns about speculation in water projects removing water from agricultural land. The limits of county 1041 powers for water speculation considerations have not been legally tested. However, even when employed against water speculation, county 1041 powers have generally been limited to regulation of physical water projects (e.g. water pipelines).[107]

One way to encourage use of existing 1041 powers to prevent Investment Water Speculation would be to simply inform counties about their authority and encourage its use against speculation[108]. One legislative action along these lines would be to clarify that anti-speculation is a valid purpose for the exercise of 1041 powers. As use of 1041 powers

[106] C.R.S. § 24-65.1-203(h).
[107] *See, e.g.*, Pueblo County Code, Ch. 17.172.130(10) ("The Project will not significantly degrade any current or foreseeable future sector of the local economy.").
[108] C.R.S. § 24-65.1-302 authorizes state agencies to provide recommendations and technical assistance to local governments.

would remain limited to water projects, and may not be applicable to water transactions or water court activities, encouragement of this form would probably, at most, reduce the negative impacts of Investment Water Speculation.

A stronger alternative would be legislation explicitly designating water rights transactions as activities of state interest, thereby authorizing county-level review of water rights sales and leases for speculative intent. As with the existing 1041 categories, the legislation could specify the parameters or factors that counties choosing to adopt the new category must consider.[109] This would be similar to the approach of Concept J, although it would be optional for county governments to make use of a new 1041 subcategory.

To apply this proposal counties would need to determine whether a water rights transaction is Investment Water Speculation. County governments might also choose to require mitigation of the impacts of speculation, rather than an outright prohibition of transactions.

Given the varied uptake of 1041 regulations across Colorado, using 1041 regulations to regulate Investment Water Speculation on a large scale would require the General Assembly to provide funding to counties with limited resources.

Pros

- Local communities bear the brunt of permanent agricultural dry-up, one possible result of Investment Water Speculation, and hence are well-positioned to evaluate the cost of an Investment Water Speculation that is likely to exacerbate dry-up.
- Several counties already have 1041 permitting programs and fees that help pay for them.

Cons

- All of the downsides identified above (Section 5.c) for any process that requires identification of particular transactions as Investment Water Speculation.
- Creates additional administrative burdens and potentially additional litigation burdens for counties.
- Many county governments are less familiar with water laws and water transactions than water courts or state agencies.
- 1041 rules vary from county to county and do not provide a common framework for Colorado water users.
- Would require funding to counties in order to implement 1041 regulations against Investment Water Speculation at a large scale.
- Subject to existing limitations on 1041 powers, unless changed by statute.

Effective as legislation addressing Investment Water Speculation?

If implemented by encouraging the use of 1041 powers under current law:

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation.

[109] *See* C.R.S. § 24-65.1-204.

If implemented by expanding the 1041 powers to specifically include water rights transactions:

- This has the potential to be effective in reducing the amount of Investment Water Speculation on a large scale.
- This concept proposes a change in Colorado law.

Concept L: Tax the profit derived from sale or lease of water rights previously purchased for Investment Water Speculation purposes

Description

As in Concept J, create new tools and processes to determine whether a water right purchase is Investment Water Speculation. If the review process identifies a purchase as Investment Water Speculation, tax all profits (from sale, lease, or other means) that the purchasing entity receives based on future transactions involving the water right. The tax would make Investment Water Speculation less attractive.

The review of the purchaser's intent to determine whether the profits tax applies could be completed by the Department of Regulatory Affairs (DORA), in consultation with DNR. DORA already has technical expertise in regulation of real estate transactions and handling tax matters. Proceeds from the tax could be used to fund the DORA program, local efforts to mitigate the impacts of Investment Water Speculation, or other community investments.

Pros

- This concept directly addresses Investment Water Speculation.
- Compared to a strict prohibition on Investment Water Speculation, taxation reduces the risk of blocking the most beneficial transactions.

Cons

- All of the downsides identified above (Section 5.c) for any process that requires identification of particular transactions as Investment Water Speculation.
- Taxes might be passed along to buyers or sellers, rather than acting as a deterrent.
- Identifying the profits of Investment Water Speculation may be difficult for several reasons:
    - Profits may be realized over a long time period and come from multiple sources. For example, profit may come from a combination of the water right's decreed beneficial use, year-to-year leases of the water right, and eventual sale of the water right.
    - The price paid for the water right may not be easily distinguishable from the price paid for land with which the water right is associated.
- Funds raised are likely to be only a fraction of the value of water. Therefore, such a fund may be unable to cover the direct and indirect impacts of Investment Water Speculation.

