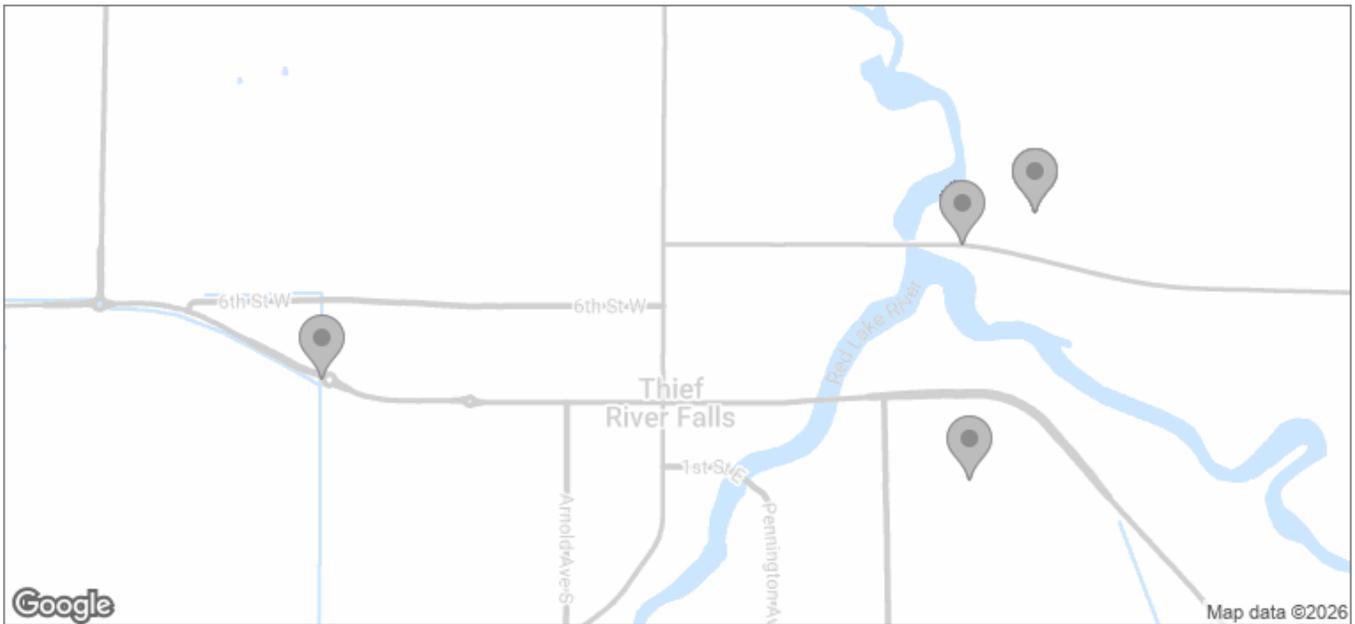


# B3 BENCHMARKING

Report for

## Northland Community and Technical College, Thief River Falls



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## Northland Community and Technical College, Thief River Falls

### Organization Properties

Organization properties based on each site's most recent energy usage period.

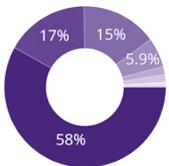
Gross Building SF	320,041 Gross Bldg SF
Occupants	
Total Sites	5
Total Buildings	20
Total Meters	27
Annual kBtu	115,674,578 kBtu/year
Annual kBtu/SF (aka EUI)	361.44 kBtu/sf/year
Annual kBtu/Occupant	0.00 kBtu/occupant
Annual CO2e	9,401.97 metric tons
Annual CO2e/SF	0.0294 metric tons/SF
Annual CO2e/Occupant	0.0000 metric tons/occupant
Annual CO2e Pounds	20,727,780 pounds
Annual CO2e/SF	64.77 pounds/SF
Annual CO2e/Occupant	0.00 pounds/occupant
Annual Cost	\$2,305,337
Annual Cost/SF	\$7.20/SF
Annual Cost/Occupant	\$0.00/occupant

### Energy Site Completeness



5 of 5 sites are energy-complete.

### Space Allocation



Building Type	Square Footage	Percentage
College Classroom	185,882	58%
Gymnasium	53,572	17%
Laboratory	48,632	15%
Aviation Storage Facility	18,817	5.9%
Office	5,200	1.6%
Maintenance Repair Shop	4,800	1.5%

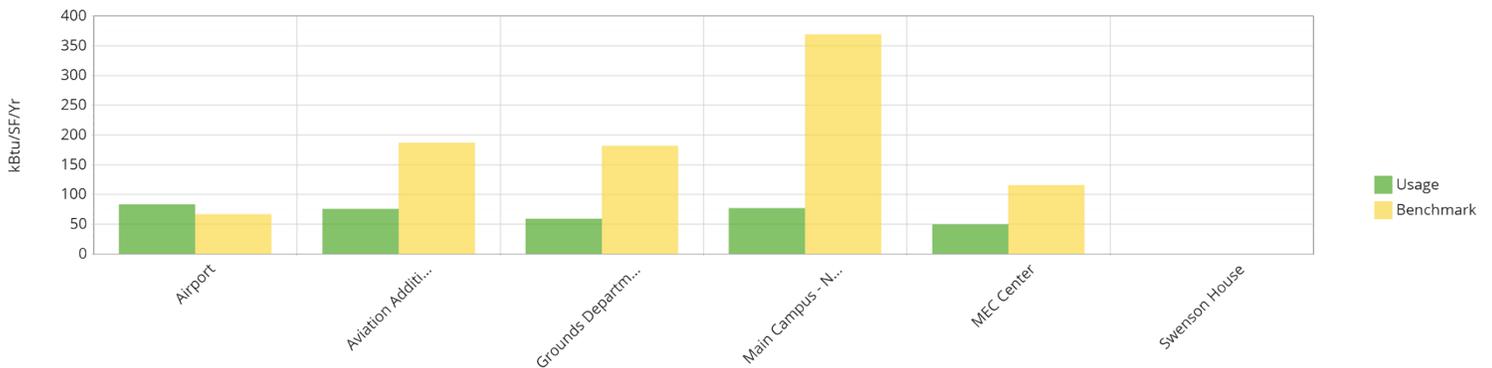
Warehouse (Conditioned)	3,138	1.0%
-------------------------	-------	------

## Energy Benchmark



The current B3 Benchmark for this organization is 5 stars. Some of the buildings have a lower benchmark and some a higher. The B3 Benchmark shows potential savings relative to the current energy code, with 2.5 stars equivalent to code performance. This report provides additional information on those sites with the greatest savings potential and links to help realize the savings.

Name	Gross SF	Actual (kBtu/SF)	Benchmark (kBtu/SF)	Actual over Benchmark	Annual Pot. Savings	B3 Benchmark
Airport	66,943	365.33	343.00		\$52,000	☆☆☆☆☆
Aviation Addition and Renovation (SB 2030 Project)	18,817	312.45	969.84		-	☆☆☆☆☆
Grounds Department Shed (practice field)	4,800	244.03	942.89		-	☆☆☆☆☆
Main Campus - NCTC-Thief River Falls	218,937	374.37	369.05		-	☆☆☆☆☆
MEC Center	10,544	209.02	599.39		-	☆☆☆☆☆
Swenson House	-	0.00	0.00	-	-	☆☆☆☆☆



Energy Code: ASHRAE2019ECB

## Energy Baseline

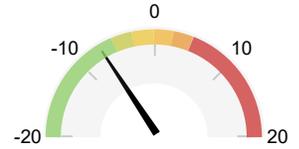
The energy baseline comparison is a comparison of a site's energy usage to itself over time.

**+329.1%**

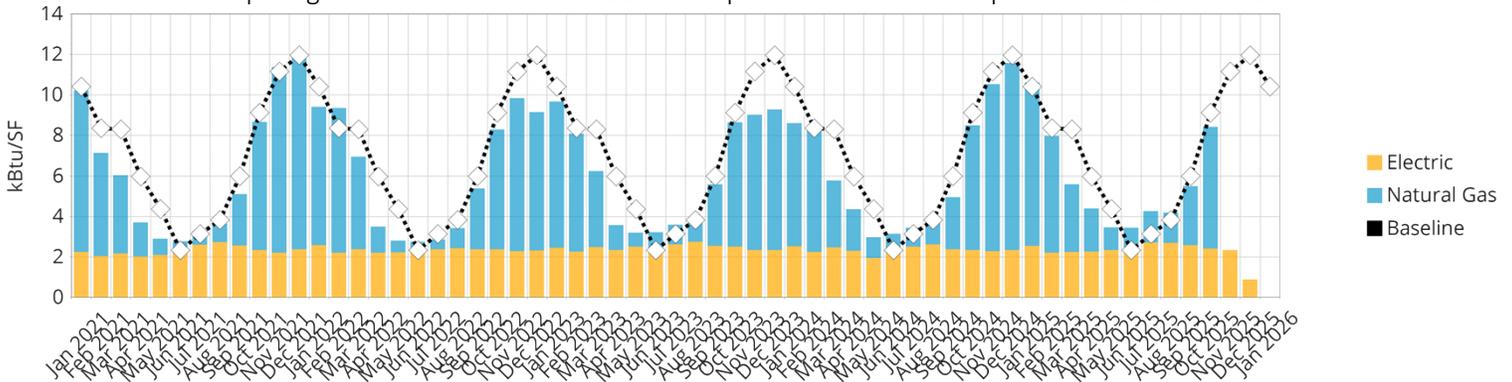
\*Actual: 347.05 kBtu/SF (January 2021 to January 2026)

\*Baseline: 80.87 kBtu/SF (January 2017 to December 2017)

\*Weather normalized



Comparing each site's most recent 12-month period to the baseline period Jan 2017 - Dec 2017

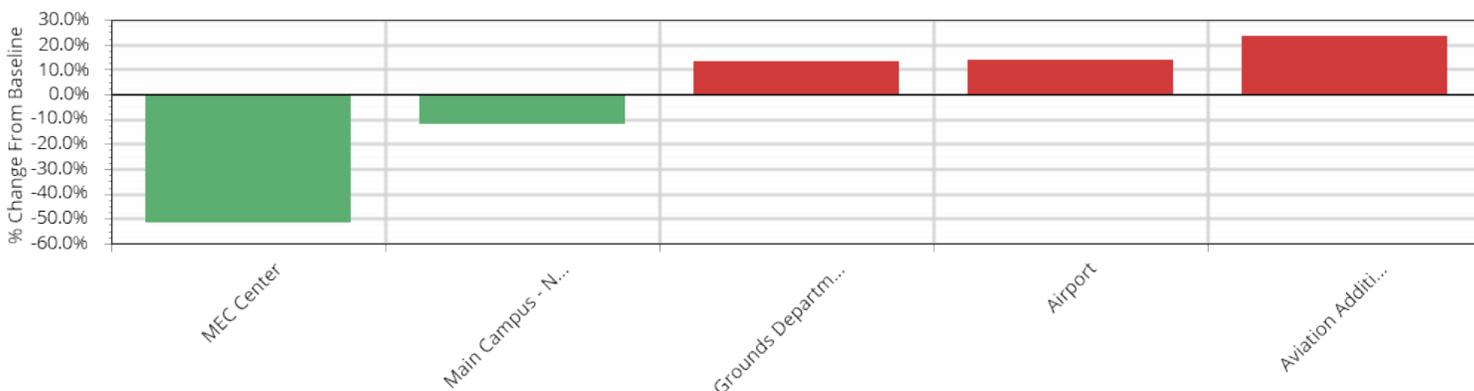


Name	Current (kBtu/SF)	Baseline (kBtu/SF)	Usage % Change	Current CO2e (Metric Tons)	Baseline CO2e (Metric Tons)	CO2e % Change
Aviation Addition and Renovation (SB 2030 Project)	312.45	356.78	↓ -12.43%	476.45	600.59	↓ -20.67%
Airport	365.33	399.10	↓ -8.46%	1,674.81	1,978.38	↓ -15.34%
Grounds Department Shed (practice field)	244.03	284.33	↓ -14.17%	65.77	79.76	↓ -17.55%
Main Campus - NCTC-Thief River Falls	374.37	428.87	↓ -12.71%	7,013.11	8,637.04	↓ -18.80%
MEC Center	209.02	361.88	↓ -42.24%	171.84	294.10	↓ -41.57%
Swenson House	0.00	0.00	▬ N/A	0.00	0.00	▬ N/A

