

# Water Management Plan Update

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Participant Meeting  
June 25, 2025



# Agenda

- Review comments received after April 23 participant meeting
- Recap 2020 WMP
- Present preliminary WMP update
- Discussion and questions



# Response to Comments

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# Response to Comments

- **Preparing written response for comments**
  - Will post on [www.lcra.org](http://www.lcra.org)
- **Will discuss comments regarding information presented at the April 23 meeting**
- **Will continue to consider participant input throughout the update process**

# Comments Received

- Received from one commenter – CTWC
- Numerous topics including:
  - Naturalized flows
  - Evaporation
  - Modeling

# Comments Received – Naturalized Flows

- **CTWC comments**
  - Extend hydrology through 2024 and update naturalized flows annually
  - Adjust naturalized flows based on rainfall runoff “capture rate”
- **LCRA responses**
  - *Data for 2024 hydrology is not currently available; will proceed with hydrology through 2023*
  - *The WMP will continue to include a buffer for potential drought worse than Drought of Record of at least 600,000 acre-feet*

# Comments Received – Evaporation

- **CTWC comment**
  - Suggests using “latest” science on evaporative losses
- **LCRA response**
  - *The latest science is not fully developed/calibrated*
  - *Using the same evaporation in the naturalized flows and the modeling is critical*

# Comments Received – Modeling (1 of 2)

- **CTWC comments**
  - WMP should have lower interruptible release amounts and higher curtailment triggers to avoid Drought Worse than Drought of Record (DWDR) declarations
  - Create a safe yield model in this WMP revision
- **LCRA response**
  - *LCRA's initial staff approach will include adjustments to interruptible agricultural supplies and environmental flows based on increasing demands and additional hydrology*
  - *The WMP model will continue to maintain a buffer of at least 600,000 acre-feet for potential DWDR*
  - *LCRA does not intend to deviate from the standard approach for firm yield models*



# Comments Received – Modeling (2 of 2)

- **CTWC comments**

- Describe parameters that will be used in WMP
- Should water availability modeling be separated into Upper and Lower Reaches
- How Arbuckle will be modeled

- **LCRA response**

- *Technical papers from the 2020 WMP provide a good starting point for understanding more detailed modeling parameters*
  - *These will be updated later in this process*
- *The supplies in the upper and lower reaches are operated as a system*
  - *Lower reach supplies are relied on first*
- *Arbuckle Reservoir is included as source to help meet firm demands in Matagorda County, interruptible agricultural demands and Matagorda Bay inflow obligations*

# 2020 Water Management Plan Recap

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# 2020 Water Management Plan Overview

- **The basic WMP framework:**
  - Three water supply conditions – Normal, Less Severe Drought and Extraordinary Drought
  - Two evaluation dates for interruptible water availability for agriculture and three evaluation dates for the environment
  - Look-ahead tests
  - Environmental flow criteria
  - Minimum combined storage of 600,000 acre-feet

# Three Water Supply Conditions

- **Normal**
- **Less Severe Drought (curtailment starts sooner)**
- **Extraordinary Drought (no interruptible stored water for non-Garwood agricultural operations)**

# Less Severe Drought Entrance and Exit Criteria

	Combined Storage on Evaluation Date (million acre-feet)	Three-Month Inflows
<b>Entering Criteria</b>	Below 1.5	Less than 50,000 acre-feet
	Below 1.4	Less than 33rd percentile
	Combined Storage at Any Time During the Previous Season (million acre-feet)	Cumulative Inflows
<b>Exiting Criteria</b>	Above 1.5	
	Above 1.4	Above the median three-month period preceding the evaluation date

# Extraordinary Drought Entrance and Exit Criteria

	Combined Storage on Evaluation Date (million acre-feet)	Duration	Long-Term Inflows
<b>Entering Criteria</b>	Below 1.3	Greater than 18 months	Below the 1950s drought inflow curve
	Below 1.4 and decreased by over 300,000 acre-feet from March 1 to July 1	-	-
	Combined Storage at Any Time During the Previous Season (million acre-feet)	Duration	Long-Term Inflows
<b>Exiting Criteria</b>	Above 1.3	-	-

# **Curtailment Curves for Non-Garwood Interruptible Stored Water for Agriculture**

- **Normal curtailment curve (first and second growing season)**
- **Less Severe Drought curtailment curve (first and second growing season)**

# First Season Interruptible Stored Water Availability for Agriculture

Normal Conditions*		Less Severe Drought Condition	
Combined storage on March 1 (million acre-feet)	Interruptible supply (acre-feet)**	Combined storage on March 1 (million acre-feet)	Interruptible supply (acre-feet)**
Above 1.3	178,000	Above or equal to 1.5	178,000
1.1 to 1.3	107,100 to 178,000	1.1 to 1.499999	88,200 to 155,000
Below 1.1	0	Below 1.1	0

\*When combined storage is above 1.5 million acre-feet, Normal conditions apply

\*\*Anytime cutoff if storage is at or below 1.0 million acre-feet



# Second Season Interruptible Stored Water Availability for Agriculture

Normal Conditions*		Less Severe Drought Condition	
Combined storage on July 1 (million acre-feet)	Interruptible supply (acre-feet)**	Combined storage on July 1 (million acre-feet)	Interruptible supply (acre-feet)**
Above 1.4	66,000	Above or equal to 1.5	66,000
1.1 to 1.4	39,700 to 66,000	1.1 to 1.499999	39,700 to 55,000
Below 1.1	0	Below 1.1	0

\*When combined storage is above 1.5 million acre-feet, Normal conditions apply

\*\*Anytime cutoff if storage is at or below 1.0 million acre-feet

# Look-Ahead Test

- **On March 1 or July 1, if projections indicate:**
  - Storage could drop below 900,000 acre-feet in the upcoming crop season, OR
  - Storage could drop below 600,000 acre-feet within 12 months
- **Then no interruptible stored water is made available to Gulf Coast, Lakeside and Pierce Ranch agricultural operations**

# Environmental Flows

- **Three evaluation dates for environmental flows**
- **Instream flow levels:**
  - Base average, Base Dry, Subsistence and Special Subsistence
- **Matagorda Bay inflows:**
  - Monthly Threshold value
  - OP 1-4