Effective as legislation addressing Investment Water Speculation?

- This concept has the potential to be effective in reducing the amount of Investment Water Speculation on a large scale.
- This concept proposes a change in Colorado law.

Concept M: Encourage ditch companies to adopt Catlin bylaws[110] that allow boards to impose terms and conditions on water transfers affecting shareholders

Description
Ditch bylaws could impose various requirements at the time of a water transaction to limit or prohibit Investment Water Speculation:

- Prevent sales of water that will remove water from use on the originally-decreed land area. Either prevent for all sales, for sales greater than a certain amount, or for a certain amount under the ditch in a particular time period.
- Require review of the purchase to determine whether there is speculative intent (see the intro to Section 5.c).
- Require mitigation for certain types of negative outcomes for sales that meet certain criteria.
- Limit voting power of individual shareholders to some percentage of shares less than a majority, so that no individual speculator can re-write the bylaws by purchasing a majority of shares.

Pros

- If successful, this could reduce speculation in ditch company water rights.

Cons

- The effect is limited to ditch company water rights where the ditch companies choose to implement changes to their bylaws. Many ditch companies are unaware of their ability to implement bylaws. Although some explanation of this ability may be helpful, there is no clear legislative step to take.
- A speculator who owns the majority of shares could change the bylaws. Limits on voting power might be evaded through transfers of ownership of some shares to entities related to the speculator.
- Different bylaws might result in inconsistent results across the state.
- Might prevent non-speculative changes of ditch company rights to other beneficial uses of water and the ability to implement other creative solutions.

Effective as legislation addressing Investment Water Speculation?

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation on a large scale.

5.d: Concepts that would identify and impact the sale of water rights without specifically identifying Investment Water Speculation

As with the concepts in 5.c., this group of concepts would directly limit or change the process for sale of water rights. Because the concepts would apply to all water right sales, the concepts avoid the difficulties imposed by attempting to explicitly identify

[110] *See Fort Lyon Canal Co. v. Catlin Canal Co.*, 642 P.2d 501, 503 (Colo. 1982).

Investment Water Speculation. At the same time, however, the widespread approach of these concepts could mean that more non-speculative transactions would be impacted or prevented.

Concept N: Impose time limits on turnover of ownership of water rights to discourage short-term ownership for quick profit

Description
Under this concept, legislation would impose minimum terms of ownership or use for water rights.

The Work Group discussed a variety of time limits, ranging from a few days to several years, but did not come to a consensus regarding what time limits on re-sale would be sufficient to prevent the flipping of water rights. Work Group members noted that whereas 15 years may be a relatively long time for a water speculator or individual farmer, it is a relatively short time for many governmental water planning entities. This concept would not target long-term Investment Water Speculation unless the time limits were very long.

Pros

- Could prevent brokers from buying a water right and quickly selling it for profit. Brokers decrease seller's proceeds and increase buyers' costs.
- Unlike solutions requiring particularized review of speculative intent, the set of transactions to which a restriction or tax would apply is fairly easy to identify.

Cons

- Without adequate exclusions or variances, a law like this could prohibit transfers that are otherwise unobjectionable.
    - For example, a law like this could harm a farmer who purchases a neighboring farm, and the associated water right, but needs to sell it due to an unexpected change in circumstances.
- The concept may devalue water rights and infringe on their non-speculative sale.
- Profits of middlemen may simply reflect socially valuable activity, facilitating the transaction with the ultimate purchaser. Rather than purchasing from the middleman, the purchaser itself could have taken the effort to identify the opportunity to purchase the water right.
- As a significant restriction on a private property right, there is some possibility that this concept would constitute a taking and require compensation be paid to owners. However, given that most owners would be able to beneficially use their water rights without sale, it is unlikely that this concept would be a taking.[111]

[111] *See Andrus v. Allard*, 444 U.S. 51, 65–66 (1979) (holding a *permanent* restriction on commercial sale of eagle feathers was not a taking); *see also Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Plan. Agency,* 535 U.S. 302, 316, 334 (2002) (holding a two-year deprivation of *all* economic value of land was not a per se taking).