# 3 BENCHMARKING

Name	Current (kBtu/SF)*	Baseline (kBtu/SF)*	Usage % Change*	Current CO2e (Metric Tons)*	Baseline CO2e (Metric Tons)*	CO2e % Change*
Airport	347.45	361.50	↓ -3.89%	1,611.22	1,844.69	↓ -12.66%
Aviation Addition and Renovation (SB 2030 Project)	295.76	325.95	↓ -9.26%	459.77	569.77	↓ -19.31%
Grounds Department Shed (practice field)	244.03	284.33	↓ -14.17%	65.77	79.76	↓ -17.55%
Main Campus - NCTC-Thief River Falls	360.69	406.08	↓ -11.18%	6,854.06	8,371.96	↓ -18.13%
MEC Center	199.69	342.95	↓ -41.77%	166.61	283.51	↓ -41.23%
Swenson House	0.00	0.00	■ N/A	0.00	0.00	■ N/A

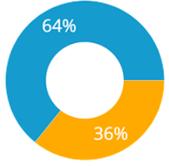
\*Weather normalized



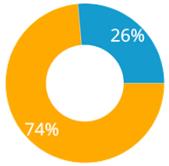
## ENERGY STAR® Scores

Name	Building Type	ENERGY STAR Property Type	ENERGY STAR Score
Airport	College Classroom	College/University	-
Aviation Addition and Renovation (SB 2030 Project)	Aviation Storage Facility	Self-Storage Facility	-
Grounds Department Shed (practice field)	Maintenance Repair Shop	Vehicle Repair Services	-
Main Campus - NCTC-Thief River Falls	Laboratory	Laboratory	-
MEC Center	Gymnasium	Fitness Center/Health Club/Gym	-
Swenson House	Decommissioned	Office	-

## Total Energy Usage & Cost



	Total Usage	Total Usage (kBtu)	kBtu/SF	CO2e Metric Tons
 Electric	13,178,734 kWh	44,965,842	140.50	5,646.29
 Natural Gas	707,087 Therms	70,708,736	220.94	3,755.68
<b>Total</b>		<b>115,674,578</b>	<b>361.44</b>	<b>9,401.97</b>

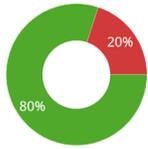


	Total Energy Cost (\$)	\$/SF
 Electric	\$1,680,097.80	\$5.25
 Natural Gas	\$501,830.15	\$1.57
<b>Total</b>	<b>\$2,181,927.95</b>	<b>\$6.82</b>

## Water

Annual Water Usage:	26,633.00 (kGal/year)
Annual Water Usage Per Occupant:	0.00
Annual Water Usage Per Square Foot:	0.0832
Annual Water Cost:	\$123,409

## Water Site Completeness



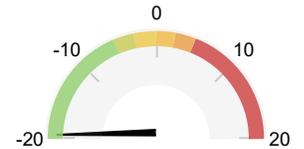
4 of 5 sites are water-complete.

## Water Baseline

The water baseline comparison is a comparison of a site's water usage to itself over time.



Actual:	26,633.00 kGal (January 2021 to January 2026)
Baseline:	12,038.97 kGal (January 2017 to January 2022)



Northland Community and Technical College, Thief River Falls

Built 1960

## Airport

66,943 Gross Bldg SF

1101 Hwy 1 East  
Thief River Falls, MN 56701

2 Electric Meters  
3 Natural Gas Meters

1 Water - Mixed Use Meter  
2 Water - Indoor Only Meters



Site has proper information for energy analysis

**B3 Benchmark**

This site is using more energy than the B3 Benchmark.

**B3 Peer Rating**

23

This site is ranked in the lower 23rd percentile compared to 173 sites of similar space usage.

**ENERGY STAR® Score**

☆ N/A

This site is unable to receive an ENERGY STAR score.

**Baseline Comparison**

↑ +388.7%

This site is using more energy than the baseline period.

## B3 Energy Benchmark

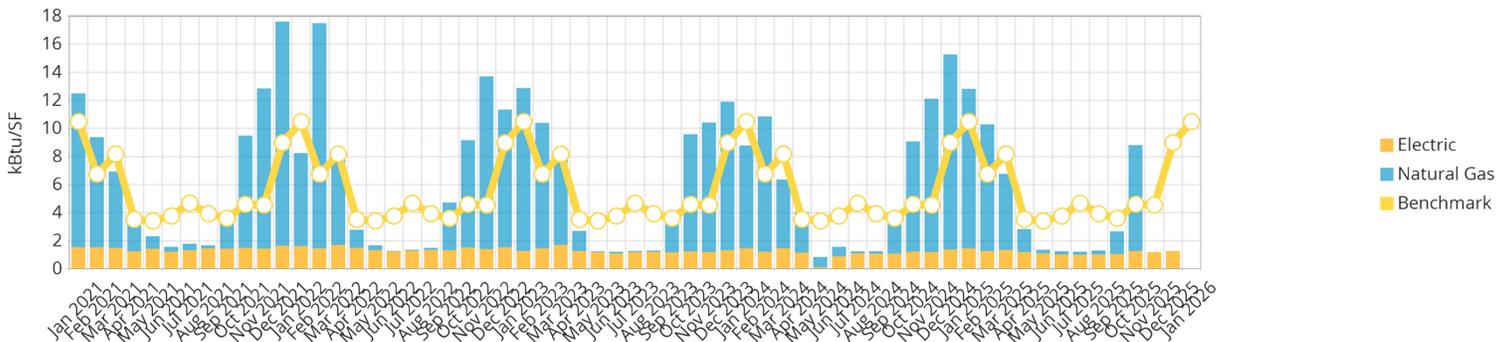
B3 Benchmark usage predictions are generated by an engineering model of a site based on entered building data. The engineering model predicts the usage of a site as if it were built to the program's chosen energy code using typical weather conditions. The more accurate the building data is, the more accurate the model will be.



Actual:	365.33 kBtu/SF (January 2021 to January 2026)
Benchmark:	343.00 kBtu/SF (ASHRAE2019ECB)
Ratio:	1.07

This site is using more energy than the B3 Benchmark.

Actual Usage Compared to Benchmark by Month



## B3 Peer Rating



23

The B3 Peer Rating is a comparison of how a site is doing compared to similar building types based on the actual to benchmark ratio.

This site is ranked in the lower 23rd percentile compared to 173 sites of similar space usage.

## ENERGY STAR

ENERGY STAR Portfolio Manager is an online tool funded by the Department of Energy that allows users to measure and track energy and water usage, as well as GHG emissions. If eligible, properties entered into ENERGY STAR can receive a 1-100 score, based on statistical data from CBECS.

B3 integrates with ENERGY STAR Portfolio Manager to gather scores automatically.



★ N/A

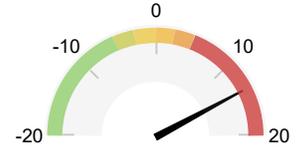
This site is unable to receive an ENERGY STAR score.

## Energy Baseline

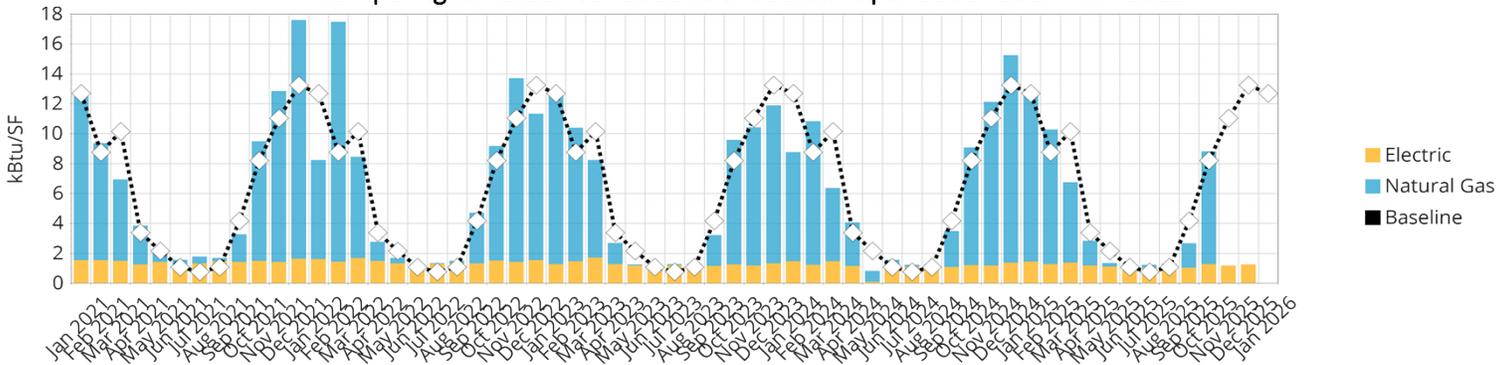
The energy baseline comparison is a comparison of a site's energy usage to itself over time.

 **+388.7%**

\*Actual: 347.45 kBtu/SF (January 2021 to January 2026)  
 \*Baseline: 71.10 kBtu/SF (January 2017 to December 2017)  
 \*Weather normalized



Comparing Jan 2021 - Jan 2026 to the baseline period Jan 2017 - Jan 2022



### Energy Comparison Since Last Year

 **-8.08%**

\*Weather normalized

### Electric Baseline Comparison

 **+352.2%**

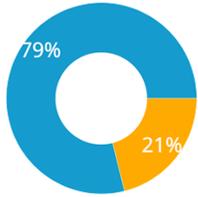
This site is using more electricity than the baseline period.

### Other Fuels Baseline Comparison

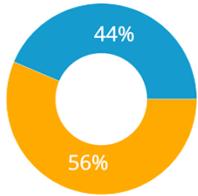
 **+382.5%**

This site is using more energy from non-electric fuel sources than the baseline period.

