

MEETING CANCELLED

Water Board – Monday, May 18 2020

The next Water Board meeting is scheduled for Monday, June 15, 2020, in the Water Conference Room, at the Service Center at 3:00 pm.

AGENDA

Water Board – Monday, May 18, 2020

Service Center 1100 S. Sherman Street, Longmont, CO 80501

Water Conference Room – 3:00 pm

If you need special assistance to participate in a Water Board meeting, please contact Heather McIntyre at 303-651-8817 in advance of the meeting to make arrangements.

1. MEETING CALLED TO ORDER
2. ROLL CALL
3. APPROVAL OF PREVIOUS MONTH'S MINUTES
4. WATER STATUS REPORT
5. PUBLIC INVITED TO BE HEARD AND SPECIAL PRESENTATIONS
6. AGENDA REVISIONS AND SUBMISSION OF DOCUMENTS
7. DEVELOPMENT ACTIVITY
 - a. Development Activity Requiring Water Board Action
 - i. None
 - b. Development Activity Submitted for Water Board Information Only
 - i. Springs at Longmont Final Plat
8. GENERAL BUSINESS

None
9. ITEMS FROM STAFF

- a. City of Longmont's 2020 Water Supply and Drought Management Plan (submission of 2020 water supply and drought management plan) Staff Contact: Wes Lowrie (303) 651-8814, wes.lowrie@longmontcolorado.gov
- b. Monthly Legislative Report (Update regarding current water legislation status) Staff Contact: Ken Huson 303-651-8365, ken.huson@longmontcolorado.gov
- c. Water Resources Engineering Projects Update (Update regarding recent and on-going water resource related engineering projects) Staff Contact: Jason Elkins 303-651-8310, jason.elkins@longmontcolorado.gov
- d. Windy Gap Firing Project Update (Update regarding the Windy Gap Firing Project) Staff Contact: Ken Huson 303-651-8340, ken.huson@longmontcolorado.gov
- e. Northern Colorado Water Conservancy District Collaborative Water-Efficient Landscape Grant Funding (Update regarding grant funding) Staff Contact: Francie Jaffe 303-774-4468, francie.jaffe@longmontcolorado.gov

10. ITEMS FROM BOARD

- a. Review of Major Project Listing and Items Tentatively Scheduled for Future Board Meetings.

11. INFORMATIONAL ITEMS AND WATER BOARD CORRESPONDENCE

12. ITEMS TENTATIVELY SCHEDULED FOR FUTURE BOARD MEETINGS

- a. Cash-in-Lieu Review (March, June, September, December)

13. ADJOURN



CITY OF LONGMONT | Water Board

Meeting Date: May 18, 2020

Item Number: 7

Type of Item: Development Activity

From: Wes Lowrie, Water Resources Analyst, 303-651-8814
wes.lowrie@longmontcolorado.gov

As the Board will recall, City Council approved Ordinance O-2012-73 on October 23, 2012, which requires Water Board action during annexation review and when further raw water deficit satisfaction is required pursuant to a particular development activity. Listed below are two development activity categories: Development Activity Requiring Water Board Action and Development Activity Submitted for Water Board Information Only.

The Springs at Longmont Final Plat is submitted for information only as part of this informational packet and will be again submitted for action at the next Board meeting which affords such action to be taken.

- 7a. Development Activity Requiring Water Board Action
 - i. None
- 7b. Development Activity Submitted for Water Board Information Only
 - i. Springs at Longmont Final Plat

Springs at Longmont Final Plat
Packet Information for Water Board Review
May 18, 2020

DESCRIPTION

Springs at Longmont Final Plat is a 25.703 acre parcel located south of State Highway 119 and east of Weld County Road 1. This Final Plat includes lands which annexed under the Mayeda Annexation which was reviewed by Water Board on February 24, 1997.

HISTORICAL WATER RIGHTS

All historical water rights consisting of 1.4165 shares in the Oligarchy Irrigation Company were transferred at time of annexation.

RAW WATER REQUIREMENT POLICY

The full 25.703 acres are subject to the full requirements of the Raw Water Requirement Policy. After application of the historical water rights, a deficit of 44.158 acre feet of water or 1.718 of an acre foot of water per acre of land remains in the direct flow requirement and a deficit of 24.444 acre feet of water or 0.951 of an acre foot of water per acre of land remains in the storage requirement. The total raw water deficit for Springs at Longmont Final Plat is 68.602 acre feet or 2.669 acre foot of water per acre of land.

POLICY COMPLIANCE

Springs at Longmont Final Plat will be in compliance with the Raw Water Requirement Policy upon satisfaction of the 68.602 acre foot deficit at time of final plat approval.



CITY OF LONGMONT | Water Board

Meeting Date: May 18, 2020

Item Number: 9a

Subject: City of Longmont's 2020/2021 Water Supply & Drought Management Plan

Type of Item: Items from Staff

From: Wes Lowrie, Water Resources Analyst (303-651-8314)
wes.lowrie@longmontcolorado.gov
Ken Huson, Water Resources Manager (303-651-8340)
ken.huson@longmontcolorado.gov

Suggested Action: Receive the 2020/2021 Water Supply & Drought Management Plan

The attached City of Longmont's 2020/2021 Water Supply & Drought Management Plan is submitted for information only as part of this informational packet and will be submitted again for action at the next Board meeting that affords such action to be taken.



City of Longmont

2020/2021 Water Supply & Drought Management Plan

Purpose:

The purpose of the City of Longmont's 2020/2021 Water Supply & Drought Management Plan is to manage the City's Water Supply and to anticipate, identify and respond to drought in the Saint Vrain Creek watershed area. This plan will evaluate the impact on raw water availability for the City of Longmont and will recommend responses to the current water supply and demand forecast. This plan also formalizes the City's planning for future droughts.

Methodology and Responsibility:

The City of Longmont's Water Supply & Drought Management Plan will be managed by the Water Resources Divisions of the Public Works & Natural Resources Department, referred to as Division. Indicators of drought, as outlined in this plan will be monitored by personnel in the Division. The Division will recommend appropriate action, guided by the response plan as outlined in this plan, for response to differing levels of drought.

Ralph Price Reservoir January 29, 2020



Definition of Drought:

A drought is typically defined as single or multiple consecutive water years with below average stream flow. For the purposes of drought response planning, the droughts of interest would only include those droughts that, because of severity, directly impact and stress raw water availability for the City of Longmont.