# Instream Flows

Instream Flow Criteria Level	Source	Combined Storage on Evaluation Date
Base-Average	Buchanan & Travis Storable Inflows (SI)	Above 1.96 million acre-feet
Base-Dry	Buchanan & Travis SI	1.8 to 1.96 million acre-feet
Subsistence	Buchanan & Travis SI & Stored Water (SW)	Below 1.8 million acre-feet
Special Subsistence at Wharton	Buchanan & Travis SI	Below 900,000 acre-feet

# Freshwater Inflows to Matagorda Bay

Combined Storage on Evaluation Date (million acre-feet)	Freshwater Inflow Criteria
Above 1.95 (March 1 and July 1) Above 1.85 (Nov. 1)	OP-4
1.5 to 1.949 (March 1 and July 1) 1.5 to 1.849 (Nov. 1)	OP-3
1.3 to 1.499 (March 1, July 1, and Nov. 1)	OP-2
1.0 to 1.299 (March 1, July 1, and Nov. 1)	OP-1
Below 1.0 (anytime)	Threshold

\*If storage is below 1.3 million acre-feet and non-Garwood interruptible stored water is cut off, then Threshold only

# Freshwater Inflows to Matagorda Bay

## Maximum Monthly Bay Release

Combined Storage (million acre-feet)	Maximum Release for Bay Criteria (acre-feet)
Above or equal to 1.5	82,000
1.3 to 1.499	56,000
Below 1.3	25,000

## Bay Release Percentage Limits

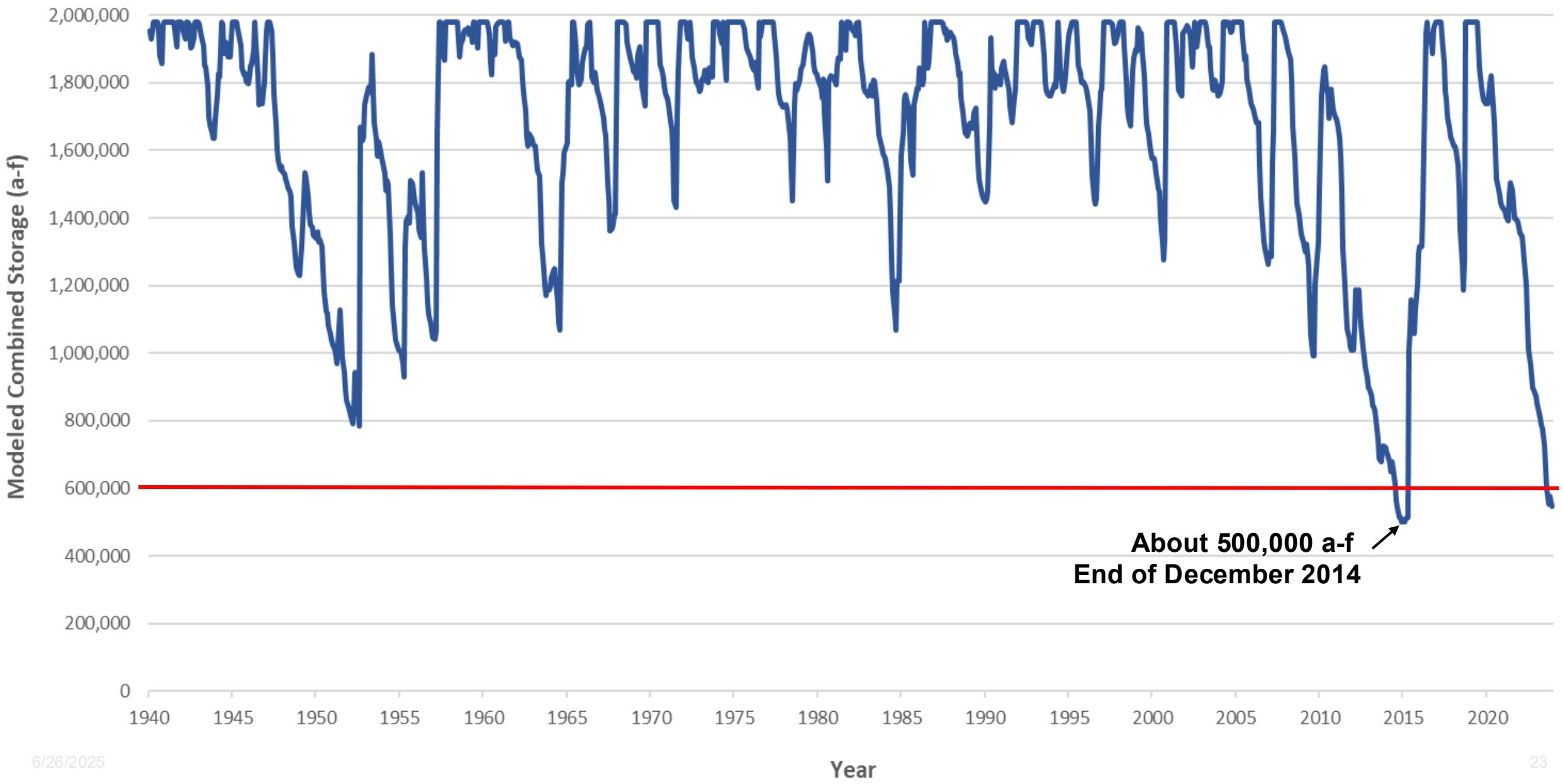
Combined Storage (million acre-feet)	Bay Release Percentage
Above 1.5	60%
Below or equal to 1.5	50%

\*Percentage limits are applied after the first 15,000 a-f for a month.

# How Does the 2020 WMP Perform Under 2032 Conditions?

- **Firm demands increase to 2032 conditions**
  - About 19% increase for normal demands
  - About 9% increase in max demands
- **Sedimentation projected to 2032**
- **Period of record extended through 2023**

# Combined Storage in the Highland Lakes: 2020 WMP with 2032 Projected Demands and Hydrology Through 2023





# Preliminary Approach to the Water Management Plan Update

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Comments can be submitted to  
[LCRAWMP@lcra.org](mailto:LCRAWMP@lcra.org)

