

# Public Works Report

## October 2023

### **Front Range Landfill (FRL) Updates**

The Facilitator Request for Proposals (RFP) for FRL Community Stakeholders process is complete and Kearns and West was the selected firm. We will be working with them over the course of the next several weeks to develop the selection process.

### **Capital Improvement Projects**

#### **NWRF Solar**

Project includes an approximately 5.5-acre solar array east of the facility that could cover close to 100% (1.7 MW) of the building's current energy use. Grant funding is being explored to support this project. Waiting on additional information from Iconergy, which has been conferring with United Power and mapping electrical feeds through multiple meters. Grant funding and new IRA cash back in lieu of tax credits are being explored to support this project. Staff met with Iconergy and explored options to reduce peaking with the use of batteries, Iconergy is putting together a proposal to begin detailed design.

#### **North Water Treatment Facility (NWTF) Design**

Design has kicked off on this second Water Treatment Facility at the NWRF Facility site. This facility will treat Boulder Creek water and Filly Lake water initially, then later be expanded to treat NISP, and possibly be a joint-use project with Left Hand Water District to treat their NISP water, for reasons of economy of scale. This phase of the design will progress us to 15% drawings, site conceptual layout, treatment alternatives, green infrastructure alternatives (Triple Bottom Line) to include a large solar array. Staff met in the last month with water counsel and consultant Burns and McDonnell and has decided to design a 6.67 MGD Reverse Osmosis plant.

#### **Streetlight Acquisition:**

Negotiations to purchase Town streetlights from Xcel Energy and United Power continue. Town representatives and Tanko presented at a recent United Power board meeting in late October to discuss their proposed power rate structure. United Power's initial response is to continue with the lumen-based rate structure that they are offering. The Town and Tanko are advocating for a watt-based structure mimicking what Xcel Energy is offering for their streetlights in Erie. Purchase date could be as early as quarter 1 in 2024. The town is working with Tanko to establish a Streetlight Master Plan to guide streetlight related development moving forward.

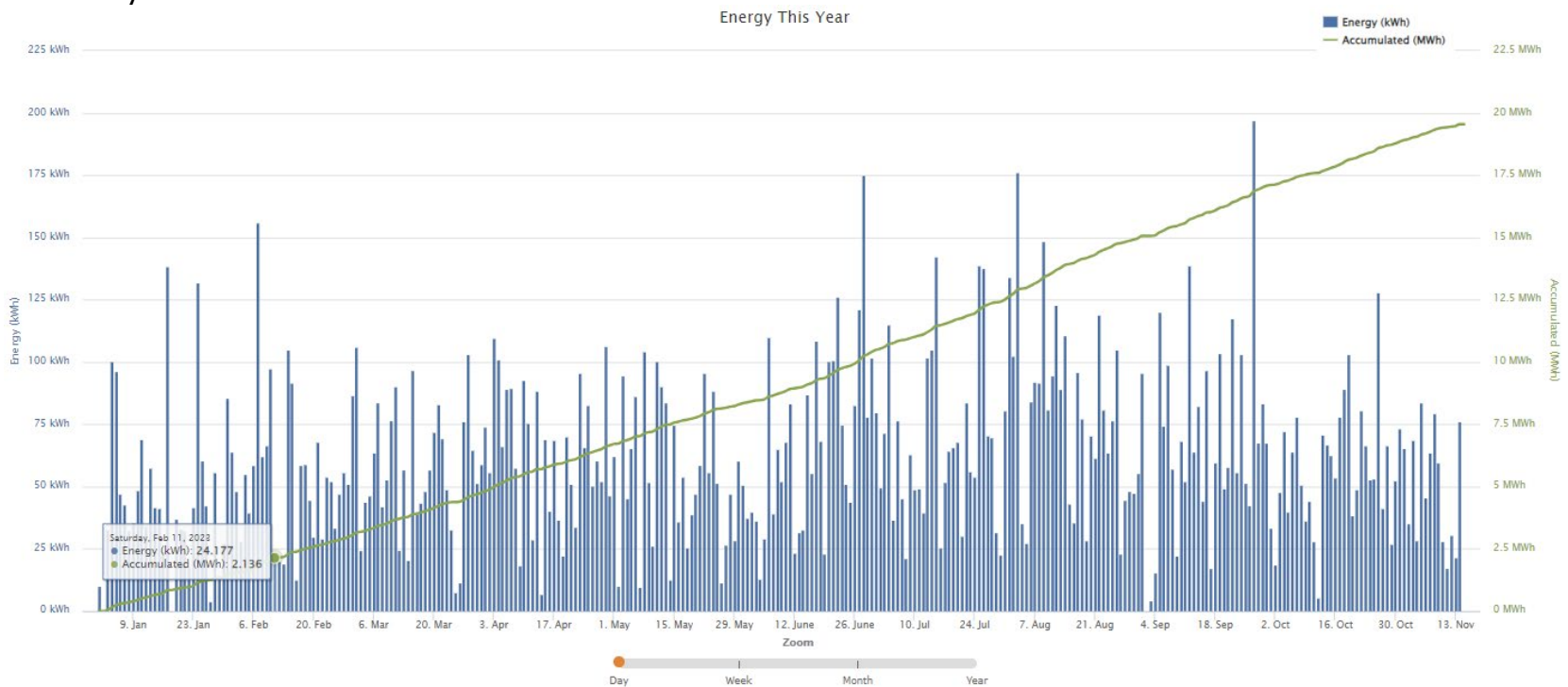
# Sustainability and Water Conservation

## Sustainability Division General Updates:

The PV solar array at the new Sustainability Division office at 625 Pierce Street is still waiting on Xcel for final interconnection. The Air Source Heat Pump is running well, and the building will soon be net zero for its carbon emissions. Sustainability will have an open house in early 2024 to showcase the building and its renovations.

## Air Quality & Transportation:

- The Sustainability Division continues to participate in the Boulder County Regional Transportation Electrification cohort. We are still waiting to hear about Boulder County's grant of which Erie committed as a project partner along with most other Boulder County municipalities.
- [Indoor air quality rebates](#) continue to trickle in.
- We are exploring non-metered level 2 EV charger opportunities at Leon A Worl Service Center (LAWSC) as currently Town EVs at this location are charged via a standard 120-volt outlet. We should have at least one level 2 charger installed at LAWSC by the end of 2023.



*The above image outlines the total energy used by the Town of Erie ChargePoint EV charging stations since the start of 2023. GHG emissions avoided per month (and EV charger use) have steadily increased in 2023. Since January 1<sup>st</sup>, Town of Erie EV charging stations have used 19.549 MWh of energy, avoiding a total of 13,880 kg of greenhouse gas emissions.*

## **Energy:**

- [Solar United Neighbors \(SUN\) Boulder County Co-op](#): This roof-top solar bulk purchase campaign is already the most successful campaign that SUN has facilitated. 12 Erie residents have signed up to participate in the 252-member group from all of Boulder County and Erie. The program members selected Smart Wave Solar for their installer on November 2<sup>nd</sup> and did so for several reasons including their competitive pricing structure and high-quality product. Check out the campaign website and resources here: <https://www.solarunitedneighbors.org/co-ops/colorado/boulder-county-solar-co-op/>.
- TOE [Energy Efficiency Rebates](#) to date:
  - Increased participation with 24 rebate recipients to date since the program's 8/1 launch.
  - Total rebate funding spent: \$9,769.99
  - Social media and utility billing advertising will continue through the end of the year.