Effective as legislation addressing Investment Water Speculation?

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation on a large scale.

Concept O: Require public record of relevant details for sales of water rights

Description
Each of the potential changes within this concept would facilitate public access to information about water right sales.

A fairly small change would be to require a public record for all changes of ownership of water rights. Section 38-30-102, C.R.S. already requires that certain sales of water rights be publicly recorded, as with real estate. However, section 38-30-10, C.R.S. exempts water rights acquired when "ownership of stock in ditch companies or other companies constitutes the ownership of a water right." In addition, only transfers of well permits, but not transfers of surface or groundwater rights, have a standardized recording process. A law could require public records of the ownership of ditch companies and other forms of water rights ownership not currently covered by statute and specify a comprehensive process for recording changes of ownership in water rights.

A new law could also require that the prices at which water rights are sold or leased be made public. This information could be organized in a publicly available database. A publicly available listing of water right sales and prices could allow buyers and sellers to better understand the market value of water rights. This would encourage direct transactions rather than transactions where a water broker makes a profit.

Finally, a law could facilitate or require public listing of water rights prior to sale. A listing of contact information and potential pricing of water rights would allow buyers more ability to buy directly from sellers, again avoiding transfer of profit to a middleman.

Although these ideas might help avoid short-term re-sale of water rights by brokers, they are unlikely to directly reduce longer-term Investment Water Speculation.

Pros

- Greater public information on the ownership of water rights and water transactions would allow greater understanding of the scope of the problem posed by Investment Water Speculation.
- Centralized information on the ownership of water rights could help facilitate short-term transactions to address temporary water needs, such as in a drought.
- Many of the other concepts considered by the Work Group would already require that some government entity be informed of changes in ownership of water rights.
- If populated with accurate information, this could be a useful tool to remove or reduce broker profit without infringing on the ability to buy and sell water because the end user of the water could potentially purchase directly from the seller rather than dealing with a broker. Some brokers may currently receive high profits due to a lack of knowledge among other market participants about the set of people seeking to buy and sell water rights or the market value of water rights.

Cons

- An optional system would not be useful if not used widely or if populated with unrealistic or bad information.
- Privacy concerns could have a chilling effect on the willingness of water right owners to enter into acquisitions with any buyer, including buyers with a need for water to facilitate beneficial uses.
    - For example, farmers may wish to sell and lease back their water rights. Exposing the sale, which would be private under current law, could be embarrassing for the farmer.
- Could attract water brokers if they can easily see who is willing to sell water rights and/or are better able to navigate new systems than ordinary people.
- Making the market for purchase of water rights more competitive could increase the price of water rights.
- There are already voluntary public auctions for water rights, so a voluntary system would not change anything.

Effective as legislation addressing Investment Water Speculation?

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation on a large scale.

Concept P: Establish a maximum rate of water right price increase and impose higher taxes when the rate is exceeded.

Description

Legislation could set a ceiling for the amount of profit from the sale of a water right in a given time period and any profits in excess of that allowed price increase would be taxed at a higher rate, similar to a short-term capital gains rate. That would avoid needing to determine intent but would penalize profit above a certain rate (such as a sale price that is an increase over the purchase price of more than 5 percent per year).

There may be reasonable exemptions to this requirement that could be built into the legislation.

Pros

- This would disincentivize Investment Water Speculation because any large profit would be taxed at a high rate.
- There is no need to determine speculative intent to apply this concept.

Cons

- Although exceptions could be built into the legislation, this could potentially impact profits for sales of water rights that are not speculative.
- Information about the price of water right sales is not currently recorded and the law would need to provide a way to make this record.
- There may be situations where there is not a clear way to determine the original sale price in order to determine the price increase.
- During a period of water shortage, in which prices for water rights rise rapidly, this

concept may disincentivize transfer of water to beneficial uses.
- Speculators may profit from purchases of water rights through leases or other arrangements that do not require sale of the water right, unless the law is crafted to apply to these other transactions.

Effective as legislation addressing Investment Water Speculation?
- This concept has the potential to be effective in reducing the amount of Investment Water Speculation on a large scale.
- This concept proposes a change in Colorado law.