8/26/2025



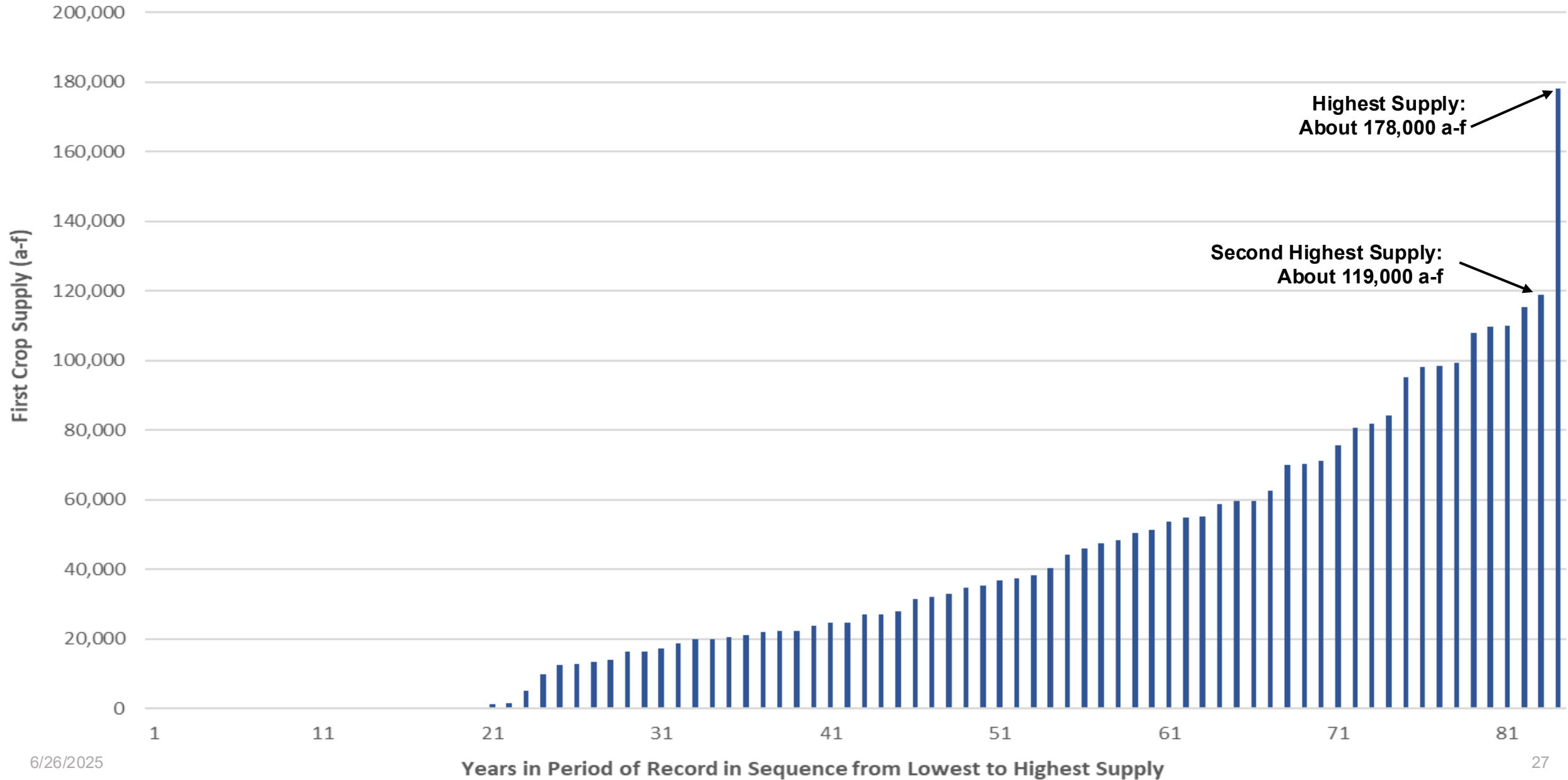
# Preliminary Less Severe Drought Entrance and Exit Criteria

	Combined Storage on Evaluation Date (million acre-feet)	Three-Month Inflows
<b>Entering Criteria</b>	Below 1.5 <b>1.8</b>	Below 50,000 <b>60,000</b> acre-feet
	Below 1.4 <b>1.6</b>	Below the 33rd percentile
	Combined Storage at Any Time During the Previous Season (million acre-feet)	Cumulative Inflows
<b>Exiting Criteria</b>	Above 1.5 <b>1.6</b>	Above the median three-month period preceding the evaluation date
	Above 1.4 <b>1.5</b>	

# Preliminary Extraordinary Drought Entrance and Exit Criteria

	Combined Storage on Evaluation Date (million acre-feet)	Duration	Long-Term Inflows
<b>Entering Criteria</b>	Below <del>1.3</del> <b>1.45</b>	Greater than 18 months	Below the 1950s drought inflow curve
	Below <del>1.4</del> <b>1.45</b> and decreased by over 300,000 acre-feet from March 1 to July 1	-	-
	Combined Storage at Any Time During the Previous Season (million acre-feet)	Duration	Long-Term Inflows
<b>Exiting Criteria</b>	Above <del>1.3</del> <b>1.45</b>	-	-

# Interruptible Stored Water First Crop Supply for Each Year of the Period of Record: 2020 WMP with 2032 Conditions



# Preliminary First Season Interruptible Stored Water for Agriculture Changes

Normal Conditions*		Less Severe Drought Condition	
Combined storage on March 1 (million acre-feet)	Interruptible supply (acre-feet)**	Combined storage on March 1 (million acre-feet)	Interruptible supply (acre-feet)**
Above <del>1.3</del> <b>1.6</b>	<del>178,000</del> <b>125,000</b>	Above or equal to <del>1.5</del> <b>1.8</b>	<del>178,000</del> <b>125,000</b>
<del>1.1 to 1.3</del> <b>1.3 to 1.6</b>	<del>107,100 to 178,000</del> <b>100,000 to 125,000</b>	<del>1.1 to 1.5</del> <b>1.3 to 1.799999</b>	<del>88,200 to 155,000</del> <b>80,000 to 100,000</b>
Below <del>1.1</del> <b>1.3</b>	0	Below <del>1.1</del> <b>1.3</b>	0

\*When combined storage is above 1.8 million acre-feet, Normal conditions apply

\*\*Anytime cutoff if storage is at or below ~~1.0~~ **1.1** million acre-feet

# Preliminary Second Season Interruptible Stored Water for Agriculture Changes

Normal Conditions*		Less Severe Drought Condition	
Combined storage on July 1 (million acre-feet)	Interruptible supply (acre-feet)**	Combined storage on July 1 (million acre-feet)	Interruptible supply (acre-feet)**
Above <del>1.4</del> <b>1.5</b>	66,000	Above or equal to <del>1.5</del> <b>1.6</b>	66,000
<del>1.1 to 1.4</del> <b>1.3 to 1.5</b>	<del>39,700</del> <b>55,000</b> to 66,000	<del>1.1 to 1.5</del> <b>1.3 to 1.599999</b>	<del>39,700 to 55,000</del> <b>47,000 to 66,000</b>
Below <del>1.1</del> <b>1.3</b>	0	Below <del>1.1</del> <b>1.3</b>	0

