



WATER AND SEWER BOARD REGULAR MEETING
May 13, 2020 – 6:30 a.m.

https://windsorgov.zoom.us/webinar/register/WN_siMZuC-4QOakPi7D61nhHg

The Town of Windsor will make reasonable accommodations for access to Town services, programs, and activities and will make special communication arrangements for persons with disabilities. Please call (970) 674-2400 by noon on the 2nd day prior to the meeting to make arrangements.

AGENDA

A. CALL TO ORDER

1. Roll Call
2. Review of Agenda by the Board and Addition of Items of New Business to the Agenda for Consideration by the Board
3. Public Invited to be Heard

B. CONSENT CALENDAR

C. BOARD ACTION

1. Approval of Minutes
2. Proposed Backflow Prevention & Cross Connection Control Ordinance (Eric Lucas, Director of Public Services)
3. Great Western Industrial Park Augmentation Lease

D. PRESENTATIONS AND DISCUSSION

1. Water Supply Update

E. ADJOURN



WATER AND SEWER BOARD REGULAR MEETING
March 11, 2020 – 6:30 a.m.
2nd Floor Conference Room – 301 Walnut Street
Windsor, CO 80550

MINUTES

A. CALL TO ORDER

Board Chairperson Bielawski called the meeting to order at 6:30 a.m.

1. Roll Call

Chairperson	Greg Bielawski
Vice-Chairperson	Carlos Medina
Secretary	Julie Cline
Youth Advisory Board Member	Hunter Rivera
	Darell Zimbelman
	Milt Tokunaga
	Milton Geiger (absent)
	Janene Willey
Town Board Liaison	Ken Bennett

Also present:

Community Development	John Thornhill
Director	Leif Lesoing
Water Resources Administrator	Janine Hegeman
Storm Water Coordinator	Erin Porter
Utility Billing Admin Specialist	

2. Review of Agenda by the Board and Addition of items of New Business to the Agenda for Consideration by the Board

Board Vice-Chairperson requested to add a recap and debrief regarding the recent event that the Ad Hoc Committee participated in. **Board Secretary Cline moved to add the agenda item; Board Member Willey seconded the motion. Motion carried unanimously.**

3. Public Invited to be Heard

There was no public comment.

B. CONSENT CALENDAR

There were no items on the consent calendar.

C. BOARD ACTION

1. Minutes of February 12, 2020 Regular Meeting

Board Secretary Cline moved to accept the minutes for the February 12, 2020 meeting; Board Member Willey seconded the motion. Motion carried unanimously.

D. PRESENTATIONS AND DISCUSSION

1. Review of Water and Sewer Board Bylaws

Board Chairman Bielawski asked about the orientation presentation for new board members. Ms. Porter advised the presentation is done through the Town Clerk's Office, and she would follow up

with Town Clerk Krystal Eucker about the presentation for all board members who have not gone through the training.

Water Resource Administrator Lesoing introduced himself and stated due to many emails and cross communication, he had reviewed the bylaws. He brought up Article III, Section E that states all meetings of the Board shall be open to the public. He said staff had been advised that two or more Board Members is considered a meeting. Because of this, meetings of the Ad Hoc Committee would need to be scheduled 48 hours prior to the meeting, posted, and an agenda set up just like a regular Board meeting.

Director of Community Development Thornhill stated that it is also best to have one point of contact between the Board and Town Staff. This lessens the miscommunication and additional work and time for Town Staff. Points of contact would be Mr. Lesoing and Board Chairman Bielawski for regular Board business, and Board Member Willey for the Ad Hoc Committee.

Board Member Zimbelman wanted to discuss Article III, Section H, which states All voting shall be by roll-call vote. The Board discussed whether the item could be changed and what the current process for voting is.

2. Planning for Water Education and Upcoming Events

Board Vice-Chairperson Medina provided information on the recent Innovation Fair that members of the Board had participated in. He stated that it went well, and there were some good conversations with community members. After the Fair, Ms. Hegeman took Board Members through a structured debrief session, and it became clear that the Board needed to develop the message that they wanted to send out to the community.

Vice-Chairperson Medina proposed that in future presentations, the participants focus on who and what the Water Sewer Board is, as well as Water Supply Education. Board Member Willey proposed having different levels based on the age of the audience.

Mr. Thornhill stated that program messaging like that takes time to build and develop. He brought up Greeley Water who had spent years developing their messaging. He said continuing to go to scheduled events to focus on educating the public on the purpose of the Water and Sewer Board was generating a first contact, and that future contacts could go into more depth as the messaging was developed.

Board Member Willey stated she wanted to know what upcoming events that the Town was planning and contributing to so that the event calendar could be planned rather than reacting to events the Board was not aware of. Mr. Thornhill stated that there were events every week relating to water that the Board could become involved with, but he advised because the Board was focused on the Yard and Garden Boot Camp, they should concentrate on the current events scheduled while the messaging was being developed.

Town Board Member Bennett updated the Water and Sewer Board on the upcoming events that he has been discussing with various entities to coordinate Northern Colorado Water Education. He is currently looking at scheduling a meeting between the various entities, including the Water and Sewer Board, the Tree Board, and the Poudre Heritage Alliance, to communicate and coordinate upcoming events.

E. COMMUNICATIONS

1. Upcoming Events:

- a. Poudre Pour, March 27, 2pm-6pm, Boardwalk Park Museum
- b. Homeowner's Landscape Boot Camp, Windsor Rec Center
 - i. April 4, 9am-11am, Best Lawn on the Block
 - ii. April 11, 9am-11am, Tree Care & Selection
 - iii. April 18, 9am-11am, Water-wise Landscaping
- c. Regional Water Education Presentations at Clearview Library
 - i. May 21, Roy Otto & John Thornhill
 - ii. June 2, Reagan Waskom & Brad Wind
- d. Northern Water Spring Water Users Meeting, April 7, 8:00am-1:30pm, Double Tree by Hilton, 919 7th Street, Greeley, CO 80634
- e. Harold Evans, Greeley Water and Sewer Board Presentation at May 13, Water & Sewer Board Meeting

G. ADJOURN

Board Secretary Cline moved to adjourn the meeting at 7:30 am; Board Vice-Chairperson Medina seconded the motion. Motion carried unanimously.

Submitted by:



Erin Porter, Utility Billing Administrative Specialist



MEMORANDUM

Date: May 6, 2020
To: Water & Sewer Board
From: Eric Lucas, Director of Public Services
Re: Proposed Backflow Prevention & Cross Connection Control Ordinance

Background / Discussion:

In 2016 the Colorado Department of Public Health and Environment (CDPHE) established a rule requiring public water providers to protect their water system from potential contamination through cross-connections. This is accomplished through the use of backflow prevention devices at properties that have been identified to pose a potential hazard to the public water system. Currently, Windsor is not compliant in that we have not completed surveys of our commercial and industrial properties to ensure they have the proper devices in place. The first step towards compliance with the rule is to establish a strong backflow ordinance that authorizes a survey to determine a cross-connection, the ability to require a property owner to control or remove a cross-connection, collect any fees to administer the program (no fees are proposed at this time), and to require the Town to maintain all related records.

The passing of this ordinance will bring the Town into compliance with Colorado Primary Drinking Water Regulation 11.39 (see attachment). The intent of this ordinance is to protect the public water system from contaminants or pollutants that could enter the distribution system by a backflow from a customer's water supply system through the service connection.

Financial Impact:

The financial impact will be minimal this fiscal year. The Town currently has two staff members that are certified backflow testers which is a prerequisite for the survey training. We are also tracking the required reports in house. At a later date, the Town may need to consider hiring a dedicated backflow technician to

administer the program as the number of devices increase with Windsor's growth.

Recommendation:

The staff recommendation is to move forward with the passing of the ordinance to keep the Town of Windsor in compliance with The Colorado Primary Drinking Water Regulation 11.39.

Attachments:

- DRAFT ORDINANCE ADDING ARTICLE VI, CHAPTER 13 TO THE WINDSOR MUNICIPAL CODE CONCERNING BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROLS WITHIN THE TOWN OF WINDSOR, COLORADO
- Colorado Primary Drinking Water Regulation 11.39

TOWN OF WINDSOR

ORDINANCE NO. 2020-[##]

AN ORDINANCE ADDING ARTICLE VI, CHAPTER 13 TO THE WINDSOR MUNICIPAL CODE CONCERNING BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROLS WITHIN THE TOWN OF WINDSOR, COLORADO

WHEREAS, the Town of Windsor (“Town”) is a home rule municipality with all powers conferred under Colorado law; and

WHEREAS, pursuant to Article II, Chapter 13 of the *Windsor Municipal Code* (“WMC”), the Town is responsible for the management, care and operation of the water works of the Town within its corporate limits; and

WHEREAS, the Town is required to protect the public water system from contaminants or pollutants that could enter the distribution system by backflow from a customer’s water supply system through the service connection; and

WHEREAS, Section 39 of 5 CCR 1002-11, *Colorado Primary Drinking Water Regulations* (“Regulations”), sets forth standards and rules adopted by the Water Quality Control Commission, that applies to the Town’s public water system; and

WHEREAS, the Town has adopted the *International Plumbing Code* in Article VI, Chapter 18 of the WMC; and

WHEREAS, failure to follow these *Regulations* could result in civil or criminal actions pursuant to sections 25-1-114 and 25-1-114.1, *Colorado Revised Statutes*, (“CRS”); and

WHEREAS, the Town desires to implement and enforce the required rules and regulations pursuant to the above-mentioned Regulations and Statutes; and

WHEREAS, the Town Board has concluded that adoption of this Ordinance promotes the public health, safety and welfare.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN BOARD OF THE TOWN OF WINDSOR, COLORADO, AS FOLLOWS:

Section 1. Chapter 13 of the *Windsor Municipal Code* shall be amended by the addition of a new Article VI, which shall read as follows:

ARTICLE VI

BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL

Sec. 13-6-10 – Intent.