Concept Q: Prohibit out-of-state persons from holding water rights

Description
Impose a law that allows only in-Colorado entities to hold water rights.

Pros
- This concept targets a concern that has been raised about the particular negative impacts due to the incidence of Investment Water Speculation by out-of-state purchasers of water rights.

Cons
- People in Colorado may also engage in Investment Water Speculation. This concept would do nothing to prevent that activity.
- Some out-of-state entities are engaged in socially beneficial, non-speculative operations in Colorado. They would be precluded from continuing their operations.
- This concept could be avoided fairly easily by incorporating an in-state corporation. Although a law could further specify that, for example, in-state corporations that hold water rights must be owned by Colorado residents, such additions would deepen both the practical and constitutional issues with this concept.
- Preventing a class of parties from participating in water right matters in Colorado, especially new appropriations, may conflict with Colorado's constitution.[112]
- If applied to current out-of-state owners of water rights this concept would almost certainly require compensation be paid to these owners under the Takings Clause.[113]
- State laws that discriminate against out-of-state entities engaging in commercial transactions generally violate the Commerce Clause of the U.S. Constitution.[114] Laws implementing this concept are thus unlikely to be constitutional.[115]

[112] *See* Colo. Const. Art. XVI, Section 6 ("The right to divert the unappropriated waters of any natural stream to beneficial uses shall never be denied.").
[113] U.S. Const., amend. V.
[114] *See Town of Southold v. Town of E. Hampton*, 477 F.3d 38, 48 (2d Cir. 2007) (summarizing Supreme Court caselaw).
[115] *See Lewis v. BT Inv. Managers, Inc.*, 447 U.S. 27, 37, 42–43 (1980) (state law prohibiting bank holding companies with an out-of-state principal place of business from owning businesses providing investment services violated Commerce Clause).

Effective as legislation addressing Investment Water Speculation?

- This concept is not likely to be effective in reducing the amount of Investment Water Speculation.

5.e: Concepts that encourage temporary changes in use of water rights and/or ensure that temporary changes do not result in or facilitate Investment Water Speculation

This group of concepts explores the interaction between new and developing mechanisms for temporary changes of use and Investment Water Speculation.

Concept R: Encourage Usage of Alternative Transfer Methods (ATMs)

Description

ATMs are an intermediate option between one-year leases of water rights and permanent sale of irrigation water rights. An ATM usually provides the legal and administrative structure for the irrigator to retain ownership of the right, while also allowing a transfer of some or all of the water to a different beneficial use for a period of time.[116] ATMs thus may help prevent permanent dry-up of irrigated lands and the associated impacts on the local community. This concept may include:

- Educating water right owners of the availability and advantages of ATMs
- Developing streamlined technical approaches to reduce the cost of using an ATM
- Passing legislation that makes ATMs less costly and time consuming
- Extending the Agricultural Water Protection Water Right option from water divisions 1 and 2 into the rest of the state (divisions 3–7)
- Passing legislation that increases opportunities for water banking.

Pros

- ATMs provide water right owners with a longer-term financial alternative to permanent sale. This may incentivize water users to maintain long-term ownership of water rights while also decreasing opportunities for Investment Water Speculation.
- ATMs encourage continued beneficial use around the state and reduction in permanent agricultural dry-up, consistent with the Colorado Water Plan.
- ATMs may reduce the burden on farmers of other concepts that increase restrictions on the sale or permanent change of use of water rights.
- As the Colorado Water Plan states, "alternative transfer methods can keep agriculturally dependent communities whole and continue agricultural production in most years, and if such arrangements can be made more permanent in nature, they will provide certainty to both municipal water providers and agricultural producers."
- The Colorado Water Plan sets a goal of sharing 50,000 acre-feet of agricultural water

[116] The Colorado Water Conservation Board has produced a report providing a detailed definition of alternative transfer methods (ATMs). *See* Colorado Water Conservation Board, "Alternative Transfer Methods in Colorado: Status Update, Framework for Continued Support, and Recommendations for CWCB Action" (July 2020), pp. 42-44.

with municipal and environmental water users by 2030[117], representing a significant volume of water that could be sheltered from Investment Water Speculation.
- Broad adoption of ATMs based on long-term agreements between irrigation water users and municipal, industrial, or environmental water users could remove irrigation water rights from the markets targeted for Investment Water Speculation.