\*When combined storage is above 1.6 million acre-feet, Normal conditions apply

\*\*Anytime cutoff if storage is at or below ~~1.0~~ **1.1** million acre-feet

# Preliminary Instream Flows Changes

Combined Storage on Evaluation Date	Instream Flow Criteria Level	Source
Above 1.96 million acre-feet	Base-Average	Buchanan & Travis Storable Inflows (SI)
1.8 to 1.96 million acre-feet	Base-Dry	Buchanan & Travis SI
Below 1.8 million acre-feet*	Subsistence	Buchanan & Travis SI & Stored Water (SW)

\*See Special Subsistence Criteria applicable to Columbus and Wharton for combined storage below 1.3 million acre-feet

# Preliminary Instream Flows Changes – Special Subsistence at Columbus and Wharton

Combined Storage on Evaluation Date	Instream Flow Criteria Level
<del>Below 900,000</del> 900,000 to 1.3 million acre-feet	Subsistence: SI only Special Subsistence: SW only
Below 900,000 acre-feet	Special Subsistence: SI & SW



# Preliminary Instream Flow Changes

Subsistence and changes to special subsistence criteria:

Instream Flow Criteria Level*	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Subsistence at Columbus	340	375	375	299	425	534	342	190	279	190	202	301
Special Subsistence at Columbus	190	279	279	190	279	279	279	190	190	190	190	190
Subsistence at Wharton	315	303	204	270	304	371	212	107	188	147	173	202
Special Subsistence at Wharton	158	152	107	135	152	186	107	107	107	107	107	107

\*Flow in cubic feet per second

# Preliminary Bay Changes

Combined Storage on Evaluation Date (million acre-feet)	Freshwater Inflow Criteria
1.95 and above (March 1 and July 1) <del>1.85</del> 1.95 and above (Nov. 1)	OP-4
1.5 to 1.949 (March 1 and July 1) 1.5 to <del>1.849</del> 1.949 (Nov. 1)	OP-3
1.3 to 1.499	OP-2
<del>1.0</del> 1.1 to 1.299	OP-1
Below <del>1.0</del> 1.1 (anytime)	Threshold

\*If storage is less than ~~1.3~~ 1.4 million acre-feet and non-Garwood interruptible stored water is cut off, then Threshold only

# Preliminary Bay Changes

## Maximum Monthly Bay Release

Combined Storage (million acre-feet)	Maximum Release for Bay Criteria (acre-feet)
Above <del>1.5</del> 1.6	82,000 <del>60,000</del>
<del>1.3 to 1.499</del> 1.4 to 1.599	56,000 <del>40,000</del>
Below <del>1.3</del> 1.4	25,000 <del>20,000</del>

## Bay Release Percentage Limit \*

Combined Storage (million acre-feet)	Bay Release Percentage*
Above <del>1.5</del> 1.6	60 <del>50%</del>
Below <del>1.5</del> 1.6	50 <del>40%</del>

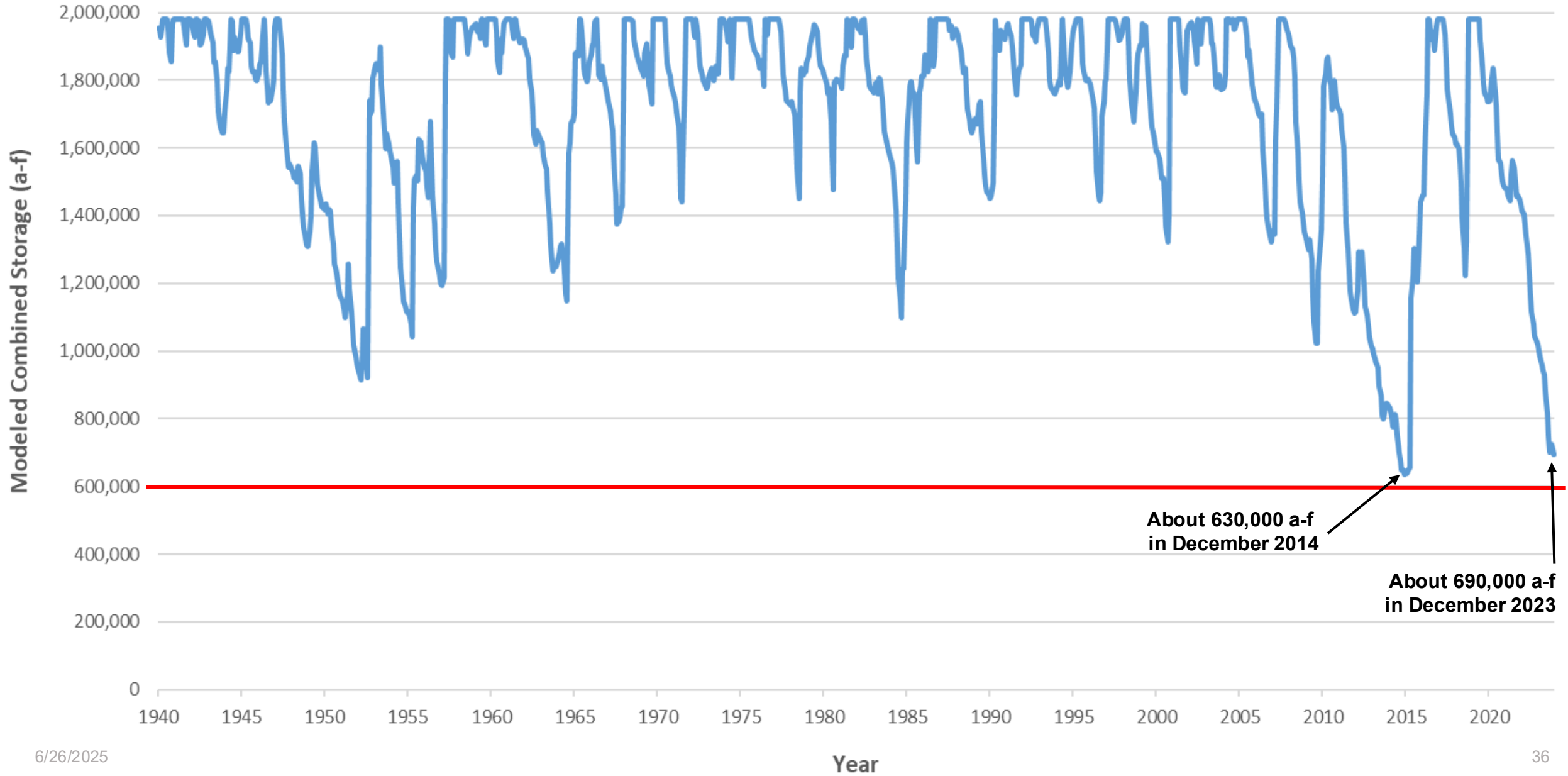
\*Percentage limits are applied after the first ~~15,000~~ 10,000 a-f for a month