The intent of this Article is to protect the public water system from contaminants or pollutants that could enter the distribution system by backflow from a customer's water supply system through the service connection, as regulated by federal and state law, in order to protect the drinking water supplied through the Town's water utility. The objectives of this Article are:

- (a) To authorize the survey of all service connections within the distribution system to determine if the connection is a cross-connection;
- (b) To authorize control over all service connections within the distribution system if the connection is a cross-connection;
- (c) To authorize control of any service connections within the distribution system in lieu of a survey as long as the service connection is controlled with an air gap or reduced pressure zone backflow prevention assembly;
- (d) To authorize the collection of fees for the administration of this program;
- (e) To require the Town to maintain records of cross-connection surveys and the installation, testing and repair of all backflow prevention assemblies installed for containment and containment by isolation purposes.

Except as otherwise provided herein, the Water Department of the Town shall administer, implement and enforce the provisions of this Ordinance.

Sec. 13-6-20. Applicability.

This Article applies to all commercial, industrial, and multi-family residential service connections, and irrigation connections using potable water, within the public water system and to any persons outside the Town who are, by contract or agreement with the public water system, users of the public water system. This Article does not apply to single-family-residential service connections unless the public water system becomes aware of a cross-connection at the single-family connection.

Sec. 13-6-30. Definitions.

a. *Active Date* means the first day that a backflow prevention assembly or backflow prevention method is used to control a cross-connection in each calendar year.

- b. *Air Gap* is a physical separation between the free-flowing discharge end of a potable water supply pipeline and an open or non-pressure receiving vessel installed in accordance with standard ASME A112.1.2.
- c. *Backflow* means the undesirable reversal of flow of water or mixtures of water and other liquids, gases or other substances into the public water systems distribution system from any source or sources other than its intended source.
- d. *Backflow Contamination Event* means backflow into a public water system from an uncontrolled cross-connection such that the water quality no longer meets the Colorado Primary Drinking Water Regulations or presents an immediate health and/or safety risk to the public.
- e. *Backflow Prevention Assembly* means any mechanical assembly installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the mechanical assembly is appropriate for the identified contaminant at the cross-connection and is an in-line field-testable assembly.
- f. *Backflow Prevention Method* means any method and/or non-testable device installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the method or non-testable device is appropriate for the identified contaminant at the cross-connection.
- g. *Certified Cross-Connection Control Technician* means a person who possesses a valid Backflow Prevention Assembly Tester certification from one of the following approved organizations: American Society of Sanitary Engineering (ASSE) or the American Backflow Prevention Association (ABPA). If a certification has expired, the certification is invalid.
- h. *Containment* means the installation of a backflow prevention assembly or a backflow prevention method at any connection to the public water system that supplies an auxiliary water system, location, facility, or area such that backflow from a cross-connection into the public water system is prevented.
- i. *Containment by Isolation* means the installation of backflow prevention assemblies or backflow prevention methods at all cross-connections identified within a customer's water system such that backflow from a cross-connection into the public water system is prevented.
- j. *Controlled* means having a properly installed, maintained, and tested or inspected backflow prevention assembly or backflow prevention method that prevents backflow through a cross-connection.
- k. *Cross-Connection* means any connection that could allow any water, fluid, or gas such that the water quality could present an unacceptable health and/or safety risk to the

public, to flow from any pipe, plumbing fixture, or a customer's water system into a public water system's distribution system or any other part of the public water system through backflow.

l. *Multi-Family* means a single residential connection to the public water system's distribution system from which two or more separate dwelling units are supplied water.

m. *Operator in Responsible Charge* means a certified operator who is designated by the owner of the water or wastewater facility and has supervisory responsibility for the operation of the facility and for the operational activities and functions of other facility operators.

n. *Single-Family* means:

- i. A single dwelling which is occupied by a single family and is supplied by a separate service line; or
- ii. A single dwelling comprised of multiple living units where each living unit is supplied by a separate service line.

o. *Uncontrolled* means not having a properly installed and maintained and tested or inspected backflow prevention assembly or backflow prevention method, or the backflow prevention assembly or backflow prevention method does not prevent backflow through a cross-connection.

p. *Water Supply System* means a water distribution system, piping, connection fittings, valves and appurtenances within a building, structure, or premises. Water supply systems are also referred to commonly as premise plumbing systems.

Sec. 13-6-40. Unprotected cross-connection prohibited.

It shall be unlawful to make, install, maintain or permit any cross-connection with the water system without providing protection against backflow by proper installation and maintenance of an approved backflow prevention device to insure that it is in proper working order.

Sec. 13-6-50. Requirements.

- a. Commercial, industrial and multi-family service connections, and any irrigation connections utilizing potable water, shall be subject to a survey for cross-connections. If a cross-connection has been identified an appropriate backflow prevention assembly and or method shall be installed at the customer's water service connection within 120 days of its discovery. The assembly shall be installed downstream of the water meter or as close to that location as deemed practical by the public water system. If the assembly or method cannot be installed within 120 days the public water system must affirmatively act to control or remove the cross-connection, suspended service to the cross-connection or

receive an alternative compliance schedule from the Colorado Department of Public Health and Environment.

- b. Any backflow prevention device required shall be of a model and size approved by the Operator in Responsible Charge, and meet the standards for approval pursuant to the American Water Works Association (AWWA), the American Society of Sanitary Engineering and the Foundation of Cross-Connection Control and Hydraulic Research (FCC & HR) of the University of Southern California in their present form and as may be amended from time to time. Any backflow prevention devices not subject to the approval of the above-listed laboratories (in-line dual checks, atmospheric vacuum breakers or hose bibb vacuum breakers) shall have full approval by appropriate organizations such as the American Society of Sanitary Engineering, International Association of Plumbing and Mechanical Officials or Los Angeles Mechanical Laboratory.
- c. The backflow prevention device shall be installed after the water meter. There shall be no connections or tees between the meter and the containment backflow prevention assembly.
 - i. In instances where a reduced pressure principle backflow preventer cannot be installed, the owner must install approved backflow prevention devices or methods at all cross-connections within the owner's plumbing system.
- d. Backflow prevention assemblies and methods shall be installed in a location which provides access for maintenance, testing and repair, preferably at or near the property line or immediately inside the structure being served before the first branch line leading off the water service line.
- e. Reduced pressure principle backflow preventers shall not be installed in a manner subject to flooding.
- f. Provisions shall be made to provide adequate drainage from the discharge of water from reduced pressure principle backflow prevention assemblies. Such discharge shall be conveyed in a manner which does not impact waters of the State.
- g. All assemblies and methods shall be protected to prevent freezing. Those assemblies and methods used for seasonal services may be removed in lieu of being protected from freezing. The assemblies and methods must be reinstalled and then tested by a certified cross-connection control technician upon reinstallation.
- h. Where a backflow prevention assembly or method is installed on a water supply system using storage water heating equipment such that thermal expansion causes an increase in pressure, a device for controlling pressure shall be installed.

- i. All backflow prevention assemblies shall be tested at the time of installation and on an annual schedule thereafter. Such tests must be conducted by a Certified Cross-Connection Control Technician. All test reports shall be sent to the Town within 30 days of test completion.
- j. The public water system shall require inspection, testing, maintenance and as needed repairs and replacement of all backflow prevention assemblies and methods, and of all required installations within the owner's plumbing system in the cases where containment assemblies and or methods cannot be installed.
- k. All costs for design, installation, maintenance, testing and as needed repair and replacement are to be borne by the customer.
- l. No grandfather clauses exist except for fire sprinkler systems where the installation of a backflow prevention assembly or method will compromise the integrity of the fire sprinkler system.
- m. For new buildings, all building plans must be submitted to the public water system and approved prior to the issuance of water service. Building plans must show:
 - 1. Water service type, size and location;
 - 2. Meter size and location;
 - 3. Backflow prevention assembly size, type and location;
 - 4. Fire sprinkler system(s) service line, size and type of backflow prevention assembly.
 - i. All fire sprinkling lines shall have a minimum protection of an approved double check valve assembly for containment of the system.
 - ii. All glycol (ethylene or propylene), or antifreeze systems shall have an approved reduced pressure principle backflow preventer for containment.
 - iii. Dry fire systems shall have an approved double check valve assembly installed upstream of the air pressure valve.
 - iv. In cases where the installation of a backflow prevention assembly or method will compromise the integrity of the fire sprinkler system the public water system can chose to not require the backflow protection. The public water system will measure chlorine residual at location representative of the service connection once a month and perform periodic bacteriological testing at the site. If the public water system suspects water quality issues the public

water system will evaluate the practicability of requiring that the fire sprinkler system be flushed periodically.

Sec. 13-6-60. Required types of backflow prevention devices.

(a) In the case of any premises where there is an auxiliary water supply, as stated in preceding paragraphs of this Article and it is not subject to any of the following rules, the Town's water system shall be protected by an approved air-gap separation or an approved reduced pressure principal backflow prevention device.

