

*"Water is Life"*



# Frenchman Cambridge Irrigation District

Water Users Meeting

March 21, 2023

Brad Edgerton, Manager

*"Water is Life"*



# Frenchman Cambridge Irrigation District

Dale Cramer, President

Todd Lichty, Vice President

Duane Vorderstrasse, Secretary / Treasurer

FCID Employs 11 Fulltime Employees

# Background:

*"Water is Life"*



FCID was Established in 1946 by a vote of the land owners.

318 in favor of the District

31 in opposition

First Irrigation District organized under the Missouri Basin Plan approved by congress in 1944

# Background:

*"Water is Life"*



FCID has three Reclamation Reservoirs with a total irrigation pool capacity of 143,000 acre-feet.

Exclusive Flood Control Pool = 235,747 AF

Surcharge Flood Pool = 290,144 AF

*"Water is Life"*



# Background:

Four Reclamation Canal Systems serving  
45,669 acres.

Meeker-Driftwood Canal serves 16,691 acres

Red Willow Canal serves 4,642 acres

Bartley Canal serves 6,130

Cambridge Canal serves 18,205

*"Water is Life"*



# Background:

Four Reclamation Canal Systems with:

156 miles of main canal

100 miles of buried pipe laterals

157 miles of surface and sub-surface drains

Total Canal Diversion  
Capacity = 829 cfs

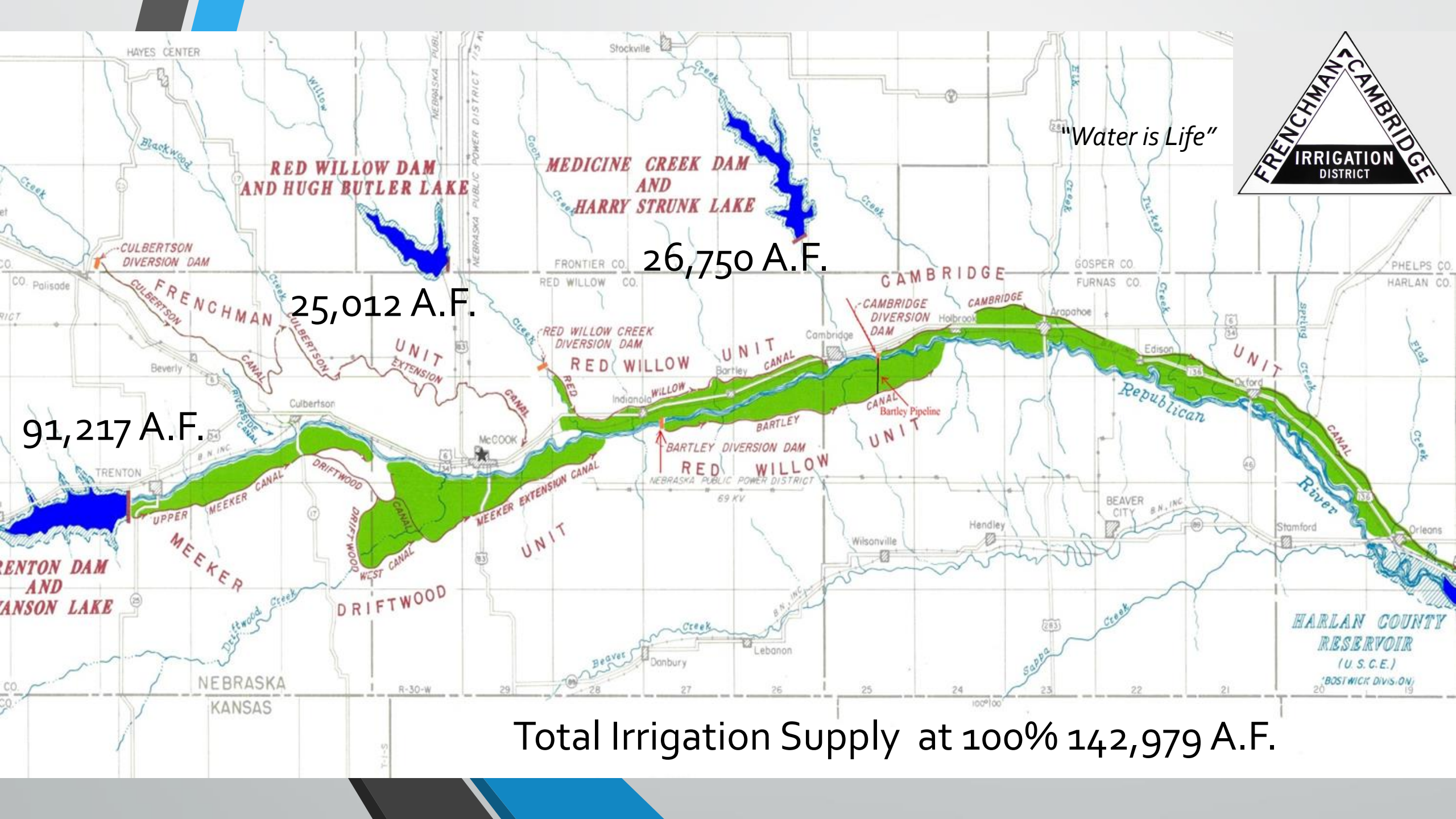
Natural Flow Permits  
granted 512 cfs

Priority Dates Range  
From 1890 to 1987

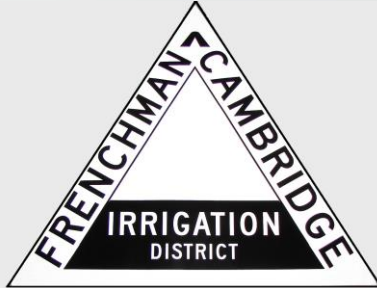
Serve over 400  
Customers

*"Water is Life"*





"Water is Life"



RED WILLOW DAM AND HUGH BUTLER LAKE

MEDICINE CREEK DAM AND HARRY STRUNK LAKE

26,750 A.F.

25,012 A.F.

91,217 A.F.

TRENTON DAM AND HANSON LAKE

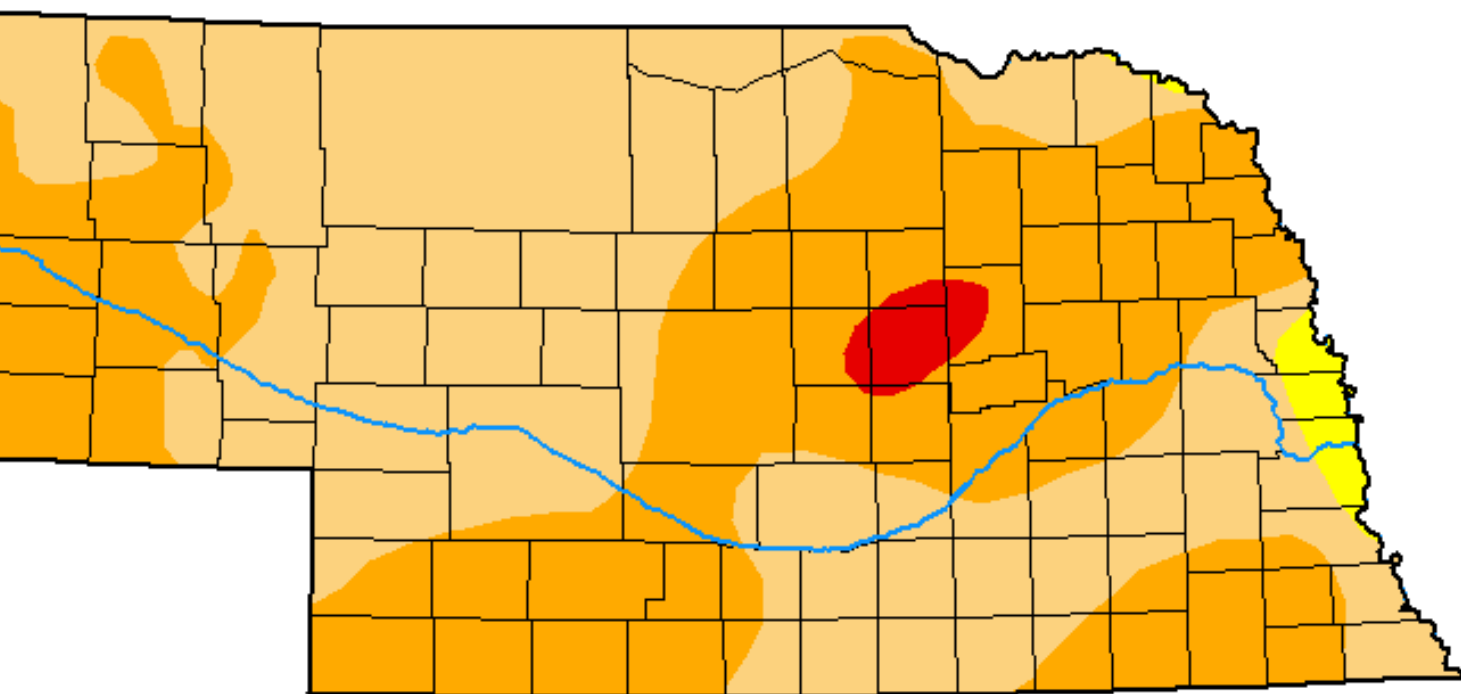
HARLAN COUNTY RESERVOIR (U.S.C.E.) BOSTWICK DIVISION

Total Irrigation Supply at 100% 142,979 A.F.









*U.S. Drought Monitor*  
**Nebraska**

**March 15, 2022**  
*(Released Thursday, Mar. 17, 2022)*  
Valid 8 a.m. EDT



*Intensity:*

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>*

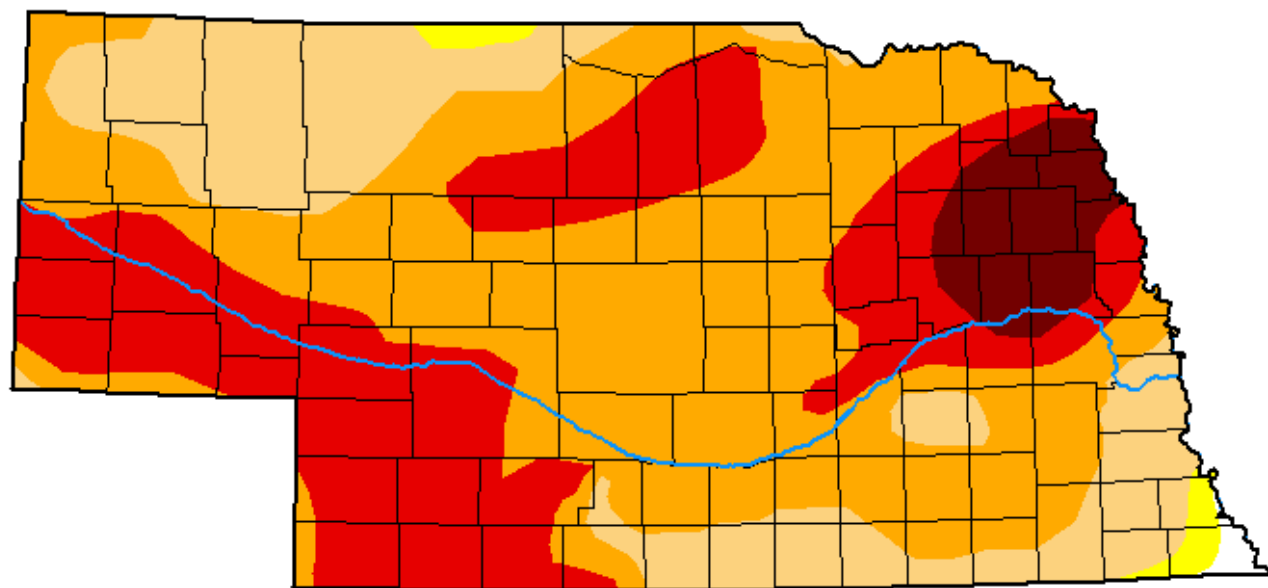
*Author:*

# Nebraska

March 14, 2023

(Released Thursday, Mar. 16, 2023)