## **Waste, Recycling, & Composting:**

- David Winsett, Part-time Waste Diversion Technician, will begin on November 27<sup>th</sup> and will cover weekend operations at the Recycling Center moving forward.
- Erie's 2023 Tree Advisory Board and Sustainability Advisory Board sponsored [Leaf & Pumpkin Collection Event](#) is November 18<sup>th</sup> from 9-3 at the Recycling Center. These materials will be continuously collected throughout the fall with special support from volunteers on site on the 18<sup>th</sup>.
- [Resource Central](#) will begin advertising a weekly re-use material pickup in Erie. The Town will begin advertising this diversion opportunity soon with the support of Resource Central.
- Sustainable Purchasing Policy department specific focus groups began in mid-November through the support of Lotus Sustainability & Engineering. An EV Procurement Plan conversation is occurring as part of this project. Draft policies will be developed from these conversations with time for department review and feedback as well as senior leadership. The goal is to have both a Sustainable Purchasing Policy and EV Procurement Policy ready for adoption by February of 2024.

## **Outreach and Education:**

- Sustainability launched its first sustainability and water conservation focused newsletter on November 1<sup>st</sup> and will continue the first of each month moving forward. If you are interested in receiving this newsletter, please signup on the Town of Erie Notify Me website under "sustainability": <https://www.erieco.gov/list.aspx>.
- Sustainability is hosting a tour for town staff and board members of [GEOS, a net zero neighborhood in Arvada](#) from 1:30-3:30 on December 15<sup>th</sup>. If you are interested in participating, please email Eryka Thorley directly, [ethorley@erieco.gov](mailto:ethorley@erieco.gov).
- Sustainability participated in the [C2ES](#) Climate Resilient Economies 2<sup>nd</sup> Roundtable event on November 14<sup>th</sup> in Denver. This event convened sustainability staff, economic development, and business leaders from around the Front Range. The Northern Front Range was chosen as one of 10 locations for this unique incubator opportunity with Erie being one of the original applicants.

## **Water Conservation & Efficiency (as of November 7th)**

1. [Turf Replacement Rebate Program](#) – Program has ended for 2023.
  - A. 46 Boulder County participants completed projects: \$67,391.61 spent in rebate funding in Boulder County to date representing 47,477 sq. ft. of total turf conversion.
  - B. 30 Weld County participants completed projects: \$40,390.00 in rebates spent and 34,571.75 sq. ft. of landscape conversion.
  - C. Total program numbers for 2023:
    1. \$107,781.61 rebate dollars spent.
    2. 82,018.75 sq. ft. of landscape conversion
2. Post-participation turf program survey was sent out to participants from 2022 and 2023 programs on 11/7. So far there are 75 responses.
3. Water efficiency rebates continue to be steadily utilized by residents with 143 participants to date representing \$14,556.47 in rebates funded.
4. Utility billing and sustainability staff continue to work together to send out weekly leak alerts to customers showing leaks on their smart meters.

### Accounts with EyeOnWater

# 22%

Out of 11,985 Accounts



**9,311** 78%  
Without EyeOnWater

**2,674** 22%  
With EyeOnWater

### User Count

# 2,501

EyeOnWater Users

Active in the last 30 days



Active in the last 24 hours



### New Sign-ups

# 137

Sign-ups in Last 6 Months



User Sign-ups Per Month

[View All EyeOnWater Users](#)

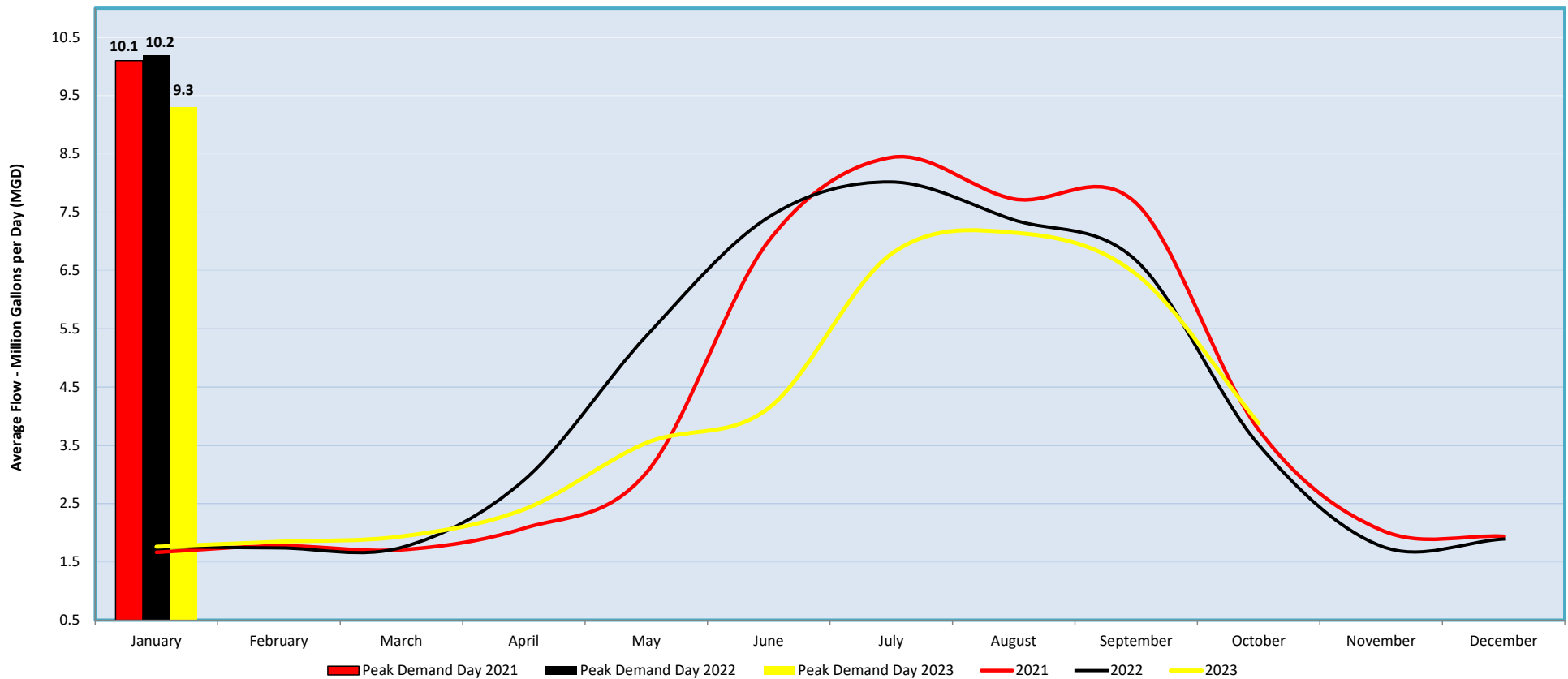
[View Detailed User Analytics](#)

# Lynn R. Morgan Water Treatment Facility (WTF)

**Average Flow Million Gallons per Day (MGD):** 2020 – 4.1 MGD 2021 – 4.3 MGD 2022 – 4.2 MGD

July 2022 set a new record for the peak daily production at 10.2 MG. February 2020 had the lowest monthly demand at 1.49 MG. As new development comes online with water saving features and smaller landscaped areas, combined with the Town's strong tier pricing and conservation messaging we are seeing water demands reacting appropriately. Overall water demands are down due to wet, cool weather this year. Our peak day this year was lower than even 2020. Typically, peak-day increases 0.5 MG each year.