## Energy Usage by Meter Source Type

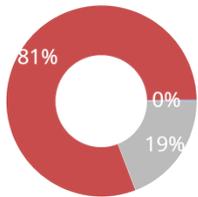


	Total Usage	Total Usage (kBtu)	kBtu/SF	kBtu/Occupant
Electric	1,513,409 kWh	5,163,750	77.14	0.00
Natural Gas	192,928 Therms	19,292,840	288.20	0.00
<b>Total</b>		<b>24,456,590</b>	<b>365.33</b>	<b>0.00</b>



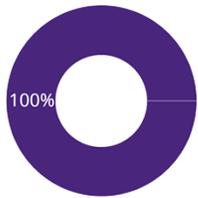
	Total Energy Cost (\$)	\$/SF	\$/Occupant	CO2E/Occupant
Electric	\$173,103.54	\$2.59	\$0.00	0.00
Natural Gas	\$133,981.37	\$2.00	\$0.00	0.00
<b>Total</b>	<b>\$307,084.92</b>	<b>\$4.59</b>	<b>\$0.00</b>	<b>0.00</b>

## End Use Breakdown



End Use	Usage (kBtu/SF)	Potential Savings \$	Potential Savings kBtu	Potential Savings CO2E
19% Baseload	70.05	\$0	0	0.00
81% Heating	294.56	\$52,000	8,367,000	444.43
0% Cooling	0.73	\$0	0	0.00
<b>Total</b>	<b>365.33</b>	<b>\$52,000</b>	<b>8,367,000</b>	<b>444.43</b>

## Space Asset Areas



Space Usage	%	Hours/Day	Days/Week	Months/Year	Conditioning
Classrooms	100%	14 hrs/day	6 days/wk	12 months/yr	Heated And Cooled

## Water

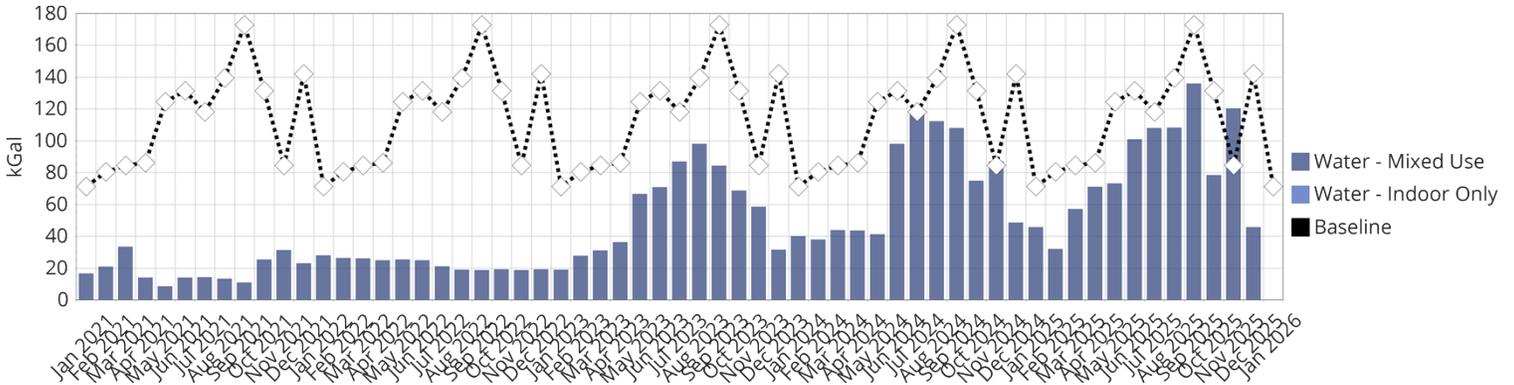
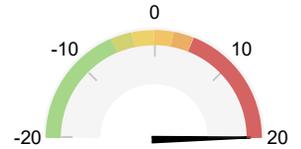
Annual Water Usage:	3,003.68 (kGal/year)
Annual Water Cost:	\$17,592
Annual Water Usage Per Occupant:	0.00
Annual Water Usage Per Square Foot:	0.0449

## Water Baseline

The water baseline comparison is a comparison of a site's water usage to itself over time.

**↑ +119.6%**

Actual: 3,003.68 kGal (January 2021 to January 2026)  
 Baseline: 1,367.56 kGal (January 2010 to January 2015)



### Water Comparison Since Last Year

**↑ +0.55%**

### Irrigated Water Comparison Since Last Year

**— N/A**

This site has insufficient information to calculate a proper baseline.

### Non-Irrigated Water Comparison Since Last Year

**↑ +0.55%**

This site is using more non-irrigated water than last year.

## Miscellaneous Properties

Total Sites:	1
Total Buildings:	3
Total Meters:	5
Annual CO2e Metric Tons:	1,674.81 metric tons
Annual CO2e/SF:	0.0250 metric tons/SF
Annual CO2e/Occupant:	0.0000 metric tons/occupant
Annual CO2e Pounds:	3,692,323 pounds
Annual CO2e/SF:	55.16 pounds/SF
Annual CO2e/Occupant:	0.00 pounds/occupant
Annual Cost:	\$324,677
Annual Cost/SF:	\$4.85/SF
Annual Cost/Occupant:	\$0.00/occupant
kBtu:	24,456,590 kBtu/year
kBtu/SF (aka EUI):	365.33 kBtu/sf/year
Date Created:	
First Building Name:	Arctco Hanger
Energy Usage Period:	January 2021 to January 2026

# 3 BENCHMARKING

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Water Usage Period:	January 2021 to January 2026
Total Usage Period:	January 2021 to January 2026
Baseline Period:	January 2017 to December 2017

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Northland Community and Technical College, Thief River Falls

## Aviation Addition and Renovation (SB 2030 Project)

1101 Highway One E  
Thief River Falls, MN 56701

Built 6/30/2016  
18,817 Gross Bldg SF  
1 Electric Meter  
1 Natural Gas Meter  
1 Water - Mixed Use Meter

 Site has proper information for energy analysis

**B3 Benchmark**



This site is using significantly less energy than the B3 Benchmark.

**B3 Peer Rating**

50

This site is ranked in the upper 50th percentile compared to 102 sites of similar space usage.

**ENERGY STAR® Score**

☆ N/A

This site is unable to receive an ENERGY STAR score.

**Baseline Comparison**



+399.9%

This site is using more energy than the baseline period.

## B3 Energy Benchmark

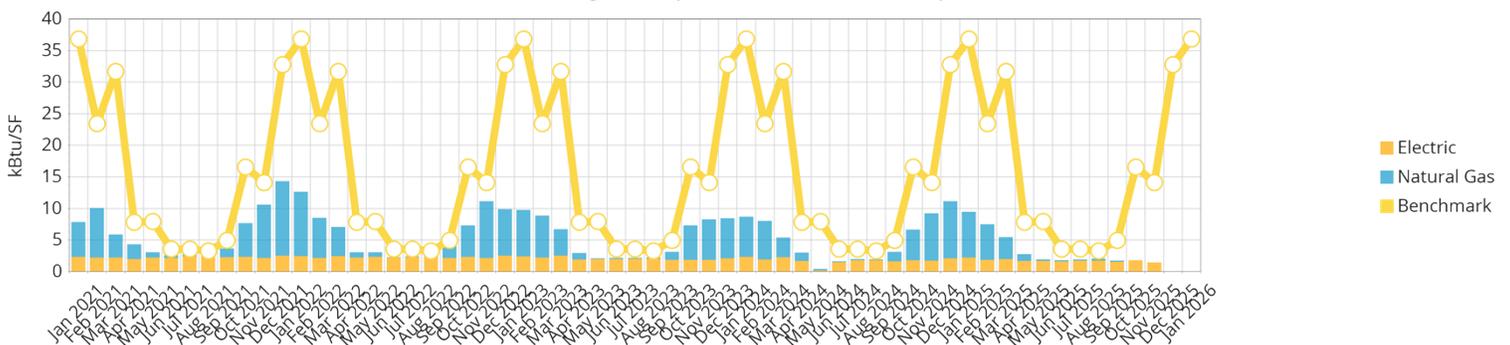
B3 Benchmark usage predictions are generated by an engineering model of a site based on entered building data. The engineering model predicts the usage of a site as if it were built to the program's chosen energy code using typical weather conditions. The more accurate the building data is, the more accurate the model will be.



Actual:	312.45 kBtu/SF (January 2021 to January 2026)
Benchmark:	969.84 kBtu/SF (ASHRAE2019ECB)
Ratio:	0.32

This site is using significantly less energy than the B3 Benchmark.

**Actual Usage Compared to Benchmark by Month**



## B3 Peer Rating



50

The B3 Peer Rating is a comparison of how a site is doing compared to similar building types based on the actual to benchmark ratio.

This site is ranked in the upper 50th percentile compared to 102 sites of similar space usage.

## ENERGY STAR

ENERGY STAR Portfolio Manager is an online tool funded by the Department of Energy that allows users to measure and track energy and water usage, as well as GHG emissions. If eligible, properties entered into ENERGY STAR can receive a 1-100 score, based on statistical data from CBECS.

B3 integrates with ENERGY STAR Portfolio Manager to gather scores automatically.



★ N/A

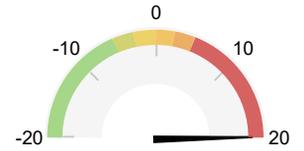
This site is unable to receive an ENERGY STAR score.

## Energy Baseline

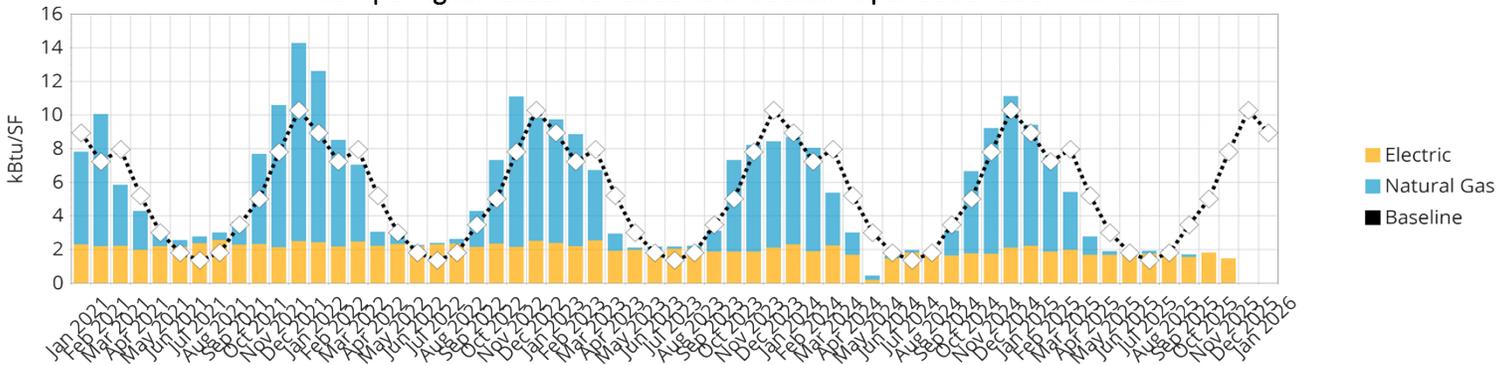
The energy baseline comparison is a comparison of a site's energy usage to itself over time.