Valid 8 a.m. EDT



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

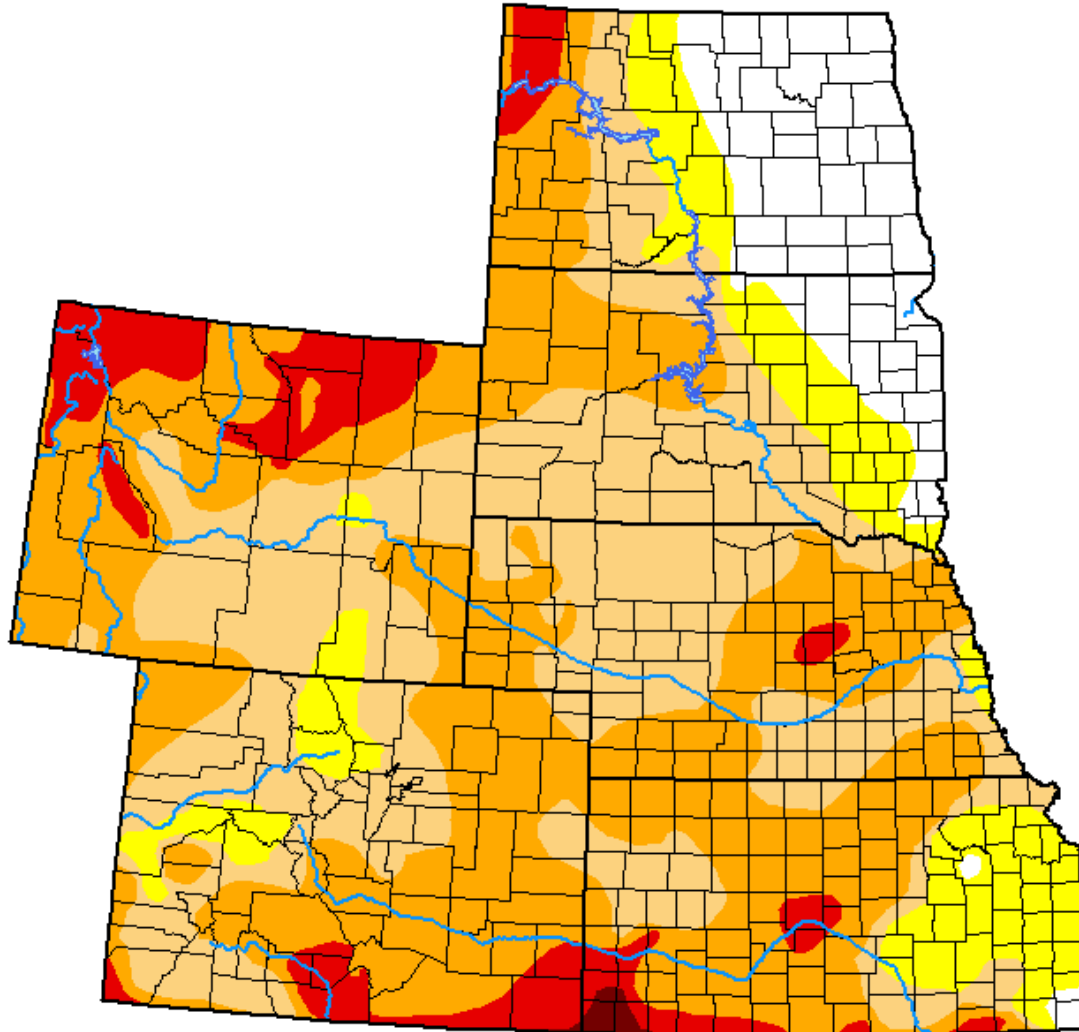
Author:

Brad Rippey  
U.S. Department of Agriculture



# U.S. Drought Monitor High Plains

March 15, 2022  
(Released Thursday, Mar. 17, 2022)  
Valid 8 a.m. EDT



### Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>*

### Author:

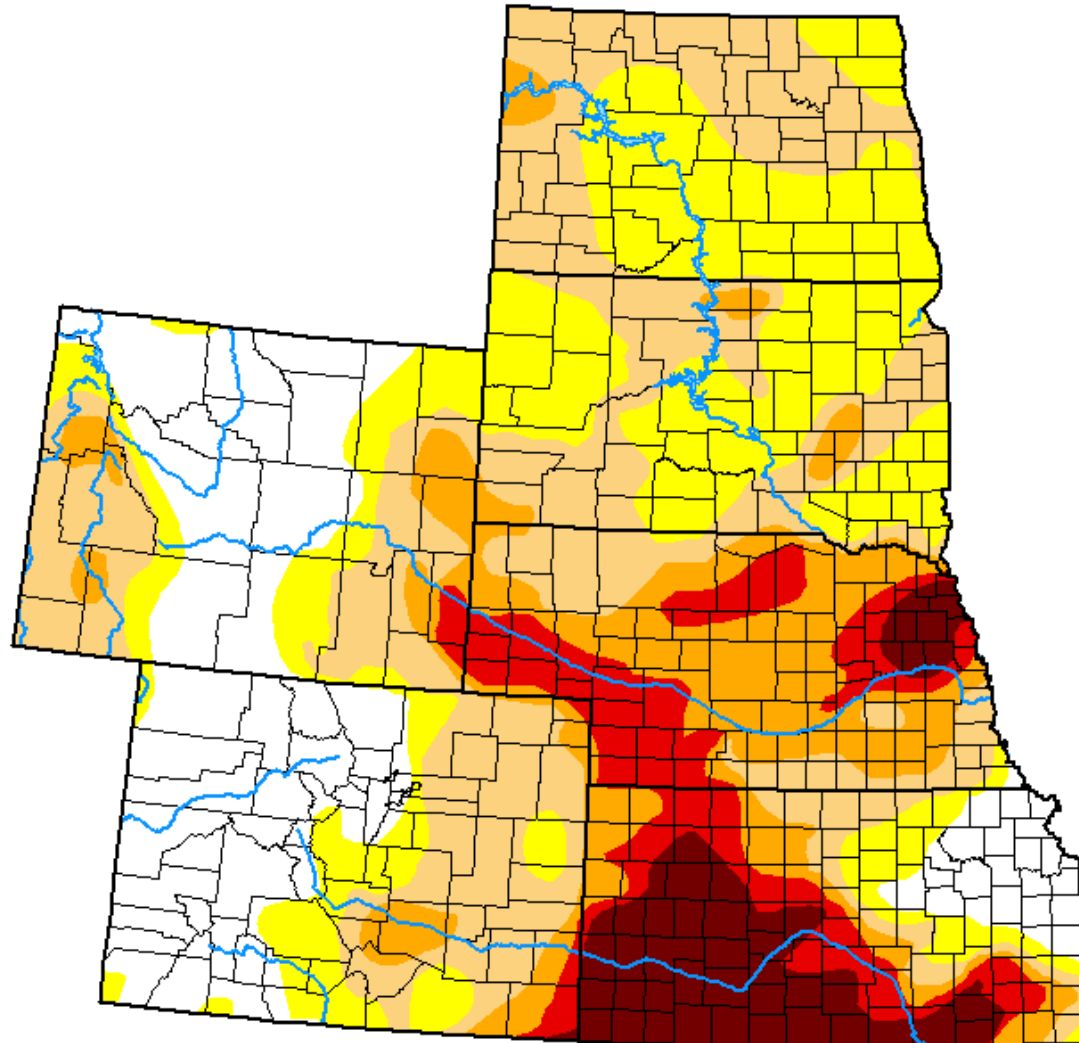
Adam Hartman  
NOAA/NWS/NCEP/CPC









[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# U.S. Drought Monitor High Plains

March 14, 2023  
(Released Thursday, Mar. 16, 2023)  
Valid 8 a.m. EDT



### Intensity:

-  None
-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
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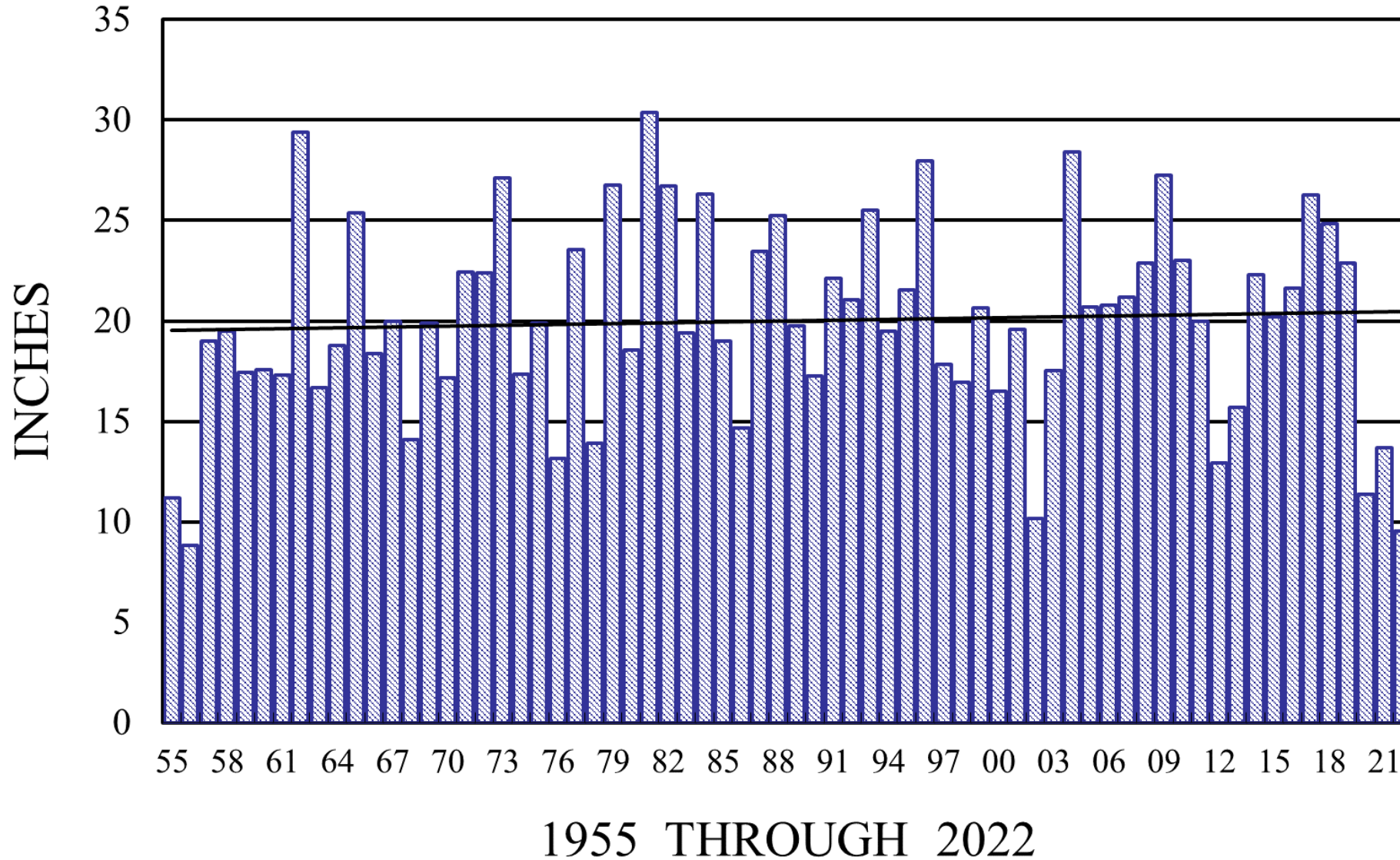
### Author:

Brad Rippey  
U.S. Department of Agriculture



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# TRENTON DAM YEARLY PRECIPITATION



