

# Lake 4, West Lake and A-Frame Dam Rehabilitation

## Weekly Construction Update Report

1/6/2020 to 1/10/2020

**Date:** 1/15/2020

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

**Location:** Boulder County Open Space west of Hygiene, CO

**Contractor:** Kirkland Construction

**Weather & Site Conditions:** Dry, cold weather

**Update by:** Obadiah Broughton, Boulder County



### Work in Progress/Completed

1. Project re-start initiated on Jan. 6th
2. Started Lake 3 embankment excavation of sub-grade foundation and clay-core trench; located existing slurry wall tie-in; initial placement of embankment material on downstream side of clay-core trench.
3. West Lake Dam foundation prep for outlet tower and pipeline. Tied rebar and had rebar inspection in anticipation of concrete pour for tower foundation on Tuesday Jan. 14th.
4. Mitigated Foothills Outlet Ditch nuisance water coming into work area by implementing a temporary cutoff ditch to Kidney Pond.
5. Demo'd and removed the final portion of Foothills Outlet Ditch siphon and started additional excavation of embankment and new outlet siphon foundation .
6. Haul road construction through the bottom of Lake 4 and the Lake 4 breach to provide access to West Lake Dam and West Lake disposal site was completed.
7. Longmont Power temporarily re-located two power poles out of the A-Frame outlet work area on 61st Street.
8. Material generation/processing plant was finalized in Lake 4 bottom and approx. 8700 tons of rip-rap bedding was processed.
9. Prepped the clay material source site for clay delivery and began hauling clay to the project site. Deliveries of filter sand for Lake 3 Dam started.
10. Continued dewatering operations to remove nuisance water in Lake 4, Lake 4 and West Lake and re-started the dewatering operation in A-frame Pond



1/6: Test pit to locate bedrock for Lake 3 embankment sub-grade foundation and clay-core trench tie-in



1/9: Initial excavation of Lake 3 embankment sub-grade foundation and clay-core trench

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### Upcoming Work *(One week look ahead. Week of 1/13/2020 to 1/17/2020)*

1. West Lake Dam outlet tower and pipeline: concrete pour for tower foundation is scheduled for Tuesday Jan. 14<sup>th</sup>; fusing of 20" HDPE outlet pipe to commence; final foundation prep prior to form work
2. Continued excavation of West Lake Dam embankment and new outlet siphon foundation.
3. Continued excavation of subgrade and clay core trench to bedrock for Lake 3 embankment repair. Begin placement of clay core and filter sand for Lake 3 embankment
4. Finalize sub-grades and foundations for Lake 4 Dam towers. Prepare forms, rebar.
5. Begin Lake 4 spillway sub-grade excavation.
6. Continue to import clay material to project site for West Lake, Lake 3 embankment, and Lake 4 dam reconstruction.
7. Continued dewatering operations to remove nuisance water from project site.

### Additional Notes

1. Weekly construction process meeting was held at the jobsite trailer on Jan. 14<sup>th</sup>
2. To facilitate the A-Frame Pond outlet structure and Lake 4 pipeline outlet pipe work, N. 61<sup>st</sup> and 63<sup>rd</sup> streets will be temporarily closed for up to two months starting on Monday Jan. 20<sup>th</sup>
3. Project website for updates and information:  
<https://www.bouldercounty.org/open-space/management/lake-4-west-lake-a-frame-pond/>



Looking north on 1/10: Compacted Lake 3 embankment



1/10: Roller test for Lake 3 embankment

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1/9: West Lake Tower formed slab and rebar



Looking north 1/7: Demolition of Foothills Outlet Ditch siphon intake structure



1/7: Demo'd Foothills Outlet Ditch siphon pipe



3 1/9: Additional rebar onsite at West Lake Dam tied and ready for placement in outlet structure.



Longmont, CO  
37 °F Fair

Recent Cities

Longmont, CO (weather/us/co/longmont/40.19,-105.18)

40.17 °N, 105.16 °W

# Longmont, CO Weather History



37° 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/40.19,-105.18/date/2020-01-06) (1-6)

1-6)

1-6)

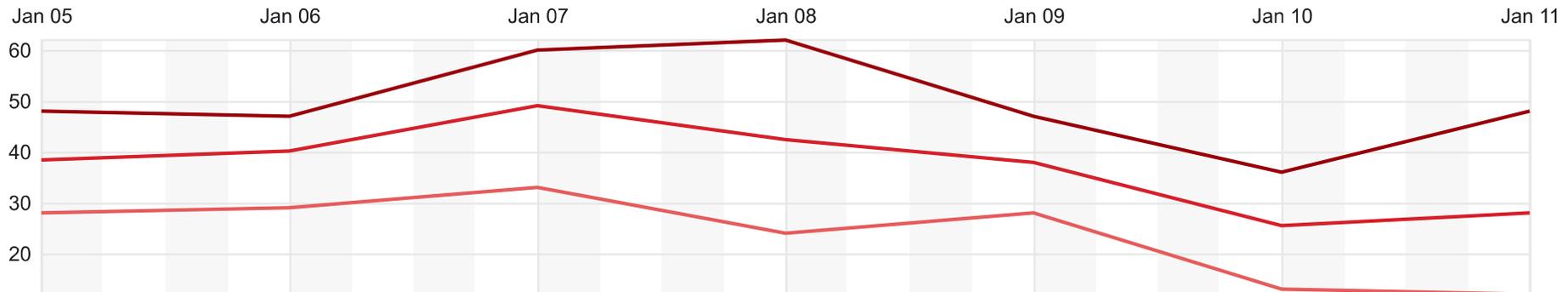
1)