(b) In the case of any premises where there is water or a substance that would be objectionable but not hazardous to health, if introduced into the public water system, the Town's water system shall be protected by an approved double check valve assembly.

(c) In the case of any premises where there is any material dangerous to health which is handled in such a fashion as to create an actual or potential hazard to the Town's water system, the water system shall be protected by an approved air-gap separation or an approved reduced pressure principal backflow prevention device. Examples of premises where these conditions will exist include sewage treatment plants, sewage pumping stations, chemical manufacturing plants, hospitals, mortuaries and plating plants.

(d) In the case of any premises where there are "uncontrolled" cross-connections, either actual or potential, the public water system shall be protected by an approved air-gap separation or an approved reduced pressure principal backflow prevention device at the service connection.

(e) In the case of any premises where, because of security requirements or other prohibitions or restrictions, it is impossible or impractical to make a complete in-plant cross-connection survey, the public water system shall be protected against backflow or back-siphonage from the premises by the installation of a backflow prevention device in the service line. In this case, maximum protection will be required; that is, an approved reduced pressure principal backflow prevention device shall be installed in each service to the premises.

(f) The following guidelines relating to backflow prevention devices for irrigation systems shall apply:

- (1) Atmospheric vacuum breakers shall be installed after the last control valve of each sprinkler circuit and at a minimum of six (6) inches above the highest irrigation circuits with heads that will not return any pressure in the circuit when the circuit control valve is closed.
- (2) Pressure vacuum breakers shall be installed at the beginning of each irrigation circuit and at a minimum of twelve (12) inches above the highest irrigation head on the circuit. Individual irrigation circuits having quick coupling valves or other similar typeheads that will permit pressure to be retained in the circuit shall have a

pressure vacuum breaker installed as a minimum requirement for each circuit. Irrigation systems using the subsurface drip method shall have a pressure vacuum breaker on each circuit. A pressure vacuum breaker may not be installed where a double check valve assembly, reduced pressure principal backflow prevention device or air-gap separation is required.

- (3) A double check valve assembly may be installed to serve multiple irrigation circuits in lieu of vacuum breakers on each individual irrigation circuit.
 - (4) Reduced pressure principal backflow device or air-gap separation shall be required before any piping network in which fertilizers, pesticides and other chemical or toxic contaminants are injected or siphoned into the irrigation system.
- (g) Water systems for fighting fire, derived from a supply that cannot be approved as safe or potable for human use, shall be kept wholly separate from drinking water pipelines and equipment. In cases where the domestic water system is used for both drinking and fire-fighting purposes, approved backflow prevention devices shall be installed to protect such individual drinking water lines as are not used for fire-fighting purposes.
- (h) The use of a Town fire hydrant shall only be done with the approval of the Operator in Responsible Charge. Any time water is taken out of a fire hydrant for the purpose of filling a tank or container, this will require the use of an air-gap or an approved reduced pressure principal backflow prevention device, which will be installed on the line connection the fire hydrant.

Sec. 13-6-70. Premises requiring backflow prevention devices.

- (a) Auxiliary water supply: In the case of premises having an auxiliary water supply which is not or may not be safe of bacteriological, radiological or chemical quality and which is not acceptable as an additional source by the Operator in Responsible Charge, the Town's water system shall be protected by an approved backflow prevention device in the service line appropriate to the degree of hazard.
- (b) Industrial fluids: In the case of premises on which any industrial fluids or any other objectionable substance is handled in such a fashion as to create an actual or potential hazard to the Town's water system, the Town's system shall be protected against backflow from the premises by an approved backflow prevention device in the water service line appropriate to the degree of hazard. This shall include the handling of process waters and waters originating from the Town's water system which have been subject to deterioration in quality.
- (c) Internal cross-connections:
- (1) In the case of premises having internal cross-connections that cannot be permanently corrected and controlled;

- (2) Intricate plumbing and piping arrangements;
- (3) Where entry to all portions of the premises is not readily accessible for inspection purposes, making it impracticable or impossible to ascertain whether or not dangerous cross-connections exist.

Sec. 13-6-80. Inspection, Testing and Repair.

- a. Backflow prevention assemblies or methods shall be tested by a Certified Cross-Connection Control Technician upon installation and tested at least annually, thereafter. The tests shall be made at the expense of the customer.
 - i. Any backflow prevention assemblies or methods that are non-testable, shall be inspected at least once annually by a certified cross-connection control technician. The inspections shall be made at the expense of the customer.
- b. As necessary, backflow prevention assemblies or methods shall be repaired and retested or replaced and tested at the expense of the customer whenever the assemblies or methods are found to be defective.
- c. Testing gauges shall be tested and calibrated for accuracy at least once annually.

Sec. 13-6-90. Reporting and Recordkeeping.

- a. Copies of records of test reports, repairs and retests, or replacements shall be kept by the customer for a minimum of three (3) years.
- b. Copies of records of test reports, repairs and retests shall be submitted to the public water system by mail, facsimile or e-mail by the testing company or testing technician.
- c. Information on test reports shall include, but may not be limited to,
 - i. Assembly or method type
 - ii. Assembly or method location
 - iii. Assembly make, model and serial number
 - iv. Assembly size
 - v. Test date; and
 - vi. Test results including all results that would justify a pass or fail outcome
 - vii. Certified cross-connection control technician certification agency
 - viii. Technician's certification number
 - ix. Technician's certification expiration date
 - x. Test kit manufacturer, model and serial number
 - xi. Test kit calibration date

Sec. 13-6-100. Right of entry.

A properly credentialed representative of the Town shall have the right of entry to survey, inspect, and enter into and upon, any and all buildings and premises, for the presence of cross-connections for possible contamination risk and for determining compliance with this section. This right of entry shall be a condition of water service in order to protect the health, safety and welfare of customers throughout the public water system's distribution system.

Sec. 13-6-110. Compliance.

- a. Customers shall cooperate with the installation, inspection, testing, maintenance, and as needed repair and replacement of backflow prevention assemblies and with the survey process. For any identified uncontrolled cross-connections, the public water system shall complete one of the following actions within 120 days of its discovery:
 - i. Control the cross-connection
 - ii. Remove the cross-connection
 - iii. Suspend service to the cross-connection
- b. The public water system shall give notice in writing to any owner whose plumbing system has been found to present a risk to the public water system's distribution system through an uncontrolled cross-connection. The notice and order shall state that the owner must install a backflow prevention assembly or method at each service connection to the owner's premises to contain the water service. The notice and order will give a date by which the owner must comply.
 - i. In instances where a backflow prevention assembly or method cannot be installed, the owner must install approved backflow prevention assemblies or methods at all cross-connections within the owner's water supply system. The notice and order will give a date by which the owner must comply.

Sec. 13-6-120. Violations and Penalties.

Any violation of the provisions of this Article, shall, upon conviction be punishable as provided in all applicable statutes, laws, and regulations, including, but not limited to those provided in Chapter 1, Article IV of the *Windsor Municipal Code*.

Sec. 13-6-130. Conflict with other codes.

If a dispute or conflict arises between the *International Plumbing Code* as adopted herein, and any plumbing, mechanical, building, electrical, fire or other code adopted by the State, then the most stringent provisions of each respective code shall prevail.

Section 2. *Windsor Municipal Code* Section 13-2-330 shall be repealed in its entirety.

Section 3. *Windsor Municipal Code* Section 13-2-340 shall be repealed in its entirety.

Section 4. *Windsor Municipal Code* Section 13-2-350 shall be repealed in its entirety.

Section 5. *Windsor Municipal Code* Section 13-2-360 shall be repealed in its entirety.

Section 6. *Windsor Municipal Code* Section 13-2-370 shall be repealed in its entirety.

Section 7. *Windsor Municipal Code* Section 13-2-380 shall be repealed in its entirety.

Section 8. *Windsor Municipal Code* Section 13-2-390 shall be repealed in its entirety.

Section 9. *Windsor Municipal Code* Section 13-2-400 shall be repealed in its entirety.

Introduced, passed on first reading and ordered published this June 8, 2020.

TOWN OF WINDSOR, COLORADO

Paul Rennemeyer, Mayor

ATTEST:

Krystal Eucker, Town Clerk

[Seal]

Introduced, passed on second reading and ordered published this June 22, 2020.

TOWN OF WINDSOR, COLORADO

Paul Rennemeyer, Mayor

ATTEST:

Krystal Eucker, Town Clerk

[Seal]

11.38(5) Special Public Notice Requirements

- (a) For non-community groundwater systems, if the supplier fails to complete corrective action for significant deficiencies, under 11.38(3), within one year of receiving written notice of significant deficiency, or earlier if required by the Department, the supplier must distribute special public notice to inform consumers of the uncorrected significant deficiency.
 - (i) The special public notice must include all of the following:
 - (A) The nature of the significant deficiency and the date the significant deficiency was identified by the Department.
 - (B) The Department-approved plan and schedule for corrective action, including interim measures, progress to date, and any interim measures completed.
 - (C) For systems supplying a large proportion of non-English speaking consumers, as determined by the Department, the supplier must include one or more of the following:
 - (I) Information in the appropriate language(s) regarding the importance of the special public notice.
 - (II) A telephone number or address where the consumer may contact the supplier to obtain a translated copy of the special public notice or request assistance in the appropriate language.
 - (ii) The supplier must redistribute the special public notice annually until the significant deficiency is corrected.
- (b) For non-community water systems with significant deficiencies that have been corrected, if required by the Department, the supplier must distribute special public notice to inform consumers of the significant deficiencies, how the deficiencies were corrected, and the dates of correction.