Historic Average  
Precip = 19.88 inches

10 yr moving Average  
Precip = 18.31 inches

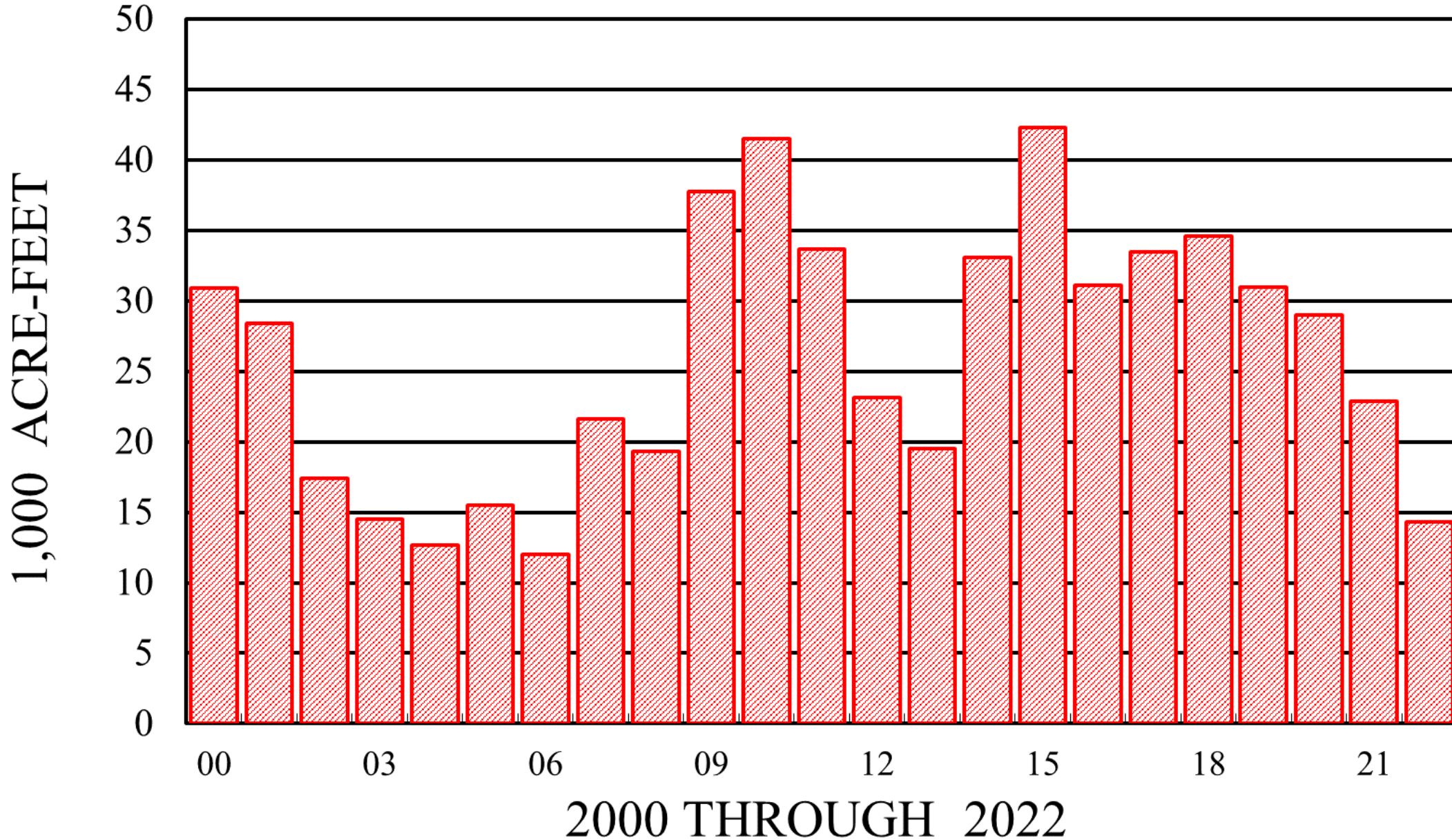
Past 3 year Average  
Precip = 11.54 inches

2022 Precip = 9.56  
inches

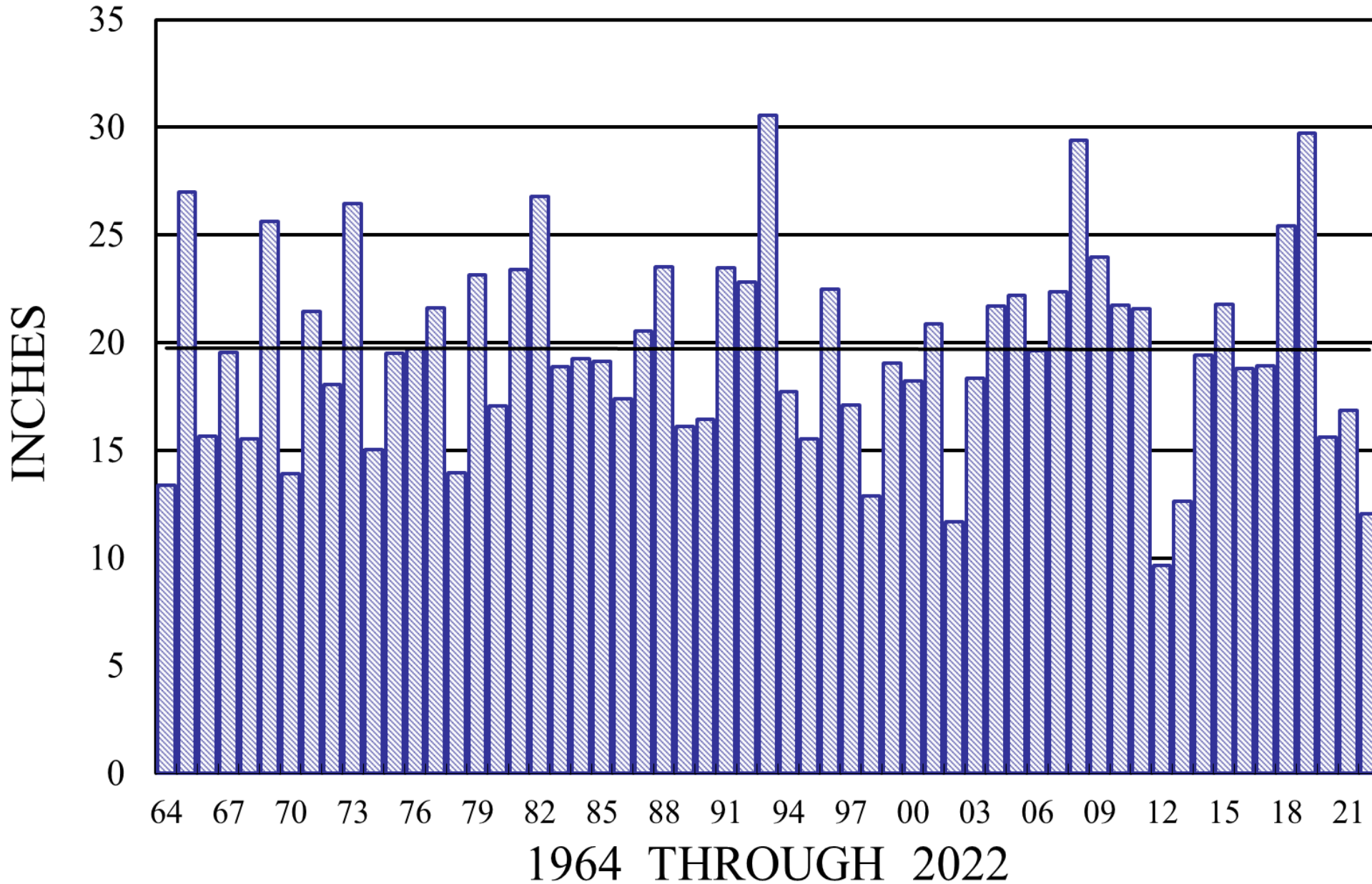
# TRENTON DAM YEARLY HISTORICAL INFLOW



2022 Inflow  
14.3 KA.F



# RED WILLOW DAM YEARLY PRECIPITATION



Historic Average  
Precip = 19.68  
inches

10 yr moving  
Average Precip =  
18.30 inches

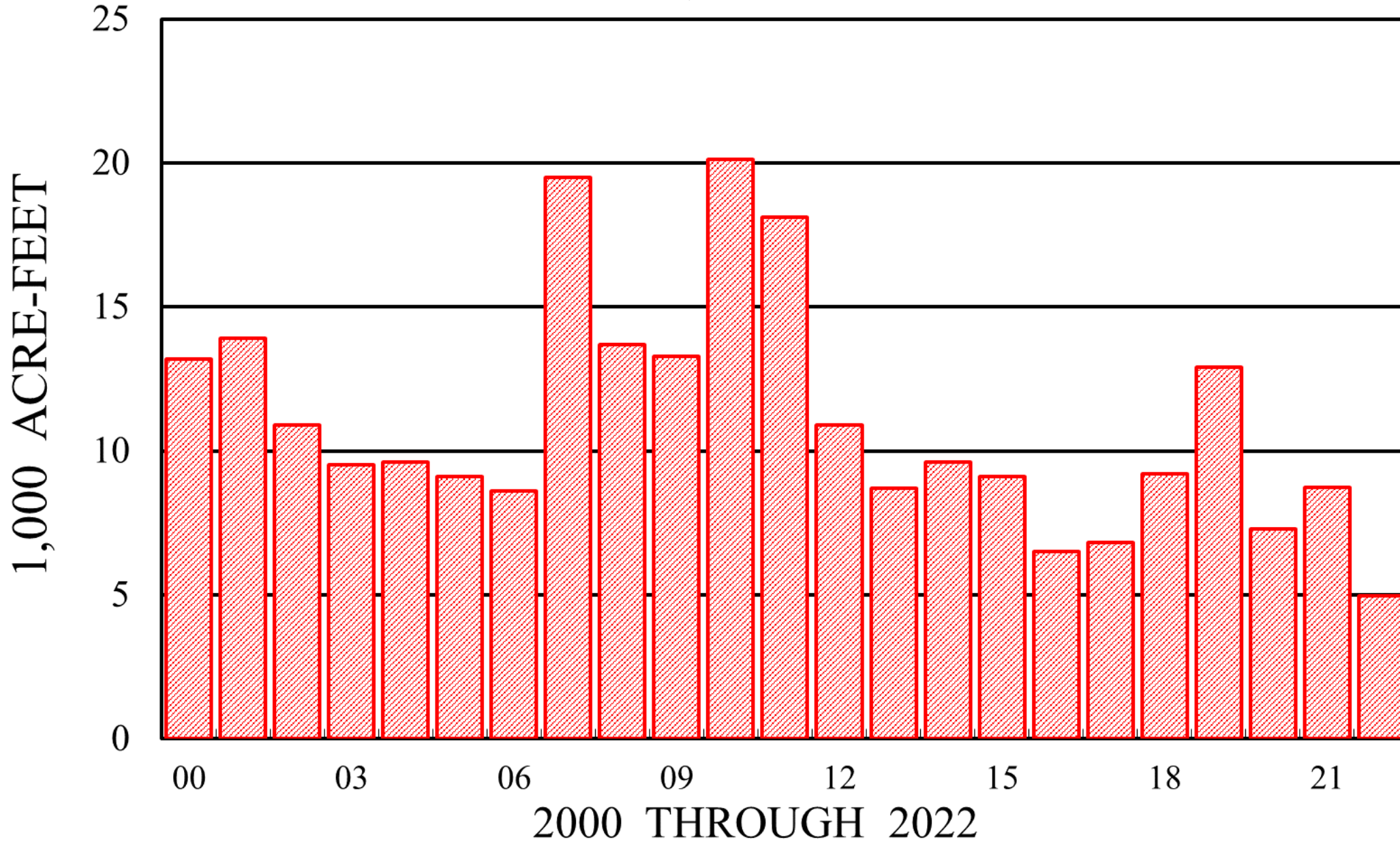
Past 3 year  
Average Precip =  
14.85 inches

