

LCRA

Water Management Plan

Overview

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Overview

- Water Supply Resource Plan (WSRP) vs Water Management Plan (WMP)
 - How and why are they different?
- WMP
 - Why LCRA has one and no one else does?
 - What are the critical elements of the WMP?
 - What's involved in the next WMP?

WMP vs WSRP

- WSRP
 - Roadmap on how LCRA will develop new water supplies
 - Strategies to meet future demands
 - Not an operating plan
- WMP
 - Required by water rights
 - Deals with only the water supplies from lakes Buchanan and Travis
 - Dictates how LCRA will operate Buchanan and Travis
 - In essence a reservoir operations plan

LCRA's Water Management Plan

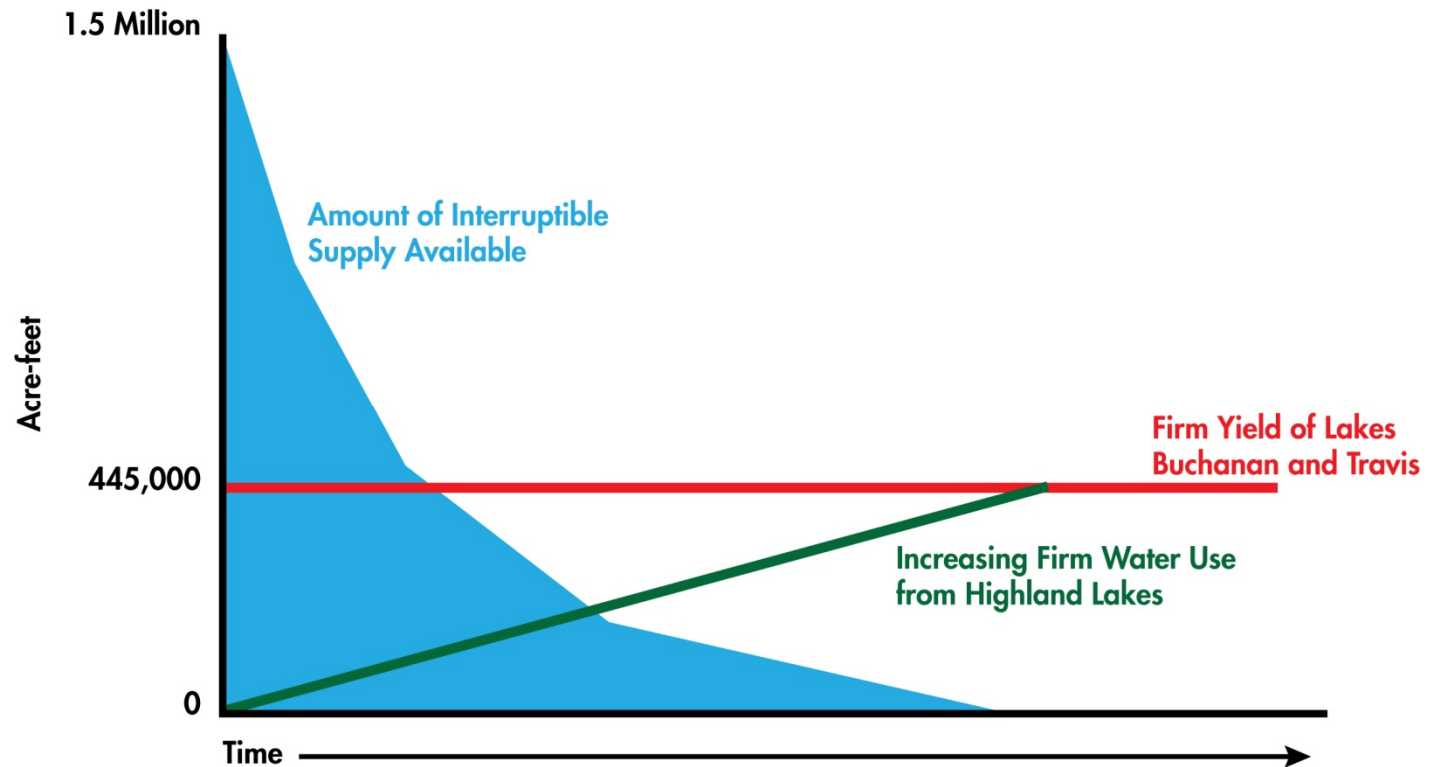


- First of its kind in the state- a bit of history
 - Adjudication order- Settlement of all parties
 - Optimize the unused firm water in lakes
 - Use water on interruptible basis
 - Supply downstream irrigation customers
 - Address environmental flows
 - Later priority date for interruptible

Firm vs Interruptible Supply Availability from lakes Buchanan and Travis

This concept approved by TCEQ

Firm and Interruptible Water Supply Concept



As firm water use increases on the Highland Lakes over time, availability of interruptible water will decrease.