# Preliminary Model Results

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# Combined Storage in the Highland Lakes: Preliminary WMP Update



# Break

# Results Summary – Preliminary Results

- Information presented in the Results Summary:

- Water demands
- Reports summary metrics
- Firm customer demands met
- Lake levels
- Interruptible curtailments and cut-offs
- Bay and estuary (B&E) inflows
- Period of Record (POR) results
- Drought of Record (DOR) results
- Additional details (same categories)
- Instream flows
- Information specific to each agricultural operation

PERIOD OF RECORD RESULTS (1940 - 2023)  DEMAND CATEGORY / PARAMETER	POR (1940-2023)	POR (1940-2023)	UNITS
	2020 WMP with 2032 Conditions	Preliminary WMP Update	
<b>Firm Demands</b>			
Maximum Firm Demand:	465,562	465,562	a-f
Maximum Firm Supply <sup>1</sup> :	465,442	465,442	a-f
<b>Lake Level</b>			
# of months combined storage below 900,000 a-f	53	30	mo
% of months combined storage below 900,000 a-f	5%	3%	
# of months combined storage below 600,000 a-f	14	0	mo
% of months combined storage below 600,000 a-f	1%	0%	
Minimum combined storage in lakes Buchanan and Travis	499,445	633,755	a-f
Combined Storage Min 2008-2015	499,445	633,755	a-f
Combined Storage Min 2019-2023	545,925	694,205	a-f
<b>Interruptible Irrigation - All Divisions</b>			
Max stored Water Made Available First Crop	178,000	125,000	a-f
Number of years first crop stored water made available	72	70	yr
Number of years first crop partially curtailed	6	14	yr
Number of years no stored water available for first crop	12	14	yr
Number of years first crop cut-off mid-season (any time cut-off)	0	0	yr
Number of years first crop ran out of stored water	1	2	yr
Max stored Water Made Available Second Crop	66,000	66,000	a-f
Number of years second crop stored water made available	67	67	yr
Number of years second crop partially curtailed	3	10	yr
Number of years no stored water available for second crop	17	17	yr
Number of years second crop cut-off mid-season (any time cut-off)	0	0	yr
<b>Environmental - Bay and Estuary (B&amp;E)</b>			
Average annual Matagorda Bay inflow volume	1,597,720	1,605,208	a-f
Average monthly salinity in Matagorda Bay	22	22	ppt
Max # of sequential months Matagorda Bay salinity exceeds 27.5 ppt	21	20	mo
% of months Threshold inflow criteria are met (Goal 100%)	97%	96%	
% of months Subsistence IF criteria met at Bastrop (Goal 100%)	100%	100%	

Note: <sup>1</sup>Firm supply is slightly less than firm demand because the Lometa water right relies on streamflow above Lake Buchanan and is not fully satisfied at all times.

This information is for discussion only.  
This is not a forecast of future conditions

# Interruptible Agriculture Results – All Divisions

Demand Category/Parameter	2020 WMP with 2032 Conditions	Preliminary WMP Update	Units
Max stored water made available - first crop	178,000	125,000	a-f
Number of years first crop stored water made available	72	70	years
Number of years first crop partially curtailed	6	14	years
Number of years no stored water available for first crop	12	14	years
Number of years first crop cut-off mid-season (any time cut-off)	0	0	years
Number of years first crop ran out of stored water	1	2	years
Max stored water made available - second crop	66,000	66,000	a-f
Number of years second crop stored water made available	67	67	years
Number of years second crop partially curtailed	3	10	years
Number of years no stored water available for second crop	17	17	years
Number of years second crop cut-off mid-season (any time cut-off)	0	0	years



# Matagorda Bay Health Evaluation Results

Demand Category/Parameter	2020 WMP with 2032 Conditions	Preliminary WMP Update
% of months Threshold inflow criteria are met	97%	96%
% of years All MBHE-1 criteria are met	71%	70%
% of years All MBHE-2 criteria are met	57%	56%
% of years All MBHE-3 criteria are met	40%	40%
% of years All MBHE-4 criteria are met	25%	25%

# Instream Flow Results

Demand Category/Parameter	2020 WMP with 2032 Conditions	Preliminary WMP Update
% of months <b>Subsistence</b> IF criteria met at Bastrop	100%	100%
% of months <b>Subsistence</b> IF criteria met at Columbus	100%	99.0%
% of months <b>Subsistence</b> IF criteria met at Wharton	99.7%	99.1%
% of months <b>Base-Dry</b> IF criteria met at Bastrop	98.5%	98.3%
% of months <b>Base-Dry</b> IF criteria met at Columbus	85.9%	85.3%
% of months <b>Base-Dry</b> IF criteria met at Wharton	77.1%	76.6%
% of months <b>Base-Average</b> IF criteria met at Bastrop	80.0%	78.9%
% of months <b>Base-Average</b> IF criteria met at Columbus	66.1%	65.0%
% of months <b>Base-Average</b> IF criteria met at Wharton	55.7%	55.0%

# Monthly Output – Preliminary Results

- Water Supply Conditions
  - White – Normal
  - Blue – Less Severe Drought
  - Orange – Extraordinary Drought
  - Purple – Cut-off caused by lookahead test
- Combined Storage
- Cumulative inflows
  - Since lakes last full
  - Drought of Record inflows
- Monthly counter since full
- Three-month cumulative inflows
- Amount of interruptible stored water remaining
- Flow released for ag and the environment