11.39 BACKFLOW PREVENTION AND CROSS-CONNECTION CONTROL RULE

11.39(1) Applicability and Definitions

- (a) All public water systems must comply with the requirements specified in this rule.
- (b) "ACTIVE DATE" means the first day that a backflow prevention assembly or backflow prevention method is used to control a cross connection in each calendar year.
- (c) "BACKFLOW" means the reverse flow of water, fluid, or gas caused by back pressure or back siphonage.
- (d) "BACKFLOW PREVENTION ASSEMBLY" means any mechanical assembly installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the mechanical assembly is appropriate for the identified contaminant at the cross connection and is an in-line field-testable assembly.
- (e) "BACKFLOW PREVENTION ASSEMBLY ANNUAL TESTING COMPLIANCE RATIO" means the number of backflow prevention assemblies tested during the calendar year divided by the number of backflow prevention assemblies installed at a cross connection that were used during the calendar year.

- (f) "BACKFLOW PREVENTION METHOD" means any method and/or non-testable device installed at a water service line or at a plumbing fixture to prevent a backflow contamination event, provided that the method or non-testable device is appropriate for the identified contaminant at the cross connection.
- (g) "BACKFLOW PREVENTION METHOD ANNUAL INSPECTION COMPLIANCE RATIO" means the number of backflow prevention methods inspected during the calendar year divided by the number of backflow prevention methods installed at a cross connection that were used during the calendar year.
- (h) "CERTIFIED CROSS-CONNECTION CONTROL TECHNICIAN" means a person who possesses a valid Backflow Prevention Assembly Tester certification from one of the following approved organizations: American Society of Sanitary Engineering (ASSE) or the American Backflow Prevention Association (ABPA). If a certification has expired, the certification is invalid.
- (i) "CONTROLLED" means having a properly installed, maintained, and tested or inspected backflow prevention assembly or backflow prevention method that prevents backflow through a cross connection.
- (j) "SINGLE-FAMILY-RESIDENTIAL" means:
 - (i) A single living unit that is supplied by its own separate service line; or
 - (ii) Multiple living units where each individual living unit is supplied by a separate service line; or
 - (iii) Two separate single living units supplied by a common service line.
- (k) "SURVEY COMPLIANCE RATIO" means the total number of connections surveyed, including the number of all non-single-family-residential connections to the public water system with the most protective backflow prevention assembly or method that was not surveyed as specified in 11.39(3)(c), divided by the total number of non-single-family-residential connections to the public water system and connections within the supplier's waterworks.
 - (i) The supplier is not required to include any non-single-family-residential connections identified after October 31 of the calendar year in the total number of non-single-family-residential connections to the public water system until the following calendar year.
- (l) "UNCONTROLLED" means not having a properly installed and maintained and tested or inspected backflow prevention assembly or backflow prevention method, or the backflow prevention assembly or backflow prevention method does not prevent backflow through a cross connection.

11.39(2) Backflow Prevention and Cross-Connection Control Program Requirements

- (a) The supplier must develop a written backflow prevention and cross-connection control program. The written backflow prevention and cross-connection control program must include all of the following:
 - (i) The supplier's process for conducting surveys.
 - (ii) The supplier's legal authority to perform a survey of a customer's property to determine whether a cross connection is present unless the supplier controls all non-single-family-residential connections to the public water system with the most protective backflow prevention assembly or backflow prevention method.

- (iii) The process the supplier will use to select a backflow prevention assembly or backflow prevention method to control a cross connection.
 - (iv) The supplier's legal authority to install, maintain, test, and inspect backflow prevention assemblies and/or backflow prevention methods and/or require customers to install, maintain, test, and inspect backflow prevention assemblies and/or backflow prevention methods.
 - (v) The process the supplier will use to track the installation, maintenance, testing, and inspection of all backflow prevention assemblies and backflow prevention methods used to control cross connections.
 - (vi) The process the supplier will use to ensure backflow prevention assemblies are tested by a Certified Cross-Connection Control Technician.
- (b) The Department may review and revise the written backflow prevention and cross-connection control program.

11.39(3) Treatment Technique Requirements for the Control of Cross Connections

- (a) If the supplier learns of a suspected or confirmed backflow contamination event, the supplier must notify and consult with the Department on any appropriate corrective measures no later than 24 hours after learning of the backflow contamination event.
- (b) The supplier is prohibited from installing or permitting any uncontrolled cross connection to the distribution system or within the supplier's waterworks.
- (c) The supplier must survey all non-single-family-residential connections to the public water system to determine if the connection is a cross connection unless the supplier controls that connection with the most protective backflow prevention assembly or backflow prevention method. The supplier must survey all connections within the supplier's waterworks to determine if the connection is a cross connection.
 - (i) If the supplier identifies a cross connection during a survey, the supplier must determine the type of backflow prevention assembly or backflow prevention method to control the cross connection.
 - (ii) If the supplier becomes aware of a single-family-residential connection to the public water system that is a cross connection, the supplier must determine the type of backflow prevention assembly or backflow prevention method to control the cross connection.
 - (iii) The supplier must achieve the survey compliance ratios as specified in Table 11.39-I.

TABLE 11.39-I Survey Compliance Ratio	
Compliance Date	Compliance Ratio
By December 31, 2016	Greater than 0.60
By December 31, 2017	Greater than 0.70
By December 31, 2018	Greater than 0.80
By December 31, 2019	Greater than 0.90
By December 31, 2020 and each year after	1.0

- (iv) The supplier may apply to the Department for alternative survey compliance ratios for the compliance dates from December 31, 2016 through December 31, 2019 specified in Table 11.39-I.

- (A) In the application, the supplier must include all of the following information:
 - (I) An explanation of why the supplier is unable to comply with the survey compliance ratios specified in Table 11.39-I.
 - (II) The proposed alternative survey compliance ratios for the compliance dates from December 31, 2016 through December 31, 2019 specified in Table 11.39-I.
 - (a) The proposed alternative survey compliance ratios must meet the survey compliance ratio of 1.0 by December 31, 2020.
 - (III) A discussion of the supplier's strategy to achieve the proposed alternative survey compliance ratios and the survey compliance ratio of 1.0 by December 31, 2020.
 - (B) The Department will only grant alternative compliance ratios for the compliance dates from December 31, 2016 through December 31, 2019.
 - (C) If the supplier receives written Department-approval for alternative survey compliance ratios, the supplier must comply with any Department-specified requirements in the approval.
- (d) If the supplier discovers an uncontrolled cross connection and a suspected or confirmed backflow contamination event has not occurred, the supplier must:
- (i) No later than 120 days after its discovery, install and maintain or require the customer to install and maintain a backflow prevention assembly or backflow prevention method at the uncontrolled cross connection, suspend service to the customer, or remove the cross connection.
 - (A) If the supplier is unable to meet the 120-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.
 - (B) The supplier can either control cross connections discovered within a customer's water system by containment or containment by isolation.
 - (I) "CONTAINMENT" means the installation of a backflow prevention assembly or a backflow prevention method at any connection to the public water system that supplies an auxiliary water system, location, facility, or area such that backflow from a cross connection into the public water system is prevented.
 - (II) "CONTAINMENT BY ISOLATION" means the installation of backflow prevention assemblies or backflow prevention methods at all cross connections identified within a customer's water system such that backflow from a cross connection into the public water system is prevented.
 - (C) The supplier must ensure that all installed backflow prevention assemblies used to control cross connections are tested by a Certified Cross-Connection Control Technician upon installation.

- (D) The supplier must ensure that all installed backflow prevention methods used to control cross connections are inspected by the supplier or a Certified Cross-Connection Control Technician upon installation.
- (e) The supplier must ensure that backflow prevention assemblies used to control cross connections are tested annually by a Certified Cross-Connection Control Technician and maintained. The supplier must achieve the backflow prevention assembly annual testing compliance ratios as specified in Table 11.39-II.

TABLE 11.39-II Backflow Prevention Assembly Annual Testing Compliance Ratio	
Compliance Date	Annual Compliance Ratio
By December 31, 2016	Greater than 0.50
By December 31, 2017	Greater than 0.60
By December 31, 2018	Greater than 0.70
By December 31, 2019	Greater than 0.80
By December 31, 2020 and each year after	Greater than 0.90

- (i) No later than 60 days after the supplier is notified of a failed test, the supplier must ensure that the backflow prevention assembly that produced the failed test is repaired or replaced and tested, service is suspended to the customer, or the cross connection is removed.
- (A) If the supplier is unable to meet the 60-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.
- (ii) Beginning January 1, 2021, for each backflow prevention assembly not tested during the previous calendar year, the supplier must ensure the backflow prevention assembly is tested no later than 90 days after the active date of the backflow prevention assembly in the following calendar year.
- (A) If the supplier is unable to meet the 90-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.
- (f) The supplier must ensure that backflow prevention methods used to control cross connections are inspected annually by the supplier or a Certified Cross-Connection Control Technician and maintained. The supplier must achieve a backflow prevention method annual inspection compliance ratio of greater than (>) 0.90.
- (i) No later than 60 days after the supplier is notified of an inadequate backflow prevention method, the supplier must ensure that the inadequate backflow prevention method is repaired or replaced, service is suspended to the customer, or the cross connection is removed.
- (A) If the supplier is unable to meet the 60-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.
- (ii) Beginning January 1, 2017, for each backflow prevention method not inspected during the previous calendar year, the supplier must ensure the backflow prevention method is inspected no later than 90 days after the active date of the backflow prevention method in the following calendar year.
- (A) If the supplier is unable to meet the 90-day deadline, the supplier must consult with the Department and the Department may approve an alternative schedule.