Revision Date: May 12, 2020

City of Longmont 2020/2021 Water Supply & Drought Management Plan

"Conserving our Water to Preserve our Quality of Life"

I. City of Longmont's Drought Supply Policy:

The City of Longmont's raw water drought supply policy is outlined in the Raw Water Master Plan. This plan describes the City's policy of using the 1-in-100 year drought recurrence interval as the basis of planning for the City's raw water supply. This drought interval is based upon a drought of approximately 7 years in length with a total Saint Vrain Creek watershed deficit of 237,000 acre-feet. This plan also describes drought indicators and potential forecasting methodologies to be used to predict drought and determine its severity and impacts on the City's raw water supply.

The Saint Vrain Creek has historically experienced drought conditions and will continue to do so in the future. The annual average measured flow in the Saint Vrain Creek at the Lyons gaging station for the period 1896 to 1982 was 93,000 acre-feet. After the addition of diversions from the creek above the Lyons gaging station, the estimated virgin flow for this period is 124,000 acre-feet. A drought of seven years in length, with a total deficit of 237,000 acre-feet, would result in a deficit of approximately 34,000 acre-feet per year.

During 2019, the Saint Vrain River Basin experienced average streamflow conditions as a result of above average snowpack and average rainfall. Water Board recommended and City Council concurred in May of 2019 to remain at a Sustainable Conservation Level Drought Response for 2019. Because of the average stream flows during 2019, Longmont finished the 2019 irrigation season (October 31, 2019) with average storage in its local reservoirs at 70% of capacity. Current projections are that by July 15, 2020, select reservoir storage will be 98% of full. During 2020, the Public Works & Natural Resources staff will continue to implement demand management strategies outlined in this plan. Water Resources staff will continue to pursue opportunities to exchange additional water to supplement the existing water supply.

Prior Water Data	2018	2019
Total Water Supply Available	23,806 acre-feet	22,709 acre-feet
Total Treated Water Demand	16,506 acre-feet	15,356 acre-feet

Snow Pack as of May 12, 2020	South Platte River Basin	Colorado River Basin
	95%	84%

For 2020, Longmont expects to continue to utilize native basin water rights, trans-mountain water rights, and local storage water rights.

Description of Indicators and Forecasting Methods:

- **Natural Resources Conservation Service’s Monthly Streamflow Forecast**
Table A indicates how the Streamflow Forecast can be used to evaluate impacts upon Longmont's water rights on an average and dry basis. Based upon the streamflow forecast, the projected yield of direct flow and storage decrees will be used for calculation of raw water availability during drought conditions. This effort will focus on the April 1 and May 1 Streamflow forecasts as indicators of drought in the upcoming irrigation season.
- **Natural Resources Conservation Service’s Monthly Snowpack Survey**
The Snowpack Survey will be used in validating and/or adjusting the Streamflow Forecasts. These surveys also provide real-time measurement of snowpack to assist in reviewing projections in the time between monthly streamflow forecasts.
- **Saint Vrain Creek Basin Reservoir Storage Levels**
Total reservoir storage in the Saint Vrain Basin varies with the availability of water during the storage season (usually November through June). The total Saint Vrain Creek storage levels will be used in conjunction with target storage levels in Ralph Price Reservoir. When comparing storage levels in reservoirs with storage rights senior to Ralph Price Reservoir, water supply availability can be projected for the storage components of Longmont's water portfolio. An example of this information for Ralph Price Reservoir is shown in Table B.
- **Trans-Mountain Water Supply Availability**
Colorado-Big Thompson Project (C-BT) Quota Declaration and Longmont carry-over of C-BT allocation from the previous year will be utilized in establishing trans-mountain water supply availability for 2020 and projections for later years. This trans-mountain water availability includes C-BT quota declarations, Upper Baldwin Ditch Replacement water, Carry-over C-BT water, Exchanged C-BT water, and Windy Gap water supplies. On November 1, 2019, the NCWCD Board set the initial 2020 quota declaration for the C-BT system at 50%. On April 9, 2020, an additional 20% declaration was made which resulted in combination with the other trans-mountain water supplies, of a total trans-basin water supply yield of 12,085 AF.
- **Raw Water Availability for City of Longmont**
Raw water availability will be updated and revised by the Division staff to estimate Water Treatment Plant demands and projected raw water availability for Longmont. An example of 2020 raw water availability is included in Table A. Projected demand in this table is based upon a Sustainable Conservation Level drought response assumption.
- **City of Longmont Treated Water Demands Greater than Normal**
As drought conditions occur, water use often increases and raw water availability decreases. Treated water demand projections will be adjusted in accordance with this expected increase. Actual use as the drought progresses will be included in the evaluation of projected water demands.

- **City of Longmont Water Supply Projections for Multi-year Drought Projections**

As an additional tool in evaluating the current year drought response level, Division staff will complete a multiple year water supply evaluation. The current and next water year of that projection will be used to determine the drought response level for the City.

II. Description of Drought Supply Response Levels:

Division staff is responsible for monitoring drought indicators and forecasting raw water availability. The following guidelines will assist Division staff and Water Board in advising City Council in determining the appropriate course of action to undertake in varying degrees of drought intensity. These will serve as a guideline only, with the experience and year by year specific details also guiding the City's actions in any given drought scenario. The City Manager, with the advisement of Division staff, will have the power to declare a specific response level in the case of an emergency. Division staff will compare raw water supply with projected demand and monitor the storage levels in Ralph Price Reservoir and the Saint Vrain Creek Basin. If the combination of supply and available storage exceed projected demand by more than 135%, the City's water supply will not be considered in a drought scenario. The City will continue to take water conservation actions at all times, especially during years of below average streamflow. Percent of water savings goal referred to hereafter shall be with respect to last year's actual demand.

Sustainable Conservation Level:

At the sustainable conservation level, the City will continue to implement Best Management Practices to conserve the water resources of the City.

Target Water Savings Goal: Sustainable demand management at all times to insure reasonable water conservation practices are followed utilizing best management practices and that the overall goal of a 10% water savings as outlined in the Raw Water Master Plan is realized.

This level will include a projection of the following indicators:

- Storage volumes in Ralph Price Reservoir greater than target levels for the Level One Drought Response in Table B; and
- Raw water supply availability projections for the current and next water year at a level greater than **135%** of projected water demand.

Level One Drought Response Targets:

At Level One, conditions will moderately impact the City's supply vs. demand.