 **+399.9%**

\*Actual: 295.76 kBtu/SF (January 2021 to January 2026)  
 \*Baseline: 59.16 kBtu/SF (January 2017 to December 2017)  
 \*Weather normalized



Comparing Jan 2021 - Jan 2026 to the baseline period Jan 2017 - Jan 2022



### Energy Comparison Since Last Year

 **-11.15%**

\*Weather normalized

### Electric Baseline Comparison

 **+381.7%**

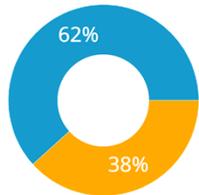
This site is using more electricity than the baseline period.

### Other Fuels Baseline Comparison

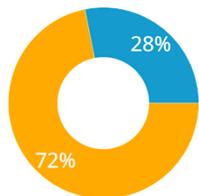
 **+393.0%**

This site is using more energy from non-electric fuel sources than the baseline period.

## Energy Usage by Meter Source Type

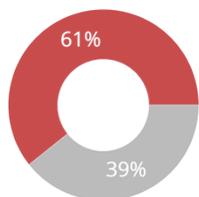


	Total Usage	Total Usage (kBtu)	kBtu/SF	kBtu/Occupant
Electric	660,469 kWh	2,253,520	119.76	0.00
Natural Gas	36,259 Therms	3,625,859	192.69	0.00
<b>Total</b>		<b>5,879,379</b>	<b>312.45</b>	<b>0.00</b>



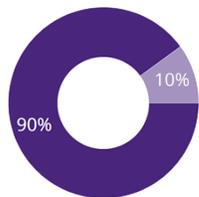
	Total Energy Cost (\$)	\$/SF	\$/Occupant	CO2E/Occupant
Electric	\$68,694.71	\$3.65	\$0.00	0.00
Natural Gas	\$26,877.39	\$1.43	\$0.00	0.00
<b>Total</b>	<b>\$95,572.11</b>	<b>\$5.08</b>	<b>\$0.00</b>	<b>0.00</b>

## End Use Breakdown



End Use	Usage (kBtu/SF)	Potential Savings \$	Potential Savings kBtu	Potential Savings CO2E
39% Baseload	122.76	-	-	-
61% Heating	189.69	-	-	-
0% Cooling	0.00	-	-	-
<b>Total</b>	<b>312.45</b>			

## Space Asset Areas



Space Usage	%	Hours/Day	Days/Week	Months/Year	Conditioning
Maintenance/Repair	90%	8 hrs/day	5 days/wk	12 months/yr	Heated And Cooled
Office	10%	8 hrs/day	5 days/wk	12 months/yr	Heated And Cooled

## Water

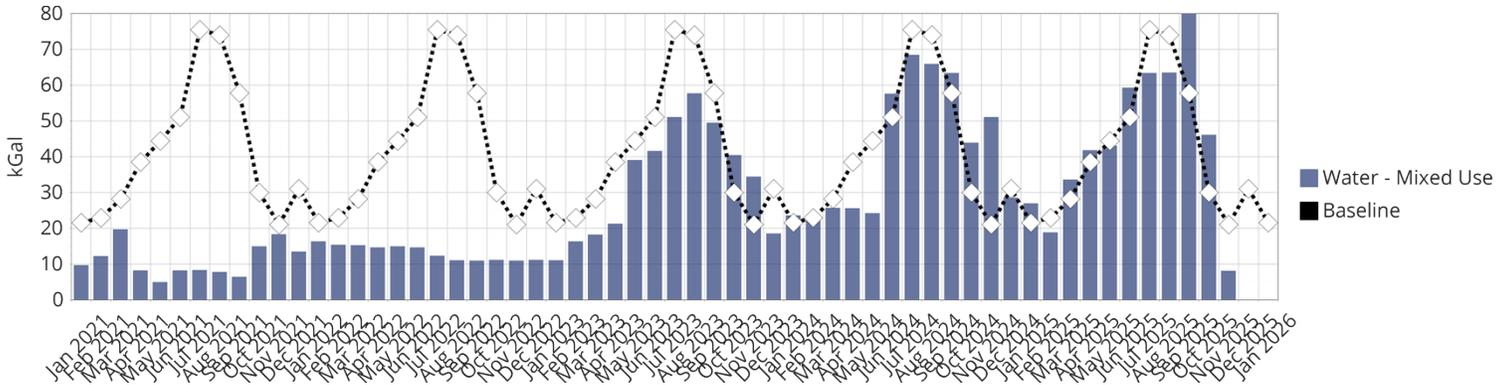
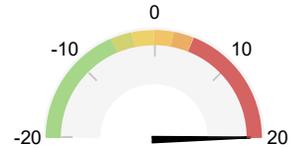
Annual Water Usage:	1,674.66 (kGal/year)
Annual Water Cost:	\$10,114
Annual Water Usage Per Occupant:	0.00
Annual Water Usage Per Square Foot:	0.0890

## Water Baseline

The water baseline comparison is a comparison of a site's water usage to itself over time.

**↑ +237.5%**

Actual: 1,674.66 kGal (January 2021 to January 2026)  
 Baseline: 496.16 kGal (January 2017 to January 2022)



### Water Comparison Since Last Year

**↓ -4.55%**

### Irrigated Water Comparison Since Last Year

**— N/A**

This site has insufficient information to calculate a proper baseline.

### Non-Irrigated Water Comparison Since Last Year

**↓ -4.55%**

This site is using less non-irrigated water than last year.

## Miscellaneous Properties

Total Sites:	1
Total Buildings:	1
Total Meters:	3
Annual CO2e Metric Tons:	476.45 metric tons
Annual CO2e/SF:	0.0253 metric tons/SF
Annual CO2e/Occupant:	0.0000 metric tons/occupant
Annual CO2e Pounds:	1,050,387 pounds
Annual CO2e/SF:	55.82 pounds/SF
Annual CO2e/Occupant:	0.00 pounds/occupant
Annual Cost:	\$105,686
Annual Cost/SF:	\$5.62/SF
Annual Cost/Occupant:	\$0.00/occupant
kBtu:	5,879,379 kBtu/year
kBtu/SF (aka EUI):	312.45 kBtu/sf/year
Date Created:	4/4/2018
First Building Name:	Aviation Addition and Renovation (SB 2030 Project)
Energy Usage Period:	January 2021 to January 2026

# 3 BENCHMARKING

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Water Usage Period:	January 2021 to January 2026
Total Usage Period:	January 2021 to January 2026
Baseline Period:	January 2017 to December 2017

---

Northland Community and Technical College, Thief River Falls

## Grounds Department Shed (practice field)

1101 Hwy 1 East  
Thief River Falls, MN 56701

Built 2002

4,800 Gross Bldg SF  
2 Electric Meters  
1 Natural Gas Meter  
1 Water - Irrigation Only Meter



Site has proper information for energy analysis

### B3 Benchmark



This site is using significantly less energy than the B3 Benchmark.

### B3 Peer Rating

73

This site is ranked in the upper 73rd percentile compared to 322 sites of similar space usage.

### ENERGY STAR® Score



This site is unable to receive an ENERGY STAR score.

### Baseline Comparison



This site is using more energy than the baseline period.

## B3 Energy Benchmark

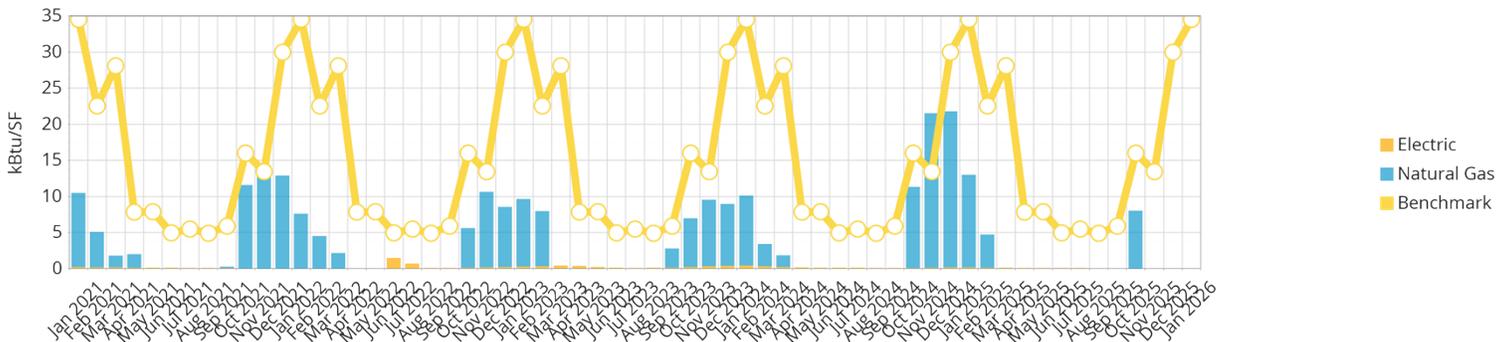
B3 Benchmark usage predictions are generated by an engineering model of a site based on entered building data. The engineering model predicts the usage of a site as if it were built to the program's chosen energy code using typical weather conditions. The more accurate the building data is, the more accurate the model will be.



Actual:	244.03 kBtu/SF (January 2021 to January 2026)
Benchmark:	942.89 kBtu/SF (ASHRAE2019ECB)
Ratio:	0.26

This site is using significantly less energy than the B3 Benchmark.

Actual Usage Compared to Benchmark by Month



## B3 Peer Rating



73

The B3 Peer Rating is a comparison of how a site is doing compared to similar building types based on the actual to benchmark ratio.

This site is ranked in the upper 73rd percentile compared to 322 sites of similar space usage.

## ENERGY STAR

ENERGY STAR Portfolio Manager is an online tool funded by the Department of Energy that allows users to measure and track energy and water usage, as well as GHG emissions. If eligible, properties entered into ENERGY STAR can receive a 1-100 score, based on statistical data from CBECS.

B3 integrates with ENERGY STAR Portfolio Manager to gather scores automatically.



★ N/A

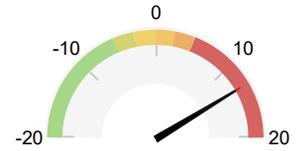
This site is unable to receive an ENERGY STAR score.

