Lake 4, West Lake and A-Frame Dam Rehabilitation

Weekly Construction Update Report

2/10/2020 to 2/14/2020

Date: 2/19/2020

Location: Boulder County Open Space west of Hygiene, CO

Project Owners: Boulder County and St. Vrain & Left Hand Water Conservancy District

Construction Contractors:

Kirkland Construction (Prime Contractor)

Lobato Construction (Sub-contractor)

Design Engineers:

Lake 4 - Engineering Analytics (EA)

West Lake and A-Frame - Applegate Group (AG);

Lake 4 Outlet Pipeline - Deere & Ault (DA)

Weather & Site Conditions: Snow events, snow on ground, cold weather

Update by: Obadiah Broughton, Boulder County

2/10: Looking south at the West Lake outlet tower and pipe

Work in Progress/Completed

1. Winter weather conditions continued to shut down active construction work on the project for the week.
2. Maintenance activities to maintain dewatering pumps and generators, site conditions and stormwater/erosion control measures occurred during this week's work shut down.
3. Continued dewatering operations to remove nuisance water in Lake 4, Lake 4 and West Lake and to drawdown the water levels in A-Frame Pond to facilitate the work.

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Upcoming Work *(One week look ahead. Week of 2/17/2020 to 2/21/2020)*

1. Lake 4 upstream embankment/dam (Lake 3 embankment) - continue placing clay core and zoned embankment fill in completed excavations. Fill upstream embankment with spoils and Lake 4 flood deposited sediment.
2. Lake 4 downstream embankment/dam - continue installing formwork and rebar in the outlet towers and outlet pipe between the towers; begin placing clay core and zoned embankment fills
3. Lake 4 dam spillway – finalize all sub-grade excavations and begin placement riprap and bedding
4. Lake 4 flood deposited sediment removal – haul and place excavated material unsuitable for embankment fill into the sediment disposal area within West Lake.
5. Clough and True Ditch – continue reconstruction ditch embankment.
6. West Lake dam – continue formwork and rebar installation for the outlet tower and pipe.
7. A-Frame - Begin backfill around outlet box culverts
8. Continue dewatering operations to remove nuisance water from project site.

Additional Notes

1. February 18th Weekly construction process meeting was canceled due to weather.
2. N. 61st and 63rd streets between SH 66 and Hygiene Rd. will be temporarily closed to thru traffic for up to two months starting as of Jan. 20.
3. Project website for updates and information: https://www.bouldercounty.org/open-space/management/lake-4-west-lake-a-frame-pond/

2/10: A-Frame Outlet Culvert looking northeast.

2/11: Looking east at the West Lake outlet tower.

2/11: Dewatering of Lake 4 outlet tower 1 foundation.

2/12: Lake 4 bottom looking to the east

2/12: Lake 3 Embankment looking to the southwest after some snow clearing by a dozer.

2/13: West Lake looking to the west to the Lake 4 spillway.

40.17 °N, **105.16** °W

Longmont, CO Weather History

28° VANCE BRAND STATION (/WEATHER/US/CO/LONGMONT/KLMO?CM_VEN=LOCALWX_PWSDASH) | CHANGE

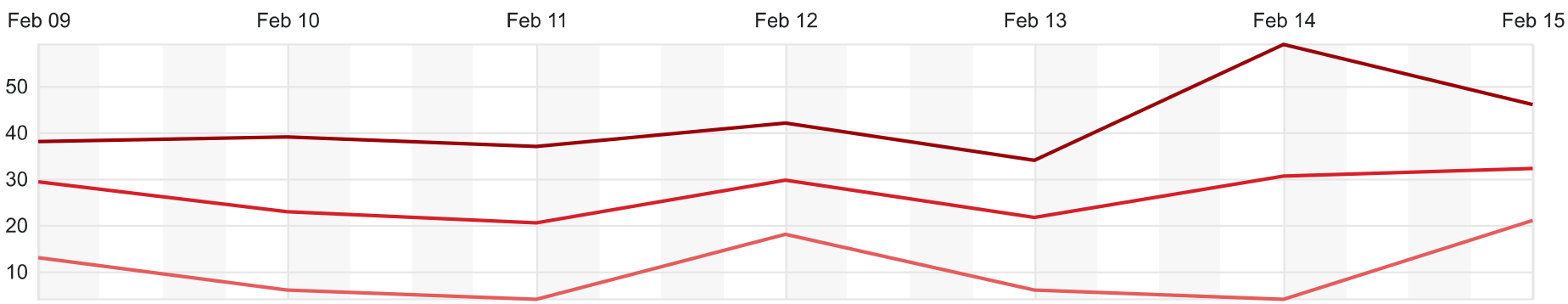
HISTORY (/HISTORY/DAILY/US/CO/LONGMONT/KLMO)