06/24/2025 End of month LCRA combined system storage (Lakes Buchanan and Travis)										NORMAL		
04:19 PM										LESS SEVERE		
Preliminary WWP Update										EXTRAORDINARY		
										LOOK-AHEAD		
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1940	1,951,175	1,950,949	1,928,995	1,980,768	1,980,768	1,980,768	1,980,768	1,947,216	1,881,851	1,855,636	1,968,163	1,980,768
1941	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,931,673	1,860,768	1,860,768	1,980,768	1,980,768
1942	1,969,735	1,953,550	1,929,380	1,980,768	1,980,768	1,980,768	1,973,164	1,905,102	1,906,437	1,933,080	1,980,768	1,980,768
1943	1,973,413	1,952,730	1,937,357	1,911,240	1,851,620	1,856,177	1,798,134	1,707,132	1,682,577	1,660,505	1,644,736	1,644,791
1944	1,704,636	1,771,392	1,834,280	1,824,830	1,880,768	1,972,470	1,887,893	1,926,906	1,906,387	1,885,617	1,884,207	1,939,181
1945	1,980,768	1,980,768	1,980,768	1,980,768	1,980,406	1,925,624	1,910,317	1,842,661	1,825,542	1,826,719	1,804,341	1,798,254
1946	1,817,847	1,849,036	1,853,572	1,894,380	1,980,768	1,920,149	1,824,519	1,733,947	1,731,636	1,738,893	1,771,994	1,801,935
1947	1,957,218	1,979,067	1,980,768	1,980,768	1,948,951	1,874,237	1,768,850	1,676,819	1,603,021	1,568,904	1,542,261	1,553,186
1948	1,535,824	1,528,901	1,514,401	1,506,923	1,499,406	1,546,364	1,524,493	1,444,294	1,404,544	1,366,435	1,333,728	1,311,991
1949	1,310,567	1,353,211	1,397,486	1,534,187	1,614,002	1,600,572	1,543,973	1,492,875	1,458,775	1,449,104	1,426,747	1,422,636
1950	1,417,006	1,435,614	1,405,896	1,417,255	1,415,961	1,367,862	1,315,475	1,256,533	1,248,239	1,211,920	1,184,720	1,166,061
1951	1,151,632	1,142,201	1,125,317	1,098,347	1,156,075	1,256,517	1,183,363	1,114,985	1,067,957	1,017,235	985,544	965,432
1952	950,082	936,407	914,815	964,329	1,066,188	1,035,613	989,825	920,405	1,780,588	1,700,824	1,711,204	1,806,135
1953	1,837,232	1,847,833	1,844,659	1,829,163	1,898,832	1,785,642	1,697,290	1,644,226	1,599,431	1,641,890	1,613,021	1,592,348
1954	1,577,298	1,545,163	1,496,935	1,554,418	1,560,001	1,433,038	1,336,896	1,246,296	1,177,138	1,145,197	1,137,773	1,115,831
1955	1,312,758	1,315,180	1,078,239	1,041,836	1,429,279	1,505,340	1,519,701	1,504,983	1,626,980	1,617,717	1,589,640	1,563,075
1956	1,539,416	1,530,536	1,479,266	1,455,032	1,477,562	1,566,875	1,460,867	1,375,419	1,302,443	1,264,159	1,236,702	1,211,426
1957	1,397,280	1,394,368	1,326,266	1,801,939	1,980,768	1,980,768	1,980,768	1,934,020	1,885,822	1,867,958	1,980,768	1,980,768
1958	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,924,093	1,876,909	1,915,894	1,933,593	1,953,787
1959	1,961,037	1,967,379	1,944,987	1,958,228	1,925,267	1,980,768	1,980,768	1,943,977	1,980,768	1,980,768	1,980,768	1,980,768
1960	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,944,265	1,859,735	1,823,301	1,820,123	1,882,242	1,965,846	1,974,229
1961	1,980,768	1,980,768	1,980,768	1,973,555	1,923,199	1,980,768	1,980,768	1,937,884	1,925,224	1,910,390	1,918,526	1,921,171
1962	1,917,579	1,898,667	1,876,710	1,865,945	1,807,548	1,771,418	1,715,376	1,638,022	1,613,276	1,652,152	1,640,169	1,635,238
1963	1,618,055	1,613,884	1,576,628	1,544,980	1,540,301	1,471,674	1,376,228	1,309,547	1,264,996	1,236,418	1,256,181	1,251,425
1964	1,261,663	1,287,052	1,308,819	1,315,603	1,274,435	1,227,745	1,166,951	1,148,559	1,084,643	1,034,033	1,073,359	1,081,083
1965	1,701,139	1,879,430	1,884,450	1,872,923	1,980,768	1,980,768	1,909,571	1,834,953	1,814,753	1,796,030	1,810,673	1,855,867
1966	1,876,576	1,903,582	1,903,448	1,971,603	1,980,768	1,915,913	1,816,906	1,801,082	1,843,036	1,814,648	1,789,021	1,770,198
1967	1,752,881	1,737,886	1,706,781	1,674,281	1,652,641	1,511,372	1,460,763	1,375,800	1,385,628	1,399,271	1,425,234	1,428,935
1968	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,972,221	1,920,779	1,902,725	1,872,024	1,859,203	1,850,791
1969	1,835,312	1,826,643	1,813,450	1,879,335	1,906,380	1,858,249	1,786,553	1,752,256	1,730,433	1,800,768	1,980,768	1,980,768
1970	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,915,636	1,852,500	1,835,375	1,813,497	1,786,390	1,769,550
1971	1,750,328	1,732,739	1,703,997	1,683,235	1,591,812	1,550,205	1,490,314	1,398,980	1,380,232	1,380,768	1,980,768	1,980,768