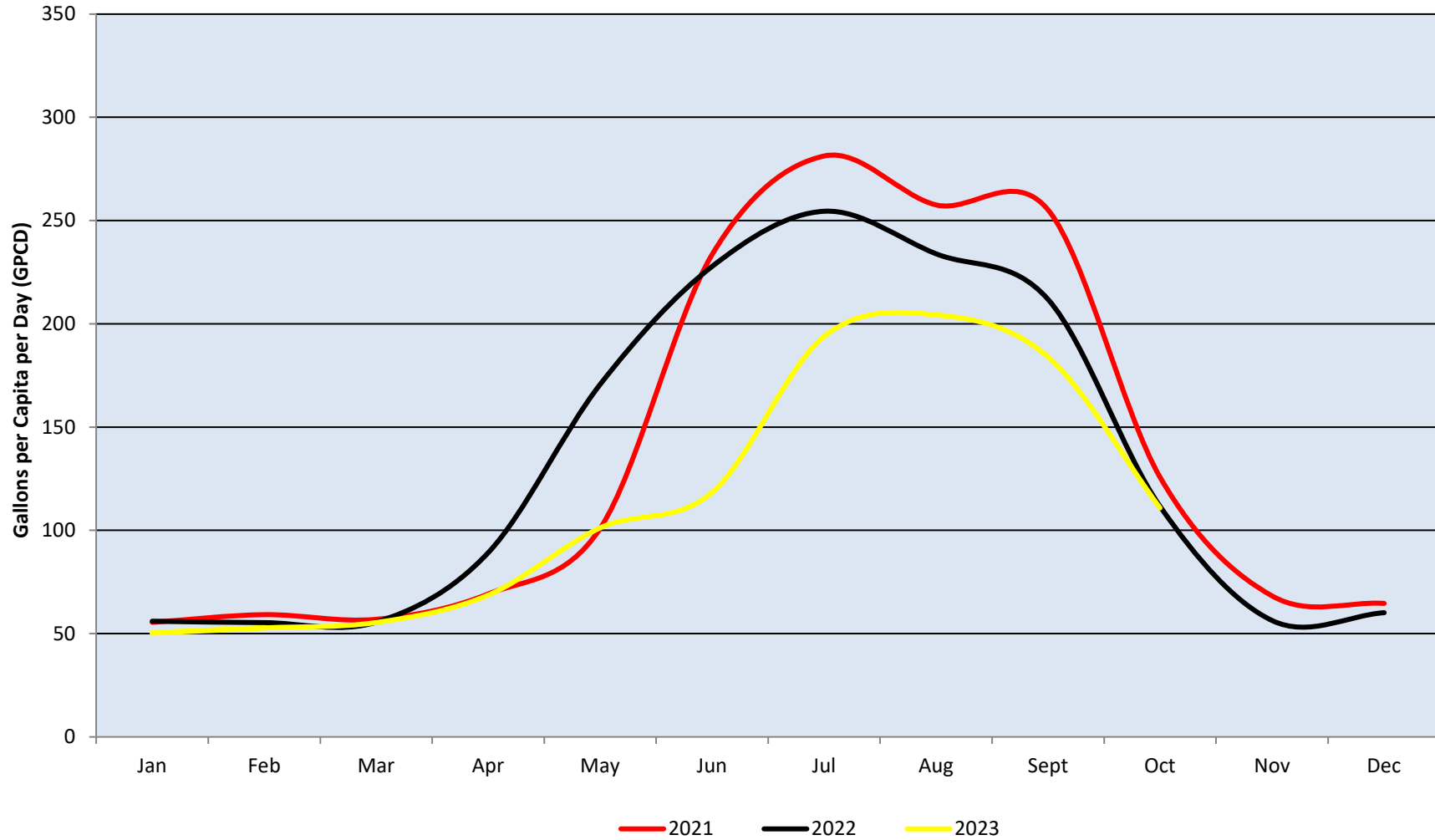
### Average Monthly Production



**Average Per Capita per Day (GPCD):**      **2020** – 143 GPCD    **2021** – 136 GPCD    **2022** – 132 GPCD

July 2020 had the highest average daily usage at 294 gallons GPCD. January 2023 had the lowest usage since 2019 at 50 GPCD. Indoor demands during winter remain relatively stable. Drought messaging, along with wetter conditions, seems to be helping curb excessive use. Reducing summer irrigation and increasing reuse water availability will reduce reliance on treated water supplies in the future. Outdoor irrigation amounts to roughly 40% of annual deliveries, the shift in demand is notable.