- (g) The supplier must control or remove any uncontrolled cross connection or ensure that any cross connection is controlled no later than 10 days after being ordered in writing by the Department.

11.39(4) Backflow Prevention and Cross-Connection Control Program Annual Written Report

- (a) Beginning in 2017, the supplier must develop a written backflow prevention and cross-connection control program report for the previous calendar year that includes all of the following information:
 - (i) Total number of non-single-family-residential connections to the public water system and connections within the supplier's waterworks.
 - (A) The supplier is not required to include any non-single-family-residential connections identified after October 31 of the calendar year in the total number of non-single-family-residential connections to the public water system until the following calendar year.
 - (ii) Total number of connections surveyed to determine if cross connections are present.
 - (iii) Survey compliance ratio.
 - (iv) Total number of identified cross connections.
 - (v) Number of uncontrolled cross connections identified during the calendar year.
 - (A) Number of identified uncontrolled cross connections that were controlled within 120 days of discovery.
 - (B) Number of identified uncontrolled cross connections that were not controlled within 120 days of discovery.
 - (vi) Number of backflow prevention assemblies installed at cross connections that were used during the calendar year.
 - (vii) Number of backflow prevention methods installed at cross connections that were used during the calendar year.
 - (viii) Number of connections where service was suspended as specified in 11.39(3) during the calendar year.
 - (ix) Number of backflow prevention assemblies used to control cross connections that were tested by a Certified Cross Connection Control Technician during the calendar year.
 - (x) Backflow prevention assembly annual testing compliance ratio.
 - (xi) Beginning January 1, 2021, the number and location of backflow prevention assemblies not tested during the calendar year covered by the report.
 - (xii) Number of backflow prevention methods used to control cross connections that were inspected during the calendar year.
 - (xiii) Backflow prevention method annual inspection compliance ratio.
 - (xiv) Beginning January 1, 2017, the number and location of backflow prevention methods not inspected during the calendar year covered by the report.

- (b) For each calendar year, the supplier must complete the annual backflow prevention and cross-connection control program report no later than May 1 of the following calendar year.

11.39(5) Compliance Determinations for Backflow Prevention and Cross-Connection Control

- (a) Compliance with the survey treatment technique requirement is based on the survey compliance ratio.
 - (i) The supplier is not required to include any non-single-family-residential connections identified after October 31 of the calendar year in the total number of non-single-family-residential connections to the public water system until the following calendar year.
- (b) Compliance with the backflow prevention assembly testing treatment technique requirement is based on the backflow prevention assembly annual testing compliance ratio.
- (c) Compliance with the backflow prevention method inspection treatment technique requirement is based on the backflow prevention method annual inspection compliance ratio.

11.39(6) Violations for Backflow Prevention and Cross-Connection Control

- (a) The following constitute backflow prevention and cross-connection control treatment technique violations:
 - (i) The supplier fails to notify the Department of any suspected or confirmed backflow contamination event as specified in 11.39(3)(a).
 - (ii) The supplier installs or permits an uncontrolled cross connection.
 - (iii) The supplier fails to achieve the survey compliance ratio specified in 11.39(3)(c) or the Department-approved alternative survey compliance ratios.
 - (iv) The supplier discovers an uncontrolled cross connection and fails to comply with the requirements specified in 11.39(3)(d).
 - (v) The supplier fails to achieve the annual backflow prevention assembly testing compliance ratio specified in 11.39(3)(e).
 - (vi) The supplier fails to comply with the backflow prevention assembly failed test requirements specified in 11.39(3)(e)(i).
 - (vii) The supplier fails to comply with the backflow prevention assembly testing requirements specified in 11.39(3)(e)(ii).
 - (viii) The supplier fails to achieve the backflow prevention method inspection compliance ratio specified in 11.39(3)(f).
 - (ix) The supplier fails to comply with the backflow prevention method inadequate method requirements specified in 11.39(3)(f)(i).
 - (x) The supplier fails to comply with the backflow prevention method inspection requirements specified in 11.39(3)(f)(ii).
 - (xi) The supplier fails to comply with a written order from the Department specified in 11.39(3)(g).

- (b) The following constitute backflow prevention and cross-connection control violations:
 - (i) The supplier fails to develop or implement a written backflow prevention and cross-connection control program as specified in 11.39(2).
 - (ii) The supplier fails to complete an annual backflow prevention and cross-connection control program report as specified in 11.39(4).

11.39(7) Response to Violations for Backflow Prevention and Cross-Connection Control

- (a) In the event of a backflow prevention and cross-connection control treatment technique violation, the supplier must:
 - (i) Notify the Department no later than 48 hours after the violation occurs.
 - (ii) Distribute Tier 2 public notice as specified in 11.33.
- (b) In the event of a backflow prevention and cross-connection control violation, the supplier must:
 - (i) Notify the Department no later than 48 hours after the violation occurs.
 - (ii) Distribute Tier 3 public notice as specified in 11.33.

11.40 RESERVED

11.41 WATER HAULER RULE

11.41(1) Applicability and Definitions

- (a) For a public water system that hauls water, the water hauler must comply with the requirements specified in this rule in addition to other applicable requirements of the *Colorado Primary Drinking Water Regulations*.
- (b) The water hauler is a supplier and means any person that owns or operates a public water system that hauls water.

11.41(2) Treatment Technique and Monitoring Requirements for Public Water Systems That Haul Water

- (a) The water hauler must operate in accordance with a Department-approved operational plan.
 - (i) The water hauler must either submit an operational plan for Department approval or use the pre-approved operational plan in the Department's *Operational Handbook for a Colorado Public Water System That Hauls Water*.
- (b) In addition to the applicable residual disinfectant concentration monitoring requirements specified in 11.8, 11.11 and 11.23, on each day a tank or container is used to deliver water, the water hauler must monitor the residual disinfectant concentration of the water dispensed from each tank or container at least once.
 - (i) If the water hauler uses more than one water loading station per day, the water hauler must also monitor the residual disinfectant concentration of the water dispensed from the tank or container at least once for each water loading station used.



MEMORANDUM

Date: May 13, 2020
To: Water & Sewer Board
From: Leif Lesoing, Water Resources Administrator
Re: Augmentation Lease Amendment with Great Western Industrial Park

Background / Discussion:

In 2017, the Town of Windsor entered into an augmentation agreement with Great Western Industrial Park ("GWIP") to provide GWIP annually 65 acre-feet of augmentation water. GWIP's water court decree entered in Case No. 07CW326 requires GWIP to provide a seven year projection for their river depletions. If the lease is not renewed now, GWIP would not be able to continue the pumping of their wells past April 2020. The lease will extend until 2027, with an option to extend until 2032. GWIP must notify the Town in 2025 for the renewal provision to adhere to their seven year projection requirement.

In the original lease the Town charged \$400 per acre-feet of augmentation water. This renewal will start at \$500 per acre-feet and will increase as the price of water increases. Increased water cost will also make GWIP more likely to develop the non-potable plan at the site.

Financial Impact:

The financial impact will be an additional \$100 per acre-foot of augmentation to the Town. Additionally, amending the lease will allow for GWIP to continue the development of the site since the Town is providing a reliable augmentation supply.

Recommendation:

Staff recommends approving the lease with GWIP.

Attachments:

- Amended Lease Agreement

FIRST AMENDMENT TO AND EXTENSION OF WATER LEASE AGREEMENT

This First Amendment to and Extension of Water Lease Agreement (this “**Amendment**”) is entered into by and between the Town of Windsor, a Colorado home rule municipal corporation (“**Windsor**”), and GWIP, LLC, a Colorado limited liability company (“**GWIP**”). Windsor and GWIP are sometimes referred to herein as the “**Parties**” collectively, and “**Party**” individually. This Amendment is entered into as of the date of mutual execution by the Parties as evidenced by the signatures below, and shall be effective as of the 1st day of April, 2020 (“**Effective Date**”).

RECITALS

WHEREAS, Windsor, as lessor, and GWIP, as lessee pursuant to assignment from Great Western Development Company, Inc., a Colorado corporation (“**Great Western**”), are each a Party to that certain Water Lease Agreement with an effective date of April 1, 2017 (the “**Lease**”).

WHEREAS, the Lease was recorded in the Weld County, Colorado real property records on September 18, 2017 at Reception No. 4336254.

WHEREAS, in accordance with the Lease, Great Western leased from Windsor the Leased Water as defined therein, for uses limited to those specified in Section 1.2 of the Lease.

WHEREAS, Great Western assigned to GWIP all of Great Western’s right, title and interest in and to the Lease as lessee thereunder, pursuant to and in accordance with that certain Assignment and Assumption of Water Lease between Great Western and GWIP, with an effective date of January 1, 2018 (“**Assignment**”).

WHEREAS, pursuant to the Assignment, GWIP accepted all rights and benefits and assumed all duties and obligations, under the Lease.