Target Water Savings Goal: Sufficient demand management, up to 10%, to insure demand does not exceed raw water availability.

This level will include a projection of the following indicators:

- Storage volumes in Ralph Price Reservoir lower than target levels in Table B.

- Raw water supply availability at a level of **120% - 135%** of projected water demand.

Level Two Drought Response Targets:

At Level Two, conditions will severely impact the City's supply vs. demand.

Target Water Savings Goal: 10% to 25%

This level will include a projection of the following indicators:

- Storage volumes in Ralph Price Reservoir lower than target levels in Table B.
- Raw water supply availability at a level of **105% - 120%** of projected water demand.

Level Three Drought Response Levels:

At Level Three, conditions will critically impact the City's supply vs. demand.

Target Water Savings Goal: To be determined at time of level three drought, goal dependent upon drought severity and water savings needs.

This level will include a projection of the following indicators:

- Storage volumes in Ralph Price Reservoir lower than target levels in Table B.
- Raw water supply availability at a level less than **105%** of projected water demand.

III. Description of Drought Response Action Plans:

Sustainable Conservation Level:

Upon determining that actionable drought conditions do not exist for the City of Longmont, any or all of the following may be performed:

- Continue public information concerning impacts to the City of Longmont's water supply to encourage that best management practices (BMP's) are followed. The City will continually promote a public water conservation campaign. BMP's include but are not limited to:
 1. No water being wasted.
 2. Time of day watering restrictions, such as no unattended irrigation between the hours of 10:00 a.m. and 6:00 p.m., will be encouraged.
 3. Use soil amendments and mulch in conjunction with appropriate plant selections.
 4. Check and replace leaky faucets and toilets.
 5. Wash only full loads of cloths and dishes.
- Voluntary measures for raw water reduction in municipal and school use of water.
 1. Parks & Recreation will conserve water where possible and utilize BMP's.
 2. Golf courses will conserve water where possible and utilize BMP's.
 3. School District will be encouraged to follow BMP's and conserve water where possible.

4. City owned facilities will strive to set the benchmark for water use practice.
 5. Encourage all customers served by Longmont Water Utilities to implement BMP's for total water use.
- Division staff will prepare for implementing Level One policies in the event this level occurs. The Division will monitor drought response effectiveness, recommend adjustments, and report to public regularly. The Division will also continue training and assigning staff to monitor outdoor water use to insure sustainable conservation efforts are followed and prepare in the event that a Level One drought is determined.

Level One Drought Projection:

Upon determining a Level One drought exists, Longmont may perform any or all of the following efforts, utilizing the actual previous year's water use as the base year for comparison purposes:

- Increase public information about the drought severity and review and enactment of appropriate conservation efforts. Conservation efforts are outlined in the City of Longmont's Water Conservation Master Plan. The City will promote a public water conservation campaign emphasizing moderately dry conditions existing at that time.
- Voluntary water conservation by service customers.
 1. Encourage all customers served by the Longmont Water Utilities to implement a ten percent (10%) reduction in water use from historical levels.
 2. Water users who normally use raw water, well water, or other sources of water for irrigation will be requested not to increase use of water through the potable water system during drought emergencies.
 3. Irrigation class tap customers may be required to reduce demand by 10%.
 4. Community garden users, as well as private garden users, will be encouraged to implement a ten percent (10%) reduction in water use from historical levels.
- Mandatory measures for raw water reduction in municipal and school use of water.
 1. Parks & Recreation will conserve water where possible, resulting in a net 10% reduction of historical annual use. Voluntary reductions apply to municipally owned critical sports fields and parks.
 2. Golf courses will conserve water where possible, resulting in a net 10% reduction of historical annual use.
 3. School District irrigation water lease reduction as appropriate, resulting in a minimum of 10% reduction of historical annual use.
 4. Saint Vrain Creek Corridor water lease reduced (or eliminated) to the extent that water is unable to be recaptured for use at the Water Treatment Plants.

5. All other municipal water use will be reduced by 10% (Building use, Fire dept. etc.) of historical annual use.
- Raw water leases and bulk water sales.
 1. Surplus water rental reduced or eliminated.
 2. Historic lease back of raw water reduced or eliminated.
 3. No water leases are guaranteed during a Level One drought (except by existing contracts). If leases are approved the City may elect to increase the lease rate to recover investment costs and to discourage non-essential uses.
 4. Bulk water permits will be reviewed for use and total demand on system. Normal use of water through bulk permits will be allowed, but use of fire hydrants for irrigation will not be allowed.
 - In drought years, there are many uses of water that will change compared to use during average and above average water years. Following are some examples of these changes in that water usage:
 1. Use of water in Golden Ponds will gradually change from primarily piscatorial to supply. In a Level One drought, water levels in the west pond will be allowed to equalize with the middle pond, with use of that amount. In addition, if the level of Golden Ponds lowers, water will not normally be replaced in this facility until the drought ends.
 2. Union Reservoir water levels will be lower than normal, resulting in lowered ability to conduct late season recreational activities on the reservoir.
 - Division staff will develop plans for implementing Level Two policies in the event this level occurs. The Division will monitor drought response effectiveness, recommend adjustments, and report to public regularly. The Division will also continue training and assigning staff to monitor outdoor water use in the event that a Level Two drought is determined.
 - Time of day watering restrictions, such as no unattended irrigation between the hours of 10:00 a.m. and 6:00 p.m., will be evaluated for practicality of implementation.

Level Two Drought Projection:

Upon determining a Level Two drought exists, Longmont may perform any or all of the following:

- Continue public information about the drought severity and enactment of increasing conservation efforts. Conservation efforts are outlined in the City of Longmont's Water Conservation Master Plan. The City will promote a public water conservation campaign emphasizing severely dry conditions. As part of the conservation strategies, the City has developed a conservation rebate program, which will provide rebates for purchase of low volume toilets to replace high volume toilets.

- Mandatory water conservation by service customers.
 1. Require all customers served by Longmont Water Utilities, including community garden users, to implement a minimum ten percent (10%) reduction in water use.
 2. Implement a formal mandatory watering program to be followed by customers.
 3. No additional water use through the potable system to replace water normally used through raw water, well water or other water supply scenarios.
 4. Irrigation class tap customers will be required to reduce demand by a minimum of 20%.