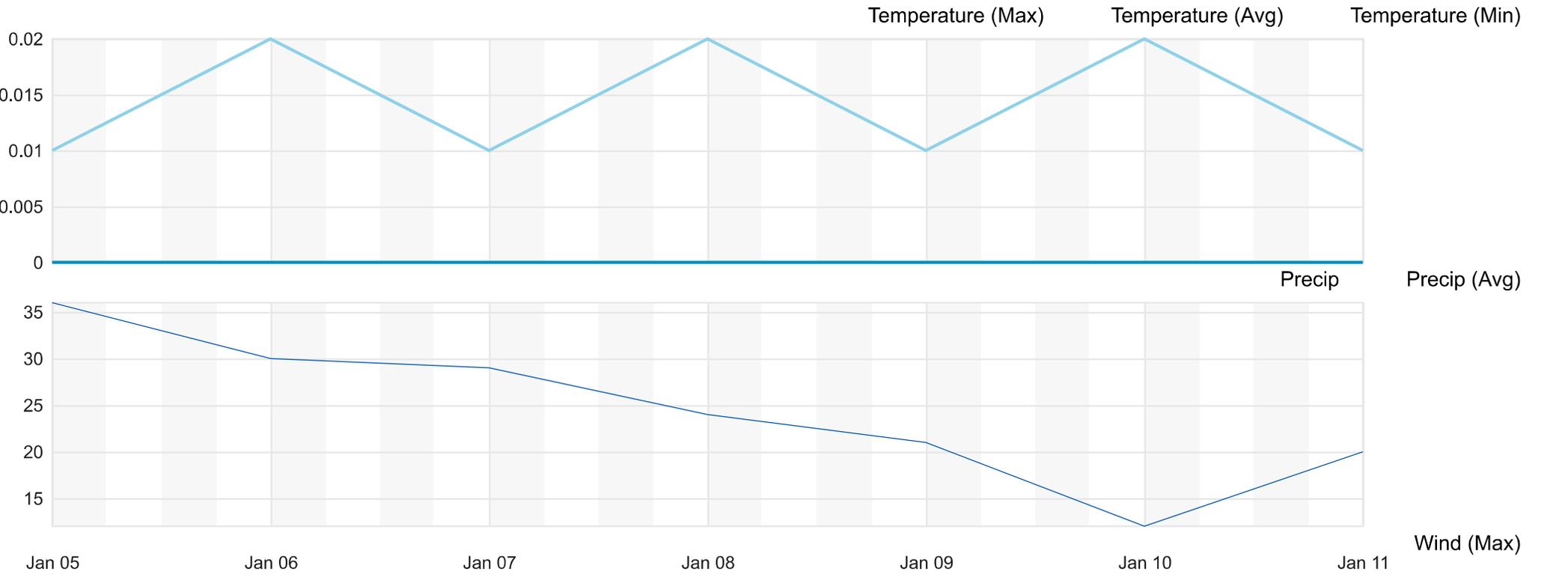
January

6

2020

View





# Summary

Temperature (° F)	Max	Average	Min	▲
Max Temperature	62	49.71	36	
Avg Temperature	49.06	37.34	25.47	
Min Temperature	33	23.86	12	
Dew Point (° F)	Max	Average	Min	▲
Dew Point	27	12.86	2	
Precipitation (Inches)	Max	Average	Min	Sum ▲

<b>Temperature (° F)</b>	Max	Average	Min	▲
Precipitation	0.00	0.00	0.00	0.00
Snowdepth	0.00	0.00	0.00	0.00
<b>Wind</b>	Max	Average	Min	▲
Wind	36	7.79	0	
Gust Wind	58	7.33	0	
<b>Sea Level Pressure</b>	Max	Average	Min	▲
Sea Level Pressure	25.19	24.9	24.54	

# Daily Observations

Time	Temperature (° F)			Dew Point (° F)			Humidity (%)			Wind Speed (mph)			Pressure (Hg)			Precipitation (in)
Jan	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
5	48	38.4	28	27	16.2	11	67	42.7	26	36	7.3	0	25.2	25.1	25.0	0.00
6	47	40.2	29	16	6.3	2	58	25.7	17	30	12.8	0	25.1	25.1	25.0	0.00
7	60	49.1	33	17	13.3	7	51	25.1	14	29	12.8	0	25.1	25.0	24.9	0.00
8	62	42.4	24	23	14.3	4	71	37.5	12	24	6.3	0	24.9	24.7	24.5	0.00
9	47	37.9	28	20	15.1	9	64	40.8	24	21	6.6	0	24.8	24.7	24.6	0.00
10	36	25.5	13	24	14.3	8	80	64.4	42	12	3.7	0	25.0	24.9	24.8	0.00
11	48	28.0	12	16	10.4	7	82	53.4	22	20	4.9	0	25.0	24.8	24.7	0.00