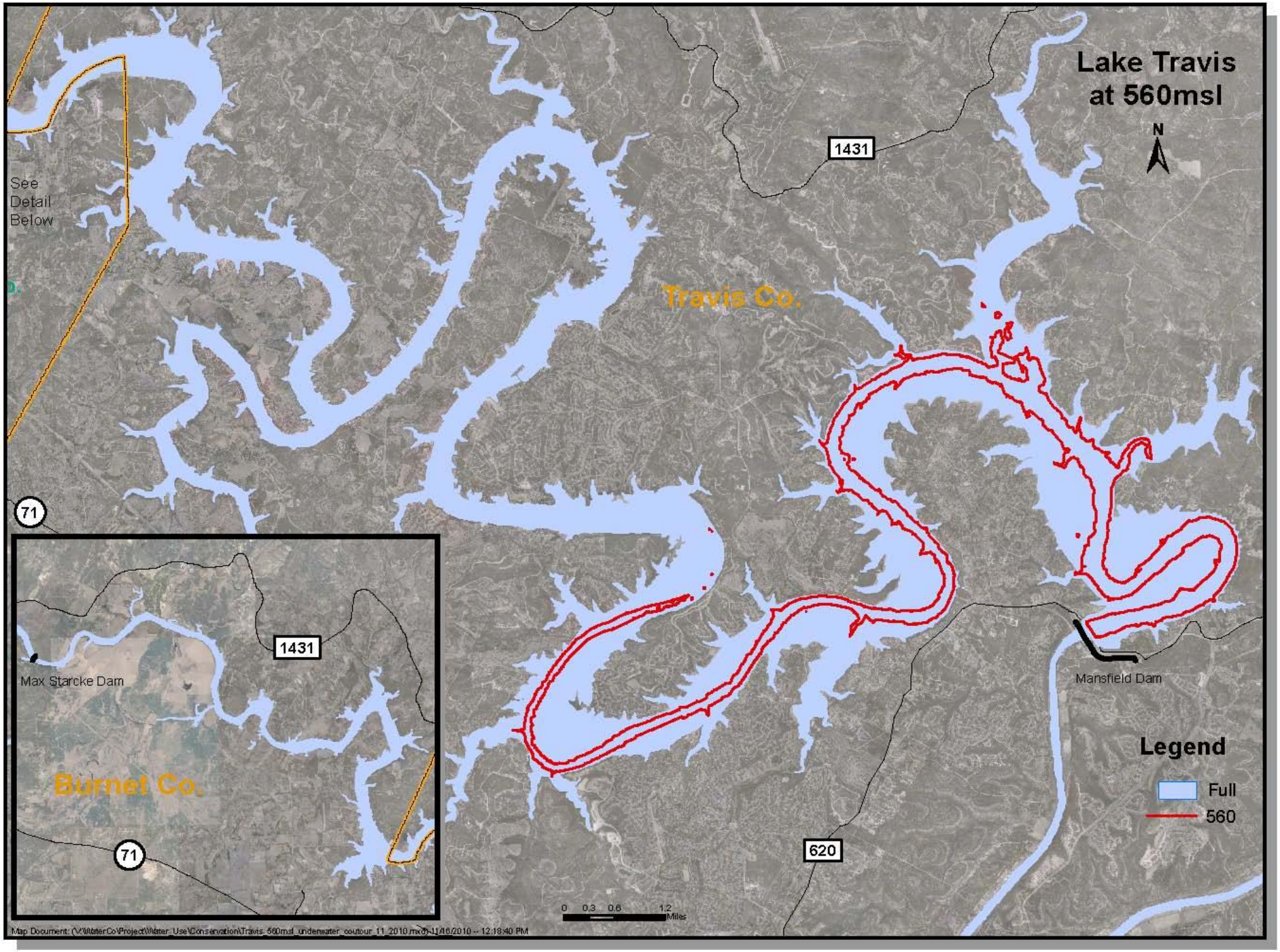