1972	1,980,768	1,980,768	1,953,683	1,928,781	1,980,768	1,980,768	1,937,213	1,876,140	1,843,605	1,815,933	1,800,188	1,793,323
1973	1,781,217	1,806,580	1,818,322	1,837,167	1,808,666	1,799,522	1,842,473	1,832,316	1,818,061	1,980,768	1,980,768	1,980,768
1974	1,980,768	1,964,908	1,943,930	1,916,114	1,980,768	1,893,775	1,807,041	1,880,768	1,980,768	1,980,768	1,980,768	1,980,768
1975	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,958,090	1,930,950	1,902,342	1,886,875	1,881,677
1976	1,870,535	1,851,679	1,836,844	1,859,636	1,827,584	1,783,016	1,880,768	1,935,659	1,979,375	1,980,768	1,980,768	1,980,768
1977	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,943,765	1,873,047	1,814,541	1,768,331	1,739,135	1,736,839	1,730,074
1978	1,727,472	1,735,239	1,721,890	1,696,694	1,636,036	1,537,988	1,450,377	1,369,697	1,349,921	1,315,389	1,285,779	1,287,263
1979	1,852,531	1,873,115	1,902,188	1,919,395	1,941,858	1,962,998	1,961,781	1,943,217	1,901,983	1,863,429	1,841,743	1,831,250
1980	1,819,875	1,808,020	1,790,307	1,760,963	1,777,578	1,677,876	1,572,713	1,475,660	1,393,903	1,300,564	1,196,823	1,080,019
1981	1,787,982	1,777,186	1,843,748	1,874,943	1,871,200	1,980,768	1,958,228	1,919,374	1,896,945	1,980,768	1,980,768	1,974,995
1982	1,962,825	1,951,335	1,954,075	1,939,511	1,977,122	1,980,768	1,929,875	1,866,495	1,816,286	1,783,762	1,775,993	1,768,596
1983	1,762,432	1,771,592	1,793,442	1,760,540	1,806,676	1,802,814	1,744,901	1,694,400	1,647,060	1,610,121	1,606,038	1,590,460
1984	1,577,908	1,557,589	1,546,319	1,494,781	1,433,265	1,309,349	1,219,805	1,148,813	1,099,944	1,044,534	1,044,954	1,044,954
1985	1,663,358	1,683,298	1,782,094	1,797,816	1,770,798	1,759,472	1,684,908	1,599,959	1,558,588	1,516,205	1,483,213	1,478,718
1986	1,811,500	1,876,238	1,850,327	1,825,494	1,845,806	1,980,768	1,902,023	1,842,940	1,867,763	1,980,768	1,980,768	1,980,768
1987	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,977,345	1,946,185	1,959,188	1,925,238	1,940,823	1,950,764
1988	1,944,451	1,933,449	1,915,488	1,886,555	1,856,610	1,823,312	1,835,873	1,759,503	1,713,536	1,680,525	1,655,688	1,646,377
1989	1,658,422	1,683,336	1,686,584	1,671,092	1,730,721	1,736,090	1,648,311	1,570,444	1,518,953	1,486,719	1,471,890	1,462,308
1990	1,452,115	1,458,589	1,498,320	1,686,316	1,977,122	1,900,414	1,923,014	1,888,096	1,847,410	1,834,087	1,937,425	1,921,024
1991	1,959,698	1,967,494	1,946,004	1,932,355	1,899,076	1,859,661	1,804,578	1,757,773	1,703,309	1,629,868	1,846,484	1,980,768
1992	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,972,954	1,933,433	1,927,270	1,933,690	1,951,119	1,980,768
1993	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,979,917	1,951,455	1,880,430	1,799,747	1,779,131	1,768,788	1,762,025
1994	1,769,782	1,788,247	1,798,275	1,786,433	1,980,768	1,923,241	1,846,429	1,796,538	1,779,085	1,795,448	1,826,053	1,909,677
1995	1,943,623	1,958,629	1,980,768	1,980,768	1,980,768	1,980,768	1,920,107	1,846,407	1,827,024	1,799,651	1,803,359	1,801,147
1996	1,788,983	1,776,551	1,751,213	1,715,620	1,626,476	1,528,361	1,495,928	1,449,372	1,466,348	1,482,552	1,735,368	1,799,699
1997	1,803,318	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,973,770	1,939,336	1,918,044	1,919,666	1,943,434
1998	1,965,341	1,980,768	1,980,768	1,980,768	1,980,768	1,910,196	1,802,750	1,727,709	1,705,073	1,676,923	1,765,106	1,842,510
1999	1,904,800	1,900,070	1,967,334	1,951,548	1,940,950	1,923,674	1,832,625	1,750,591	1,692,845	1,660,733	1,630,135	1,611,308
2000	1,589,710	1,588,880	1,569,664	1,545,316	1,508,408	1,511,304	1,441,404	1,368,106	1,324,008	1,301,523	1,280,768	1,280,768
2001	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,955,888	1,832,493	1,779,317	1,766,420	1,762,824	1,947,336
2002	1,961,348	1,969,986	1,962,737	1,940,363	1,886,099	1,847,579	1,880,768	1,934,156	1,907,822	1,956,361	1,980,768	1,980,768
2003	1,980,768	1,980,768	1,980,768	1,963,881	1,907,996	1,906,689	1,839,897	1,782,116	1,778,272	1,817,143	1,796,252	1,773,925
2004	1,775,702	1,782,328	1,815,013	1,980,768	1,980,768	1,980,768	1,969,366	1,980,768	1,950,028	1,953,020	1,980,768	1,980,768
2005												