- Mandatory measures for raw water reduction in municipal and school use of water.
 1. Parks & Recreation water reductions at a level between 20% and 90% depending upon severity of drought and overall response to demand reductions. To the extent possible, the identified critical sports fields, trees, and non-turf landscaped areas will continue to be irrigated with a 10% reduction in application of water.
 2. Golf course watering will be reduced between 20% and 90% depending upon severity of drought and overall response to demand reductions.
 3. School District irrigation water lease reduction at a level between 20% and 90% depending upon severity of drought and overall response to demand reductions.
 4. Saint Vrain Creek Corridor water lease eliminated to the extent that water is unable to be recaptured for use at the Water Treatment Plants.
 5. All other municipal water use will be reduced to the maximum extent possible (Building use, Fire dept. etc.).

- Raw water leases and bulk water sales.
 1. Surplus water rental eliminated.
 2. Historic lease back of raw water reduced or eliminated.
 3. No water leases are guaranteed during a Level Two drought (except by existing contracts). If leases are approved, the City may elect to increase the lease rate to recover investment costs and to discourage non-essential uses.
 4. Bulk water permits will be reviewed for use and total demand on system. Normal use of water through bulk permits may be allowed, but use of fire hydrants for irrigation will not be allowed.

- Division staff shall develop plans for implementing Level Three policies, including mandatory water use reductions. The Division will monitor drought response effectiveness, recommend adjustments, and report to the public regularly.

- The Division will continue to train and assign staff in monitoring, issuing warnings, and imposing penalties for water waste and violations of any permits and noncompliance with any water restrictions.

Level Three Drought Projection:

Upon determining a Level Three drought exists, Longmont may perform any or all of the following:

- Continue public information about the drought severity and enactment of mandatory conservation efforts. Conservation efforts are outlined in the City of Longmont's Water Conservation Master Plan. The City will promote a public water conservation campaign emphasizing critically dry conditions.
- Mandatory Water Conservation by Service Customers.
 1. Mandatory water use reduction equal to projected water supply availability deficit for all customers, including community gardens, served by the Longmont Water Utilities. Outdoor watering restrictions will be set based upon severity of drought. Restrictions will result in severely cutting back or completely eliminating watering based upon severity of the Level Three drought.
 2. Water rates to be adjusted to provide clear financial incentive to limit outside water use using the increasing block structure. Adjust water rates to maintain revenue during the drought as needed.
 3. Impose a moratorium on new water taps.
 4. No additional water use through the potable system to replace water normally used through raw water, well water or other water supply scenarios.
 5. Irrigation class tap customers will be required to reduce demand by a minimum of 90%, or possibly eliminated.
- Mandatory measures for raw water reduction in municipal and school use of water. All outdoor watering of public facilities may be eliminated depending upon the severity of the drought at this level.
 1. Parks & Recreation water reductions, resulting in a reduction of 90 % of use. Minimal watering of critical sports fields and parks will occur. The primary intent of Parks and Recreation watering will be to maintain economic investments in non-turf landscaping, trees and municipal facilities. Field use will be restricted or eliminated to protect facilities as needed.
 2. Golf course watering will be limited to greens and tees.
 3. School District irrigation water lease eliminated.
 4. Saint Vrain Creek Corridor water lease eliminated to the extent that water is unable to be recaptured for use at the Water Treatment Plants.
 5. All other municipal water use will be reduced to the maximum extent possible (Building use, Fire dept. etc.).
- Raw water leases and bulk water sales.
 1. Surplus water rental eliminated.
 2. Historic lease back of raw water eliminated.
 3. Bulk water permits and sale of water through fire hydrants will not be allowed. Hydrant use for irrigation will not be allowed.

- Division staff will continue to further develop plans for responding to the drought. The Division will monitor drought response effectiveness, recommend adjustments, and report to public regularly. Division staff will continue to monitor and enforce watering restrictions as necessary.

Website Links:

City of Longmont Public Works & Natural Resources Department:

<http://longmontcolorado.gov/departments/departments-n-z/water>

Snow Survey Data:

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/co/snow/?cid=nrcs144p2_063182

Reviewed by:

Longmont Water Board on May 18, 2020

**TABLE A
CITY OF LONGMONT
WATER RIGHTS YIELDS
2020**

revision date 05/12/2020

WATER RIGHTS	2002 ACTUAL RAW WATER USE AC-FT	2018 ACTUAL RAW WATER USE AC-FT	2019 ACTUAL RAW WATER USE AC-FT	2020 PROJECTED RAW WATER AVAILABLE AC-FT	2021 PROJECTED RAW WATER AVAILABLE AC-FT	2022 PROJECTED RAW WATER AVAILABLE AC-FT
1. CBT QUOTA DECLARATION	70%	80%	70%	70%	50%	50%
2. DIRECT FLOW WATER RIGHT DECREES	3309	6676	6310	7310	7574	7574
3. 1929 TRANSFER DECREES	1108	0	1337	1337	1337	1337
4. PIPELINE DECREES	904	0	1837	1837	1837	1837
5. TRANSFERED RESERVOIR STORAGE DECREES	456	1163	1163	1163	1163	1163
6. RESERVOIR STORAGE AVAILABLE FOR RELEASE	7366	3538	4222	4222	4199	4199
7. TRANSBASIN WATER RIGHTS	8715	15876	11710	12085	12277	12277
8. LESS CBT CARRYOVER BETWEEN YEARS	(940)	(2825)	(2825)	(2825)	(2825)	(2825)
9. LESS WATER RENTAL AND LEASES	(1497)	(612)	(1045)	(1000)	(1000)	(1000)
10. TOTALS	19421	23816	22709	24129	24562	24562
11. DEMANDS AT LEVEL 1 DROUGHT RESPONSE	17217					
12. PERCENT OF SUPPLY VS DEMAND AT LEVEL 1 RESPONSE	113%					
13. DEMANDS AT SUSTAINABLE CONSERVATION LEVEL	*	16505	15803	16119	16603	17101
14. PERCENT OF SUPPLY VS DEMAND AT SUSTAINABLE CONSERVATION LEVEL		144%	144%	150%	148%	144%
B1. NOVEMBER 1ST PROJECTED STORAGE				32000		
B2. DROUGHT LEVEL INDICATED BY WATER IN STORAGE				S		
B3. TO DATE IN-BASIN LONGMONT STORAGE (AC-FT)				29818		
B4. NUMBER OF MONTHS AVAILABLE TO MEET AVERAGE DEMAND				22		

* Projected water demands reflect previous water demand usage and consider long range weather forecasts, water conservation efforts, changes in treated water demands, economic forecasts and community growth.