### Average Daily Usage Per Capita

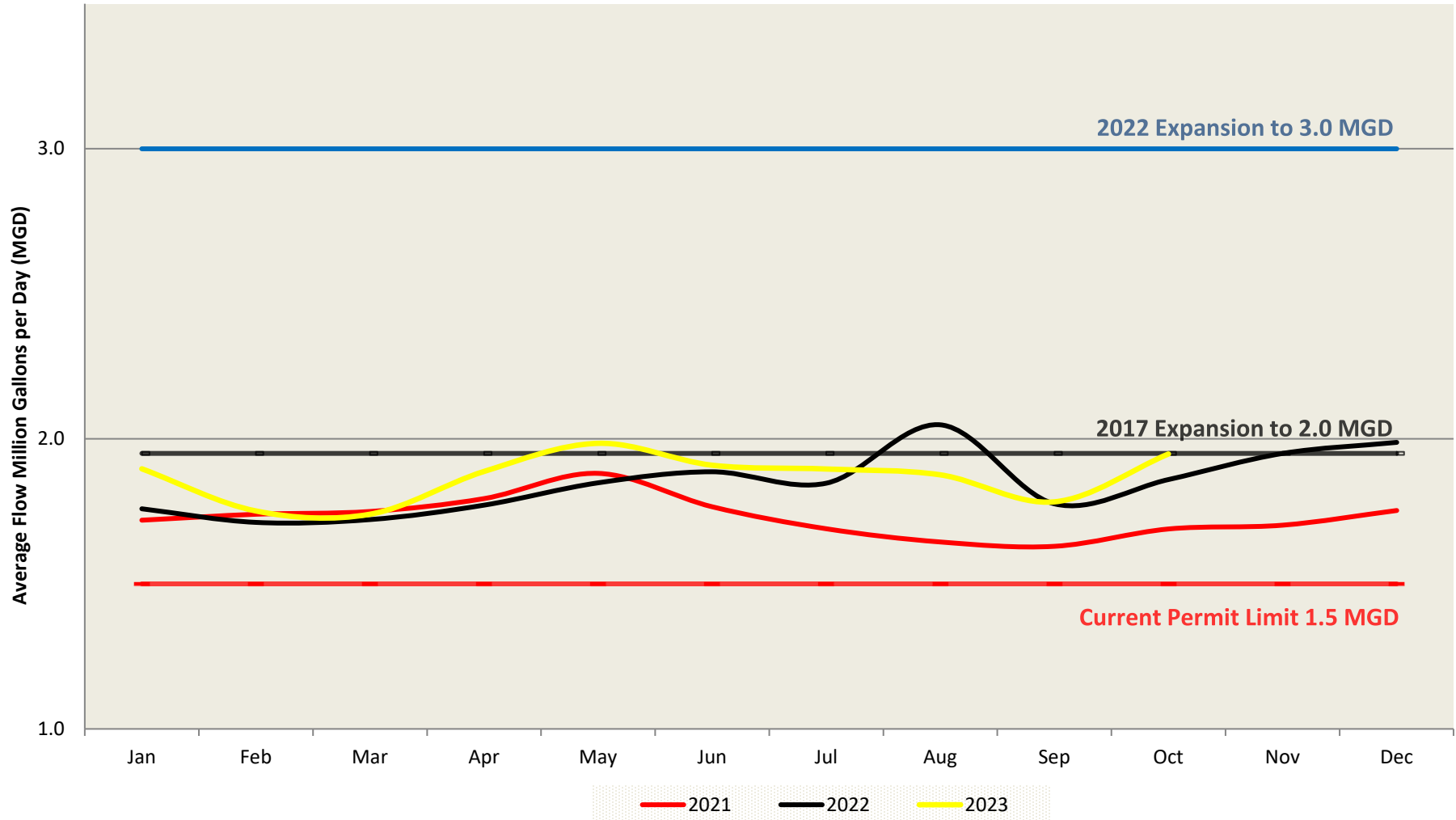


# North Water Reclamation Facility

**Average Flow MGD:** 2020 - 1.66 MGD 2021 - 1.73 MGD 2022 - 1.85 MGD

January 2020 had the lowest average flow of 1.53 million gallons per day (MGD). August 2022 set a high average monthly flow of 2.05 MGD, likely due to microburst rainstorms that month.

## Average Monthly Flows

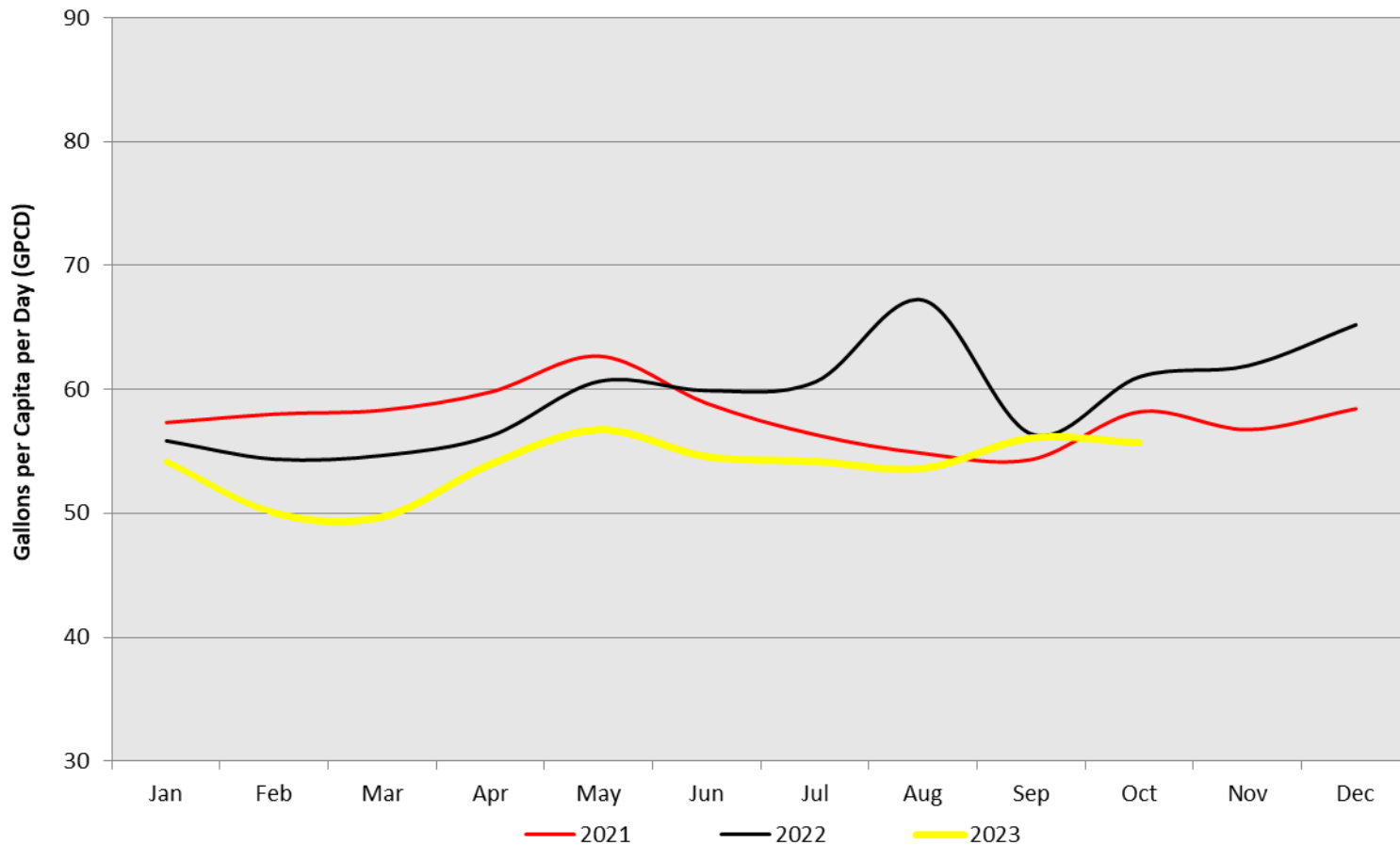




**Annual Gallons Per Capita per Day (GPCD):    2020 - 58 GPCD    2021 - 58 GPCD    2022 - 59 GPCD**

This graph depicts customer indoor water usage. August 2022 had the highest usage at 67 GPCD, again due to intense rain. February 2023 had the lowest usage at 50 GPCD. Fall, with relatively little precipitation and dropping groundwater levels, is typically a good indicator of true daily flows. Even with inflows due to excessive precipitation, indoor water usage continues to drop due to new construction and water saving features as well as a relatively new and non-leaking sewer system.