## Energy Baseline

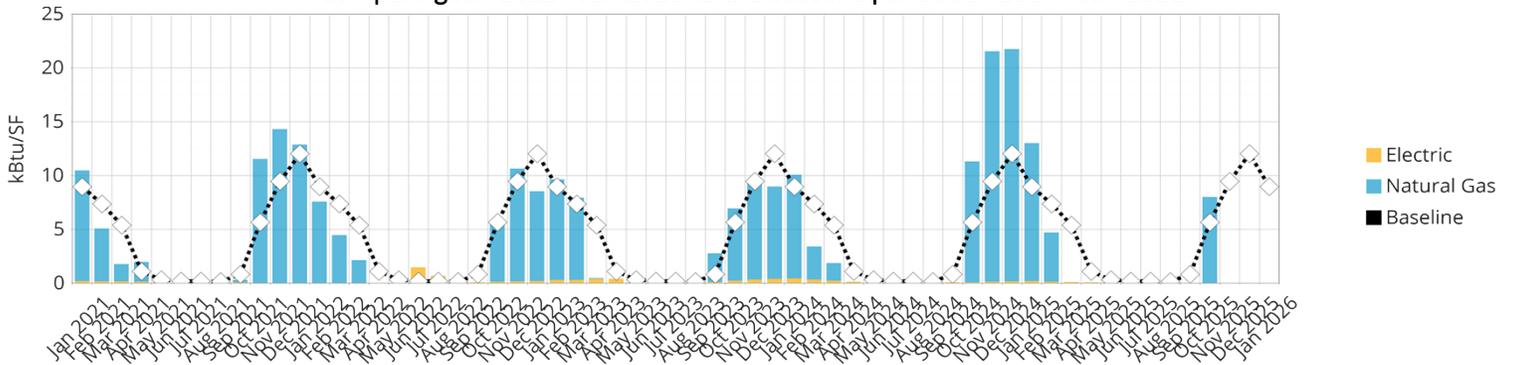
The energy baseline comparison is a comparison of a site's energy usage to itself over time.

 **+370.6%**

\*Actual: 244.03 kBtu/SF (January 2021 to January 2026)  
 \*Baseline: 51.85 kBtu/SF (January 2017 to December 2017)  
 \*Weather normalized



Comparing Jan 2021 - Jan 2026 to the baseline period Jan 2017 - Jan 2022



### Energy Comparison Since Last Year

 **-14.59%**

\*Weather normalized

### Electric Baseline Comparison

 **+90.40%**

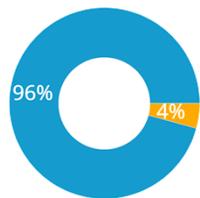
This site is using more electricity than the baseline period.

### Other Fuels Baseline Comparison

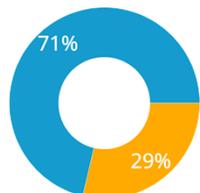
 **+403.2%**

This site is using more energy from non-electric fuel sources than the baseline period.

## Energy Usage by Meter Source Type

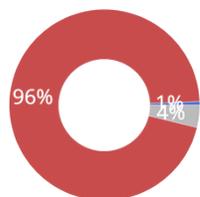


	Total Usage	Total Usage (kBtu)	kBtu/SF	kBtu/Occupant
Electric	14,463 kWh	49,348	10.28	0.00
Natural Gas	11,220 Therms	1,122,020	233.75	0.00
<b>Total</b>		<b>1,171,368</b>	<b>244.03</b>	<b>0.00</b>



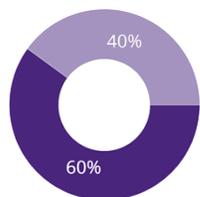
	Total Energy Cost (\$)	\$/SF	\$/Occupant	CO2E/Occupant
Electric	\$4,327.87	\$0.90	\$0.00	0.00
Natural Gas	\$10,766.49	\$2.24	\$0.00	0.00
<b>Total</b>	<b>\$15,094.36</b>	<b>\$3.14</b>	<b>\$0.00</b>	<b>0.00</b>

## End Use Breakdown



End Use	Usage (kBtu/SF)	Potential Savings \$	Potential Savings kBtu	Potential Savings CO2E
4% Baseload	9.26	-	-	-
96% Heating	233.36	-	-	-
1% Cooling	1.42	-	-	-
<b>Total</b>	<b>244.03</b>			

## Space Asset Areas



Space Usage	%	Hours/Day	Days/Week	Months/Year	Conditioning
Maintenance/Repair	60%	13 hrs/day	6 days/wk	12 months/yr	Heated And Cooled
Office	40%	13 hrs/day	6 days/wk	12 months/yr	Heated And Cooled

## Water

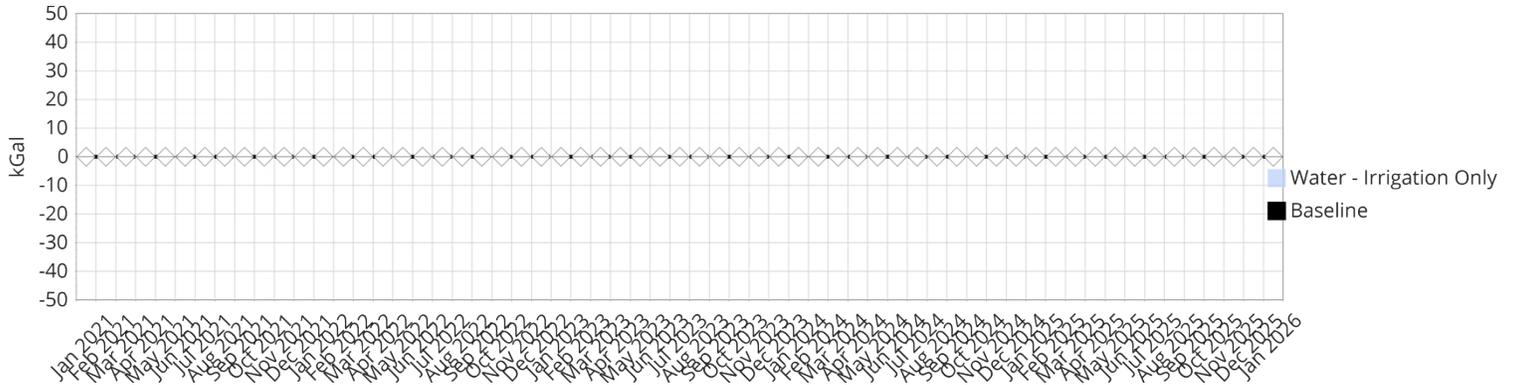
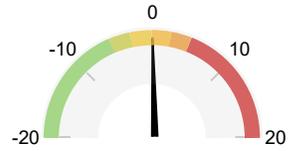
Annual Water Usage:	0.00 (kGal/year)
Annual Water Cost:	\$0
Annual Water Usage Per Occupant:	0.00
Annual Water Usage Per Square Foot:	0.0000

## Water Baseline

The water baseline comparison is a comparison of a site's water usage to itself over time.

**N/A**

Actual: 0.00 kGal (January 2021 to January 2026)  
 Baseline: 0.00 kGal (January 2010 to January 2015)



### Water Comparison Since Last Year

**N/A**

### Irrigated Water Comparison Since Last Year

**N/A**

This site has insufficient information to calculate a proper baseline.

### Non-Irrigated Water Comparison Since Last Year

**N/A**

This site has insufficient information to calculate a proper baseline.

## Miscellaneous Properties

Total Sites:	1
Total Buildings:	1
Total Meters:	3
Annual CO2e Metric Tons:	65.77 metric tons
Annual CO2e/SF:	0.0137 metric tons/SF
Annual CO2e/Occupant:	0.0000 metric tons/occupant
Annual CO2e Pounds:	144,991 pounds
Annual CO2e/SF:	30.21 pounds/SF
Annual CO2e/Occupant:	0.00 pounds/occupant
Annual Cost:	\$15,094
Annual Cost/SF:	\$3.14/SF
Annual Cost/Occupant:	\$0.00/occupant
kBtu:	1,171,368 kBtu/year
kBtu/SF (aka EUI):	244.03 kBtu/sf/year
Date Created:	
First Building Name:	Seasonal Practice Field (Grounds Department Shed)
Energy Usage Period:	January 2021 to January 2026

# 3 BENCHMARKING

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Water Usage Period:	January 2021 to January 2026
Total Usage Period:	January 2021 to January 2026
Baseline Period:	January 2017 to December 2017

---

Northland Community and Technical College, Thief River Falls

## Main Campus - NCTC-Thief River Falls

1101 Hwy 1 East  
Thief River Falls, MN 56701

Built 1967  
218,937 Gross Bldg SF  
2 Electric Meters  
5 Natural Gas Meters  
4 Water - Mixed Use Meters  
1 Trash Meter  
1 Recyclables Meter

 Warning. Heating source is targeted to natural gas, but no connected natural gas meters defined.

**B3 Benchmark**

★★★☆☆

This site is using significantly less electric than the B3 Benchmark.

**B3 Peer Rating**

N/A

This site does not have enough peers of similar space usage to calculate a peer rating.

**ENERGY STAR<sup>®</sup> Score**

☆ N/A

This site is unable to receive an ENERGY STAR score.

**Baseline Comparison**

↑ +322.3%

This site is using less energy than the baseline period.

## B3 Energy Benchmark

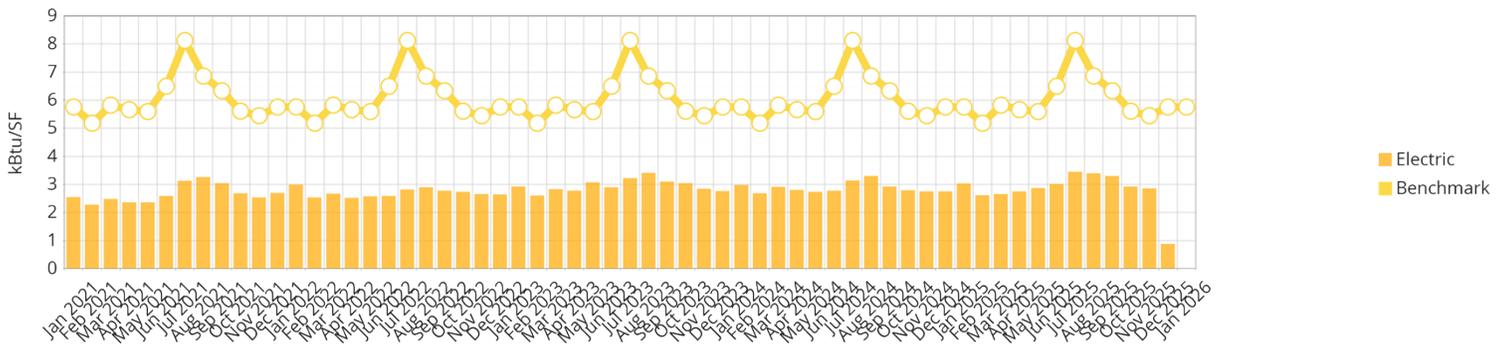
B3 Benchmark usage predictions are generated by an engineering model of a site based on entered building data. The engineering model predicts the usage of a site as if it were built to the program's chosen energy code using typical weather conditions. The more accurate the building data is, the more accurate the model will be.

★★★☆☆

Actual:	374.37 kBtu/SF (January 2021 to January 2026)
Benchmark:	369.05 kBtu/SF (ASHRAE2019ECB)
Ratio:	1.01

This site is using significantly less electric than the B3 Benchmark.

Actual Usage Compared to Benchmark by Month



## B3 Peer Rating



The B3 Peer Rating is a comparison of how a site is doing compared to similar building types based on the actual to benchmark ratio.