WHEREAS, the Parties desire to enter into this Amendment upon the terms and conditions set forth below.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

AGREEMENT

1. Definitions. All capitalized terms not defined herein shall have the meaning ascribed to such terms in the Lease.

2. Amendment. Section 2 of the Lease is hereby stricken and replaced in its entirety with the following:

2. Term. The initial term of this Lease shall commence on the Effective Date and shall continue through and including April 30, 2027 (the “Initial Term”).

- a. Any time before expiration of the Initial Term, GWIP may extend this Lease for an additional five (5) years beyond the Initial Term (*i.e.*, until April 30, 2032) (the “Extended Term”), if GWIP’s augmentation storage facilities are not yet operational on the GWIP property as of the time of the request to extend.

3. Extension of Lease. GWIP has requested that Windsor extend the Lease term, through the end of the Extended Term (April 30, 2032) and Windsor has agreed to do so. The Parties hereby agree that the Lease shall be and hereby is extended through the end of the Extended Term, or through and including April 30, 2032, upon the same terms and conditions set forth in the original Lease document, except as modified by this Extension.

4. Lease Price. As part of the consideration for this Extension, the Lease Price shall be increased to \$500.00 per acre-foot of leased water beginning in 2020. Windsor shall have the option, at its discretion and upon notice to GWIP, to increase the lease price in any subsequent year, beginning in 2021. The Parties agree that if GWIP has not terminated the Initial Term by January 1, 2025 (at its option pursuant to Section 3 of the Lease), Windsor, at its discretion may substantially increase the Lease Price for remainder of the Initial Term and the Extended Term. This provision shall supersede any contrary language in the provisions in the Lease, including Section 1.4.

5. Notice of Leased Water. Section 1.5 of the Lease is hereby stricken and replaced in its entirety with the following:

1.5. On or before April 1st of each year, GWIP shall pay Windsor the Lease Price for the minimum 20 acre-feet of Leased Water for the upcoming Lease Year. Along with such payment, GWIP shall provide a projection of the total amount of Leased Water anticipated to be leased by GWIP that Lease Year (the “Initial Lease Notice”). On or before June 1st of the Lease Year, GWIP shall provide an updated projection for the anticipated amount of water to be leased by GWIP (the “Second Lease Notice”). Windsor shall not be required to deliver to GWIP any amount which is more than 20% above the volume of water described in the Second Lease Notice and GWIP shall be required to pay Windsor for at least 80% of the volume of water described in the Second Lease Notice, regardless of whether such amount is actually needed and/or delivered for GWIP’s benefit. On or before August 1st of each Lease Year, GWIP shall provide Windsor with a final statement of the amount of Leased Water to be leased by GWIP for that Lease Year (the “Final Lease Notice”). On September 1st of each Lease Year, GWIP will provide the additional payment to Windsor for the Lease Price of any Leased Water which is in excess of the minimum 20 acre-feet of Leased Water (e.g. if the Final Lease Notice provides that GWIP will be leasing 30 acre-feet of Leased Water during a Lease Year, the total amount due to Windsor on or before September 1st shall be the 10 acre-feet x the Lease Price). GWIP shall not be entitled to a refund for any Leased Water not used during any Lease Year.

6. References to Great Western. All references to “Great Western” in the original Lease document, shall, in light of the Assignment, be deemed to be references to GWIP or to any assignee of GWIP hereof.

7. References to Extended Term. For the purposes of Section 3 of the original Lease document, reference to “Extended Term” shall be deemed to include both the Extended Term and any Second Extended Term.

8. No Other Amendments. No other terms of provision of the Lease are modified by this Amendment.

9. Ratification. All of the terms and provision of the Lease not expressly modified by this Amendment are hereby ratified, confirmed, and remain in full force and effect.

10. Counterparts. This Amendment may be executed in counterparts, by electronic signature, scanned and emailed signature, DocuSign, and faxed signature, each of which (or any combination of which) when signed by all of the Parties will be deemed an original, as will all copies thereof, and all of which when taken together will constitute one Amendment.

TOWN OF WINDSOR,
a Colorado home rule municipal corporation

By: _____
Name: _____
Title: _____

ATTEST:

Town Clerk

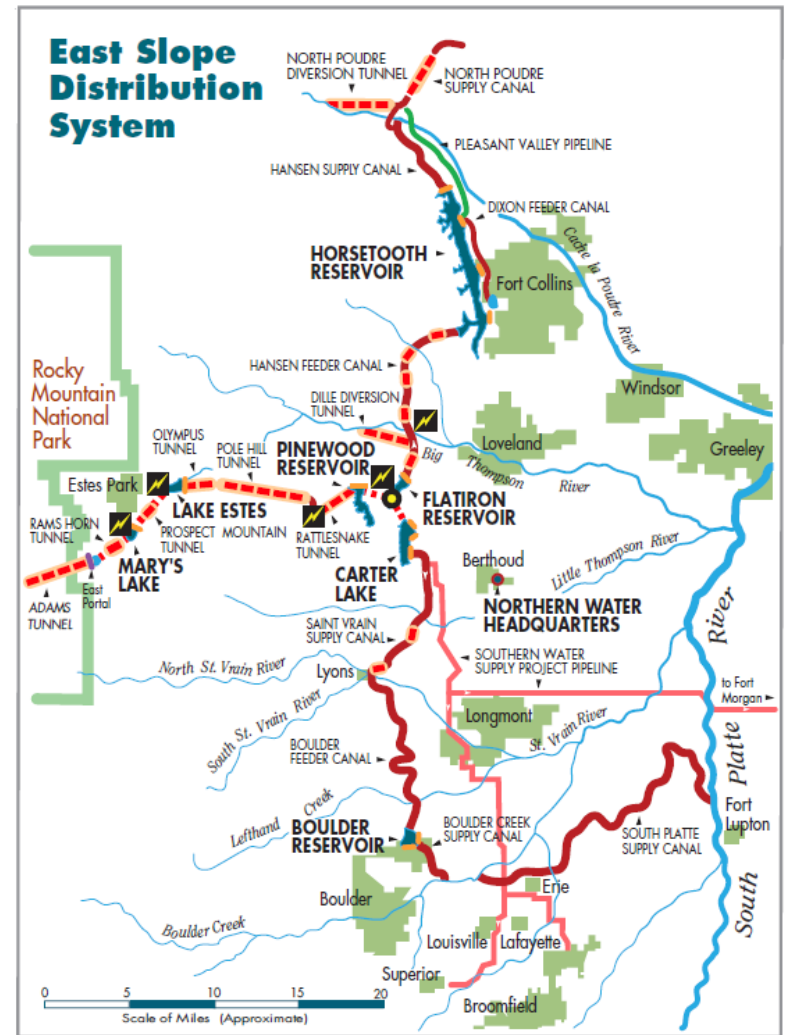
GWIP, LLC, a Colorado limited liability company

By: _____
Name: _____
Title: _____



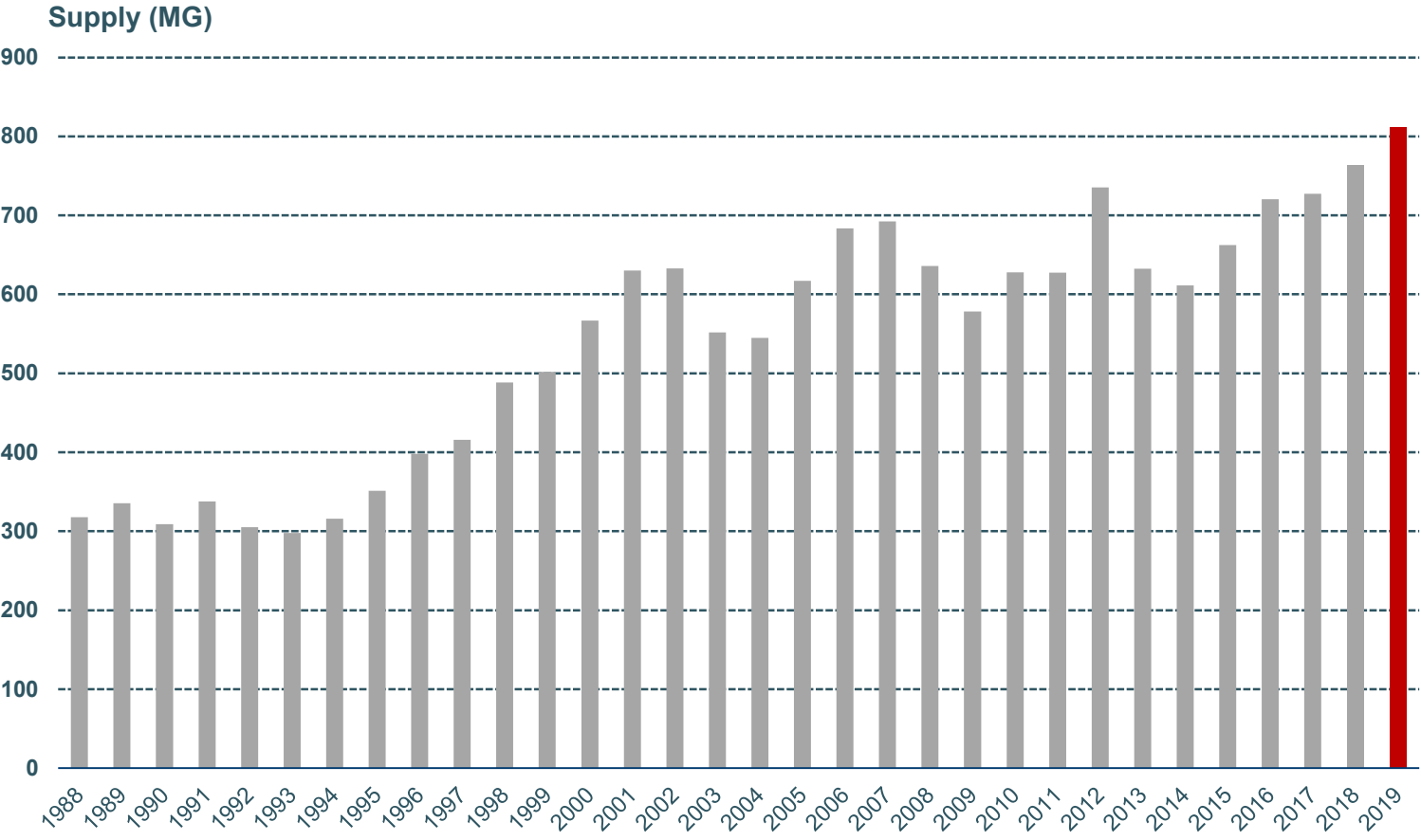
Water Supply Outlook

*Water & Sewer Board
April 10, 2019*





Annual Demand





South Platte Basin Snowpack (SWE)