2022 Precip = 12.07  
inches

# RED WILLOW DAM and HUGH BUTLER LAKE YEARLY HISTORICAL INFLOW

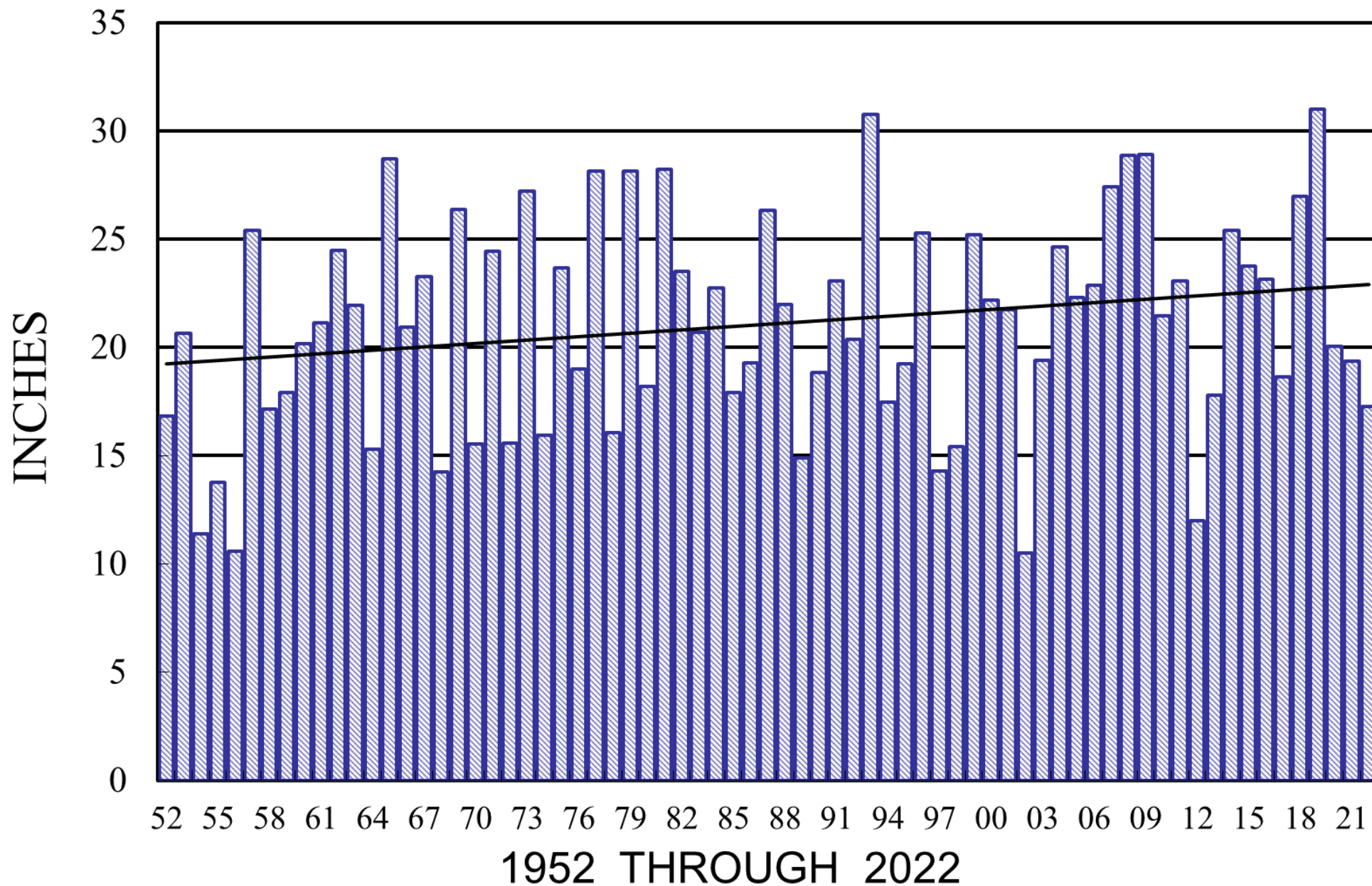


2022 Inflow  
5.0 KA.F





# MEDICINE CREEK DAM YEARLY PRECIPITATION



Historic Average  
Precip = 21.08  
inches

10 yr moving  
Average Precip =  
22.3 inches

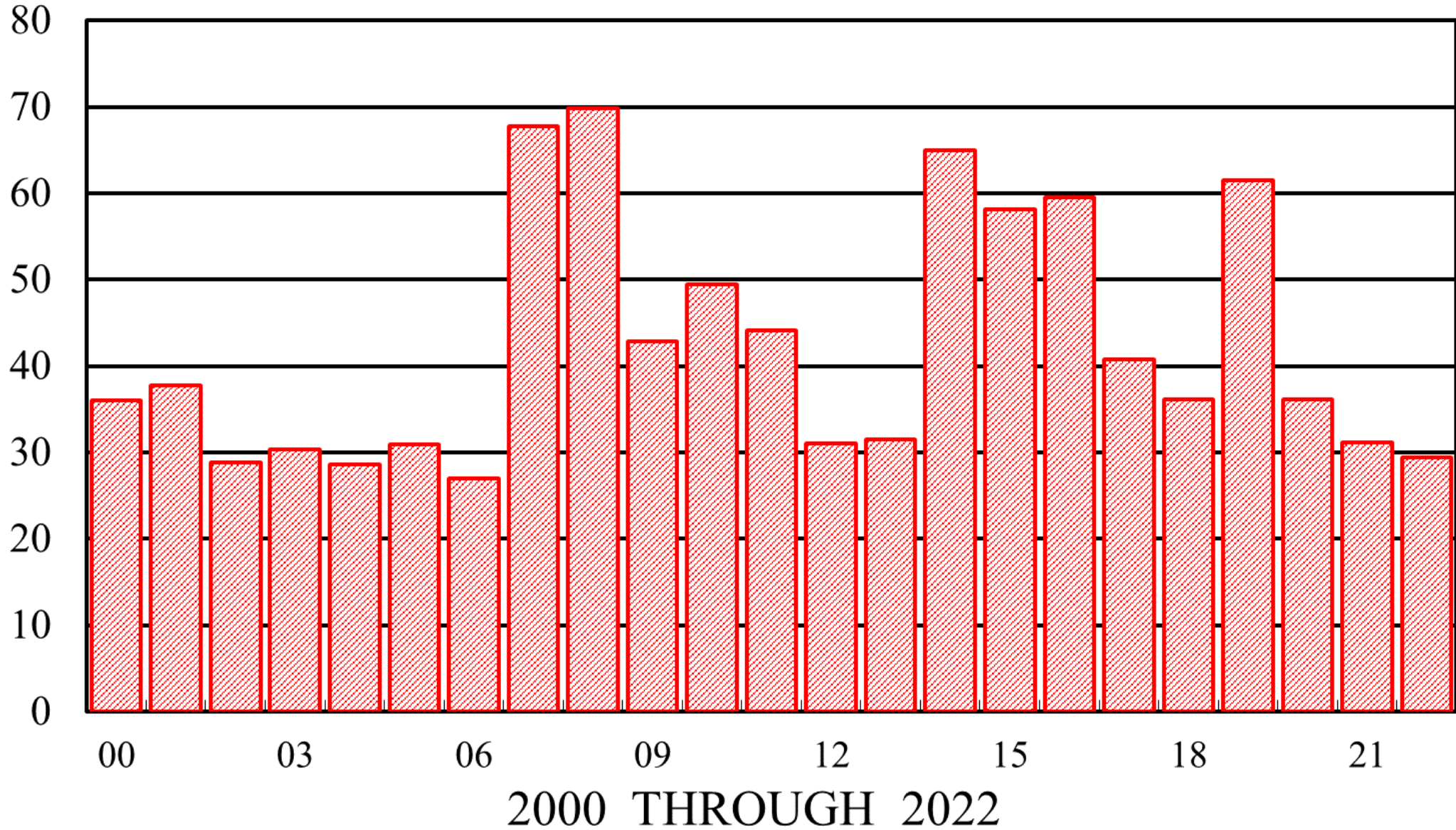
Past 3 year  
Average Precip =  
18.88 inches

2022 Precip =  
17.26 inches

# MEDICINE CREEK DAM and HARRY STRUNK LAKE YEARLY HISTORICAL INFLOW



1,000 ACRE-FEET



2022  
Inflow  
29.4  
KA.F

\*2014-2017 includes N-CORPE Augmentation

# Frenchman Cambridge 2023 Storage Water Supply



## Reservoir Content / Irrigation Supply

Reservoirs 2023	Swanson		Hugh Butler		Harry Strunk		Total AF
	Elevation	Acre-Feet	Elevation	Acre-Feet	Elevation	Acre-Feet	AF
Top of Irrigation Pool	2752.00	110,175	2581.80	36,224	2366.10	34,647	181,046
FCID Contracted Shut Off Elevation/Content AF	2725.00	18,958	2561.00	11,212	2343.00	7,897	38,067
<i>FCID Contracted Irrigation Pool Capacity at 100% Full</i>	27.00	91,217	20.80	25,012	23.10	26,750	142,979
Current Elevation / Content (Acre- Feet)	2729.47	28927.00	2562.85	12771	2361.24	26,800	68,498
% of Full Capacity	26.3%		35.3%		77.4%		37.8%
<i>Current 2023 Irrigation Supply</i>	<i>Feet</i>	<i>A.F.</i>	<i>Feet</i>	<i>A.F.</i>	<i>Feet</i>	<i>A.F.</i>	<i>A.F.</i>
	4.47	9,969	1.85	1,559	18.24	18,903	30,431
Tuesday, March 21, 2023	% Irr. Pool	10.9%	% Irr. Pool	6.2%	% Irr. Pool	70.7%	21.3%
<b>One Year Change</b>							
Monday, March 21, 2022	2,737.36	51,409	2,567.31	16,996	2,365.66	33,846	102,251
<b>One Year Change in Storage (AF / Elevation)</b>	-7.89	(22,482)	-4.46	(4,225)	-4.42	(7,046)	(33,753)