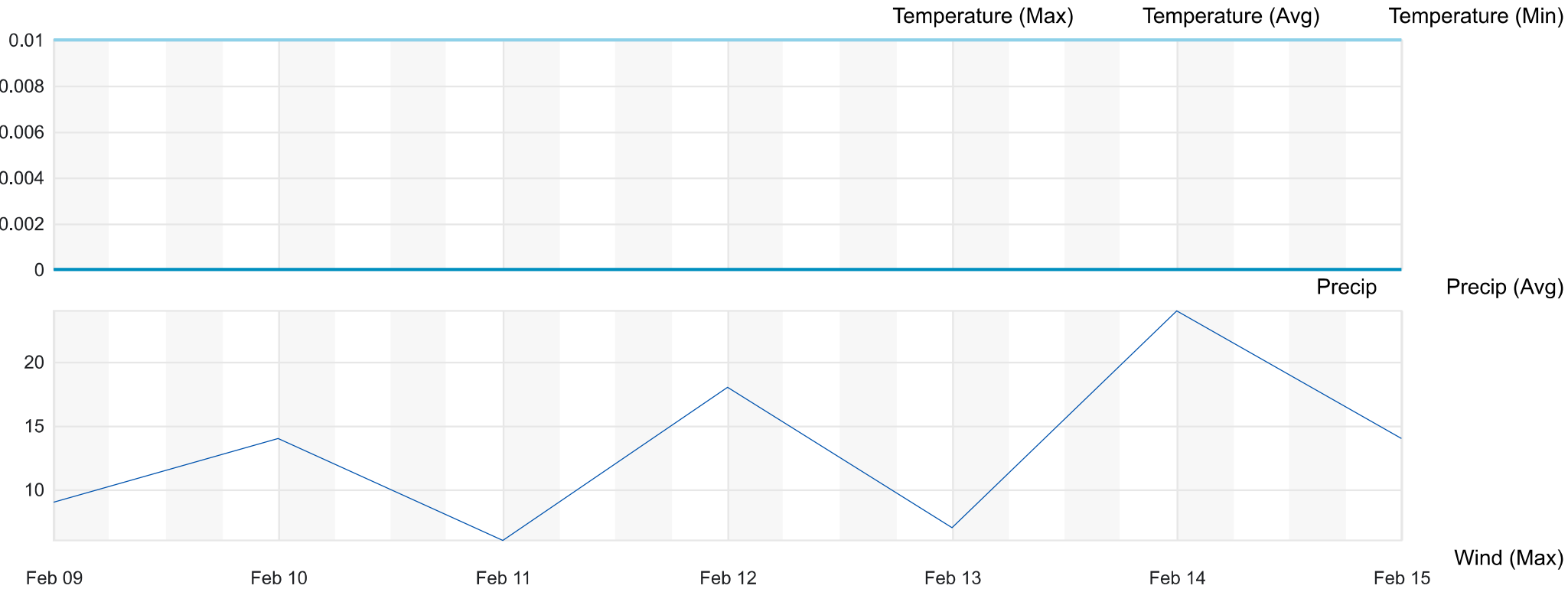
- TODAY (/WEATHER/US/CO/LONGMONT/KLMO)
- HOURLY (/HOURLY/US/CO/LONGMONT/KLMO)
- 10-DAY (/FORECAST/US/CO/LONGMONT/KLMO)
- CALENDAR (/CALENDAR/US/CO/LONGMONT/KLMO)
- HISTORY (/HISTORY/DAILY/US/CO/LONGMONT/KLMO)
- WUNDERMAP (/WUNDERMAP?LAT=40.17&LON=-105.16)

Daily | **Weekly** | Monthly

(/history/daily/us/co/longmont/KLMO/date/2020-2-10) **(/history/weekly/us/co/longmont/KLMO/date/2020-2-10)** (/history/monthly/us/co/longmont/KLMO/date/2020-2)

February | 10 | 2020 | View





Summary

Temperature (° F)	Max	Average	Min
Max Temperature	59	42.14	34
Avg Temperature	32.24	26.7	20.51
Min Temperature	21	10.29	4

Dew Point (° F)	Max	Average	Min
Dew Point	31	15.97	0

Precipitation (Inches)	Max	Average	Min	Sum

Temperature (° F)	Max	Average	Min	▲
Precipitation	0.00	0.00	0.00	0.00
Snowdepth	0.00	0.00	0.00	0.00

Wind	Max	Average	Min	▲
Wind	24	4.03	0	
Gust Wind	35	1.25	0	

Sea Level Pressure	Max	Average	Min	▲
Sea Level Pressure	25.16	24.92	24.7	

Daily Observations

Time	Temperature (° F)			Dew Point (° F)			Humidity (%)			Wind Speed (mph)			Pressure (Hg)			Precipitation (in)
Feb	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
9	38	29.3	13	31	22.3	9	86	75.6	52	9	3.5	0	25.1	25.0	24.8	0.00
10	39	22.9	6	24	15.5	2	89	75.6	44	14	4.1	0	25.2	25.0	24.9	0.00
11	37	20.5	4	21	11.2	0	89	70.4	37	6	1.7	0	25.1	24.9	24.8	0.00
12	42	29.7	18	27	17.4	9	89	63.0	33	18	5.7	0	25.0	24.9	24.7	0.00
13	34	21.6	6	21	15.4	2	89	77.6	53	7	1.8	0	25.0	25.0	24.9	0.00
14	59	30.6	4	23	11.9	0	86	55.0	14	24	6.3	0	24.9	24.8	24.7	0.00
15	46	32.2	21	24	18.1	12	87	59.6	26	14	5.2	0	25.0	24.9	24.8	0.00