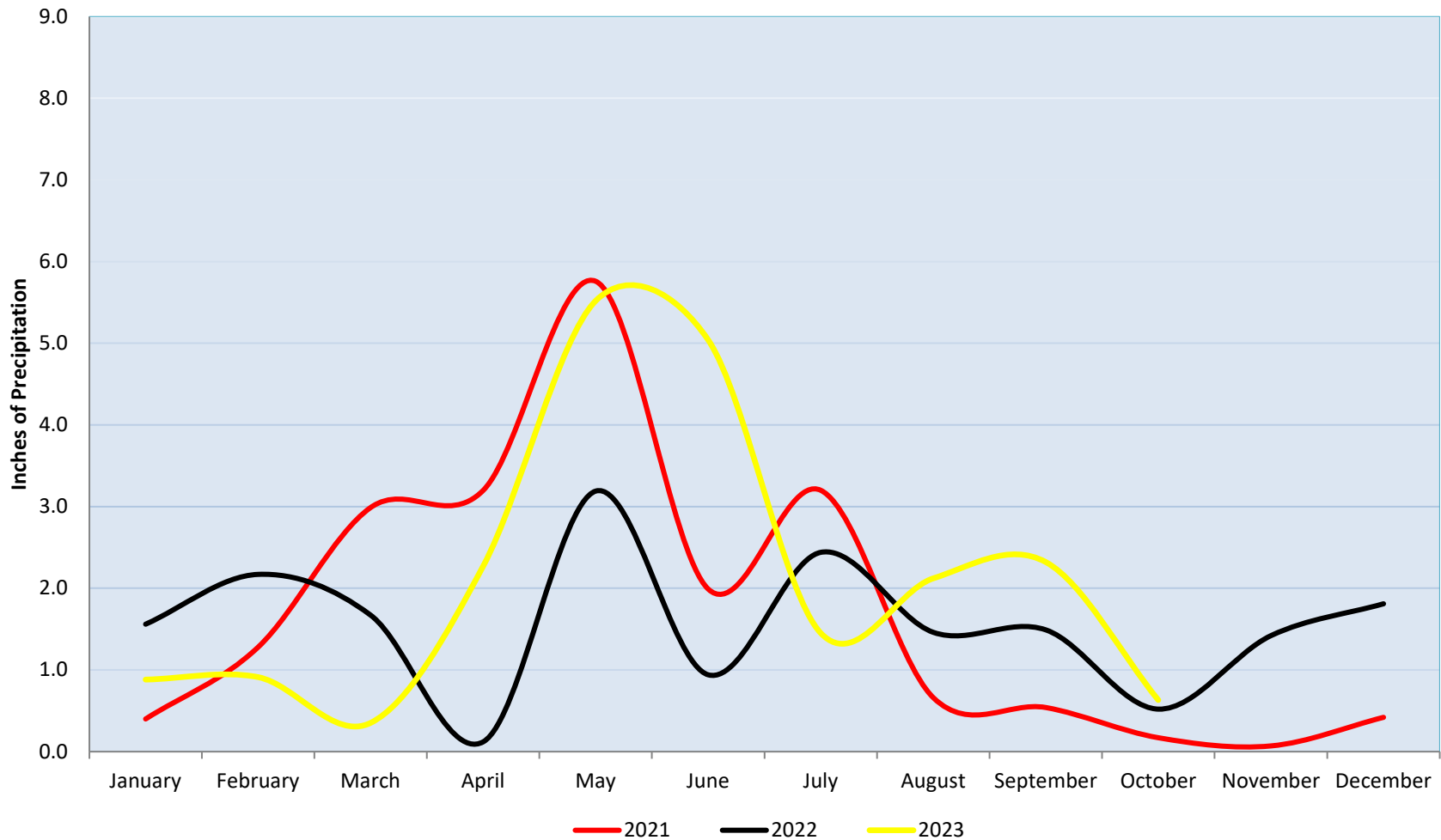
**Average Daily Usage Per Capita**



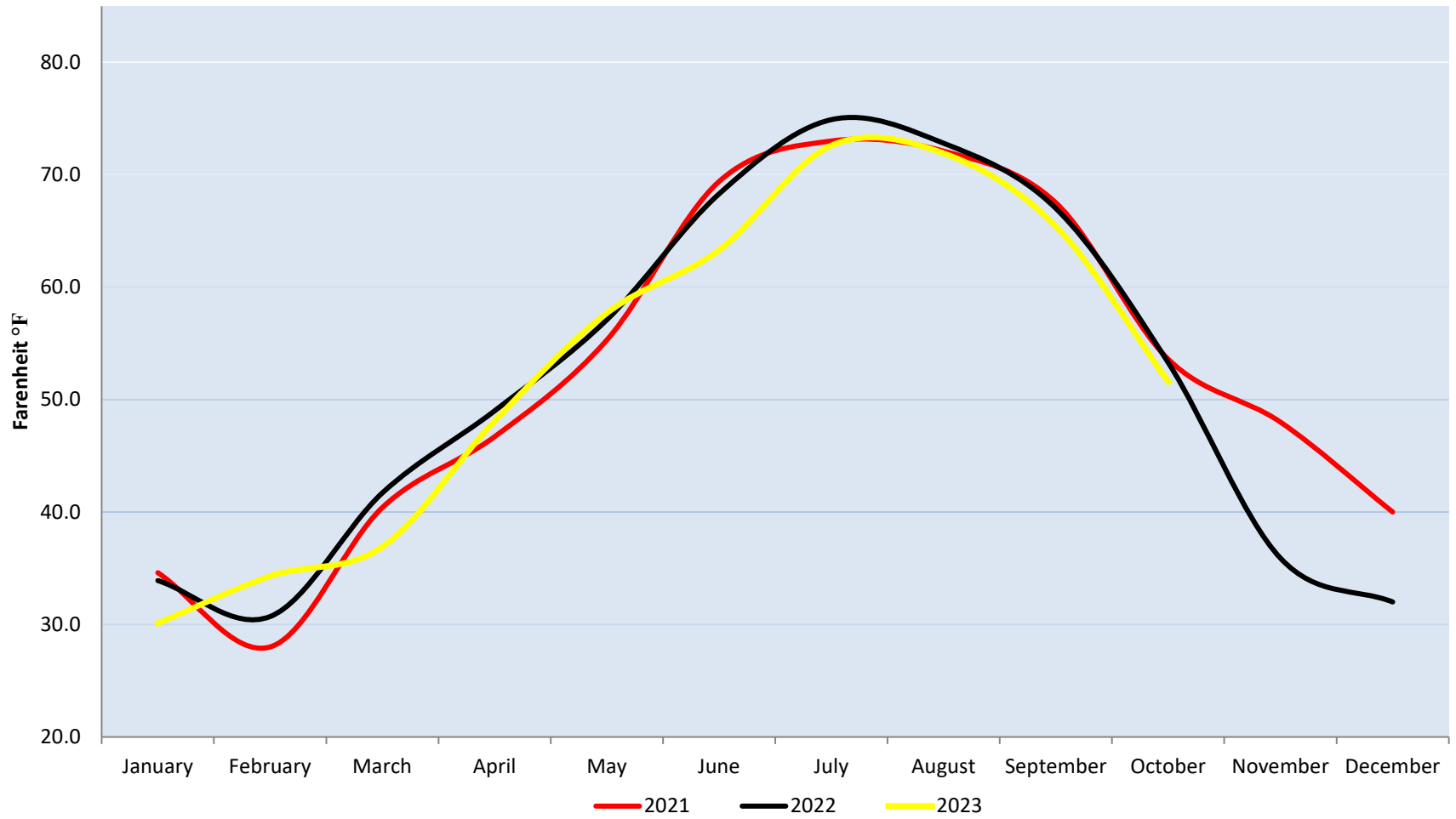
## Monthly Data for Boulder – National Oceanic and Atmospheric Administration (NOAA) & Natural Resource Conservation Service (NRCS)

NOAA is predicting 33–40% below normal precipitation and 33-40% above below normal temperatures into early December. This years odd precipitation is on display in the graph below.