TABLE B
RALPH PRICE RESERVOIR STORAGE
2020

* DESIGN DROUGHT YEAR							
	1	2	3	4	5	6	7
Calendar Year	2020	2021	2022	2023	2024	2025	2026
Sustainable Conservation Level	>90%	>90%	>85%	>85%	>80%	>80%	>75%
Response Level One	75% - 90%	75% - 90%	70% - 85%	70% - 85%	65% - 80%	65% - 80%	60% - 75%
Response Level Two	60% - 75%	60% - 75%	55% - 70%	55% - 70%	50% - 65%	50% - 65%	50% - 60%
Response Level Three	< 60%	< 60%	< 55%	< 55%	< 50%	< 50%	< 50%
JULY 15, 2019 PROJECTED BUTTON ROCK STORAGE (AC-FT)			16197	100%			
MAY 12, 2020 ACTUAL BUTTON ROCK STORAGE (AC-FT)			12628	78%			



CITY OF LONGMONT | Water Board

Meeting Date: May 18, 2020

Item Number: 9b

Subject: Update on 2020 Water Legislation

Type of Item: Items from Staff

From: Ken Huson, Water Resources Manager, 303-651-8340
ken.huson@longmontcolorado.gov
Wes Lowrie, Water Resources Analyst, 303-651-8814
wes.lowrie@longmontcolorado.gov

Suggested Action: Receive information

On May 9, 2020, the below joint statement was released by the Democratic leadership stating that the legislature will now be delayed another week and will return the week of May 25, 2020.

Democratic Leadership in the General Assembly today announced that the temporary suspension of the legislature will continue until the week of May 25 to give additional time for preparations including safety protocols, to work through appropriate legislation, and to seek greater clarity on potential Congressional action that could significantly impact our state budget.

“When we set out a tentative timeline to reconvene the General Assembly, we did so with the recognition that we faced a lot of uncertainty, and so we built in the flexibility to extend the temporary adjournment if needed,” said Speaker KC Becker, D-Boulder. “As businesses across Colorado also begin the process of reopening, this extension allows the General Assembly additional time to double check our safety protocols, continue conversations on appropriate legislation and seek more information about any Congressional action that may be coming in the weeks ahead. We are hopeful that Congress may provide additional and badly needed aid to help us avoid budget cuts that will devastate our communities.”

“Last week our Joint Budget Committee had to begin the heart-wrenching process of rewriting Colorado’s budget after COVID-19 created a more than \$3 billion revenue shortfall,” said President Leroy Garcia, D-Pueblo. “With so much at risk and our desired return date fast approaching, we determined that it would benefit all Coloradans if we gave our budgetary and legislative process a bit more breathing room. Though facing our dire fiscal situation has been a painful task, we are committed to protecting our most critical institutions and vulnerable

populations as best as we possibly can. We look forward to continuing to fight for our communities in the Capitol when we all return on May 26.”

For additional Legislative information, visit Water Board’s webpage located at <http://longmontcolorado.gov/departments/boards-committees-and-commissions/director-of-boards-committees-and-commissions/water-board>. From this page, the Board can access the prior Water Board Legislative Communications, City Manager’s Legislative Affairs webpage, Legislative Guiding Water Principles, and a link to the Colorado General Assembly homepage.



CITY OF LONGMONT | Water Board

Meeting Date: May 18, 2020

Item Number: 9c

Subject: Water Resources Engineering Projects Update

Type of Item: Items from Staff

From: Jason Elkins, Water Resources Engineer, (303) 651-8310
jason.elkins@longmontcolorado.gov

Suggested Action: Receive Information

Below is a summary of recent and current water resources engineering projects.

WTR181 South St. Vrain Pipeline Rehabilitation Project – Currently, pipeline has been potholed and located throughout the Town of Lyons. Our design consultant, Dewberry, has submitted final plan details for the permanent and temporary access points needed to clean the pipe. Our contractor, C&L Water Solutions, has reviewed the plans and submitted a cost proposal to staff for review. To date, project is tracking the budget and schedule as planned.

WTR181 Highland Ditch Inlet Structure at Nelson Flanders Feasibility Study – Our design consultant, Burns and McDonnell, has presented several options to City staff and the Highland Ditch Company for consideration. Options include a new intake structure located further downstream to avoid debris, a heated building to house the mechanical screen for winter operations, and a flume weir for automated level control. Another option being considered is a pump station located in the Town of Lyons that would convey water from the South St. Vrain Pipeline into the North St. Vrain Pipeline. The pump station option is also being considered as part of a FEMA PAAP that would pay for the majority of the construction costs (about \$1M).

WTR173 Rehabilitation of Existing Raw Water Diversion Structures – This project is expected to begin master planning efforts this summer, with the objective of creating Design Standards and Specification for diversion structures that are listed as high-priority projects in the Water Master Plan & Capital Improvement Plan.



CITY OF LONGMONT | Water Board

Meeting Date: May 18, 2020

Item Number: 9d

Subject: Windy Gap FIRMING Project Update

Type of Item: Items from Staff

From: Ken Huson (303)651-8340
Ken.huson@longmontcolorado.gov

Suggested Action: Receive Information

Current Status of Project:

State Water Court Filings: Negotiations with all objectors complete. Working on final decree language with co-applicant (Colorado River Conservation District), then a final decree should be able to be entered soon.

Project Allotment Contract and Financing: Allotment legal committee has been diligently working on an allotment contract for the last three months. Will have at least a draft contract for water board to review at the June water board meeting. Most project financing aspects are being incorporated in the allotment contract, so both can be reviewed at the same time.

Project Final Design: MWH hired summer 2016, design efforts complete and awaiting final approval from Colorado State Engineers Office.

Grand Lake Clarity: No new status.

Windy Gap Reservoir Connectivity Channel: Property closing complete. Channel design underway, expected to be completed next spring. Bidding proposed for summer 2021 and construction proposed for fall 2021 and summer 2022.

Federal Suit: Plaintiffs and interveners final briefs filed July 25, 2019. Still awaiting federal district court decision.

Barnard Construction: All project submittals have been submitted, currently under review.

PRPA power line: A new power line will need to be installed by PRPA (the area power provider) to provide power for the project site. Currently under design. Expected installation this summer.

WAPA power line relocation: WAPA is re-negotiating their cost and schedule, given the delay from the Federal suit. WAPA still indicates they will not do install until after the Federal suit is positively resolved, under negotiation.