This site does not have enough peers of similar space usage to calculate a peer rating.

## ENERGY STAR

ENERGY STAR Portfolio Manager is an online tool funded by the Department of Energy that allows users to measure and track energy and water usage, as well as GHG emissions. If eligible, properties entered into ENERGY STAR can receive a 1-100 score, based on statistical data from CBECS.

B3 integrates with ENERGY STAR Portfolio Manager to gather scores automatically.



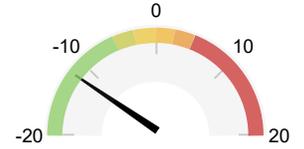
This site is unable to receive an ENERGY STAR score.

## Energy Baseline

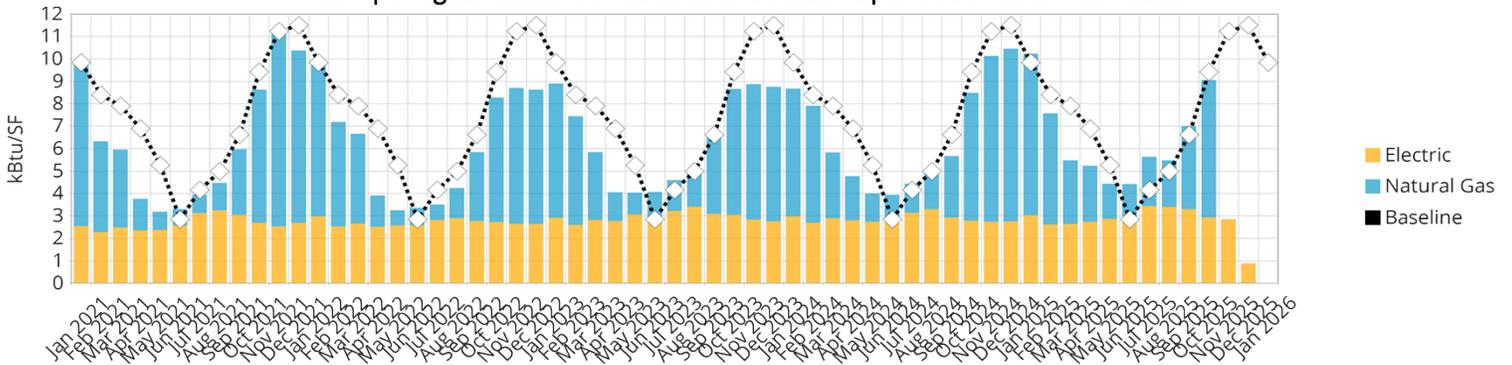
The energy baseline comparison is a comparison of a site's energy usage to itself over time.

 **+322.3%**

\*Actual: 360.69 kBtu/SF (January 2021 to January 2026)  
 \*Baseline: 85.42 kBtu/SF (January 2017 to December 2017)  
 \*Weather normalized



Comparing Jan 2021 - Jan 2026 to the baseline period Jan 2017 - Jan 2022



### Energy Comparison Since Last Year

 **-4.30%**

\*Weather normalized

### Electric Baseline Comparison

 **+368.4%**

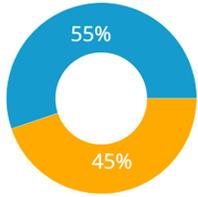
This site is using more electricity than the baseline period.

### Other Fuels Baseline Comparison

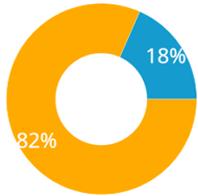
 **+287.8%**

This site is using more energy from non-electric fuel sources than the baseline period.

## Energy Usage by Meter Source Type

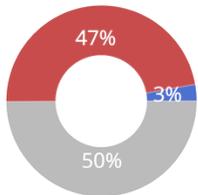


	Total Usage	Total Usage (kBtu)	kBtu/SF	kBtu/Occupant
Electric	10,769,276 kWh	36,744,769	167.83	0.00
Natural Gas	452,186 Therms	45,218,590	206.54	0.00
<b>Total</b>		<b>81,963,359</b>	<b>374.37</b>	<b>0.00</b>



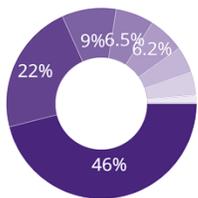
	Total Energy Cost (\$)	\$/SF	\$/Occupant	CO2E/Occupant
Electric	\$1,407,365.16	\$6.43	\$0.00	0.00
Natural Gas	\$317,420.35	\$1.45	\$0.00	0.00
<b>Total</b>	<b>\$1,724,785.51</b>	<b>\$7.88</b>	<b>\$0.00</b>	<b>0.00</b>

## End Use Breakdown



End Use	Usage (kBtu/SF)	Potential Savings \$	Potential Savings kBtu	Potential Savings CO2E
50% Baseload	186.86	-	-	-
47% Heating	177.09	-	-	-
3% Cooling	10.41	-	-	-
<b>Total</b>	<b>374.37</b>			

## Space Asset Areas



Space Usage	%	Hours/Day	Days/Week	Months/Year	Conditioning
Classrooms	46%	14 hrs/day	6 days/wk	12 months/yr	Heated And Cooled
Laboratory - Research	22%	14 hrs/day	6 days/wk	12 months/yr	Heated And Cooled
Gymnasium	9.2%	14 hrs/day	6 days/wk	12 months/yr	Heated And Cooled
Fitness	6.5%	14 hrs/day	6 days/wk	12 months/yr	Heated And Cooled
Laboratory - Educational	6.2%	14 hrs/day	6 days/wk	12 months/yr	Heated And Cooled
Office	4.4%	8 hrs/day	5 days/wk	12 months/yr	Heated And Cooled
Locker Rooms	3.9%	14 hrs/day	6 days/wk	12 months/yr	Heated And Cooled
Warehouse	1.4%	11 hrs/day	6 days/wk	12 months/yr	Unconditioned

## Water

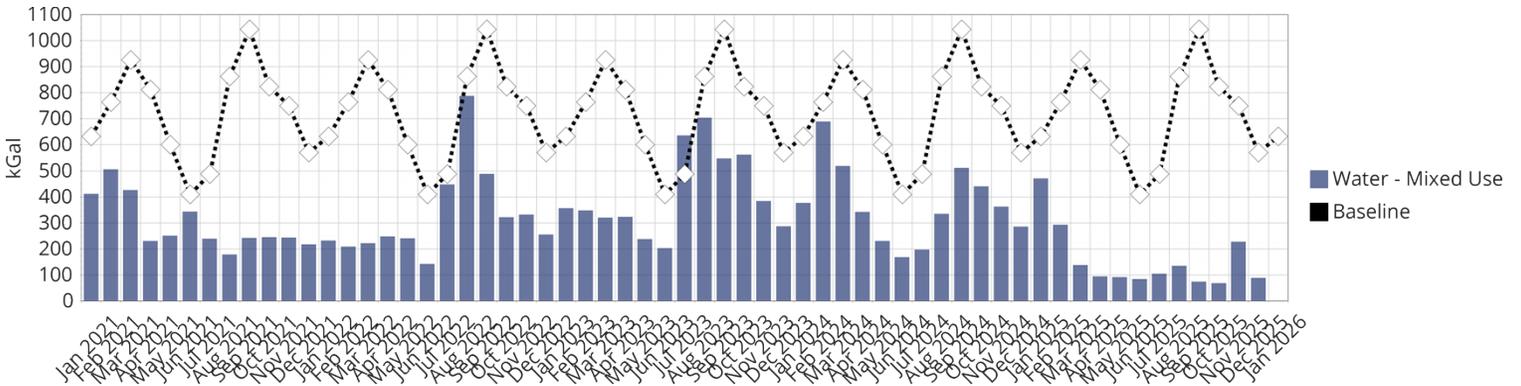
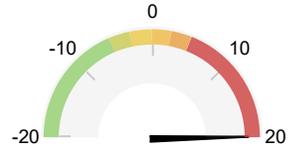
Annual Water Usage:	18,674.37 (kGal/year)
Annual Water Cost:	\$68,847
Annual Water Usage Per Occupant:	0.00
Annual Water Usage Per Square Foot:	0.0853

## Water Baseline

The water baseline comparison is a comparison of a site's water usage to itself over time.

 **+115.0%**

Actual:	18,674.37 kGal (January 2021 to January 2026)
Baseline:	8,685.49 kGal (January 2010 to January 2015)



### Water Comparison Since Last Year

 **-10.75%**

### Irrigated Water Comparison Since Last Year

 **N/A**

This site has insufficient information to calculate a proper baseline.

### Non-Irrigated Water Comparison Since Last Year

 **-10.75%**

This site is using less non-irrigated water than last year.

## Miscellaneous Properties

Total Sites:	1
Total Buildings:	14
Total Meters:	13
Annual CO2e Metric Tons:	7,013.11 metric tons
Annual CO2e/SF:	0.0320 metric tons/SF
Annual CO2e/Occupant:	0.0000 metric tons/occupant
Annual CO2e Pounds:	15,461,236 pounds
Annual CO2e/SF:	70.62 pounds/SF
Annual CO2e/Occupant:	0.00 pounds/occupant
Annual Cost:	\$1,793,633
Annual Cost/SF:	\$8.19/SF
Annual Cost/Occupant:	\$0.00/occupant
kBtu:	81,963,359 kBtu/year

---

kBtu/SF (aka EUI):	374.37 kBtu/sf/year
Date Created:	
First Building Name:	Activities
Energy Usage Period:	January 2021 to January 2026
Water Usage Period:	January 2021 to January 2026
Total Usage Period:	January 2021 to January 2026
Baseline Period:	January 2017 to December 2017

---

Northland Community and Technical College, Thief River Falls

Built 1999

## MEC Center

10,544 Gross Bldg SF

1101 Hwy 1 East  
Thief River Falls, MN 56701

1 Electric Meter  
1 Natural Gas Meter

1 Water - Indoor Only Meter



Site has proper information for energy analysis

**B3 Benchmark**

This site is using significantly less energy than the B3 Benchmark.

**B3 Peer Rating**

74

This site is ranked in the upper 74th percentile compared to 70 sites of similar space usage.

**ENERGY STAR® Score**

☆ N/A

This site is unable to receive an ENERGY STAR score.

**Baseline Comparison**

↑ +98.75%

This site is using less energy than the baseline period.