### Precipitation



# Mean Temperature



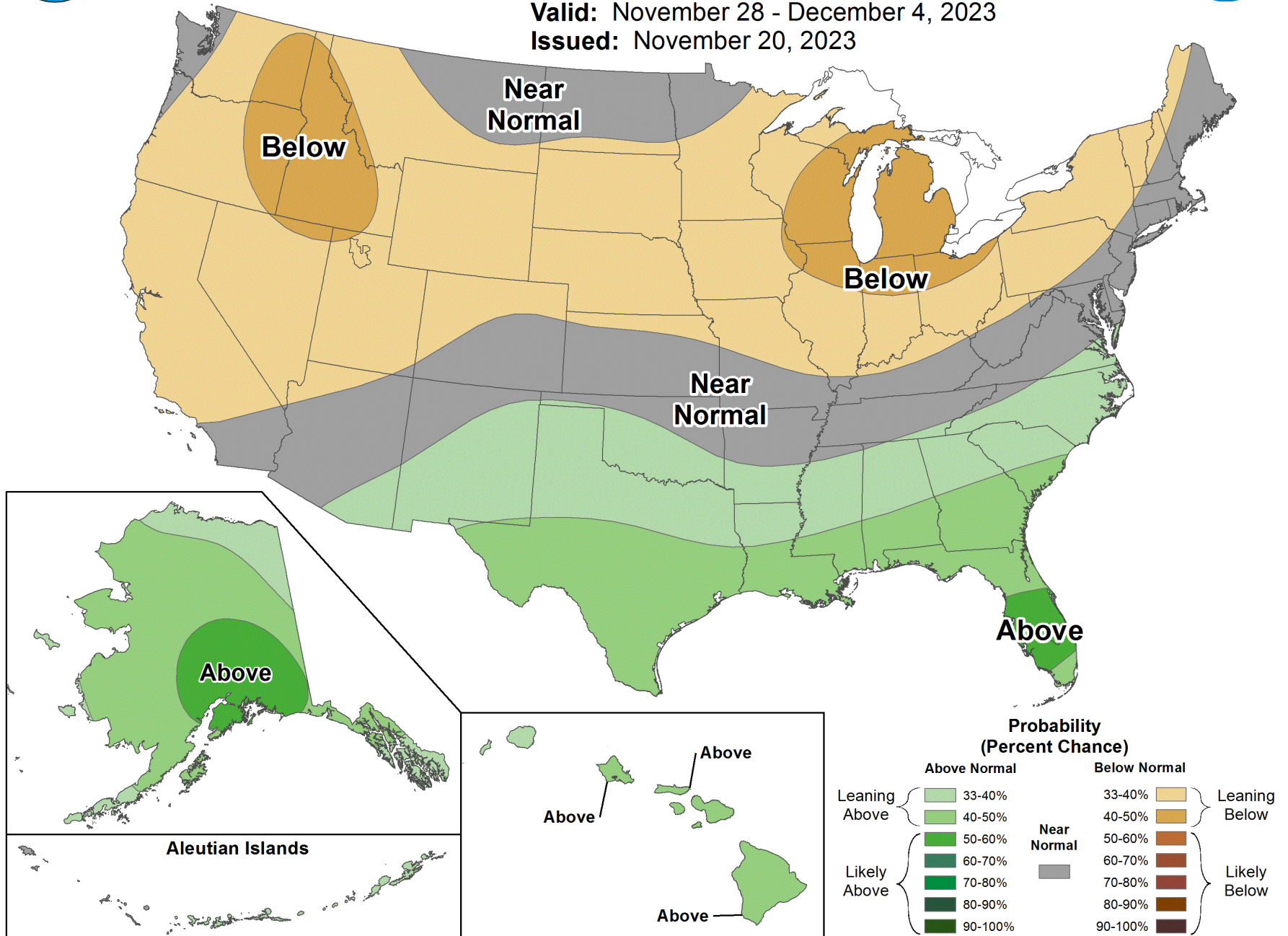


# 8-14 Day Precipitation Outlook



Valid: November 28 - December 4, 2023

Issued: November 20, 2023





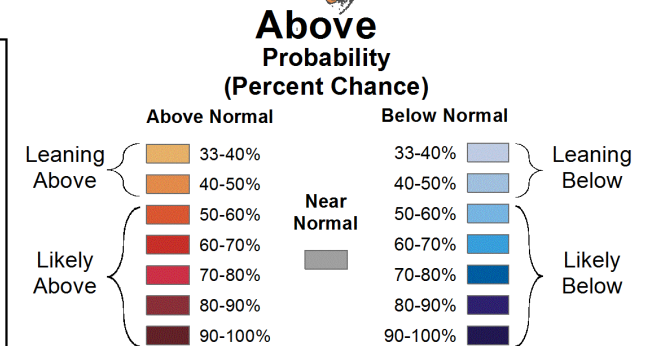
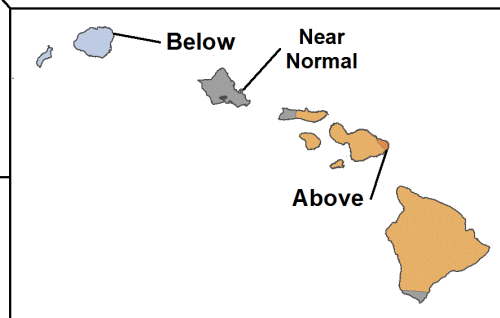
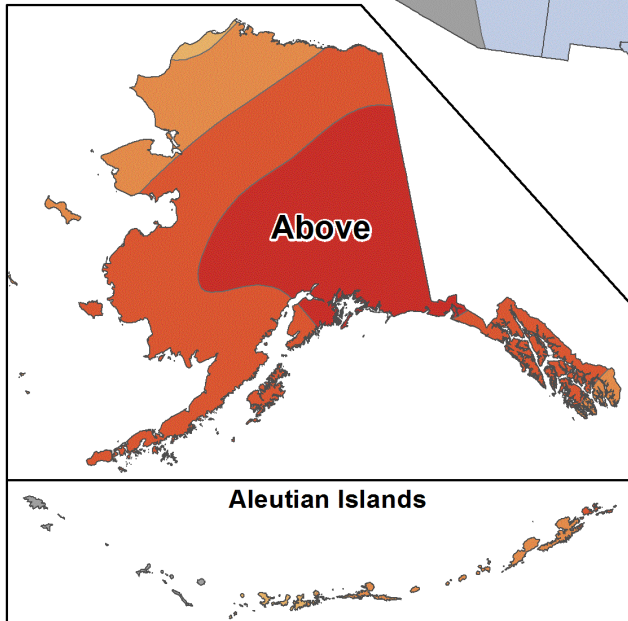
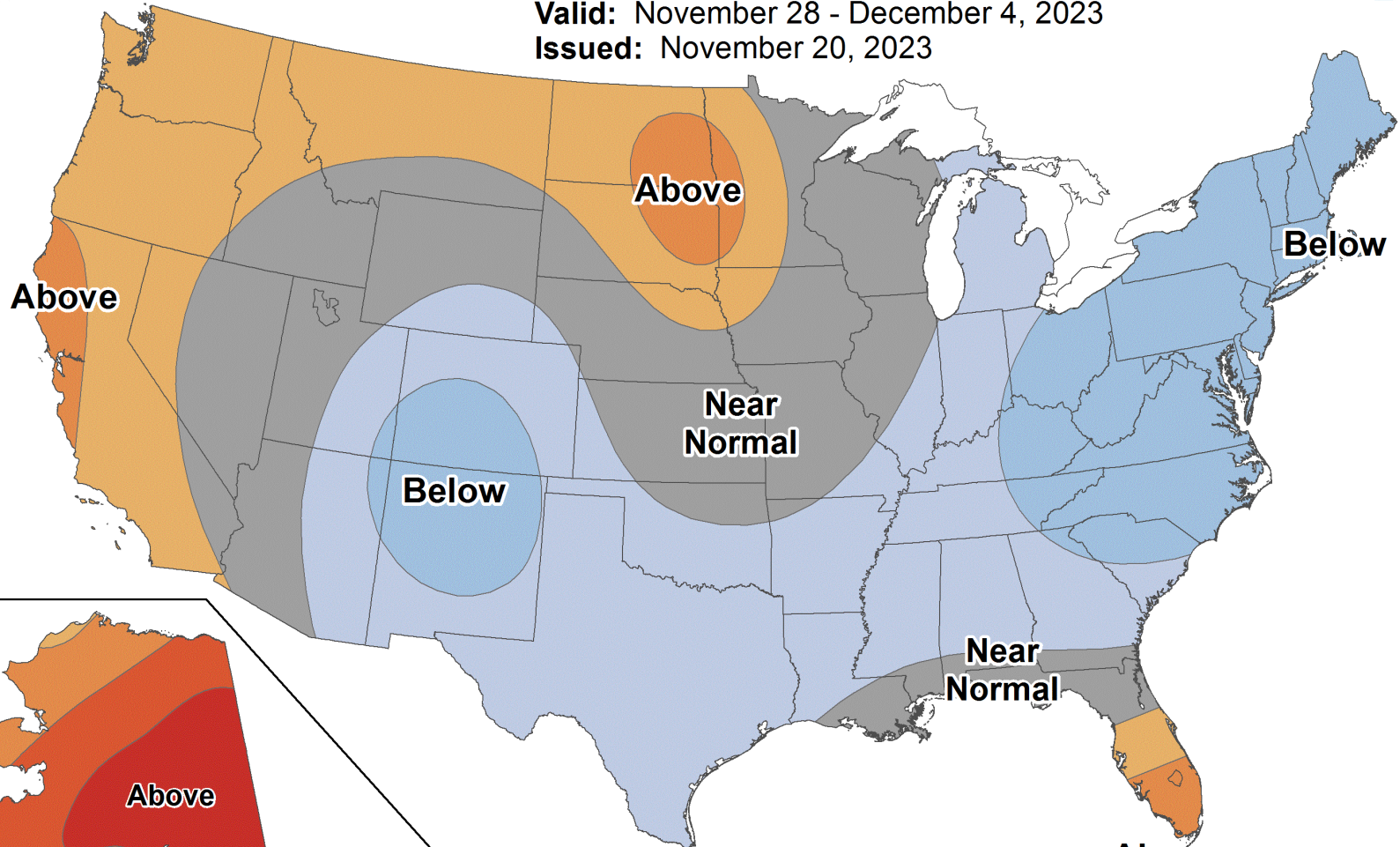


# 8-14 Day Temperature Outlook



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## Engineering Division Updates

### Land Use Projects

Project Name	Project Description	Project Status
Erie Air Park Replat D	5 Light Industrial/Hangar Bldgs - 10.340 acres	Referral Review
Erie Highlands Filing 18 FP	Residential - 124 townhome units	On Hold
Old Town - Main Street Subdivision - FP	Residential Lots	Referral Review
Lafferty Farm FP	127 Residential Lots	Referral Review
Ranchwood Town Center MS/SP	Residential Mix of Townhomes and Apartments – 288 Units	Referral Review
Colliers Hill Filing 6 – FP	Residential - 452 Single Family Units	Referral Review
Old Town - Erie Junction - FP	Residential - 10 duplex buildings/1 tri-plex building	Referral Review
Redtail Ranch PP	Residential - 546 lots	Referral Review
Erie Village Filing 5 – MS/SP	Mixed use development, 38 Townhomes, 32 Single Family Residential, 30,000 sq. ft office/retail	Referral Review
Spring Hill PP	Residential Development	Referral Review