Prior Project Milestones:

Final Purpose and Needs Study: Completed September 2005

Final EIS: Completed November 2011

HB-1041 Permit, Grand County: Received December 2012

Bureau ROD, Project Permit and Amendatory Carriage Contract: Issued Dec. 2014

401 Certification: Received March 2016

Shoshone Outage Protocol: Final signature June 2016

Windy Gap Firming Project IGA: July 2016

404 Permit: Permit issued May 16, 2017

Project Participation: All 90,000 AF of permitted storage capacity has been subscribed.



CITY OF LONGMONT | Water Board

Meeting Date: May 18, 2020

Item Number: 9e

Subject: Northern Colorado Water Conservancy District Collaborative Water-Efficient Landscape Grant Funding

Type of Item: Item From Staff

From: Francie Jaffe, Water Conservation & Sustainability Specialist, (303) 774-4468 francie.jaffe@longmontcolorado.gov

Suggested Action: Receive Information

Northern Colorado Water Conservancy District (Northern Water) funds water-efficient landscape projects within Northern Water's boundaries for public facilities, businesses, schools, multi-family complexes, and HOA-managed landscapes. To help achieve the City's Water Efficiency Master Plan water conservation goals as supported by the Sustainability Plan, Public Works and Natural Resources decided to pursue the 50/50 matching grant for the transition of Kentucky bluegrass to a native seed mix at the Longmont Service Center and a City-owned site on Hover between 12th Ave. and Mt. View Ave. These projects are expected to reduce maintenance cost and reduce outdoor water consumption by 50%. If these projects are successful, the City hopes to every year continue to transition right-of-ways, medians, and low-traffic areas to lower water using native seed mixes. These sites also act as education for our residents, HOAs and businesses. By demonstrating to residents that a native seed mix can be used on right-of-ways and areas where there is minimal foot traffic and still look aesthetically beautiful, we can highlight that turf can be functional but also save water.

A Resolution to sign the Intergovernmental Agreement with Northern Water to pursue this grant project will go to City Council on May 29th. If passed, work will begin on this project in mid-June 2020.

Collaborative Water-Efficient Landscape **GRANT** **APPLICATION**

NORTHERN WATER USE ONLY

Application No.
Date & Time Received



Applicant name: City of Longmont, Public Works and Natural Resources

Applicant organization or entity: City of Longmont

Type of organization: Local Government

Contact person: Francie Jaffe

Address: 1100 S Sherman St

City/State/Zip Code: Longmont, CO, 80501

Phone (office): (303) 774-4468

E-mail address: francie.jaffe@longmontcolorado.gov

Project Details

Project name: Turf Transition Project

Project address (if different from applicant): 1) 100 S Sherman St. (Service Center) and 2) 2315 Mountain View Ave (Hover/Mt. View)

City/State/Zip Code (if different from applicant): Longmont, CO 80501

Project overview (purpose and need):

The turf transition project has multiple purposes. First, the transition from Kentucky bluegrass to a native seed mix using a wheatgrass blend will conserve water for the city helping to reach our water conservation goals and decrease maintenance costs for the City. If these projects are successful, the City hopes to every year continue to transition right-of-ways, medians, and low-traffic areas to lower water using native seed mixes. These sites also act as education for our residents, HOAs and businesses. By demonstrating to residents that a native seed mix can be used on right-of-ways and areas where there is minimal foot traffic and still look aesthetically beautiful, we can highlight that turf can be functional but also save water. The City is currently working to develop education for HOAs, so once the turf sites are established, we can use these as demonstration sites for HOAs to encourage them to transition to lower water using turf.

Size of project (square feet): 1) Service Center: 35,630 ft² and 2) Hover/Mt. View: 18,218 ft²

Is this landscape currently irrigated? If so, please describe your current system:

Yes, the landscape for both sites is irrigated with an in-ground irrigation system. All systems are potable water with backflow devices, master valves and flow meter. All systems operate using a remote controller, zone valves, mainlines, laterals and rotor or pop up head sprinklers. All systems are programmed by the Toro Sentential software.

If a new irrigation system will be installed on this landscape, please describe that system:

The wheatgrass blend will use about 50% less water and will be mowed at a taller height. To adjust to these changes, the City will upgrade the sprinkler system to include six-inch risers on the irrigation heads. All upgrades to the systems will meet the City's design standards and specifications. A drip system will be added to site one (the Service Center) for trees that are in the transition area. At site two (Hover/Mt. View), drip irrigation is not needed but there is an irrigation zone that is currently not working that will require more extensive upgrades.

What are the anticipated water savings following your project's completion?

For each site, we used average historical water usage from 2001 to 2017 to estimate the current water usage for the percentage of the site that is being converted to the wheatgrass

blend. We are predicting a 50% reduction in water usage for each of these sites. Here is the annual expected water reduction for both sites:

1) Service Center: 472,840 gallons/year and 2) Hover/Mt. View: 439, 638 gallons/year

What is currently the landscape’s estimated ratio of turf vs. plants (percentages)?

1. Service Center – turf comprises 87% of the conversion area, shrub beds with plants is 13%.
2. Hover Street – turf comprises 90% of the conversion area, shrub beds with plants is 10%.

What will be the estimated ratio of turf vs. plants following the project (percentages)?

The areas will retain the same percentages of plant materials (turf to plants). However, the entire turf areas at each site will be converted 100% from Kentucky Bluegrass to Western Wheatgrass, saving water and labor.

Describe the location in regard to its public access and opportunities for education:

These sites were selected because they are in spaces that are easily viewed by the public - the public visits the Service Center for City resources and the Hover/Mt. View site is on a high traffic street. The sites can also serve as demonstration sites for turf transitions, specifically for HOAs who are interested in lowering their outdoor water use. We are collaborating with the Neighborhood Group Leaders Association to develop HOA education and these projects can be used as demonstration sites for the work that HOAs can do in their own communities.

Are you receiving or pursuing grant funding support through another source? If so, please explain.

No, we are not pursuing or receiving any other grant support.

