LCRA’s Water Management Plan

• Operations plan for supplying water from lakes Buchanan and Travis to users throughout the lower Colorado River basin

• Allows for supply of interruptible water provided we don’t impair our ability to meet the needs of our firm customers

• Developed with significant input from participants, and approved by the Texas Commission on Environmental Quality
2020 Water Management Plan

• WMP substantially revised in 2015, with further updates in 2020
  – Hydrology through 2016
  – Firm demand projections through 2025

• WMP has safeguards and is responsive to:
  – Inflows
  – Storage conditions
  – Actual operations and demands
  – Possible future conditions
  – Increased firm demands
WMP Safeguards – Responsive to Inflow and Storage Conditions

• Storage in the Highland Lakes and recent inflows are evaluated when allocating interruptible supply

• Separate evaluation dates before first and second seasons factor in the most recent conditions

• Water supply conditions determined based on storage and inflows
WMP Safeguards – Water Supply Conditions

• Enter Less Severe Drought if:
  – Storage below 1.5 million acre-feet and three-month inflows less than 50,000 a-f; or
  – Storage below 1.4 million a-f and three-month inflows below 33rd percentile
• Extraordinary Drought if:
  – Storage below 1.3 million a-f, drought duration since full at least 18 months, and inflows worse than drought intensity curve; or
  – Storage below 1.4 million a-f and storage dropped 300,000 a-f between March 1 and July 1
WMP Safeguards – Reduced Agricultural Supply and Operational Considerations

- Allocations for agricultural supply reduced or cut off based on conditions at beginning of season
  - “Curtailment curves” for Normal or Less Severe Drought
  - Cutoff if in Extraordinary Drought
WMP Safeguards – Reduced Agricultural Supply and Operational Considerations (Continued)

• Agricultural supply can be cut off mid-season:
  – If diversions exceed allocations;
  – If releases from Highland Lakes exceed release caps; or
  – If storage falls to 1 million a-f
WMP Safeguards – Possible Future Conditions

- Look-Ahead Test – additional curtailment of agricultural supply if necessary:
  - 12 months – stay above 600,000 a-f
  - Upcoming season stay above 900,000 a-f
WMP Safeguards – Possible Future Conditions (Continued)

• Drought Worse Than Drought of Record
  – If storage below 600,000 a-f, drought at least 24 months and inflows worse than historic drought

• WMP firm demands based on year 2025 projections
  – Will begin revision process ahead of demands being realized
Municipal, Industrial, Recreation and Firm Irrigation Use From Lakes Buchanan and Travis and Colorado River

*Based on measured use for January through September and projected use for October, November and December

Projected 2025 normal/average demands

Projected 2025 high/max demands

Water Use (a-f)

2016 2017 2018 2019 2020 Projections*

Municipal Industrial Recreation and Firm Irrigation

*Based on measured use for January through September and projected use for October, November and December
Use of Interruptible Stored Water and Run-of-River at the Four Downstream Agricultural Operations

Projected total agricultural demands high-use year
Projected total agricultural demands average-use year

*Based on measured use for January through September and projected use for October, November and December
Applying 2020 WMP to 2021 First Season

• March 1 evaluation date
  – Projected combined storage:
    ▪ Median about 1.49 million a-f
    ▪ 99th percentile exceedance projection of about 1.48 million a-f
Applying 2020 WMP to 2021 First Season (Continued)

• Agricultural supply
  – If storage below 1.5 million a-f and three-month inflows below 50,000 a-f, enter Less Severe Drought
    ▪ December + January inflows totaled 31,520 a-f

• Environmental flow criteria
  – Varies if above or below 1.5 million a-f
# First Season Interruptible Stored Water Availability

<table>
<thead>
<tr>
<th>First Season – Normal</th>
<th>First Season – Less Severe Drought</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined storage on March 1 (million a-f)</td>
<td>Interruptible stored water (a-f)*</td>
</tr>
<tr>
<td>Below 1.1</td>
<td>0</td>
</tr>
<tr>
<td>1.1 to 1.3</td>
<td>107,100 to 178,000</td>
</tr>
<tr>
<td>Above 1.3</td>
<td>178,000</td>
</tr>
</tbody>
</table>

*Anytime cutoff if storage drops to or below 1 million a-f*
First Season Interruptible Stored Water Availability (Continued)
Environmental Flows During First Season

- Instream flow criteria at Subsistence level
- Bay inflow criteria
  - Release criteria will vary if above or below 1.5 million a-f on March 1, including:
    - Two-month bay inflow target
    - Maximum release as a percentage of storable inflows
    - Maximum monthly release
  - Release obligation for bay limited to storable inflows into Highland Lakes
Applying 2020 WMP to 2021 Second Season

- July 1 evaluation date
  - Projected combined storage:
    - Median about 1.31 million a-f
    - 99th percentile exceedance projection of about 1.1 million a-f
Applying 2020 WMP to 2021 Second Season (Continued)

- Agricultural supply
  - For median combined storage, would be significantly curtailed
  - If storage below 1.3 million a-f and low inflows continue, likely cut off under Extraordinary Drought

- Environmental flow criteria
  - If agricultural supply is cut off, bay criteria reduces to Threshold only
Summary of Current Status

First season:

- Combined storage in lakes Buchanan and Travis likely to be below 1.5 million a-f on March 1
- Will need to evaluate inflows to determine if conditions result in a reduction under the WMP in available supplies

Second season:

- If dry conditions continue to drive low inflows, and if combined storage continues to drop, strong chance for either a greatly curtailed or completely curtailed water allocation under the WMP
Key Takeaway – the 2020 WMP is Protective and Responsive

- To lake storage
- To inflows
- To actual operations
- To possible future conditions
- To firm demands