Erie Indoor Sports – FP	SE Corner of CLR and Bonnell	PP – BOT Scheduled; FP – Referral Review
Westerly PP 3	Residential - 276 units - Single Family/Paired Homes/Townhomes	Referral Review
Westerly Filing 3 FP	Residential 228 Lots	Referral Review
Canyon Creek Filing 7 FP	106 Single Family Units	Referral Review
Canyon Creek Filing 8 FP	88 Paired Homes	Referral Review
Erie Highlands Commercial	Commercial Plat	On Hold
Vista Ridge Filing 14, Lot 9	Children’s Eye Physician	Referral Review
Four Corners – Antelo Apartments	Apartments – 202 Units	Referral Review
Nine Mile Corner – Chase Bank – Lot 9	Site Plan	Referral Review
Nine Mile Corner- Chic-fil-a	Site Plan	Referral Review
Summerfield FP 1	446 Residential Lots	Final Plat Approved; Finalizing Engineering Design
North Westerly	Annexation/Initial Zoning/Pre-DA	Annexation and Pre-

		DA Approved
Summerfield PP 2	Residential	Referral Review
Parkdale Filing 5 FP	Residential	Referral Review
Vista Ridge – Little Sunshine Playhouse Preschool – SP		Referral Review
Vista Ridge – Bellco Credit Union – SP		Referral Review
Four Corners Commercial Corner – SP/FP	Commercial Corner Development	Referral Review
Vista Ridge F14 – Valvoline	Site Plan	Referral Review
Vista Ridge – Dutch Bros SP	Site Plan	Referral Review
North Westerly – Annexation and Initial Zoning	Residential and Commercial Development	Referral Review
111 <sup>th</sup> & Arapahoe	Annexation and Zoning	Referral Review