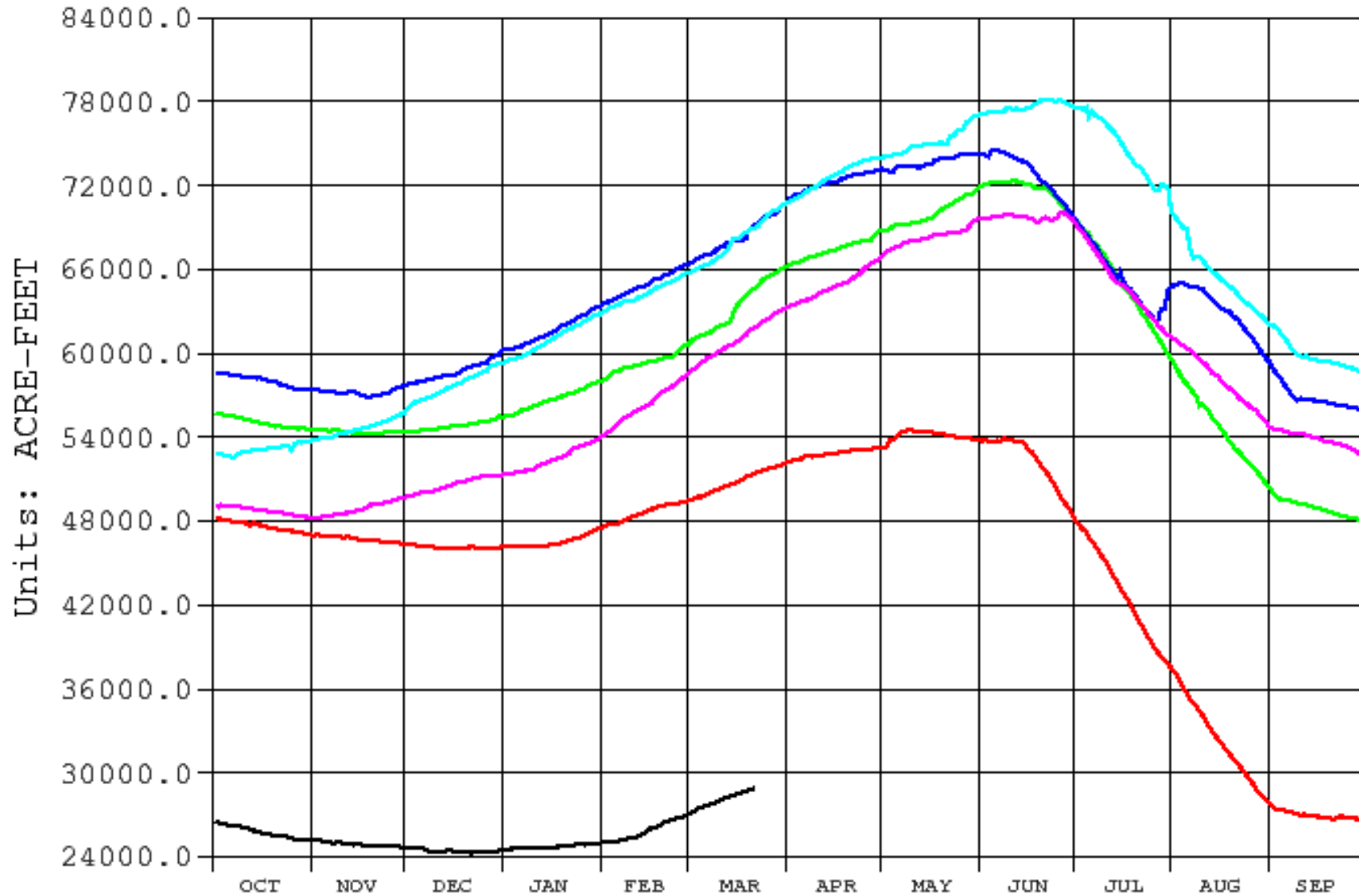
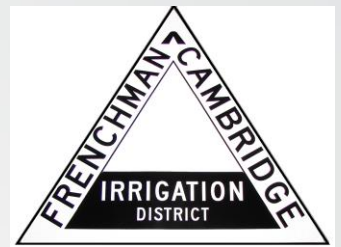
Elevation/Content AF	2725.00	18,958	2561.00	11,212
<i>FCID Contracted Irrigation Pool Capacity at 100% Full</i>	27.00	91,217	20.80	25,012
<b>Current Elevation / Content (Acre-Feet)</b>	<b>2729.47</b>	<b>28927.00</b>	<b>2562.85</b>	<b>12771</b>
<b>% of Full Capacity</b>	<b>26.3%</b>		<b>35.3%</b>	
<b>Current 2023 Irrigation Supply</b>	<b>Feet</b>	<b>A.F.</b>	<b>Feet</b>	<b>A.F.</b>
	<b>4.47</b>	<b>9,969</b>	<b>1.85</b>	<b>1,559</b>
Tuesday, March 21, 2023	% Irr. Pool	10.9%	% Irr. Pool	6.2%
<b>One Year Change</b>				
Monday, March 21, 2022	2,737.36	51,409	2,567.31	16,996
<b>One Year Change in Storage (AF / Elevation)</b>	<b>-7.89</b>	<b>(22,482)</b>	<b>-4.46</b>	<b>(4,225)</b>

Content AF	2725.00	18,958	2561.00	11,212	2343.00	7,897
Irrigation Pool						
100% Full	27.00	91,217	20.80	25,012	23.10	26,750
Content (Acre- feet)	2729.47	28927.00	2562.85	12771	<u>2361.24</u>	<u>26,800</u>
Capacity	26.3%		35.3%		77.4%	
Irrigation Supply	<i>Feet</i>	<i>A.F.</i>	<i>Feet</i>	<i>A.F.</i>	<i>Feet</i>	<i>A.F.</i>
	4.47	9,969	1.85	1,559	18.24	18,903
As of March 21, 2023	% Irr. Pool	10.9%	% Irr. Pool	6.2%	% Irr. Pool	70.7%
<b>One Year Change</b>						
As of March 21, 2022	2,737.36	51,409	2,567.31	16,996	2,365.66	33,846
Change in Storage (AF / Acre-foot)	-7.89	(22,482)	-4.46	(4,225)	-4.42	(7,046)

Archive Data From 1 OCT Through 30 SEP

Plotted 03/21/2023 08:33

# Swanson Reservoir



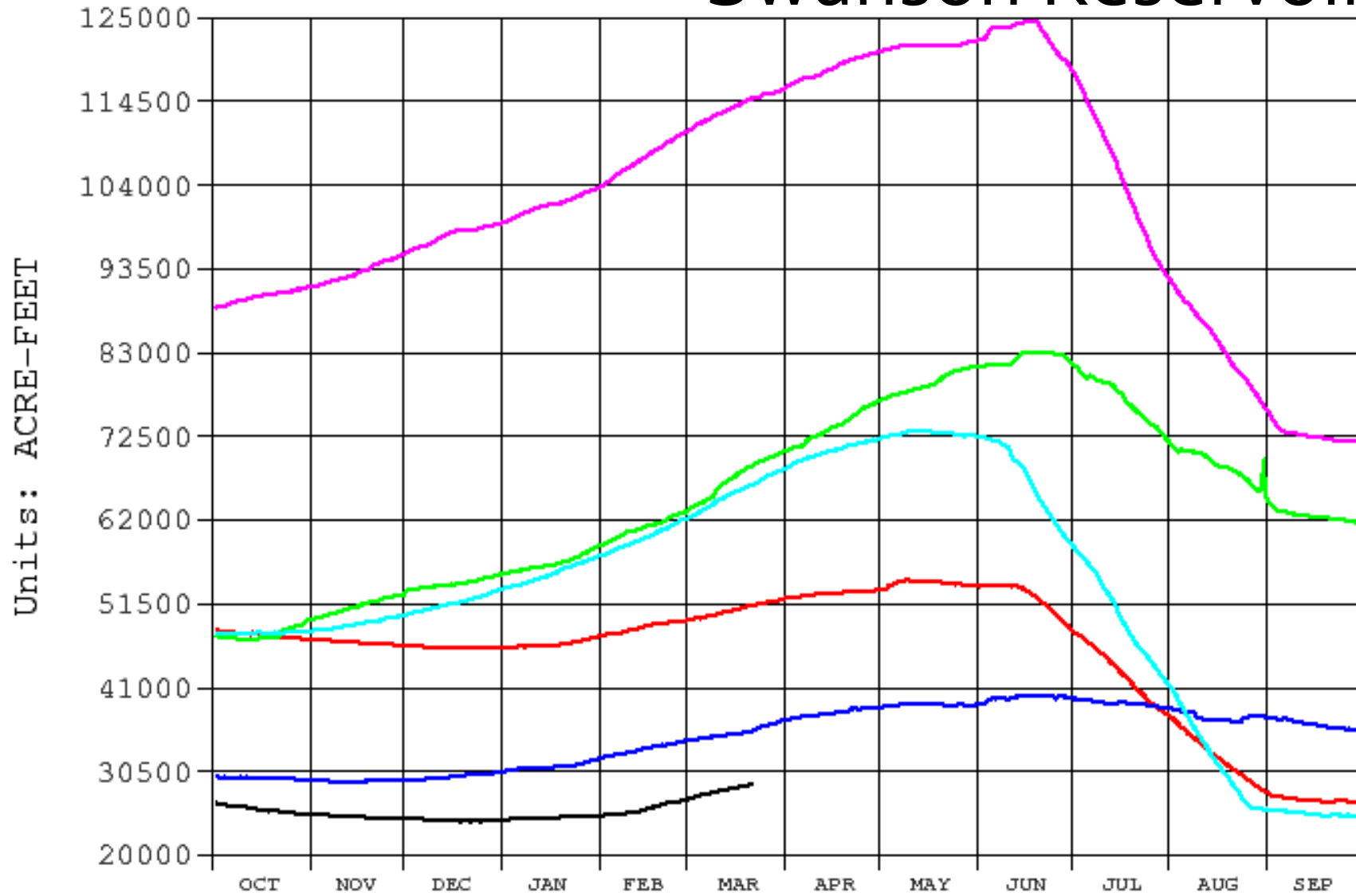
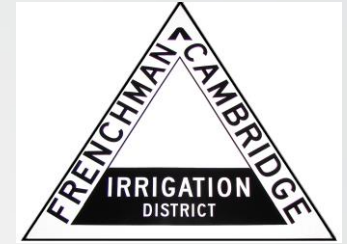
TRNE Swanson Lake (Trenton Dam), NE  
AF Reservoir Storage Content (acre-feet)

2023 2022 2021  
2020 2019 2018

Archive Data From 1 OCT Through 30 SEP

Plotted 03/21/2023 08:47

# Swanson Reservoir



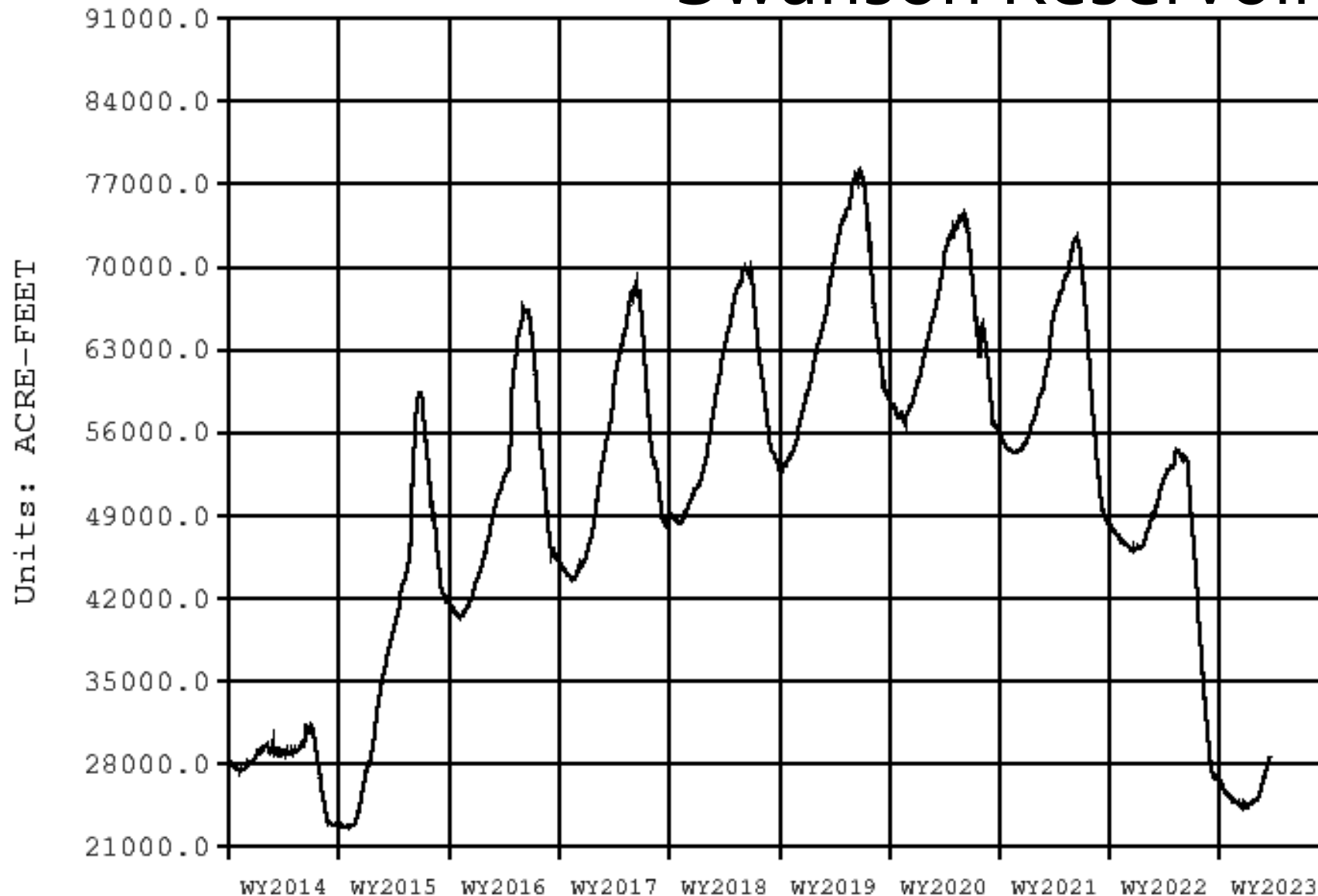
TRNE Swanson Lake (Trenton Dam), NE  
AF Reservoir Storage Content (acre-feet)