Anticipated timeline for project:

The project for all sites will follow this process for conversion the first year:

1. *First Week of July 2020:* Kill all existing turf with a non-selective herbicide
2. *Third Week of July 2020:* Repeat herbicide application for complete control
3. *Last Week of July 2020:* Mow area, core aerate, overseed, fertilize and drag the area
4. *August – Mid-Oct 2020 (12 weeks):* Start establishment irrigation schedule after seeding
5. *Fall 2020:* Establishment will occur the first season by the fall season
6. *Spring 2021:* Full establishment occurring the next spring
7. *2020 – 2023:* Spot control of weeds will need to occur the first few years

Total timeline for the conversion itself is 4 weeks

Contractors/others involved in the project:

L&M Enterprises Inc. will assist Park Operations with both the sprinkler upgrades and turf conversion. The company will also be involved in the ongoing maintenance (mowing, fertilizing aerating) after establishment.

Amount requested: \$15,000

Appendix

Photos of Property

- 1) Service Center



2) Hover/Mt. View



Project Drawings and Sketches and Site Map with Dimensions:

Service Center Conversion

35,630 square feet

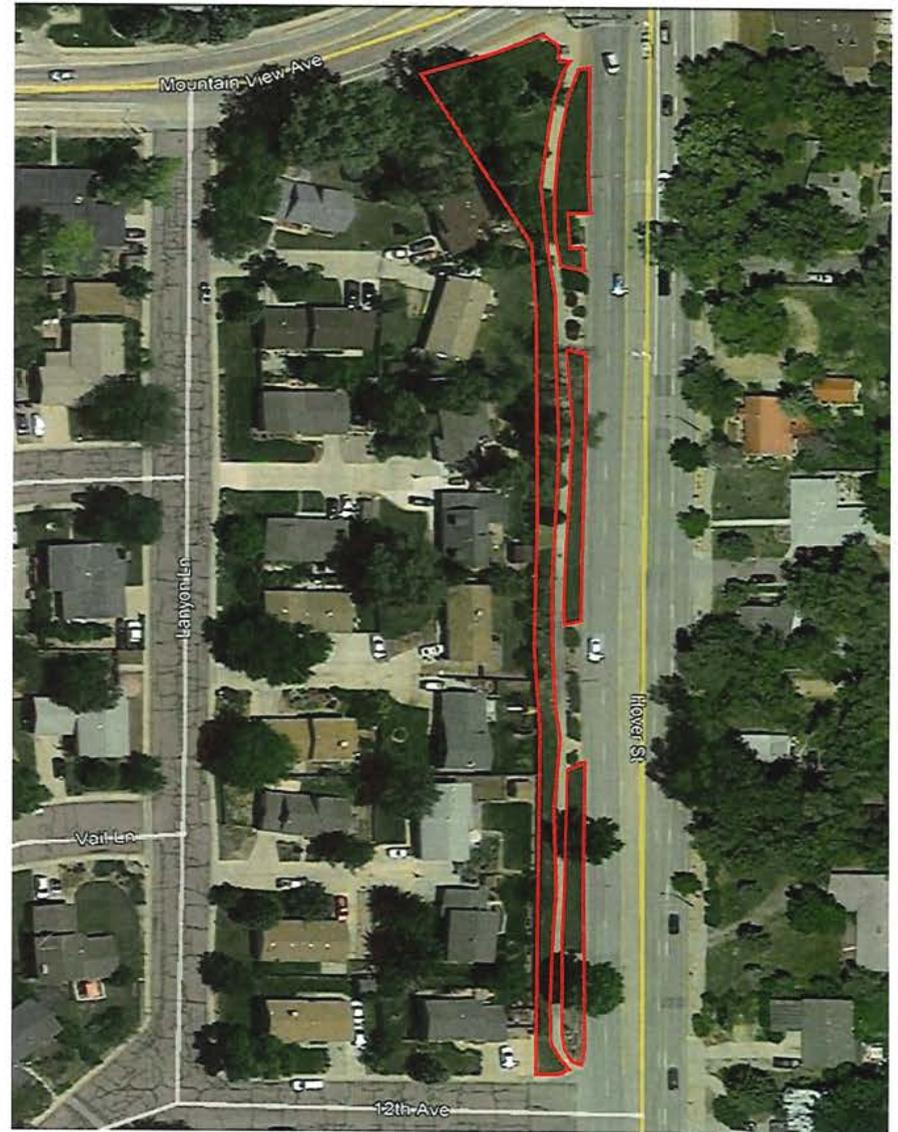
- Kill all turf area with a glyphosate herbicide at 2-3 oz./1000 sq. ft. rate
- Repeat application in 10-14 days for total kill
- After total kill, mow dead turf at 1.5 – 2 inches, collecting cuttings
- Aerate using a hollow tine core aerator to pull 2-3 inch plugs. 4 - 5 passes needed
- Broadcast seed or drill seed to depth of .25 - .5 inch depth. Divide the seed in half and apply 2 perpendicular directions
- 350 PLS# per acre (286# for 35,630 sq. ft.)
- Apply a low fertility (8-2-0) slow release granular organic fertilizer at a rate of .75 #N/1000 sq. ft.
- Drag seeded area with a metal drag mat



Hover Street Conversion

18,218 square feet

- Kill all turf area with a glyphosate herbicide at 2-3 oz./1000 sq. ft. rate
- Repeat application in 10-14 days for total kill
- After total kill, mow dead turf at 1.5 – 2 inches, collecting cuttings
- Aerate using a hollow tine core aerator to pull 2-3 inch plugs. 4 - 5 passes needed
- Broadcast seed or drill seed to depth of .25 - .5 inch depth. Divide the seed in half and apply 2 perpendicular directions
- 350 PLS# per acre (146# for 18,218 sq. ft.)
- Apply a low fertility (8-2-0) slow release granular organic fertilizer at a rate of .75 #N/1000 sq. ft.
- Drag seeded area with a metal drag mat



Budget:

Turf Transition Budget	
Category	Estimated Expenses
Labor for conv.	\$ 11,802.00
Mobilization	\$ 2,700.00
Seed	\$ 1,675.00
Irrigation Upgrade	\$ 3,800.00
Drip and bed add	\$ 5,000.00
Signage and education	\$ 2,400.00
Staff Time	\$ 3,033.33
Contingency	\$ 1,520.52
Total	\$ 31,930.85
Northern Water Match Request	\$ 15,000.00
Total City Match	\$ 16,930.85
City Staff Time	\$ 3,033.33
City Financial Commitment	\$ 13,897.52

Five-year Maintenance Plan:

Similar maintenance to conventional Kentucky Bluegrass maintenance.