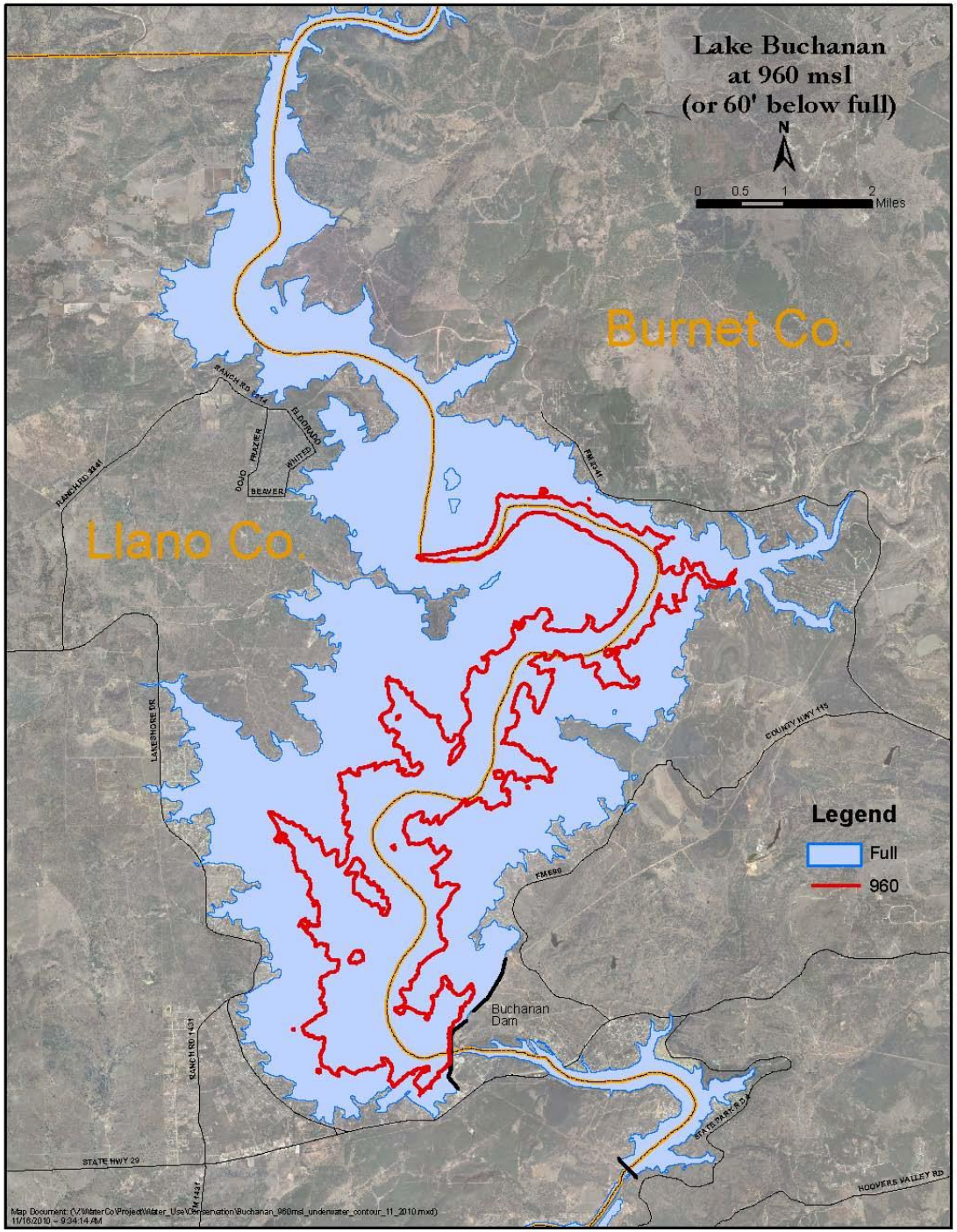
Interests