2023 2022 2010  
2005 2000 1997

Archive data From 1-OCT-2013 Through 30-SEP-2023

Plotted 03/17/2023 13:14

# Swanson Reservoir



TRNE

Swanson Lake (Trenton Dam), NE

AF

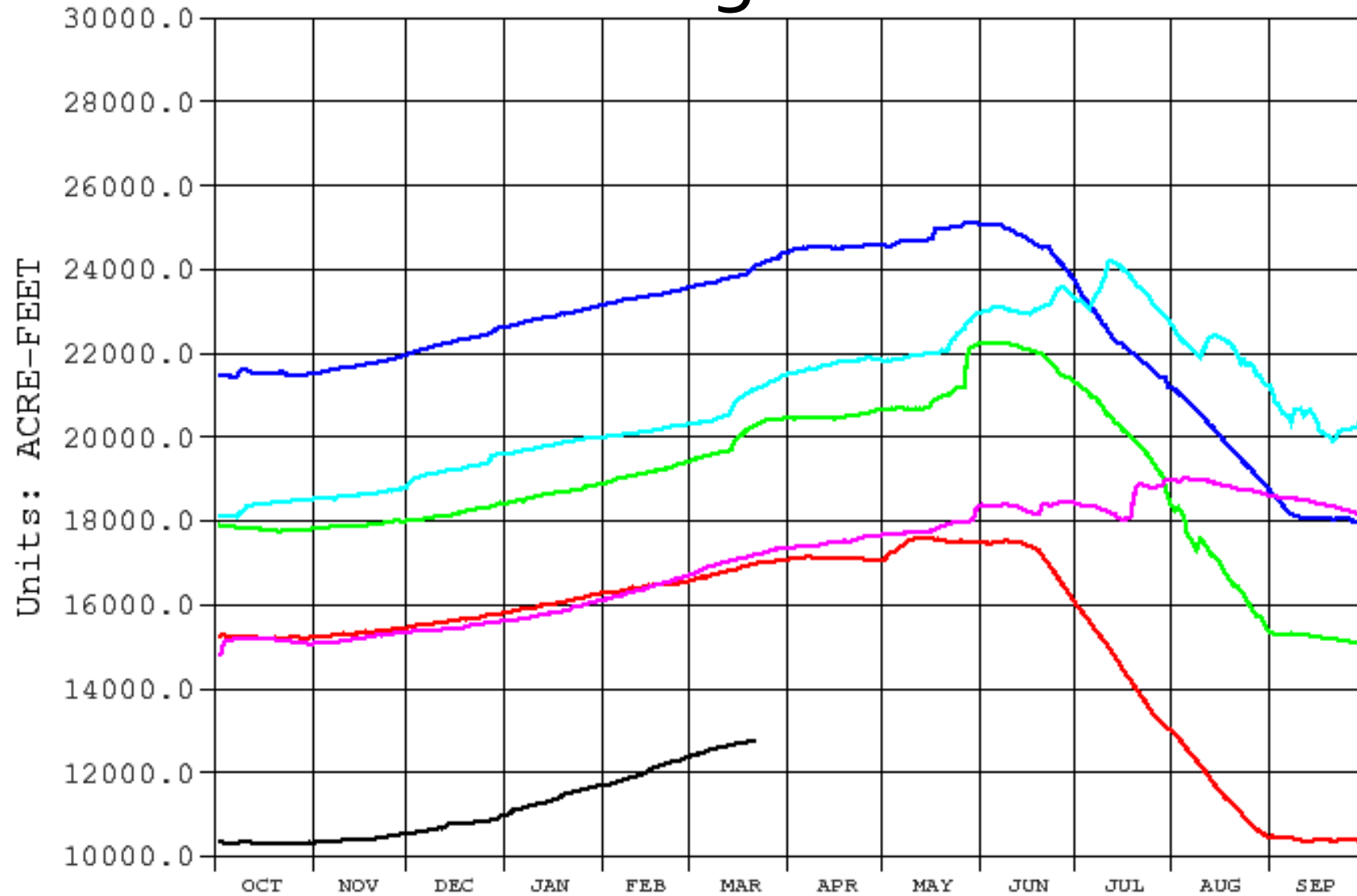
Reservoir Storage Content (acre-feet)



Archive Data From 1 OCT Through 30 SEP

Plotted 03/21/2023 08:51

# Hugh Butler Reservoir



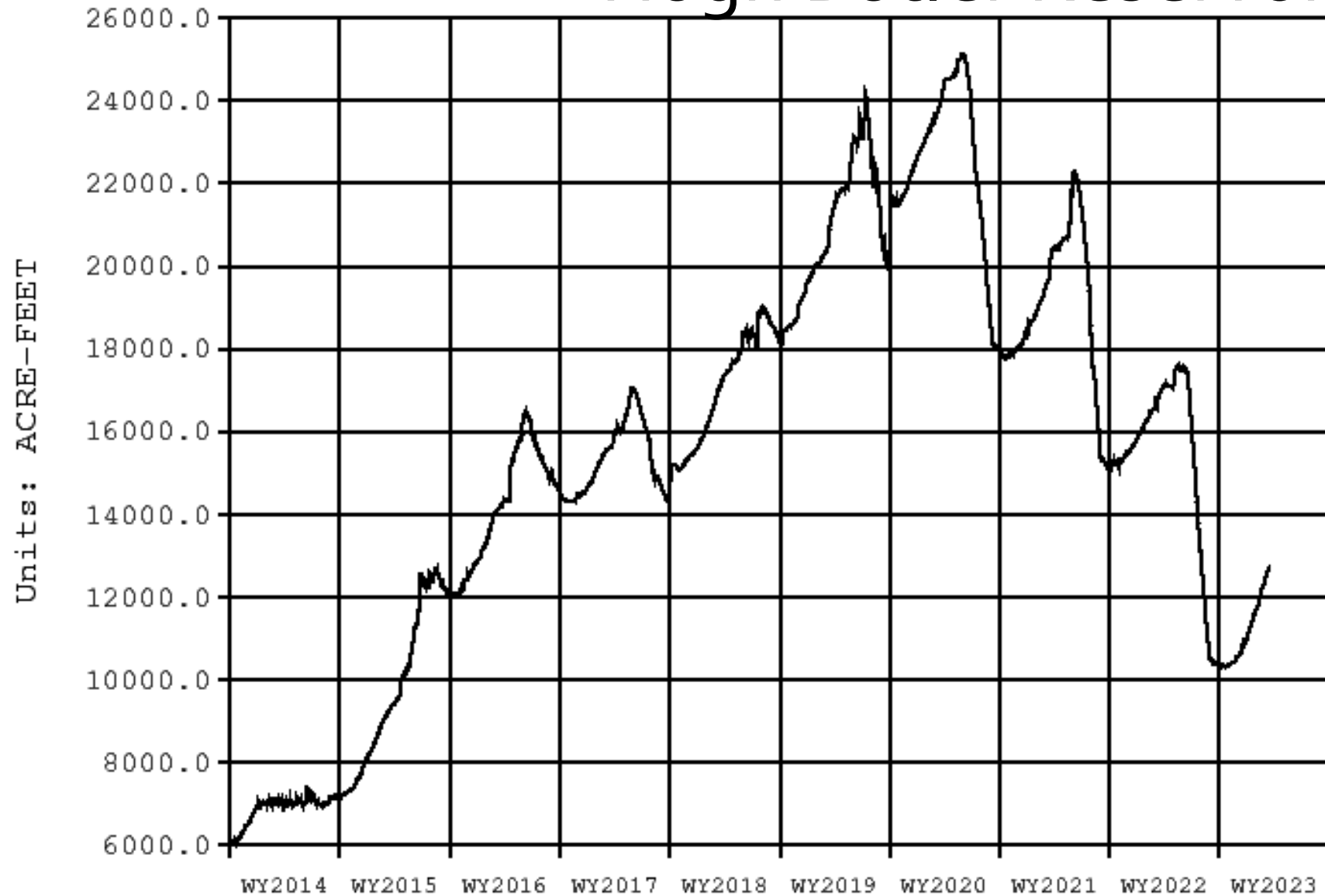
HBNE Hugh Butler Lake (Red Willow Dam), NE  
— AF Reservoir Storage Content (acre-feet)

2023 2022 2021  
2020 2019 2018

Archive data From 1-OCT-2013 Through 30-SEP-2023

Plotted 03/17/2023 13:16

# Hugh Butler Reservoir



HBNE

Hugh Butler Lake (Red Willow Dam), NE

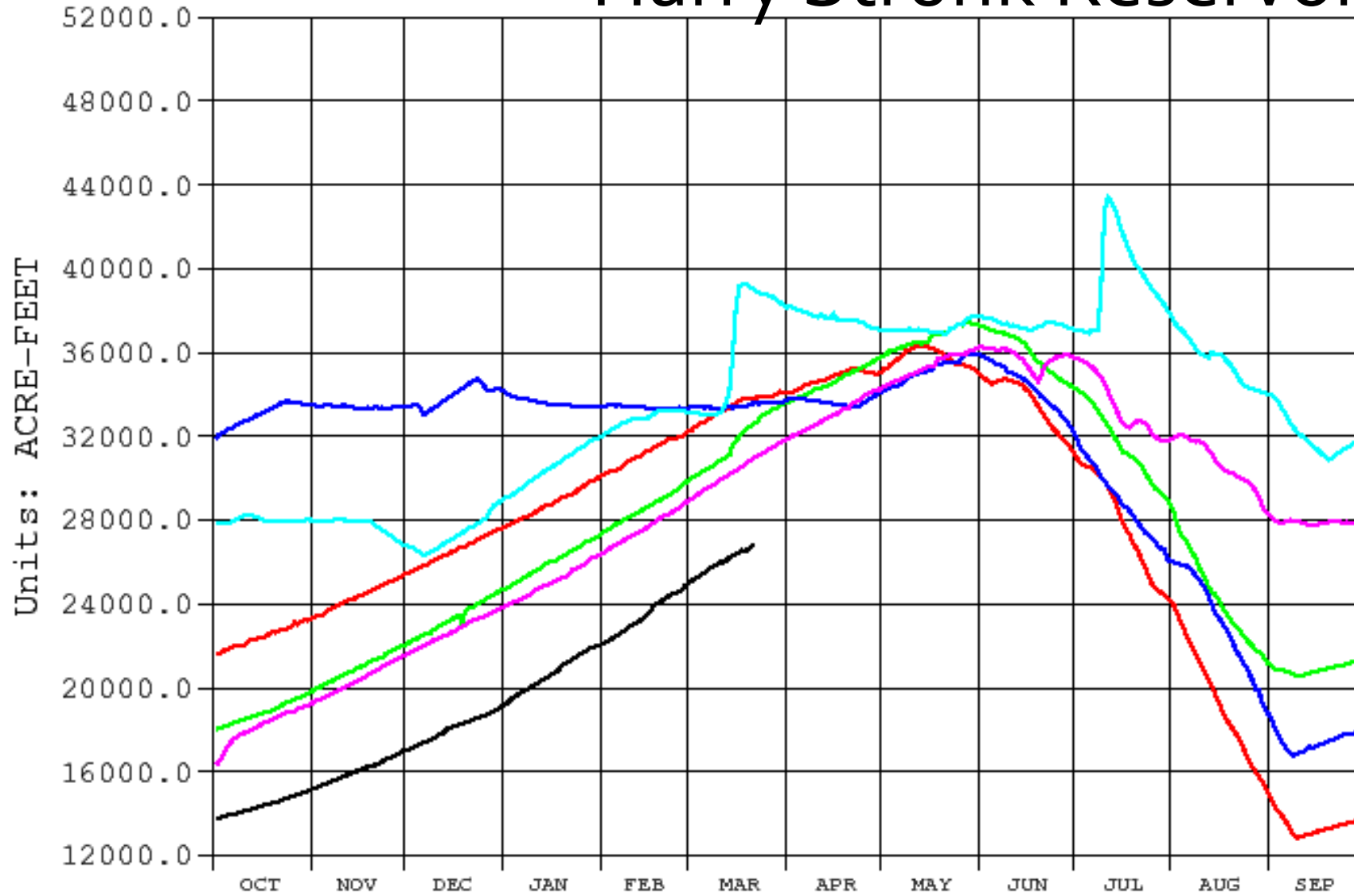
\_\_\_\_ AF

Reservoir Storage Content (acre-feet)