- Mowing:
 - Mow biweekly at a height of 4 inches
 - First mowing will be May 1st through the end of October
- Fertilizing:
 - Fertilize once per year in the spring time with slow release organic fertilizer
 - Apply 1 lb. of nitrogen per year
- Overseeding:
 - Check all areas the first spring after establishment. Overseed any bare areas
 - Overseed only as needed after
- Weed Control:
 - Cultural practices are the best defense against weeds. Higher mowing with dense seeding will choke out most weeds
 - Post emergent spot treat areas May through August
 - Pre and post emergent applications can be made in April and August if needed
- Irrigation:
 - Irrigate 1-3 times per week depending on time of year and weather
 - Apply .30" and .50" of water per cycle, May through October



CITY OF LONGMONT | Water Board

Meeting Date: May 18, 2020

Item Number: 10a

Subject: Review of Major Projects Listing and Items Tentatively Scheduled for Future Water Board Meetings

Type of Item: Informational

From: Water Board

Suggested Action: N/A

Attached is a copy of the most recent Water Board project status report. Please note the report includes expected future review date information for each item.

WATER BOARD PROJECT STATUS REPORT

	<u>ITEM</u>	<u>MOST RECENT WATER BOARD REVIEW DATE</u>	<u>PROJECTED NEXT WATER BOARD REVIEW DATE</u>	<u>MOST RECENT ACTION TAKEN AND/OR PROPOSED FUTURE ACTION</u>
1	Union Reservoir Enlargement Land Acquisition Program	February 25, 2019	April 20, 2020	Annual update was presented to Water Board February 25, 2019.
2	Water Supply and Drought Management Plan	April 15, 2019	April 20, 2020	2019 Plan presented to Water Board in April 2019 with recommendation to City Council to remain at a Sustainable Conservation Level.
3	Windy Gap Firming Project	February 24, 2020	May 18, 2020	Review of Longmont's 5th Interim Agreement.
4	Water Legislation & Guiding Water Principles	February 24, 2020	May 18, 2020	Review of current legislation.
5	Cash-In-Lieu Review	December 16, 2019	June 15, 2020	Currently at \$16,840 per Acre-Foot. Resolution R-2019-78. Proposed to increase to \$17,683.
6	Button Rock Preserve & Forest Stewardship	May 20, 2019	June 15, 2020	Review the Button Rock Preserve visitation policy.
7	Longmont Water System Yield	July 15, 2019	TBD	Ongoing discussion of future water projects and projected future water yields.

Tentative Future Event Schedule	
Event	Date
Water Board Monthly Meeting	June 15, 2020
Water Board Monthly Meeting	July 20, 2020
Water Board Monthly Meeting	August 17, 2020
Water Board Monthly Meeting	September 21, 2020

Water Board Member Terms

John Caldwell - 2020
 Kathy Peterson - 2021
 Todd Williams - 2022
 Roger Lange - 2023
 Renee Davis - 2024

Updated: May 2020



CITY OF LONGMONT | Water Board

Meeting Date: May 18, 2020

Item Number: 11

Type of Item: Informational Items & Water Board Correspondence

Attached are information items and Water Board correspondence.

Heather McIntyre

From: Heather McIntyre
Sent: Tuesday, March 24, 2020 11:43 AM
To: Heather McIntyre
Cc: Ken Huson; Wes Lowrie; Nelson Tipton; Kevin Boden; Jason Elkins; Francie Jaffe; David Bell; Dale Rademacher
Subject: April 20 Water Board Meeting CANCELLED
Attachments: 042020 Water Board Agenda-Cancellation.pdf

Hello, Water Board members,

We have been instructed to cancel the April 20, 2020, Water Board meeting as part of the continued closures during the Coronavirus pandemic. The cancellation notice is attached.

Please keep your eye out for a forthcoming informational packet as the April 20th date comes closer. We want to make sure we're keeping you informed as best we can.

Thank you,

Heather McIntyre

Executive Assistant

Public Works & Natural Resources | City of Longmont

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OFFICE 303-651-8817

1100 S. Sherman Street | Longmont, Colorado 80501

longmontcolorado.gov

From: Michelle Gomez <Michelle.Gomez@longmontcolorado.gov>
Sent: Monday, March 23, 2020 5:05 PM
To: BCC Liaisons <BCC_Liaisons@longmontcolorado.gov>
Cc: City Clerk's Staff <City_Clerks_Staff@longmontcolorado.gov>
Subject: Cancellation Notices

Good afternoon everyone!

In light of the closures until April 20 all board meetings will be cancelled. If you could email the cancellation notices to [City Clerks Staff@longmontcolorado.gov](mailto:City_Clerks_Staff@longmontcolorado.gov), we will get them posted weekly when we are in the office. Please let me know if you have any questions.

Stay safe!

Michelle Gomez

Executive Assistant

City Clerk's Office | City of Longmont

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OFFICE 303-651-8649

350 Kimbark Street | Longmont, Colorado 80501

longmontcolorado.gov

MEETING CANCELLED

Water Board – Monday, April 20, 2020

The next Water Board meeting is scheduled for Monday, May 18, 2020, in the Water Conference Room, at the Service Center at 3:00 pm.

Heather McIntyre

From: Heather McIntyre
Sent: Tuesday, April 21, 2020 1:01 PM
To: Heather McIntyre
Cc: Ken Huson; Wes Lowrie; Kevin Boden; Nelson Tipton; Jason Elkins; Francie Jaffe; David Bell
Subject: Water Board - Question About Your Computer Access

Hello Water Board members,

I hope you are all safe and well. We are currently assessing the possibility of holding an electronic Water Board meeting for our May meeting, in the event it would be needed. There is a little bit of planning we would need to coordinate on our end to make this happen, so we are reaching out to you now to start getting things in order if we end up having to meet remotely. For us to have a successful meeting in which everyone would be able to participate, we need to know the following information from each board member and staff member. Please reply **ONLY TO ME** with answers to each of the following questions so that we can figure out if we would need to make arrangements to get you set up to be able to participate.

1. Does your computer have a camera and a microphone?
2. If you do not have a camera, do you have a microphone or a headset with a microphone that you would be able to use for the meeting?
3. Do you have experience using videoconferencing software/participating in an online meeting or would you need help to figure it out?

Please let me know your answers as soon as possible to give us time to coordinate getting you the appropriate equipment and/or training, if it is needed.

Thank you,

Heather McIntyre

Executive Assistant

Public Works & Natural Resources | City of Longmont

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OFFICE 303-651-8817

1100 S. Sherman Street | Longmont, Colorado 80501

longmontcolorado.gov