### **Development Construction Projects Status**

<b>Project</b>	<b>Status</b>
BV PK-8 School	In Acceptance Process
Compass Filing 3	In Final Acceptance Process
Compass Filing 4	In Final Acceptance Process
Flatiron Meadows Filing 12	In Final Acceptance Process
Flatiron Meadows Filing 13	In Warranty
111th Waterline Extension	In Warranty
Four Corners	Under Construction
Nine Mile MS	In Warranty
Nine Mile MF	In Warranty
Nine Mile Lowe's	In Warranty
Nine Mile Taco Bell	In Warranty
Nine Mile UC Health	In Warranty
Nine Mile Lot 3 Shops	In Warranty
Parkdale Fil 1&2	Under Construction
Parkdale Fil 3	Under Construction
Parkdale Amenity Center	Scheduling Pre-Construction Meeting
Wild Rose	In Warranty

Erie Highlands Filing 14 & 15	In Warranty
Erie Highlands Filing 16	In Warranty
Colliers Hill Filing 4D	In Warranty
Colliers Hill Filing 4E	In Warranty
Colliers Hill Filing 4F	In Warranty
Colliers Hill 4G	Under Construction
Colliers Hill 4H	Under Construction
Colliers Hill 4I	Under Construction
Colliers Hill 5	In Warranty
Erie Commons Filing 4 - 3rd Amend. Townhomes	In Final Acceptance Process
Erie Commons Filing 4 - 4th Amend. Commercial Plat	In Warranty
Erie Commons Filing 4 - 5th Amend. Wee Cottages	In Warranty
Erie Commons Filing 4 - Circle K	In Initial Acceptance Process
Erie Commons Filing 4 - Ziggy's Coffee	Under Construction
Erie Commons Filing 4 - Premier Members Credit Union	In Warranty
Sunset	Under Construction
Westerly Filing 1	In Warranty
Westerly Filing 2	Under Construction
Westerly Zone 4 Waterline	Scheduling Pre-Construction Meeting
Westerly Amenity Center	Under Construction
Morgan Hill Filing 2	In Warranty
Morgan Hill Metro District 2 Improvements	In Warranty
Morgan Hill Clubhouse / Pool	In Warranty
Right Move Storage	In Warranty
Erie Self Storage	In Initial Acceptance Process
Vista Ridge Filing 1A	Under Construction
Vista Ridge Filing 6, 2nd Amendment	In Warranty
Vista Ridge Filing 14, Lot 12B	In Warranty
Vista Ridge Filing 14, Lot 12 A&D	In Warranty
Vista Ridge - Popeye's	In Warranty
Vista Ridge - Autowash	In Warranty
Rex Ranch Filing 2	In Warranty



Rex Ranch Filing 3	In Warranty
Old Town - 730 Briggs	In Warranty
Coal Creek Properties	In Warranty
Creekside	In Initial Acceptance Process
Coal Creek Center - Core and Shell (Starbucks)	Under Construction
Coal Creek Center - Eye Care Center	In Warranty

### **Capital Improvement Projects**

<b>Project</b>	<b>Status</b>
Traffic Signal Communication Project	Implementation and Training Underway
Weld County Road 7 and Erie Parkway Signal	In Acceptance Process
Coal Creek Reach 1 - 3 Improvements	Under Construction
Zone 2 Waterline Improvements	Tank site and easement negotiation underway with Southern Land.
Zone 2 Tank Site and Tank Design	Tank site and easement negotiation underway with Southern Land.
Horizontal Directional Drilling Well Project	Working on potential change order/redrill expectations with contractor
North Water Reclamation Facility Expansion	Complete – Working on punchlist
Zone 3 - Phase 2B and Zone 4 Waterline Extension	Under Construction; WCR 4 Closed; Expecting paving late Sept/early Oct, Experiencing weather delays. Zone 3/Zone 4 testing ongoing.
County Line Road Improvements - Telleen to Evans	Coordinating with CDOT on Easements and coordinating with Xcel on power burial and street light placement.
County Line Road Improvements - Telleen to Austin	Working toward 50% design for North and South Phase
Old Town Connection to Colliers Hill	Study Session held in September for iconic bridge design consideration
IGA with Colliers Hill - WCR 5 Widening/Re-Use Line Ext.	Improvements Undergoing Punch List identification and corrections;
Town Center Roundabouts - Design and Construction	North Roundabout in Land Coordination / South Roundabout – 50% design review
Water Quality Pond - Lagoon Conversion	Boardwalk, shade shelter, and storm structures under construction
Mobile Bypass Pumping Station	Acquisition Underway; Anticipated delivery in fourth quarter of 2023
119th and Erie Parkway Roundabout Improvement	Scheduled for BOT meeting for construction contract

111th and Arapahoe Intersection Improvements	IGA Approved with Lafayette; Design underway; Signal timing corridor plan being developed.
Boulder Creek Streambed Stabilization	Construction completed; Working on restoration work and planting
Pipe South Boulder Canyon Ditch along 119th	Design complete; In Easement Negotiation
Re-Use High Zone Pump Station	Pumps installed; New parts to be delivered based on initial testing; Coordinating with development for future testing
Vista Ridge Detention Pond Modifications	In Design
Neighborhood Speed Mitigation Program	Focus Group meetings starting in September
Red Hawk Elementary School Traffic Study	Operations and Maintenance working on install; Engineering and Planning to Pursue Safe Routes to School Grant for additional work
Filly Lake Well Pump Station and Pipeline Project	In design.
North Water Treatment Plant	In Design
Sheridan and Ridgeview Signal Warrant Analysis	RFPs from on-call received; will move forward with selected on-call consultant
Zone 3 Water Tank	Town will begin alternatives analysis in late 2023
Water Quality Pond and Irrigation Pond Repairs	Engineering and Operations and Maintenance Coordinating on repairs.
Transportation Standards and Specifications Update	TAC meeting #1 scheduled
NW Regional Drainage Evaluation	In Coordination with Frederick on IGA

### **Projects in Support of other Departments**

Transportation Department Development

Neighborhood Speed Mitigation Program (NSMP)

Central Square Software Implementation – Under Development

Comprehensive Plan, Plan Map, and Zoning Map Amendments and Transportation Master Plan

2023 Town of Erie Standards and Specifications for Design and Construction Updates

I-25 Gateway Planning

### **Streets, Transportation & General Updates**

## **Snapshot of Upcoming Major Streets Projects 2023**

Sheridan Reconstruction from Ridgeview to CR4 – Complete  
Mill and overlays on 119<sup>th</sup>, County Line Road and Kenosha – Complete  
Closures of CR4 between CR5 and Bonanza for Water Pipeline – Complete  
County Line Road between Telleen and Cheeseman for Safer Mainstreets Project – Xcel Undergrounding - Upcoming  
CR5 Partial Closures related to Sunset Development and Widening – Ongoing  
119<sup>th</sup> and Erie Parkway Roundabout Improvements - Underway

### **Other Significant Projects**

SH7 & 119<sup>th</sup> Intersection Improvements – Lafayette/CDOT  
SH7 Preliminary Corridor Design – CDOT  
US287 Bus Rapid Transit – Phase 2 – Mobility and Safety  
SH 52 & I-25 Mobility Hubs  
SH7 Bike Treatment Plan  
111<sup>th</sup> and Arapahoe Improvements (w/Lafayette)