- Maintain lake levels efficiently to preserve life throughout the entire Colorado Basin
- Ensure the health and safety of all residents: Water availability, quality and navigability
- Maintain economic stability of the Highland Lakes region to continue to contribute to the State's much needed tax revenue
- The City of Austin has major economic interests at stake that can affect the entire region.

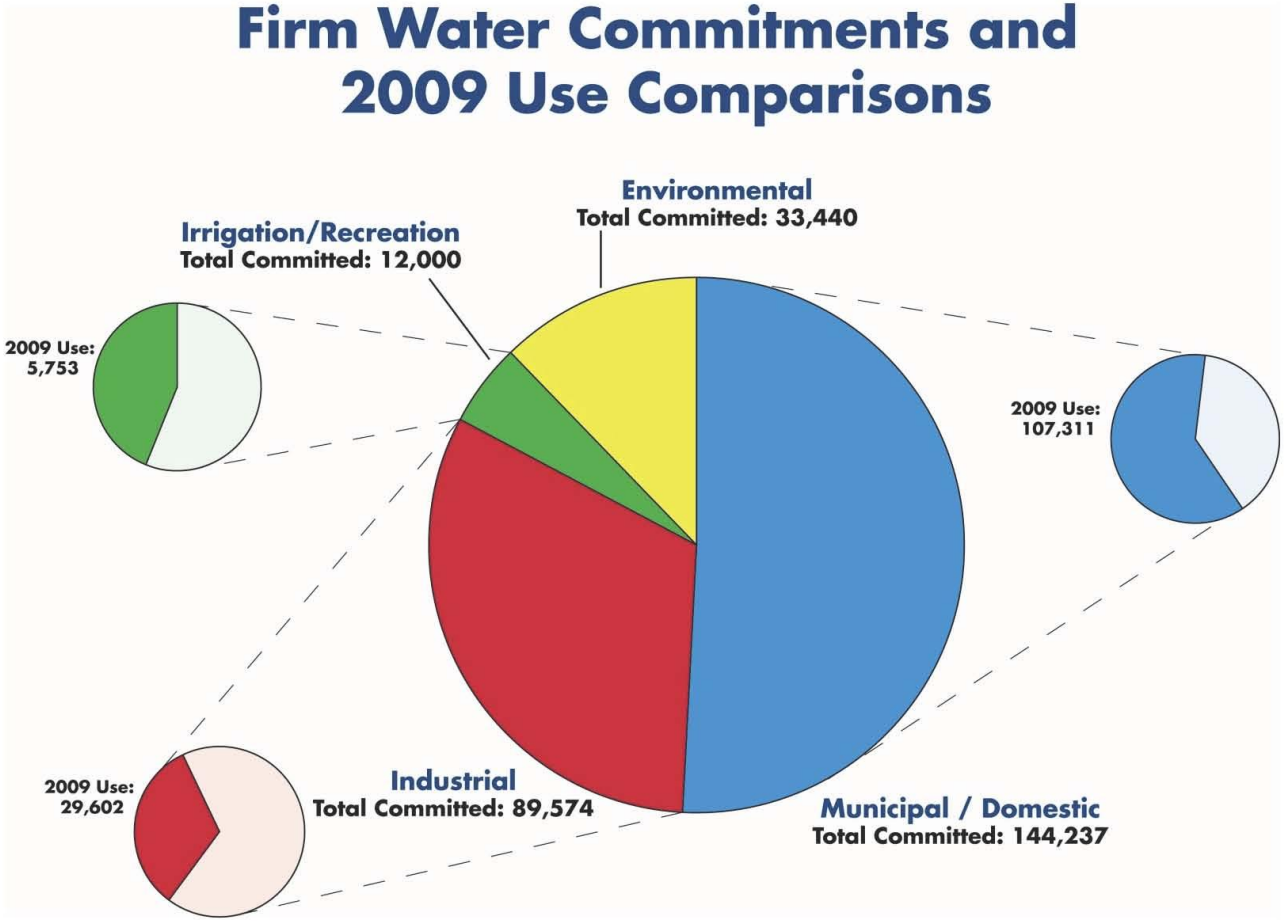
Challenges

- Low lake levels/Stored Water conditions
  - Lack of rainfall
  - Pre-existing, un-amended water rights/contracts
  - WMP allows interruptible customers water use to continue down to 325,000 ac-ft. (January 1) or 200,000 ac-ft. otherwise
- Adapt for changing population
- “Water available to sell”