Archive Data From 1 OCT Through 30 SEP

Plotted 03/21/2023 08:54

# Harry Strunk Reservoir



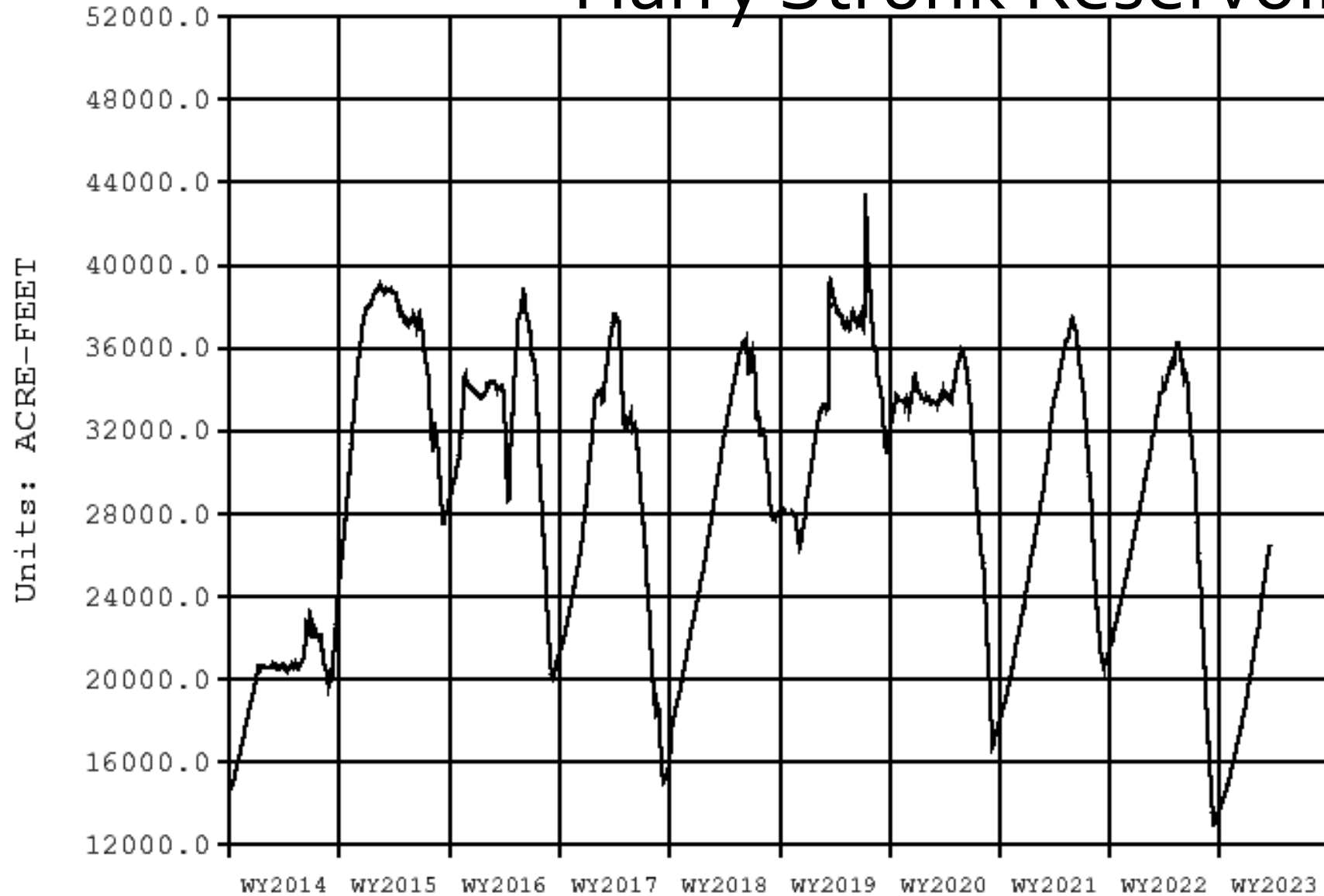
HSNE Harry Strunk Lake (Medicine Creek), NE  
AF Reservoir Storage Content (acre-feet)

2023 2022 2021  
2020 2019 2018

Archive data From 1-OCT-2013 Through 30-SEP-2023

Plotted 03/17/2023 13:17

# Harry Strunk Reservoir



HSNE

Harry Strunk Lake (Medicine Creek), NE

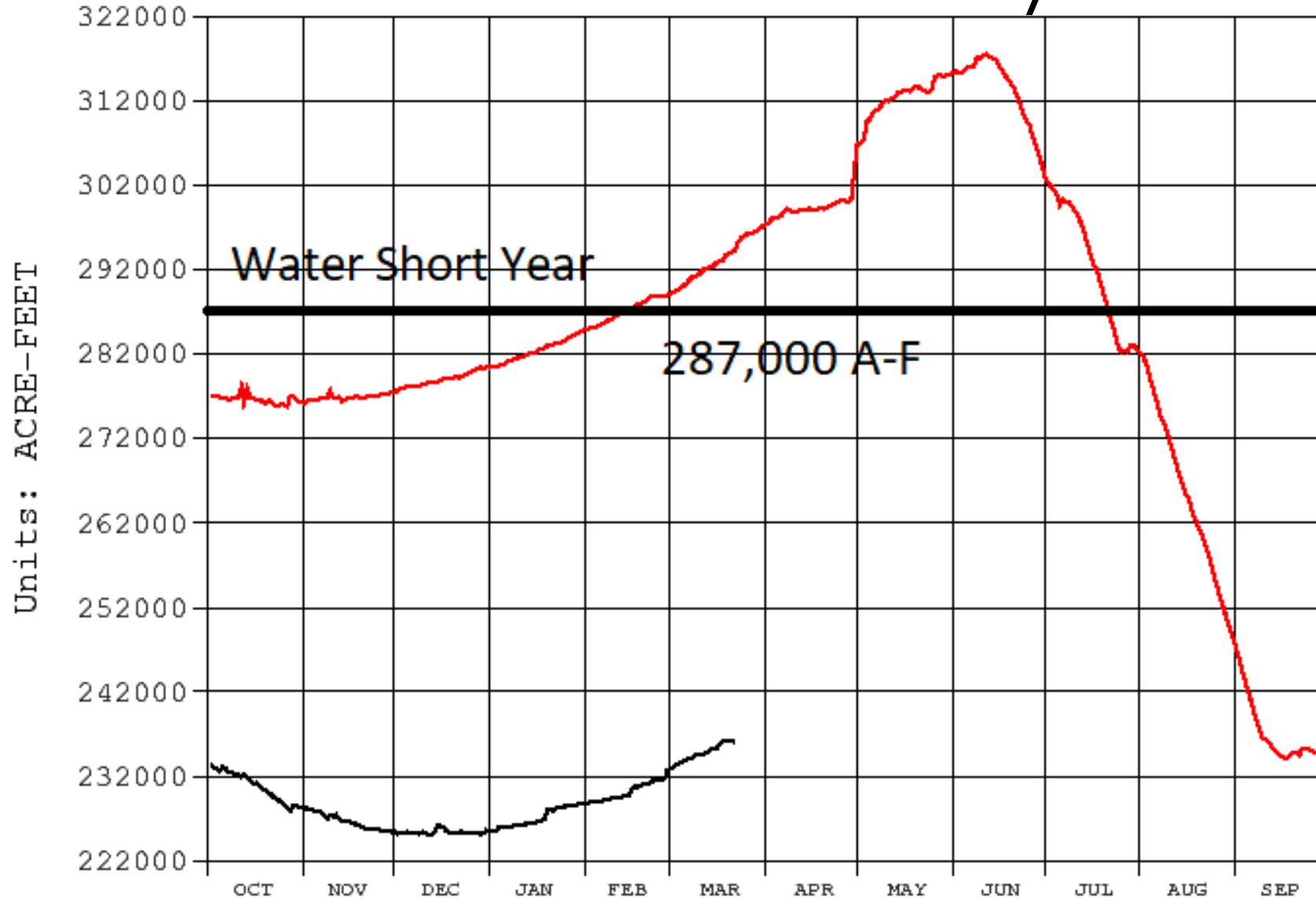
AF

Reservoir Storage Content (acre-feet)

Archive Data From 1 OCT Through 30 SEP

Plotted 03/21/2023 09:53

# Harlan County Reservoir



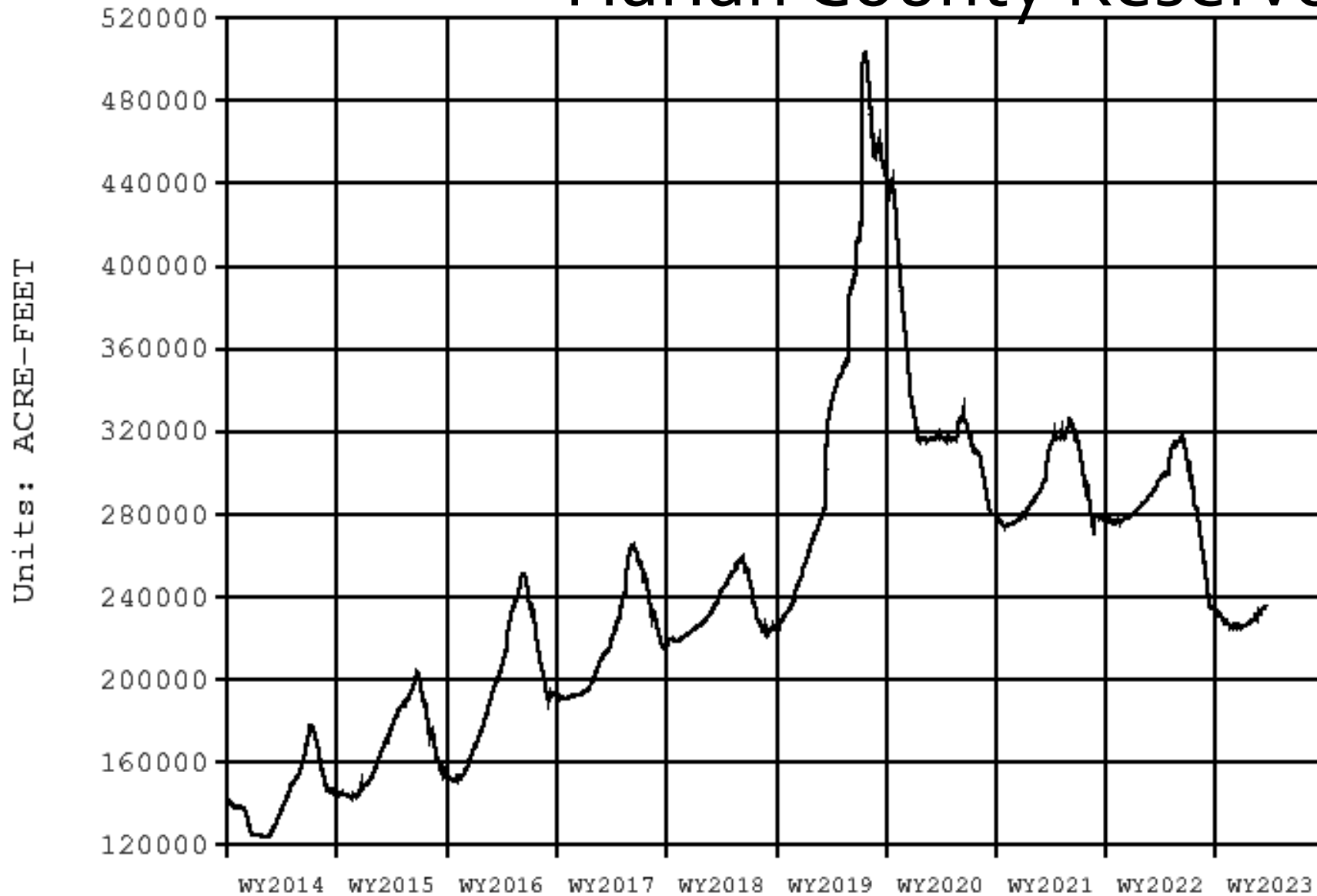
HCNE Harlan County Dam, NE  
AF Reservoir Storage Content (acre-feet)