# End of Month LCRA Combined System Storage (Lakes Buchanan and Travis)

	NORMAL
	LESS SEVERE
	EXTRAORDINARY
	LOOK-AHEAD

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2000	1,589,710	1,588,880	1,569,664	1,545,316	1,508,408	1,511,304	1,441,404	1,368,106	1,324,008	1,401,521	1,980,768	1,980,768
2001	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,905,888	1,832,493	1,779,317	1,766,420	1,762,824	1,947,336	1,954,795
2002	1,963,348	1,969,986	1,962,737	1,940,363	1,886,099	1,847,579	1,980,768	1,934,156	1,907,822	1,956,361	1,980,768	1,980,768
2003	1,980,768	1,980,768	1,980,768	1,963,881	1,907,996	1,906,689	1,839,897	1,782,116	1,778,272	1,817,143	1,796,292	1,773,925
2004	1,775,702	1,782,328	1,815,013	1,980,768	1,980,768	1,980,768	1,969,366	1,980,768	1,950,028	1,953,020	1,980,768	1,980,768
2005	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,932,248	1,868,183	1,888,012	1,817,856	1,787,859	1,765,521	1,746,237
2006	1,729,668	1,716,134	1,701,753	1,690,983	1,700,123	1,593,532	1,511,116	1,432,212	1,388,960	1,370,156	1,339,929	1,323,517
2007	1,354,933	1,344,244	1,625,468	1,714,293	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,969,013	1,955,804	1,936,973
2008	1,921,348	1,902,886	1,890,383	1,869,402	1,808,736	1,673,773	1,584,190	1,503,876	1,441,444	1,406,999	1,377,532	1,353,421
2009	1,330,106	1,312,579	1,300,039	1,329,107	1,270,648	1,158,702	1,082,941	1,023,712	1,024,705	1,235,333	1,318,621	1,357,185
2010	1,514,148	1,781,799	1,819,602	1,857,216	1,867,270	1,799,825	1,788,418	1,715,299	1,800,606	1,763,847	1,738,402	1,720,037
2011	1,711,180	1,697,888	1,654,688	1,601,509	1,517,847	1,379,532	1,302,218	1,233,282	1,175,857	1,150,226	1,123,419	1,111,779
2012	1,114,200	1,179,161	1,292,202	1,275,578	1,291,634	1,237,497	1,194,598	1,132,176	1,105,598	1,074,683	1,041,036	1,012,204
2013	1,008,226	990,340	965,707	961,307	951,365	894,827	866,993	809,341	800,257	834,224	846,250	843,720
2014	831,981	821,473	801,214	775,674	813,847	792,848	749,346	698,082	677,454	649,692	649,118	633,755
2015	643,888	639,785	652,911	655,139	1,156,991	1,224,685	1,303,393	1,247,171	1,203,077	1,276,415	1,347,161	1,441,834
2016	1,460,436	1,461,736	1,577,545	1,758,882	1,980,768	1,980,768	1,921,427	1,943,173	1,919,820	1,887,905	1,959,919	1,980,768
2017	1,980,768	1,980,768	1,980,768	1,980,768	1,932,985	1,860,011	1,773,961	1,750,511	1,700,244	1,665,480	1,640,240	1,631,367
2018	1,613,355	1,613,507	1,599,427	1,559,087	1,493,786	1,390,889	1,301,118	1,223,316	1,317,692	1,980,768	1,980,768	1,980,768
2019	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,980,768	1,917,632	1,843,397	1,787,965	1,763,235	1,749,680	1,736,975
2020	1,738,248	1,739,771	1,809,429	1,833,967	1,804,427	1,725,257	1,645,081	1,567,244	1,554,635	1,521,279	1,499,810	1,488,341
2021	1,480,933	1,475,869	1,460,090	1,444,970	1,523,332	1,563,526	1,540,640	1,499,407	1,458,711	1,460,330	1,447,823	1,433,832
2022	1,414,982	1,405,411	1,372,468	1,339,286	1,287,320	1,226,433	1,161,529	1,114,109	1,078,724	1,042,408	1,036,804	1,020,543
2023	1,000,302	985,237	958,775	940,293	930,114	880,976	814,920	747,291	701,736	724,470	709,549	694,205

# Storable Inflows Before Instream and Bay Releases

	NORMAL
	LESS SEVERE
	EXTRAORDINARY
	LOOK-AHEAD

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2000	191	14,272	4,199	0	0	42,465	0	0	0	131,644	568,685	2,471	763,926
2001	0	1,345	0	8,093	0	0	0	0	32,901	29,267	178,620	5,771	255,997
2002	13,387	13,006	18,052	14,208	0	17,189	106,267	8,639	17,043	65,734	29,017	0	302,541
2003	3,154	0	7,030	16,752	0	26,507	0	0	39,643	81,222	6,562	5,291	186,160
2004	20,288	26,024	51,884	160,612	1,910	0	9,960	19,988	7,120	25,367	7,279	5,767	336,197
2005	491	0	3,970	14,345	0	0	0	81,426	0	0	1,521	3,157	104,910
2006	3,528	1,793	6,962	14,387	47,055	0	0	0	0	907	0	0	74,632
2007	36,155	7,060	285,048	105,492	253,991	0	0	9,716	5,620	11,281	16,732	26,815	757,910
2008	16,635	12,378	21,914	5,831	0	0	0	0	0	0	0	0	56,759
2009	0	602	14,739	49,189	0	0	0	0	16,112	219,048	98,854	53,721	452,264
2010	163,634	266,805	42,032	44,035	0	0	26,933	0	105,536	0	0	1,254	650,229
2011	8,789	1,916	0	0	0	0	0	0	0	11	0	1,275	11,991
2012	14,591	73,502	127,079	7,685	45,248	0	0	0	0	0	0	0	268,105
2013	6,147	0	0	11,694	22,012	0	5,279	0	13,329	49,089	27,688	13,464	148,701
2014	2,469	2,018	0	0	56,897	8,117	0	0	0	0	10,988	0	80,489
2015	17,560	7,291	25,534	14,476	503,075	100,201	121,722	0	0	80,560	81,084	109,123	1,060,624
2016	34,591	18,661	133,304	192,742	206,352	0	0	48,640	34,438	13,921	90,720	22,142	795,510
2017	620	937	6,473	5,221	0	0	0	0	0	0	0	4,142	17,392
2018	0	10,488	6,202	0	0	0	0	0	108,527	642,906	2,298	0	770,421
2019	0	4,180	6,276	0	0	0	0	0	0	0	4,277	4,764	19,496
2020	11,738	11,225	87,053	43,491	0	0	0	0	9,529	0	0	3,423	166,459
2021	5,021	9,380	6,422	2,819	100,701	74,161	12,805	0	0	19,753	3,568	3,535	238,165
2022	0	2,100	0	0	0	0	0	0	0	0	6,577	735	9,411
2023	0	0	0	0	14,287	0	0	0	0	40,049	2,041	64	56,440

# Next Steps

- **Responses to comments from the previous meeting, the WAM, Results Summary and Monthly Output will be posted later this week**
- **Comment period open throughout the update process**
  - Submit comments related to this meeting to **LCRAWMP@lcra.org** by July 18
- **Staff available to meet upon request**
- **Fourth participant meeting: Aug. 26**
  - Continue reviewing preliminary modeling results

# Timeline

<b>March 27, 2025</b>	First participant meeting
<b>April 23, 2025</b>	Second participant meeting
<b>June 25, 2025</b>	<b>Third participant meeting</b>
<b>Aug. 26, 2025</b>	Fourth participant meeting
<b>Sept. 23, 2025*</b>	Fifth participant meeting
<b>October 2025</b>	Sixth participant meeting
<b>January 2026</b>	Present staff recommendation on WMP updates to LCRA Board
<b>Spring 2026</b>	Request LCRA Board approval
<b>Summer 2026</b>	Submit to TCEQ for approval

# Questions?