Cons
- Some water users have stated concerns that the types of ATMs that are administratively approved outside of the water court do not receive as thorough of a review as water court-approved ATMs.
- ATMs have been developed with the objective of minimizing permanent dry-up by providing a financially viable alternative to permanent sale of a water right to a non-agricultural water user. However, even if participation in ATMs is increased significantly, investors may still find willing sellers and buyers.
- The Work Group cannot conclude that encouraging the use of ATMs by making them more attractive or feasible would eliminate Investment Water Speculation.
    - The financial benefit from selling to an entity practicing Investment Water Speculation may be difficult to overcome.
- ATMs may provide entities engaged in Investment Water Speculation a way of profiting from their purchase of water rights.

Effective as legislation addressing Investment Water Speculation?
- This concept does not involve strengthening anti-speculation law directly, but dedicated legislative action could create opportunities that incentivize long-term ownership of water rights and shelter water rights from Investment Water Speculation.

Concept S: Ensure safeguards against Investment Water Speculation are included within a Demand Management program or something similar if established in the future.

Description
If Colorado establishes a Demand Management or similar program, the program should include safeguards to prevent Investment Water Speculation through that program. For example, an investor may purchase irrigation water rights with the expectation of getting paid for participation in Demand Management or profiting if Demand Management raises the price of water in a region. The developers of the program should include acceptance and participation criteria to ensure that Investment Water Speculation does not occur through the program. The developers of the program may refer to the criteria used to determine whether Investment Water Speculation is occurring that are described in Section 5c .

[117] Colorado Water Plan at 15, available at https://dnrweblink.state.co.us/cwcb/0/doc/200996/Electronic.aspx?searchid=ab75ea87-7dbe-4fea-98dc-b924c94c17f0.

Pros

- Any new program, such as Demand Management, could establish rules that prevent exploitation by investors.

Cons

- Depending on how the rules to prevent Investment Water Speculation are established, if not crafted carefully they could prevent participation by water users who are not investors, but seem to be, due to program rules. This could negatively impact participation and, therefore, the success of the program, which is a concern that is independent of preventing Investment Water Speculation

Effective as legislation addressing Investment Water Speculation?

- This concept has the potential to be effective in reducing the amount of Investment Water Speculation but only in specific programs like demand management if implemented by the administration of the program.

6. Presentation to the Water Resources Review Committee

In Section 5 of this report, the Work Group brainstormed and discussed concepts aimed at Traditional and Investment Water Speculation. That discussion includes the pros and cons of 19 concepts. The Work Group wants to stress to the Committee the complexity and nuance of the problem identified in SB 20-048 and the fact that any concept that would be effective in reducing or preventing Investment Water Speculation also comes with significant drawbacks.

Of the 19 concepts, eight of them meet the following criteria, which were the threshold criteria established by the Work Group to include a concept in this final section of the report:

1. The concept requires enacting new law or amending existing law; and
2. The concept has the potential to effectively reduce Investment Water Speculation on a large scale, rather than just in certain limited situations.

The eight concepts that meet those two criteria are discussed below in no particular order. The Work Group believes the General Assembly intended the two criteria in SB20-048 when it directed the Work Group to "explore ways to strengthen current water anti-speculation law" and to "submit a written report to the (Water Resources Review) Committee...regarding any recommended changes." This section discusses eight concepts that meet the criteria. However, the Work Group did not reach consensus that any concept should be a recommended change in law. Each concept is already discussed in detail in Section 5. To avoid repeating that analysis, the discussion below includes a brief concept description and then focuses on the drawbacks of the concept and whether the drawbacks can be minimized. Common drawbacks include a high cost to implement the concept or impacts to the time and cost of water transactions for all water users, even those who are not speculative investors. Further, the Work Group recognizes that drawbacks that could potentially reduce the sale price of water rights, and therefore, their value as property, present a risk to the current owners of irrigation water rights.