## B3 Energy Benchmark

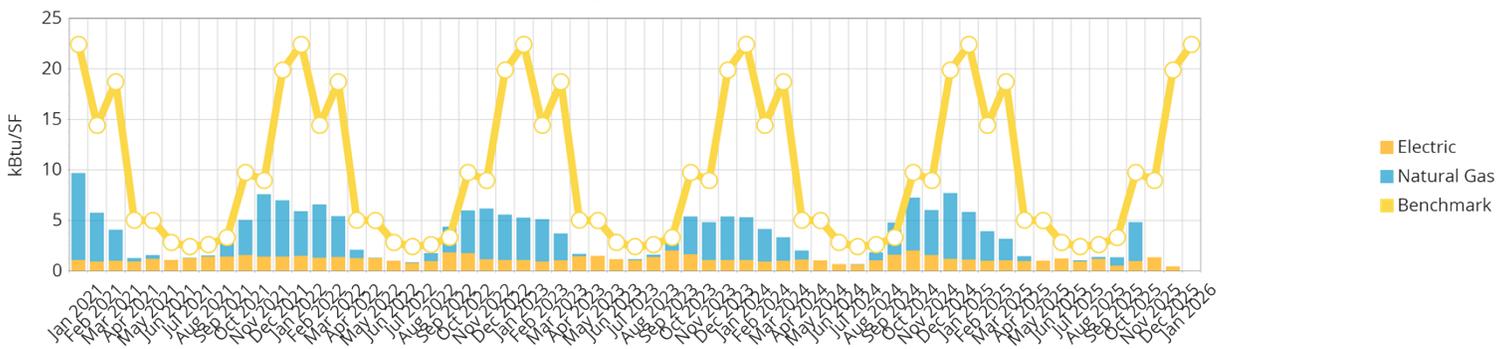
B3 Benchmark usage predictions are generated by an engineering model of a site based on entered building data. The engineering model predicts the usage of a site as if it were built to the program's chosen energy code using typical weather conditions. The more accurate the building data is, the more accurate the model will be.



Actual:	209.02 kBtu/SF (January 2021 to January 2026)
Benchmark:	599.39 kBtu/SF (ASHRAE2019ECB)
Ratio:	0.35

This site is using significantly less energy than the B3 Benchmark.

Actual Usage Compared to Benchmark by Month



## B3 Peer Rating



74

The B3 Peer Rating is a comparison of how a site is doing compared to similar building types based on the actual to benchmark ratio.

This site is ranked in the upper 74th percentile compared to 70 sites of similar space usage.

## ENERGY STAR

ENERGY STAR Portfolio Manager is an online tool funded by the Department of Energy that allows users to measure and track energy and water usage, as well as GHG emissions. If eligible, properties entered into ENERGY STAR can receive a 1-100 score, based on statistical data from CBECS.

B3 integrates with ENERGY STAR Portfolio Manager to gather scores automatically.



★ N/A

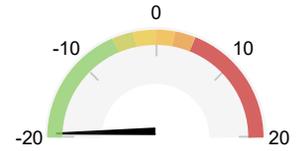
This site is unable to receive an ENERGY STAR score.

## Energy Baseline

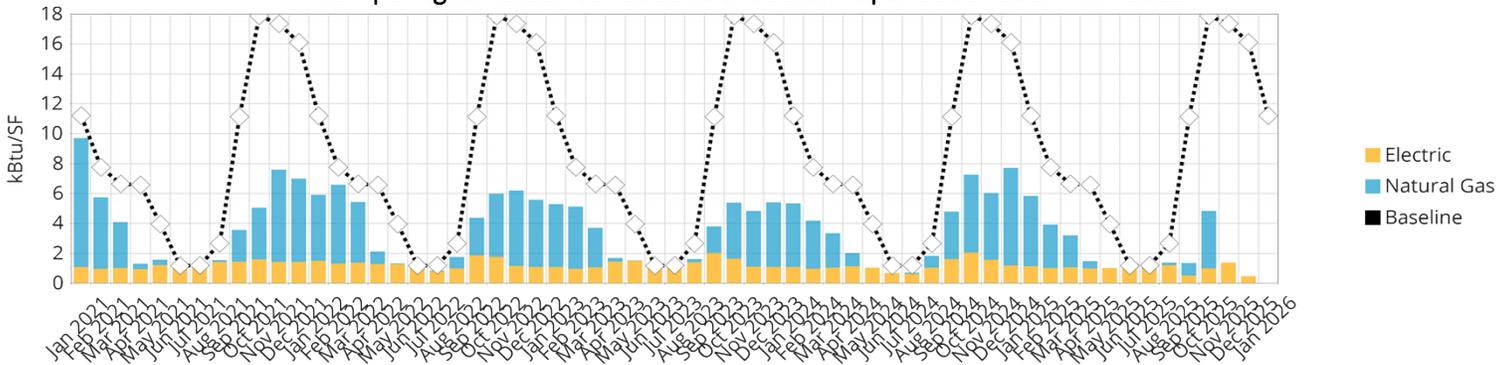
The energy baseline comparison is a comparison of a site's energy usage to itself over time.

 **+98.75%**

\*Actual: 199.69 kBtu/SF (January 2021 to January 2026)  
 \*Baseline: 100.47 kBtu/SF (January 2017 to December 2017)  
 \*Weather normalized



Comparing Jan 2021 - Jan 2026 to the baseline period Jan 2017 - Jan 2022



### Energy Comparison Since Last Year

 **-15.91%**

\*Weather normalized

### Electric Baseline Comparison

 **+232.0%**

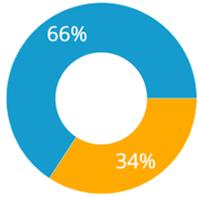
This site is using more electricity than the baseline period.

### Other Fuels Baseline Comparison

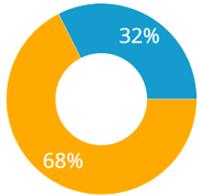
 **+67.38%**

This site is using more energy from non-electric fuel sources than the baseline period.

## Energy Usage by Meter Source Type

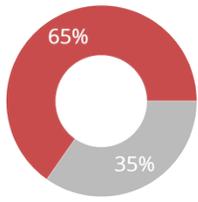


	Total Usage	Total Usage (kBtu)	kBtu/SF	kBtu/Occupant
Electric	221,118 kWh	754,455	71.55	0.00
Natural Gas	14,494 Therms	1,449,427	137.46	0.00
<b>Total</b>		<b>2,203,882</b>	<b>209.02</b>	<b>0.00</b>



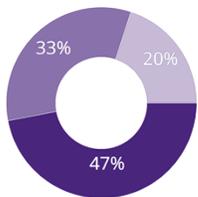
	Total Energy Cost (\$)	\$/SF	\$/Occupant	CO2E/Occupant
Electric	\$26,606.52	\$2.52	\$0.00	0.00
Natural Gas	\$12,784.54	\$1.21	\$0.00	0.00
<b>Total</b>	<b>\$39,391.06</b>	<b>\$3.74</b>	<b>\$0.00</b>	<b>0.00</b>

## End Use Breakdown



End Use	Usage (kBtu/SF)	Potential Savings \$	Potential Savings kBtu	Potential Savings CO2E
35% Baseload	72.62	-	-	-
65% Heating	136.40	-	-	-
0% Cooling	0.00	-	-	-
<b>Total</b>	<b>209.02</b>			

## Space Asset Areas



Space Usage	%	Hours/Day	Days/Week	Months/Year	Conditioning
Gymnasium	47%	14 hrs/day	5 days/wk	12 months/yr	Heated Only
Fitness	33%	14 hrs/day	5 days/wk	12 months/yr	Heated Only
Locker Rooms	20%	14 hrs/day	5 days/wk	12 months/yr	Heated Only

## Water

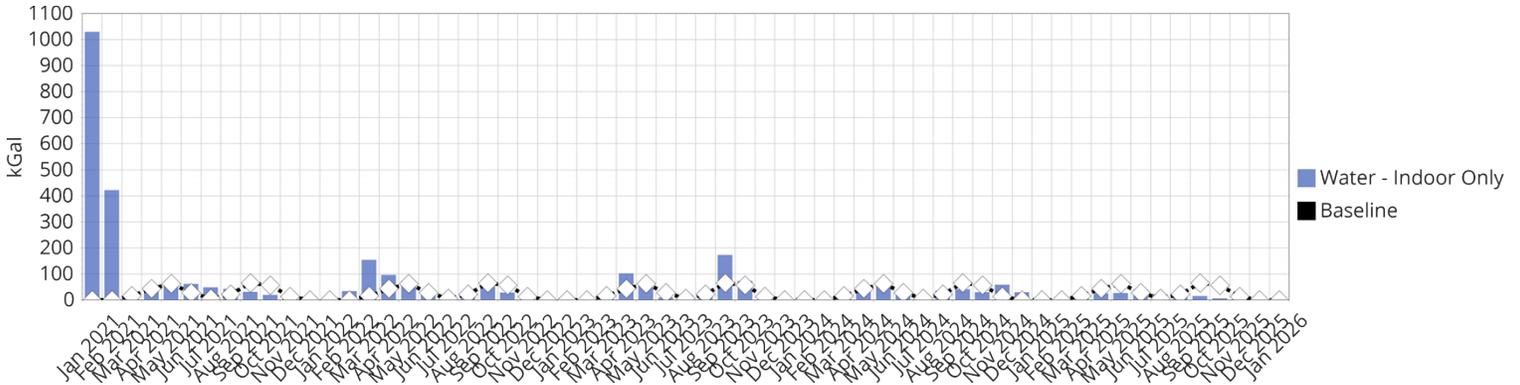
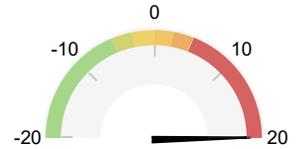
Annual Water Usage:	3,280.29 (kGal/year)
Annual Water Cost:	\$26,856
Annual Water Usage Per Occupant:	0.00
Annual Water Usage Per Square Foot:	0.3111

## Water Baseline

The water baseline comparison is a comparison of a site's water usage to itself over time.

**↑ +958.2%**

Actual: 3,280.29 kGal (January 2021 to January 2026)  
 Baseline: 310.00 kGal (January 2010 to January 2015)



### Water Comparison Since Last Year

**↑ +3.92%**

### Irrigated Water Comparison Since Last Year

**— N/A**

This site has insufficient information to calculate a proper baseline.

### Non-Irrigated Water Comparison Since Last Year

**↑ +3.92%**

This site is using more non-irrigated water than last year.