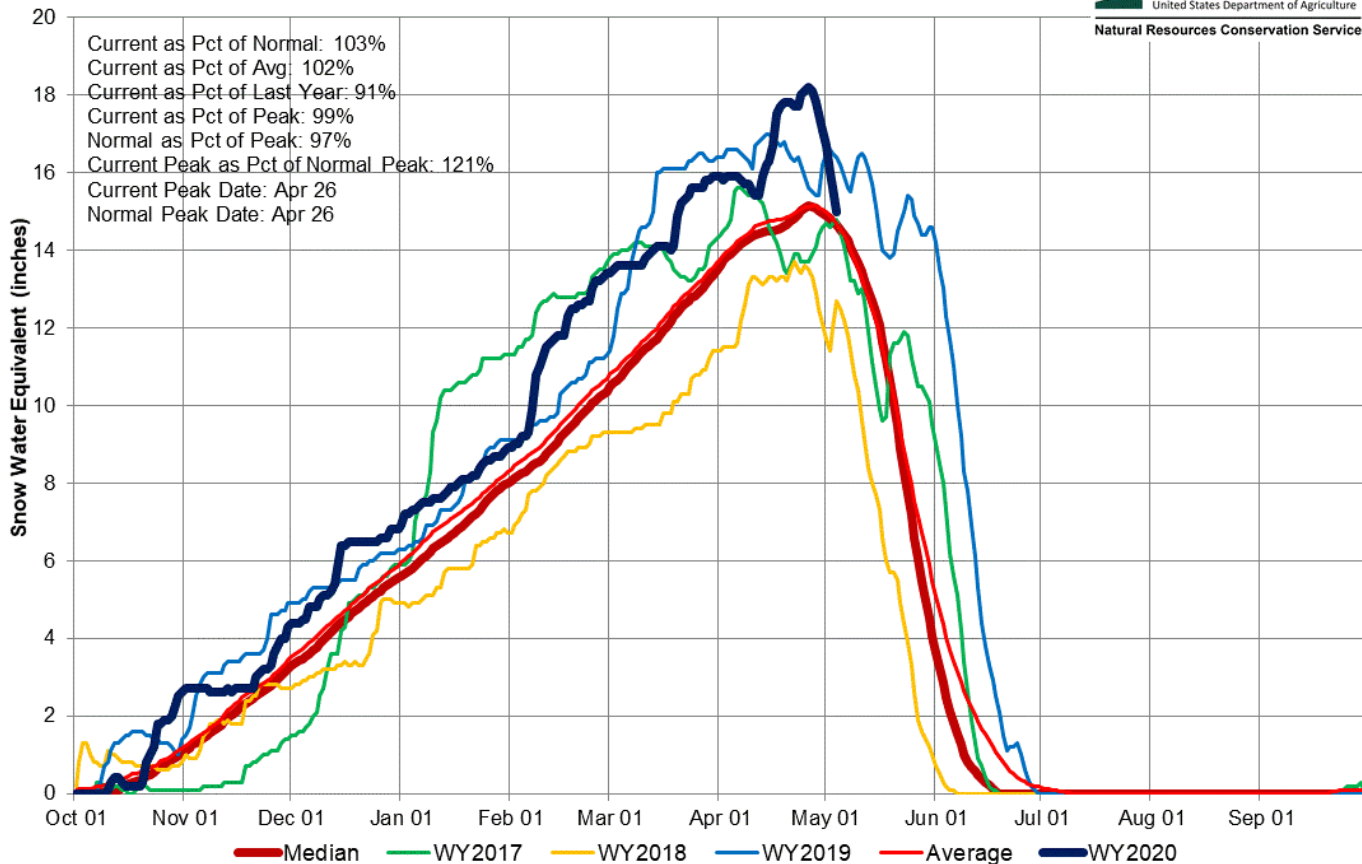
South Platte River Basin Time Series Snowpack Summary

Based on Provisional SNOTEL data as of May 04, 2020



United States Department of Agriculture

Natural Resources Conservation Service





Colorado Basin Snowpack (SWE)

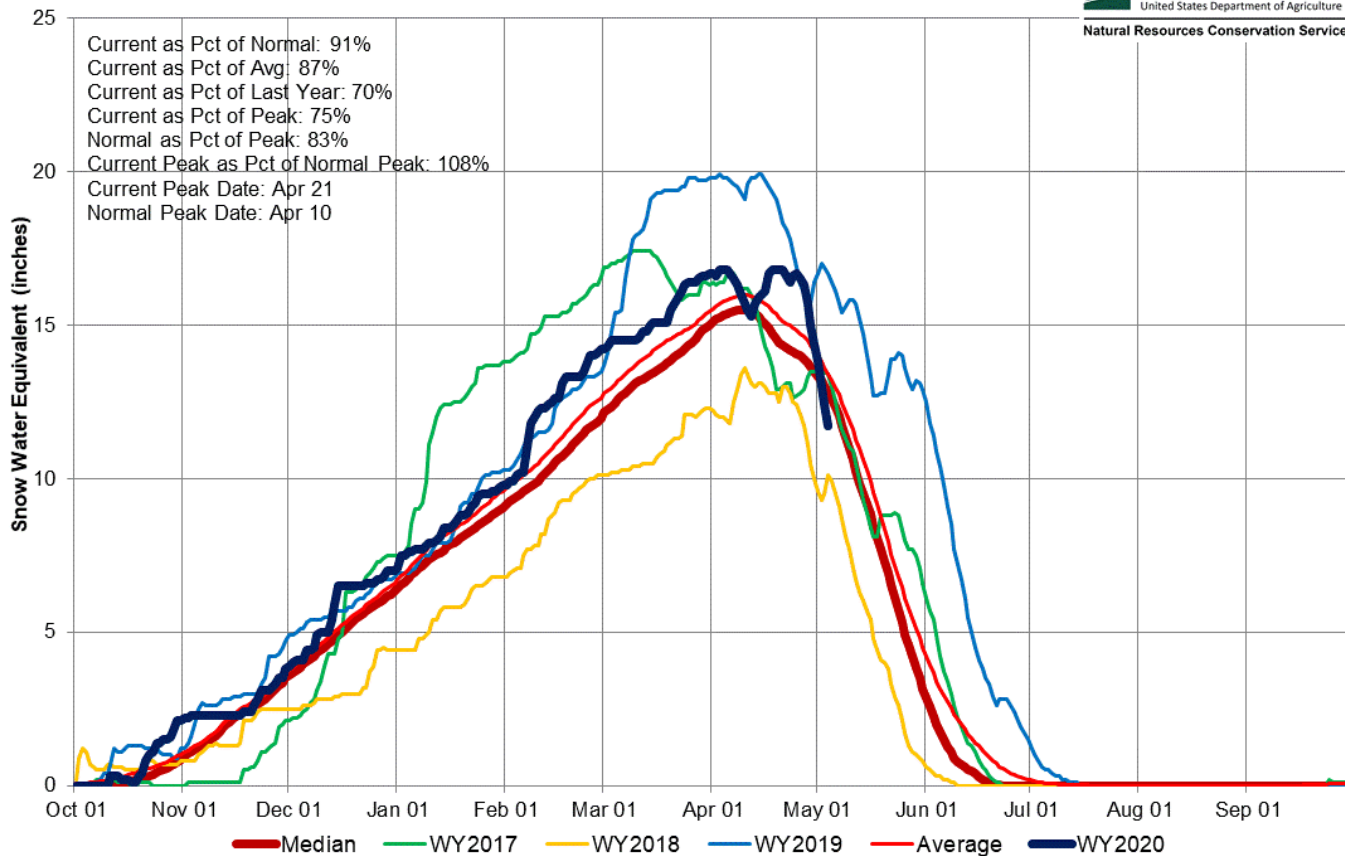
Colorado River Basin Time Series Snowpack Summary