Concept E: Prohibit or penalize compensated non-diversion

> The receipt of payment for non-diversion would be made illegal or penalized, unless that payment occurs pursuant to an exception allowed by law. Allowable exceptions would include enrollment in organized conservation programs or a State-approved Demand Management Program, if one is established. Non-diversion pursuant to the CWCB's instream flow acquisition program would continue to be allowed. Potential penalties for receiving payment for non-diversion include abandonment of the water right.
>
> The primary focus of this concept would be to address speculation near the state line. A potential problem with enforcement is that it may be difficult to determine that a water user is compensated for non-diversion unless the compensation is made by a public entity in a downstream state.

Concept G: Fund and/or create a right of first refusal for the purchase of water rights for long-term irrigation use for public benefit.

This concept would provide funds for a public entity to purchase irrigation rights to keep those rights in irrigation use. Alternatively or in combination, the state or other entities would be granted a right of first refusal to purchase irrigation water rights before those rights can be sold to a speculator.

This concept would result in a great degree of control for the state in water right sales. However, it would be extremely expensive to implement, as the state would need to fund a program to purchase, and then ensure the proper use of a large number of water rights. Relatedly, implementing the program in a manner that does not produce windfalls for existing water rights owners could be difficult. The degree of direct state control entailed by this concept, as opposed to control by the State's citizens and market transactions, would be contrary to Colorado's history of primarily regulating water usage through a system of property rights. Expenditures and the degree of state control might be limited somewhat by limiting the program to only those water rights where there is a proposed sale to speculators. However, this modification would require identification of speculative intent within sales, which is itself a difficult problem. See the discussion of Concept J.

Concept H: Eliminate or reduce the agricultural tax benefit for lands from which water is removed

This concept would reduce the tax benefit for lands converted from irrigated agriculture to non-irrigated agricultural land use types.

Relative to most of the other concepts with significant potential to reduce Investment Water Speculation, this concept would be fairly simple to administer and implement. However, it is also a concept that is uncertain in its effect on Investment Water Speculation. The benefit of agricultural tax status varies depending on the parcel in question, and even on parcels for which the benefit is largest it may be insufficient to disincentivize Investment Water Speculation, particularly if speculators anticipate very large increases in the price of water rights. This concept does not evaluate whether a water transfer is speculative and therefore would penalize all water transactions where the water is removed from the land. With that, it creates a disincentive for changes of use, or agricultural water conservation efforts of a non-speculative nature.

Concept I: Unless irrigated land is going to be changed to a new land use, require water to be tied to the land

This concept would impose stringent limits on when water rights currently used for irrigation use can be changed to other uses. To be effective in reducing Investment Water Speculation, the concept would

need to be applied to a broad swath of lands and water rights, as otherwise the concept might simply increase speculative pressure on water rights for which changes of use are permitted.

This concept would be a dramatic restriction on water rights, both significantly devaluing water rights and making it very difficult to transfer water rights to other beneficial uses. Like Concept H, it would be effective only to the extent that it prevents or discourages any changes of use, not just changes of use subsequent to an Investment Water Speculation purchase. Minimizing the unintended consequences of this concept would also decrease its effectiveness as a method for preventing or reducing Investment Water Speculation.

Concept J: Create a statewide process to identify and prohibit Investment Water Speculation

This concept would create a statewide process through the water courts, a state agency, or another government body by which water rights purchases would be reviewed for speculative intent and blocked if speculative intent is found.

Concept J, by directly targeting Investment Water Speculation, has the potential for lower impact on non-speculative transactions. If successful at identifying transactions in which Investment Water Speculation is occurring, Concept J is also a definitive way of preventing these transactions.

This concept would require intervention in water right transactions by a governmental entity in an area that is not now encumbered by such oversight. Further, identifying appropriate measures of speculative intent may be difficult. Section 5.c contains a detailed list of possible objective criteria for evaluating the intent of a prospective purchaser, such as the type of entity, the type of transaction, the size of the purchasing entity's water rights holdings, and the entity's stated future plans for the water right. Even if workable, these criteria will need to be elaborated upon.

The difficulty involved in objectively identifying transactions in which Investment Water Speculation is occurring means that the process may be costly to administer. Moreover, administration cost trades off with the accuracy and speed of the process. If overly stringent or ineffective at accurately identifying intent, non-speculative transactions may be mistakenly identified as speculative and prevented; some transactions may not even be attempted due to this risk as well as the cost of going through the process. Determining whether a transaction involves Investment Water Speculation would add a time-consuming step to a process that may otherwise be able to move more quickly.