2023 2022

Archive data From 1-OCT-2013 Through 30-SEP-2023

Plotted 03/17/2023 13:19

# Harlan County Reservoir



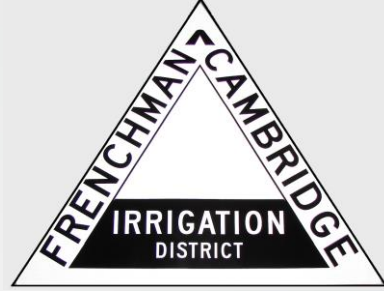
HCNE

Harlan County Dam, NE

\_\_\_\_\_ AF

Reservoir Storage Content (acre-feet)

*"Water is Life"*



# 2023 Water Rates and Allocations

Reclamation's Forecast = 12,000 A-F

Meeker-Driftwood Canal 3.50 inches per acre

FCID:

Meeker-Driftwood Canal is allocated 0 inches

*"Water is Life"*



# 2023 Water Rates and Allocations

Reclamation's Forecast = 800 Acre-Feet

Red Willow Canal 0.5 inches per acre

FCID

Red Willow Canal – 0 inches per acre



*"Water is Life"*



# 2023 Water Rates and Allocations

Bartley Canal is allocated 0 inches

River Water will be available as long as water is in the River!!

River Water should be available early! (April 15, 2023)

6 inches per acre will be allocated to the Acres below the pump station.

*"Water is Life"*



# 2023 Water Rates and Allocations

Cambridge Canal is allocated 8 inches

Reclamation's Forecast = 28,500 Acre-Feet

Cambridge Canal 8 inches per acre.

River Water Should be available also

"Water is Life"



# 2023 Water Rates and Allocations

All Acres will be charged \$10.00

Allocated Acres will pay \$4.75 per inch allocated.

Example: 8 inches X \$4.75 = \$38.00 plus \$10.00 per acre = \$48.00 / Acre

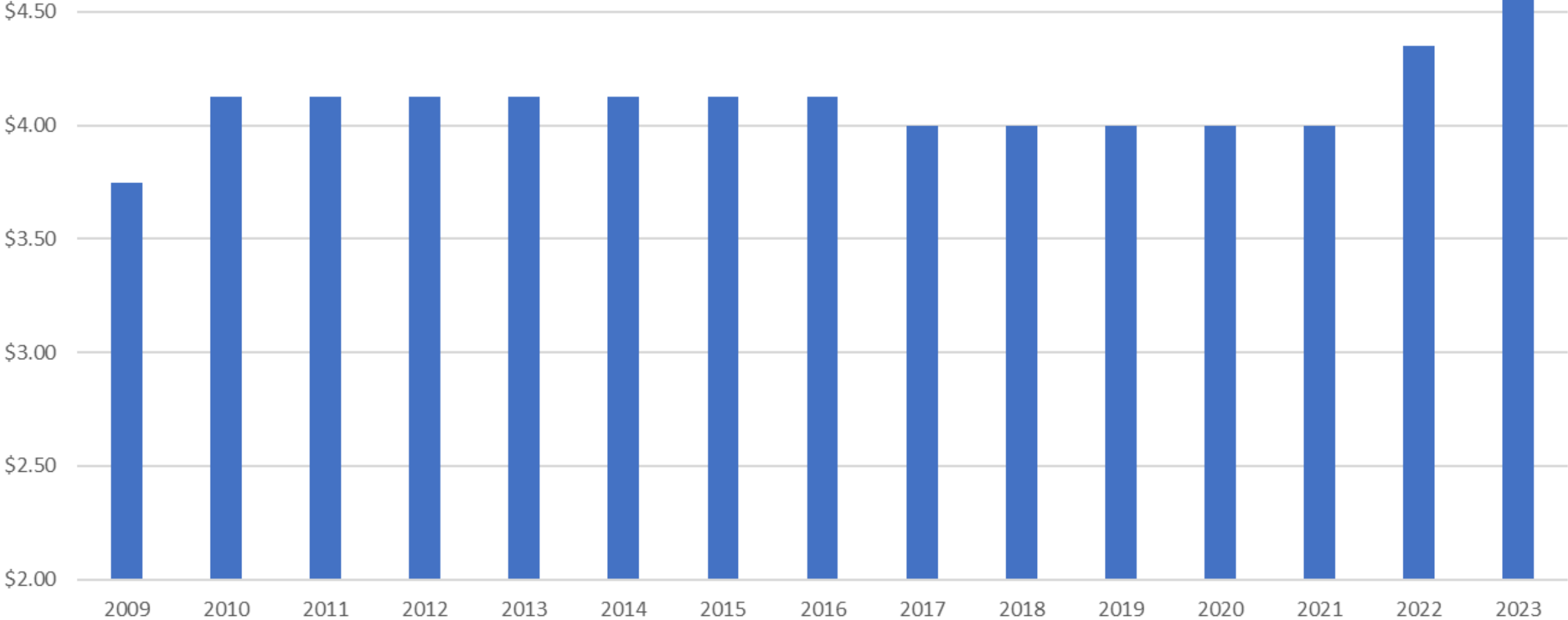
River Water delivered is also \$4.75 per acre-inch.

# 2023 Water Rates

## FCID

### Per Acre Water Assessment

(Fee per inch of Water Allocated)



# FCID's Finances

*"Water is Life"*



O & M CD = \$275,025

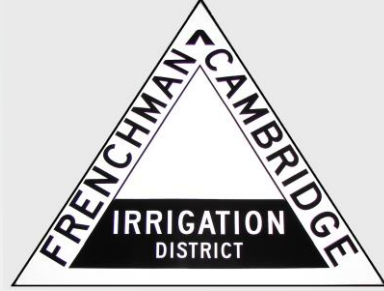
Federal Obligated Savings = \$422,590

Money Market Account = \$298,243

Checking = \$53,385

# 2023 Budget

*"Water is Life"*



## 2023 Adopted Budget

Projected Income	\$1,246,206
Projected Expenses	\$1,533,003
Budget Shortfall	<b>\$286,797</b>

# Water Conservation

"Water is Life"



Grants:

Year	Project	Nebraska	Reclamation	FCID	Total	Grant Type
2011	Bartley Pump Station		\$754,000	\$824,173	\$1,578,173	WaterSMART
2012	Cambridge Canal Automation		\$299,700	\$332,300	\$632,000	WaterSMART
2012	Pump Station Automation		\$94,900	\$96,400	\$191,300	Area Office
2017	Cambridge Canal TCC (Phase I)	\$915,500		\$610,400	\$1,525,900	WSF
2019	Cambridge Canal TCC (Phase II)	\$528,600		\$352,470	\$881,070	WSF
2020	Meeker-Driftwood Canal TCC	\$2,000,000	\$1,500,000	\$486,446	\$3,986,446	WaterSMART
<b>Totals</b>		<b>\$3,444,100</b>	<b>\$2,648,600</b>	<b>\$2,702,189</b>	<b>\$8,794,889</b>	







Cambridge Diversion Dam





















# RRA Forms

*"Water is Life"*



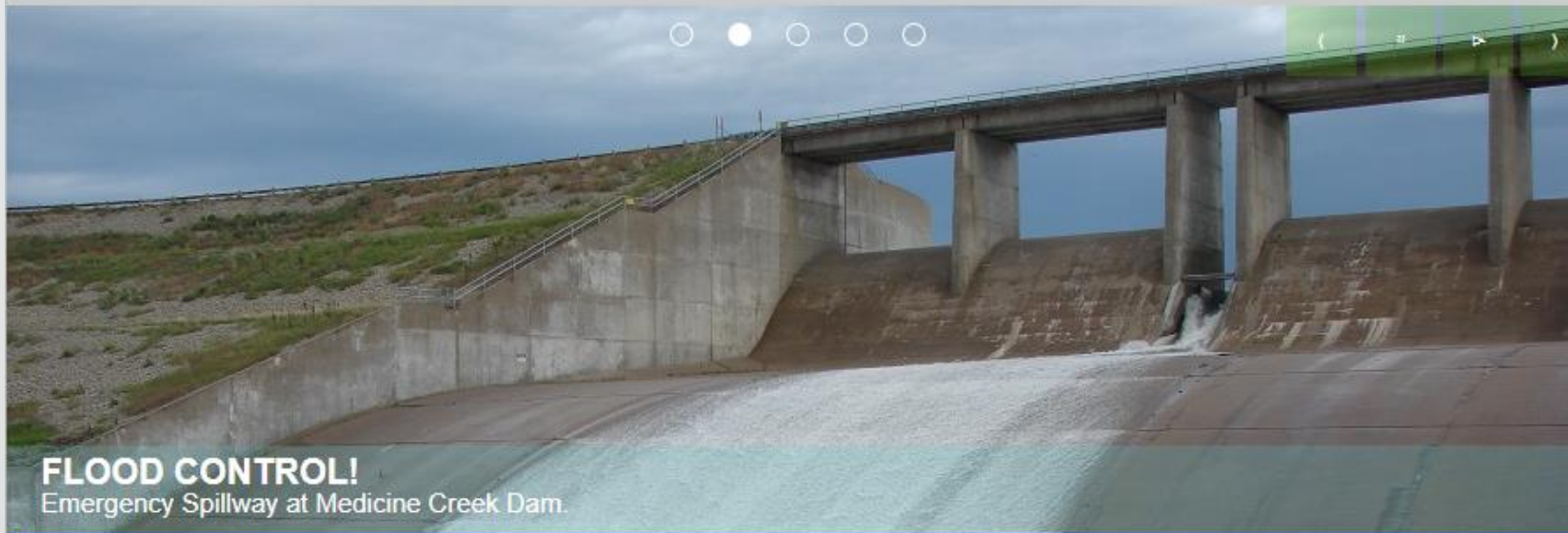
## Reclamation Reform Act of 1982

Everyone that farms or own 240 acres under a Federal Project must comply with the RRA laws.

Complete all required forms each year and file with the Irrigation District before receiving water!

Must notify the District within 60 days after a change in ownership.

No one can irrigate over 960 acres



**FLOOD CONTROL!**  
Emergency Spillway at Medicine Creek Dam.

*"Water is Life"*

## Welcome to FCID

The Frenchman Cambridge Irrigation District is a political subdivision of the State of Nebraska organized under irrigation district laws of Nebraska on April 18, 1946. (Statutes 46-101 to 46-128) Frenchman Cambridge was created to enable the people of southwest Nebraska to develop the State's irrigation potential. Frenchman Cambridge delivers natural flow irrigation water to more than 45,600 acres in southwest Nebraska using four different canal systems; the District hold 41 direct flow permits with priority dates ranging from December 22, 1890 to November 13, 1987, and can legally divert 531.5 cubic feet per second of natural flow. Frenchman Cambridge is the 8th largest Irrigation District in Nebraska based on acres served.

[FCID Newsletter 2021](#)

[FCID Newsletter 2020](#)

[FCID Newsletter 2019](#)

[Canal Automation by  
Rubicon Water](#)

[Site Connect](#)

**Web Ordering:**

[Desktop](#)

[Mobile](#)



# WaterLINE Online

Tuesday, 21 March, 2023

## Login to Irrigator Portal

User Number:

Password:

 Login

[Forgot your Password?](#)

An aerial photograph of a large reservoir or dam system. The water is a deep greenish-blue color. A long, wide dam structure runs across the lower right portion of the image. The surrounding landscape is a mix of brown and green fields, with some clusters of trees and small buildings. The sky is a pale blue with some light clouds.

Thank You!!