## Miscellaneous Properties

Total Sites:	1
Total Buildings:	1
Total Meters:	3
Annual CO2e Metric Tons:	171.84 metric tons
Annual CO2e/SF:	0.0163 metric tons/SF
Annual CO2e/Occupant:	0.0000 metric tons/occupant
Annual CO2e Pounds:	378,842 pounds
Annual CO2e/SF:	35.93 pounds/SF
Annual CO2e/Occupant:	0.00 pounds/occupant
Annual Cost:	\$66,247
Annual Cost/SF:	\$6.28/SF
Annual Cost/Occupant:	\$0.00/occupant
kBtu:	2,203,882 kBtu/year
kBtu/SF (aka EUI):	209.02 kBtu/sf/year
Date Created:	
First Building Name:	MEC Center
Energy Usage Period:	January 2021 to January 2026

# 3 BENCHMARKING

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Water Usage Period:	January 2021 to January 2026
Total Usage Period:	January 2021 to January 2026
Baseline Period:	January 2017 to December 2017

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Northland Community and Technical College, Thief River Falls

Built 1994

## Swenson House

1101 Hwy 1 East  
Thief River Falls, MN 56701

- 1 Electric Meter
- 1 Natural Gas Meter
- 1 Water - Mixed Use Meter
- 1 Sanitary Sewer Meter
- 1 Stormwater Fee Meter



Site is decommissioned/demolished

<p><b>B3 Benchmark</b></p>  <p>This site has insufficient data to provide an accurate B3 Benchmark.</p>	<p><b>B3 Peer Rating</b></p> <p style="font-size: 2em; text-align: center;">N/A</p> <p>Site is decommissioned/demolished.</p>	<p><b>ENERGY STAR® Score</b></p>  <p>This site is unable to receive an ENERGY STAR score.</p>	<p><b>Baseline Comparison</b></p>  <p>This site has insufficient information to calculate a proper energy baseline.</p>
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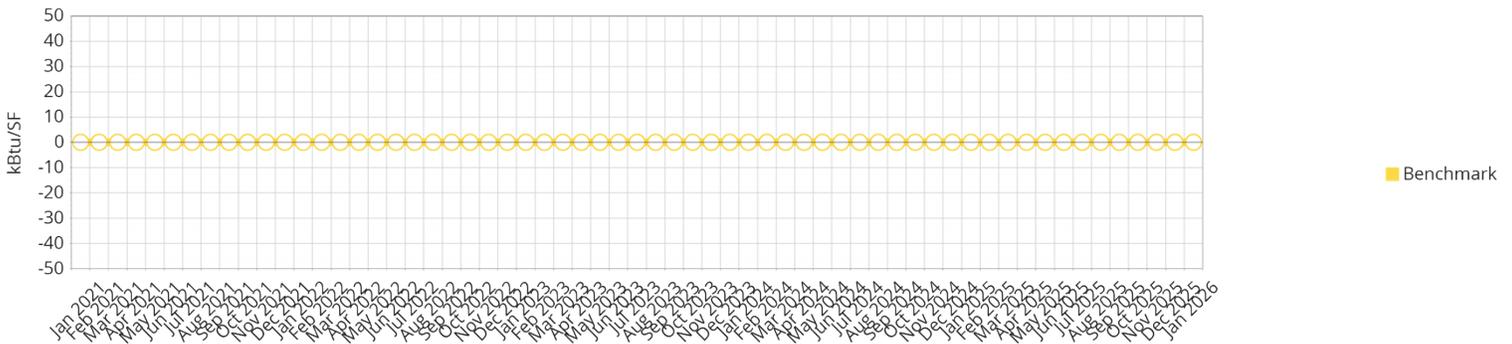
## B3 Energy Benchmark

B3 Benchmark usage predictions are generated by an engineering model of a site based on entered building data. The engineering model predicts the usage of a site as if it were built to the program's chosen energy code using typical weather conditions. The more accurate the building data is, the more accurate the model will be.

	Actual: 0.00 kBtu/SF (January 2021 to January 2026)
	Benchmark: 0.00 kBtu/SF (ASHRAE2019ECB)
	Ratio:

This site has insufficient data to provide an accurate B3 Benchmark.

Actual Usage Compared to Benchmark by Month



## B3 Peer Rating



The B3 Peer Rating is a comparison of how a site is doing compared to similar building types based on the actual to benchmark ratio.

Site is decommissioned/demolished.

## ENERGY STAR

ENERGY STAR Portfolio Manager is an online tool funded by the Department of Energy that allows users to measure and track energy and water usage, as well as GHG emissions. If eligible, properties entered into ENERGY STAR can receive a 1-100 score, based on statistical data from CBECS.

B3 integrates with ENERGY STAR Portfolio Manager to gather scores automatically.



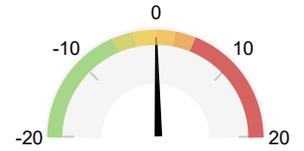
This site is unable to receive an ENERGY STAR score.

## Energy Baseline

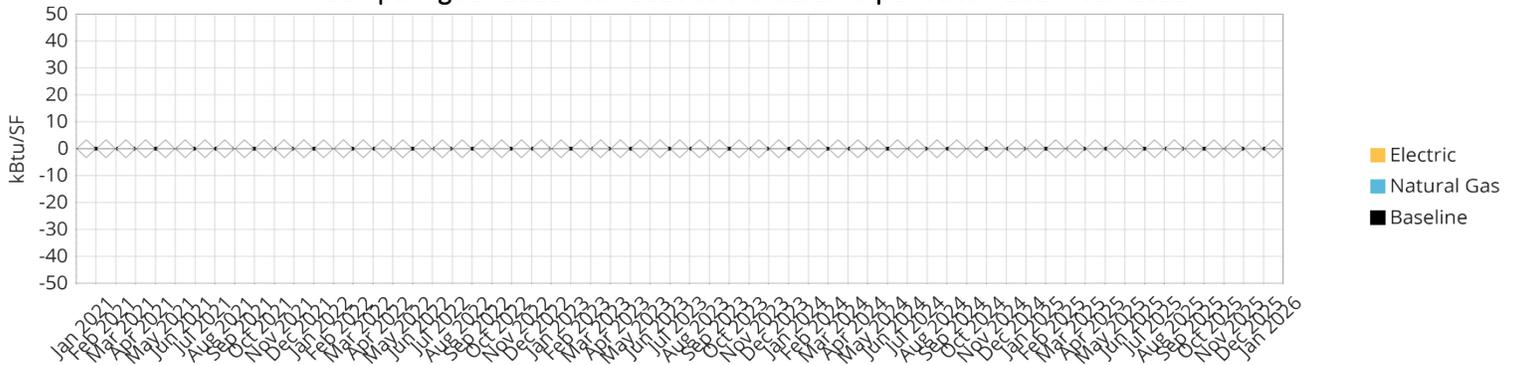
The energy baseline comparison is a comparison of a site's energy usage to itself over time.

**N/A**

\*Actual: 0.00 kBtu/SF (January 2021 to January 2026)  
 \*Baseline: 0.00 kBtu/SF (January 2017 to December 2017)  
 \*Weather normalized



Comparing Jan 2021 - Jan 2026 to the baseline period Jan 2017 - Jan 2022



### Energy Comparison Since Last Year

**N/A**

\*Weather normalized

### Electric Baseline Comparison

**N/A**

This site has insufficient information to calculate a proper baseline.

### Other Fuels Baseline Comparison

**N/A**

This site has insufficient information to calculate a proper baseline.

## Energy Usage by Meter Source Type

	Total Usage	Total Usage (kBtu)	kBtu/SF	kBtu/Occupant
 Electric	0 kWh	0	0.00	0.00
 Natural Gas	0 Therms	0	0.00	0.00
<b>Total</b>		<b>0</b>	<b>0.00</b>	<b>0.00</b>

	Total Energy Cost (\$)	\$/SF	\$/Occupant	CO2E/Occupant
 Electric	\$0.00	\$0.00	\$0.00	0.00
 Natural Gas	\$0.00	\$0.00	\$0.00	0.00
<b>Total</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>0.00</b>

## End Use Breakdown

End Use	Usage (kBtu/SF)	Potential Savings \$	Potential Savings kBtu	Potential Savings CO2E
 0% Baseload	0.00	-	-	-
 0% Heating	0.00	-	-	-
 0% Cooling	0.00	-	-	-
<b>Total</b>				

## Space Asset Areas

Space Usage	%	Hours/Day	Days/Week	Months/Year	Conditioning
 Office	NaN %	8 hrs/day	5 days/wk	12 months/yr	Heated And Cooled

## Water

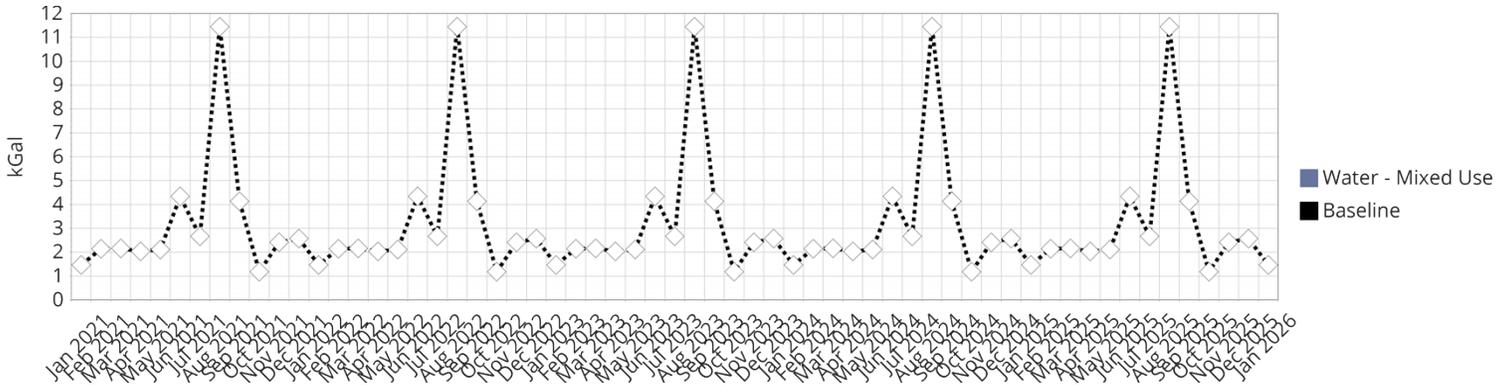
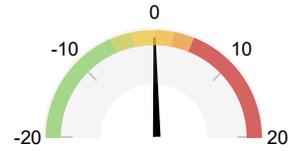
Annual Water Usage:	0.00 (kGal/year)
Annual Water Cost:	\$0
Annual Water Usage Per Occupant:	0.00
Annual Water Usage Per Square Foot:	0.0000

## Water Baseline

The water baseline comparison is a comparison of a site's water usage to itself over time.

**N/A**

Actual: 0.00 kGal (January 2021 to January 2026)  
 Baseline: 38.72 kGal (January 2010 to January 2015)



### Water Comparison Since Last Year

**N/A**

### Irrigated Water Comparison Since Last Year

**N/A**

This site has insufficient information to calculate a proper baseline.

### Non-Irrigated Water Comparison Since Last Year

**N/A**

This site has insufficient information to calculate a proper baseline.

## Miscellaneous Properties

Total Sites:	1
Total Buildings:	0
Total Meters:	0
Annual CO2e Metric Tons:	0.00 metric tons
Annual CO2e/SF:	0.0000 metric tons/SF
Annual CO2e/Occupant:	0.0000 metric tons/occupant
Annual CO2e Pounds:	0 pounds
Annual CO2e/SF:	0.00 pounds/SF
Annual CO2e/Occupant:	0.00 pounds/occupant
Annual Cost:	\$0
Annual Cost/SF:	\$0.00/SF
Annual Cost/Occupant:	\$0.00/occupant
kBtu:	0 kBtu/year
kBtu/SF (aka EUI):	0.00 kBtu/sf/year
Date Created:	
First Building Name:	Swenson House (Acq FY03)
Energy Usage Period:	January 2021 to January 2026

# 3 BENCHMARKING

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Water Usage Period:	January 2021 to January 2026
Total Usage Period:	January 2021 to January 2026
Baseline Period:	January 2017 to December 2017

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