Concept K: Encourage local governments to police Investment Water Speculation through their 1041 powers

Counties already have some powers to regulate water projects under 1041 permitting projects. This concept would significantly expand the reach and usage of these powers by modifying the statutory language governing 1041 powers to explicitly cover review of water rights sales for speculative intent and providing state funding to counties to develop and implement 1041 regulations under the new designation.

The process followed by the counties in Concept K would be similar to the government body considering speculation in Concept J. Relative to Concept J, Concept K has the potential advantages of working through an existing review system (1041 regulations) and facilitating local control.

The drawbacks of Concept K are also similar to Concept J. Like Concept J, Concept K would also require review of individual transactions for speculative intent, which inherently entails governmental oversight in the water market, in an area where there is none now. Local control of the process may make this intent determination even more difficult, raising both the cost of administration and the cost for non-speculative water users of participating in water transactions. Counties have limited existing experience with water transactions compared to a statewide entity. This would further increase the challenge of implementation. Varying requirements across the state could result in a regulatory patchwork, with some counties limiting Investment Water Speculation far more than others. This could make it difficult for individuals to navigate the system and inhibit statewide water planning, and would not uniformly reduce Investment Water Speculation throughout the state. Although the legislature could specify uniform requirements explicitly by law or through required rulemaking, this would remove much of the potential benefit of this concept relative to Concept J.

Concept L: Tax the profit derived from sale or lease of water rights previously purchased for Investment Water Speculation purposes

This concept is similar to Concept J, and would require a similar process to review the intent of a water right purchase. However, instead of outright preventing transactions identified as Investment Water Speculation, this concept would merely disincentivize the transactions by imposing a tax. The tax would apply to all subsequent payments to the purchasing entity involving the water right, at a rate that would make Investment Water Speculation less attractive.

Compared to Concept J, Concept L could avoid some costs of delay, if the review process were to occur after the sale of water rights is complete; however, to have the effect of disincentivizing the Investment Water Speculation, the review would more logically take place at the time of the transaction, as in Concept J. In addition, the negative consequences associated with erroneously identifying a transaction as involving Investment Water Speculation would be reduced relative to Concept J, since the transaction might still go forward.

However, Concept L also introduces several complications relative to Concept J. As Concept L involves identification of profit, it requires more complex (and hence more costly) record-keeping. Concept L may also be less effective at reducing Investment Water Speculation, as taxes may be passed along to water users rather than being borne by the investor. In addition, if review is applied only after transactions are complete, purchasers would face even greater risk from inaccurate identification of speculative intent.

Concept P: Establish maximum rate of water right price increase and impose higher taxes when the rate is exceeded.

This concept would establish a water right price increase rate, above which a high tax rate would need to be paid on water right transactions.

Concept P would be easier to administer because it does not involve identification of Investment Water Speculation. And, at least when water right prices are changing gradually, this concept would likely be less disruptive to transactions that do not involve Investment Water Speculation than the Concepts that have the effect of preventing or disincentivizing changes of use.

However, when supply or demand for water is changing rapidly from year to year, resulting in significant changes to prices for non-speculative water right purchases, this Concept could inhibit necessary water right transfers that do not involve Investment Water Speculation. Conversely, when prices for water rights are relatively stable this concept would be less effective at preventing Investment Water Speculation. In addition, regardless of how water right prices change over time, existence of the tax would immediately decrease the price at which current owners of water rights could sell. Finally, regarding administrability, it may be difficult to obtain accurate information about the original purchase price of the water right.

6.a. Summary of Section 6

The Work Group is diverse, with varied and sometimes conflicting interests. Some members of the Work Group find that any concept, even if further developed to minimize drawbacks, is unacceptable.

The Committee should be aware that there are several concepts discussed in Section 5 that do not meet the two criteria listed above, but might be beneficial to Colorado as a whole with minimal drawbacks and therefore may be worthy of consideration by the Committee and the Colorado water community in other contexts.

While the Work Group does not recommend any concepts for implementation, further concept development could result in proposed law that is both effective against speculation at a large scale and minimizes drawbacks to a degree that is acceptable to the General Assembly. The Work Group recommends that the General Assembly gather feedback from multiple and diverse stakeholders within Colorado for any change in law considered.