WMP – What is it really?

- Amendment to the water rights for lakes Buchanan & Travis
 - Intermediate lakes (Inks, LBJ and Marble Falls) are not part of the WMP
 - Not an amendment to downstream water rights
- **Determines day-to-day operation and utilization of supplies of lakes Buchanan & Travis**
- First developed in 1989 & amended in 1992, 1999 and 2010
- Any changes proposed must be approved by LCRA Board and TCEQ

WMP: Key Elements

- **Allocate Supply**
 - Establish firm yield for lakes Buchanan and Travis
 - Develop guidelines for helping to meet downstream environmental needs
 - Quantify annual interruptible supply availability
 - Sets up allocation procedures and operating policies to demonstrate how firm customers demand can be met through a drought of record
 - Defines trigger levels for:
 - Curtailment of interruptible water to customers
 - Reductions in level of water supplied for environmental flows

Environmental Flow Needs

- Instream Flow Needs for the Lower Colorado River
 - multiple locations downstream of Lake Travis
 - Critical & Target
- Freshwater Inflow needs for Bays and Estuaries of Matagorda Bay
 - Critical, Intermediate & Target



WMP: Key Elements

- **Drought Management**
 - Manage through a “Drought-of-Record”
 - How to meet firm water needs
 - Process for curtailment of interruptible stored water
 - Establish criteria for determining and managing through a drought more severe than “Drought-of-Record”
 - Curtailment of firm water customers use

2010 WMP – Curtailment Thresholds

2010 Water Management Plan - Drought Triggers

When water in the lakes is ...	On this date ...	Action prescribed in 2010 Water Management Plan
Lakes Travis and Buchanan are full at 2.011 million acre-feet		
Less than 94 percent full	Jan. 1 or July 1	Interruptible supplies cease for all customers except irrigation operations.
Less than 1.7 million acre-feet	Jan. 1	Environmental releases for bays and estuaries are reduced to meet 150 percent of critical (to the extent of storable inflows).
Less than 1.6 million acre-feet	At any time	Request voluntary conservation from firm water customers and begin aggressive public information campaign.
Less than 1.4 million acre-feet	Jan. 1	Begin gradual curtailment of interruptible supply to irrigation operations. Amount of curtailment increases when water storage levels are lower. Environmental releases for instream flows are reduced to meet critical needs.
Less than 1.1 million acre-feet	Jan. 1	Environmental releases for bays and estuaries are reduced to meet critical needs.
900,000 acre-feet	At any time	Request firm customers to implement mandatory conservation restrictions. Meet with customers to develop curtailment plan should drought worsen.
600,000 acre-feet	At any time	If criteria indicate that drought is worse than the Drought of Record, then begin pro rata curtailment of firm supply after ceasing interruptible supply (timing based on duration of drought).
325,000 acre-feet	Jan. 1	No interruptible supply available.
200,000 acre-feet	At any time	No interruptible supply available.

Requirements in 2010 Order

- **Stakeholder process**
 - Allow meaningful participation to achieve regional consensus
 - Include summary of steps taken by LCRA to TCEQ
- **Interruptible curtailment procedures to satisfy projected firm demands should recent intense drought conditions recur**
- **Evaluation of criteria for declaring a drought worse than drought of record**
- **Evaluation of minimum combined storage level necessary to protect firm customers**
- **Incorporation of recent settlements- STPNOC and Austin**
- **Revisions to provisions governing how LCRA provides water to address environmental flows**
 - New studies
 - Provide water to maximum extent reasonable and practicable
- **Begin by July 1, 2010 and submit to TCEQ not later than July 1, 2013.**

Next Update to WMP

- Update Process
 - Historically about 18 months to 2 ½ years
- Update will be challenging
 - Will analyze every element of the plan
 - New modeling tools & science
 - Heighten interest by all the stakeholders
 - Look out further than 5 years
 - More readable/understandable

Next Update to WMP

- Staff has already started on the process
 - Stakeholder Process
 - Working on putting together a balanced list of interests
 - Identifying the issues for discussion with stakeholders
 - Obtaining input from regional councils
 - Developing an aggressive timeline
 - Technical analysis
 - Getting all the necessary tools ready

Next Update to WMP

- Charge - complete the plan as quickly as possible
 - Goal is to complete Stakeholder process in about one year (summer of 2011)
 - Begin drafting next WMP after Board guidance on key issues
 - Submit Revised WMP prior to deadline established in the Agreed Order

Questions?



Ask for your help!

- What issues or concerns should the Advisory Committee take up or consider in the next update to the Water Management Plan?