Based on Provisional SNOTEL data as of May 04, 2020



United States Department of Agriculture

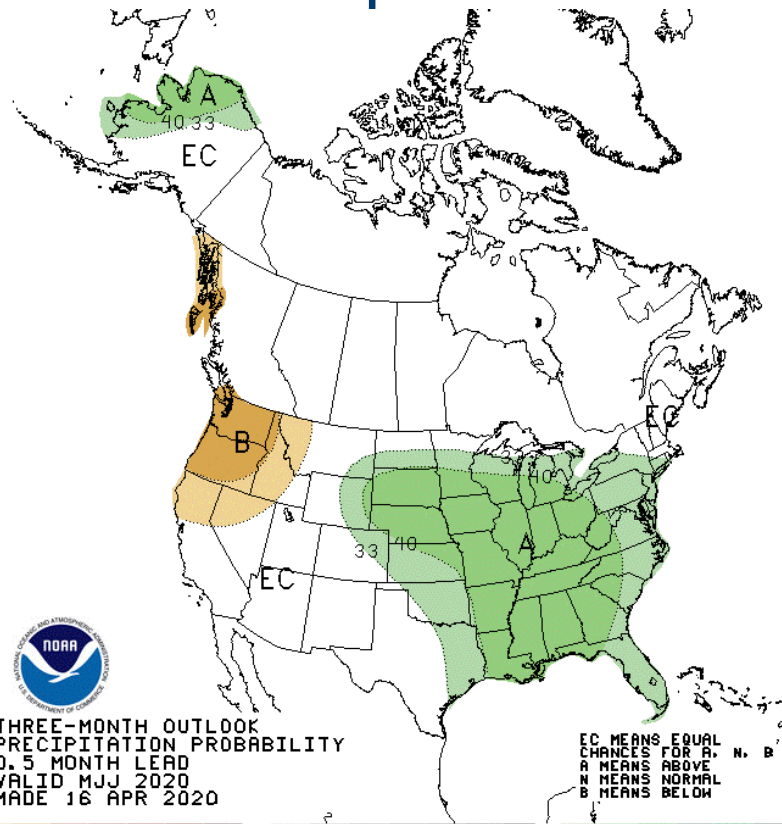
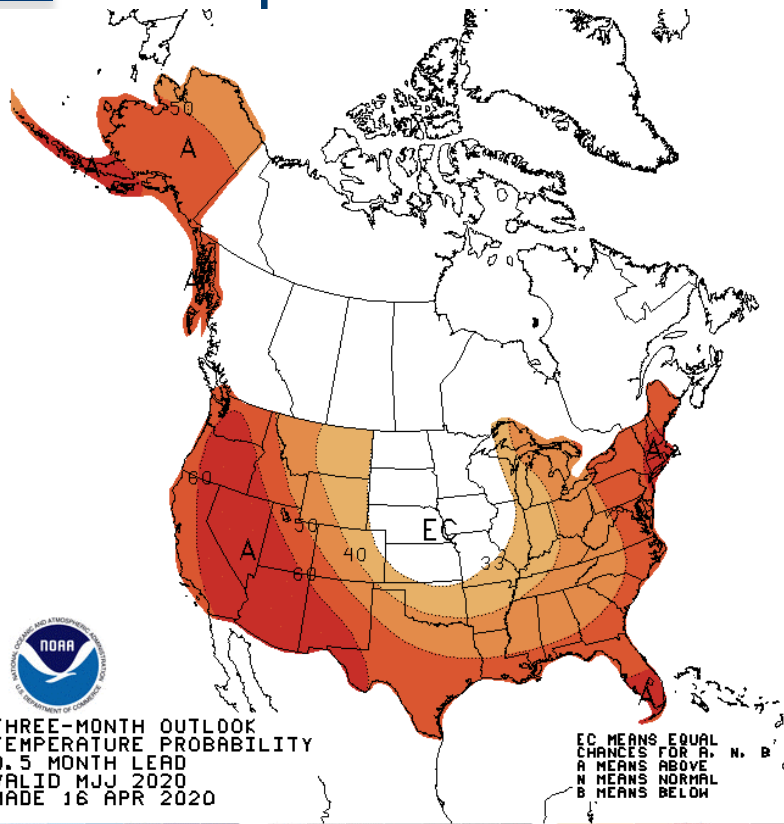
Natural Resources Conservation Service



Three-Month Outlook

Temperature

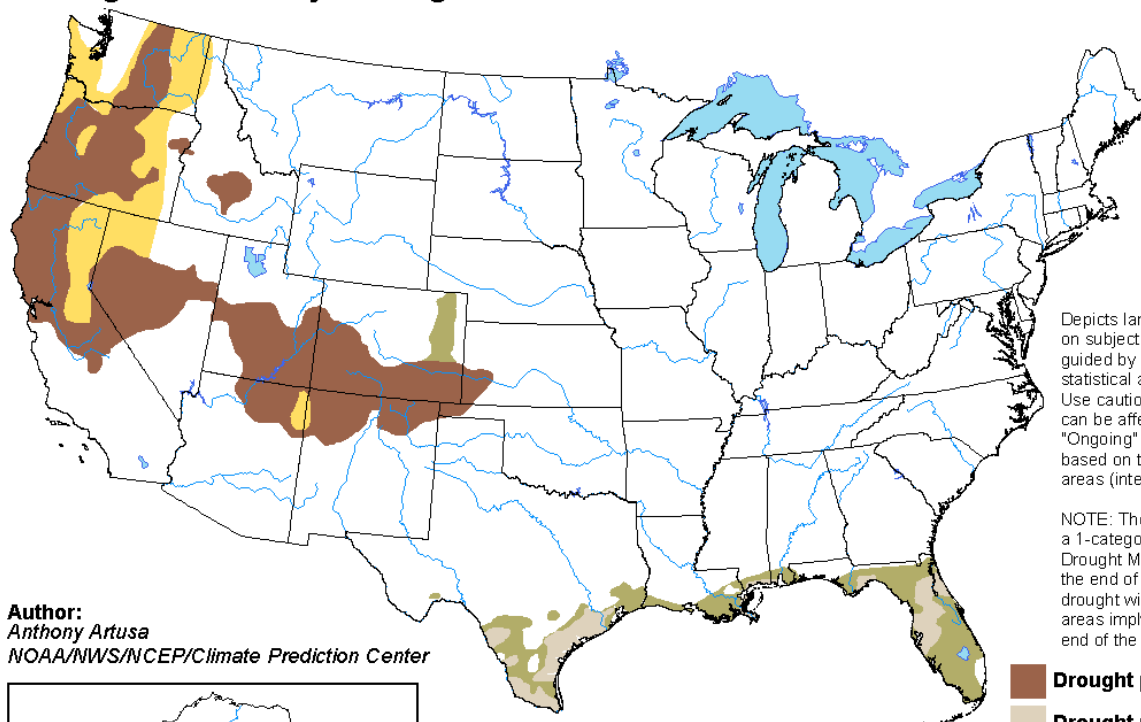
Precipitation



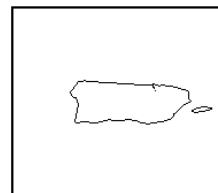
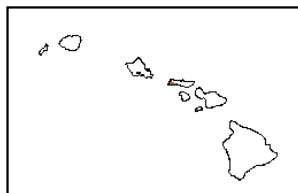
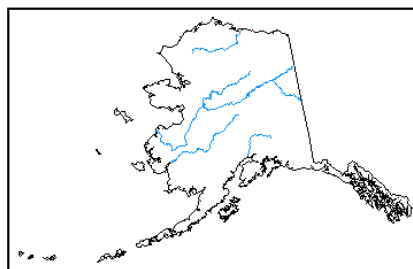
U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for April 16 - July 31, 2020
Released April 16



Author:
Anthony Artusa
NOAA/NWS/NCEP/Climate Prediction Center



Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

- Drought persists**
- Drought remains but improves**
- Drought removal likely**
- Drought development likely**



<http://go.usa.gov/3eZ73>

Demands

Historical Water Usage

Year	Amount purchased from NWCWD (million gallons)	Amount purchased from FCLWD (million gallons)	Amount purchased from Greeley (million gallons)		Total Amount purchased (million gallons)	Total Amount purchased (acre feet)
2011	327.6	110.1	189.9	▼	627.6	1,925
2012	416.8	111.3	207.2	▼	735.3	2,256
2013	337.1	110.3	185.2	▼	632.6	1,940
2014	294.4	109.8	207.3	▼	611.5	1,876
2015	354.7	110.8	196.8	▼	662.3	2,032
2016	400.6	107.6	212.3	▼	720.5	2,210
2017	414.0	110.3	203.0	▼	727.3	2,231
2018	449.5	104.7	210.0	▼	764.2	2,344
2019	496.2	110.4	205.3	▼	811.9	2,490
Average	387.9	109.5	201.9		699.2	2,145

+5% ~ 2,500 AF



2020 Projected Treatable Supply (80% quota)

Raw Water Supply		
	Number of shares	Yield in 2020 (acre-feet)
CBT variable quota (70%)	1,771	1,417 acre-feet
CBT fixed quota (70%)	2,101	1,471
CBT carryover		771
North Poudre Irrigation Co. CBT water	513.75	1,541 3.0 af/share
Total CBT available		5,200 acre-feet
NPIC CBT water rented and/or put into Windsor Lake		-
Carryover to 2020		774
Available water before shrinkage		4,425
Available water after 17.0% shrinkage		3,782 acre-feet

~ 1,284 acre-feet of additional water rental available

Questions?