- No incentives for “Firm” water customers to conserve water. The conserved water may not stay in the lakes.
- Firm customers bear the risk
- Water runoff downstream in flood periods is not stored
- “Interruptible” customers have not been treated as such


Lake Travis
at 560msl
N
1431
See
Detail
Below
Travis Co.
71
1431
Max Starcke Dam
Burnet Co.
71
Mansfield Dam
620
Legend
Full
560
0 0.3 0.6 1.2
Miles
Map Document: (\\WaterCo\Project\Water_Use\Conservation\Travis_560msl_underwater_contour_11_2010.mxd) 11/16/2010 -- 12:18:40 PM


Lake Buchanan
at 960 msl
(or 60' below full)
N
0 0.5 1 2
Miles
Burnet Co.
Llano Co.
RANCH RD 2341
RANCH RD 1431
LAKESHORE DR
COUNTY HWY 115
FM 2341
FM 690
STATE HWY 29
HOOVERS VALLEY RD
Buchanan
Dam
Legend
Full
960

Firm Water Committed

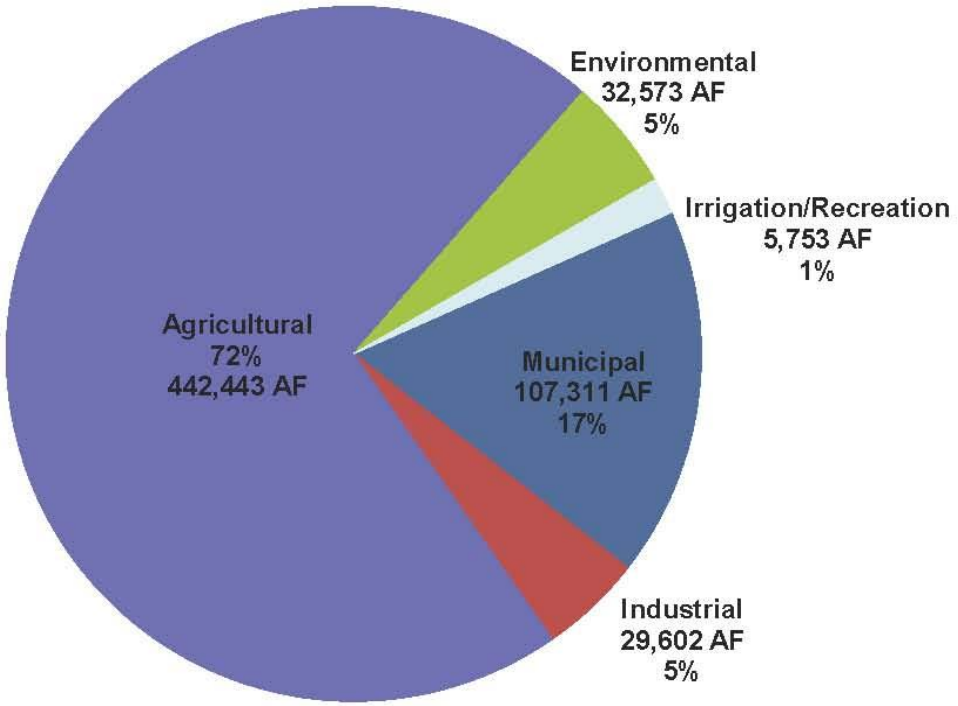


Total Firm Commitment 2009: 279,251 AF

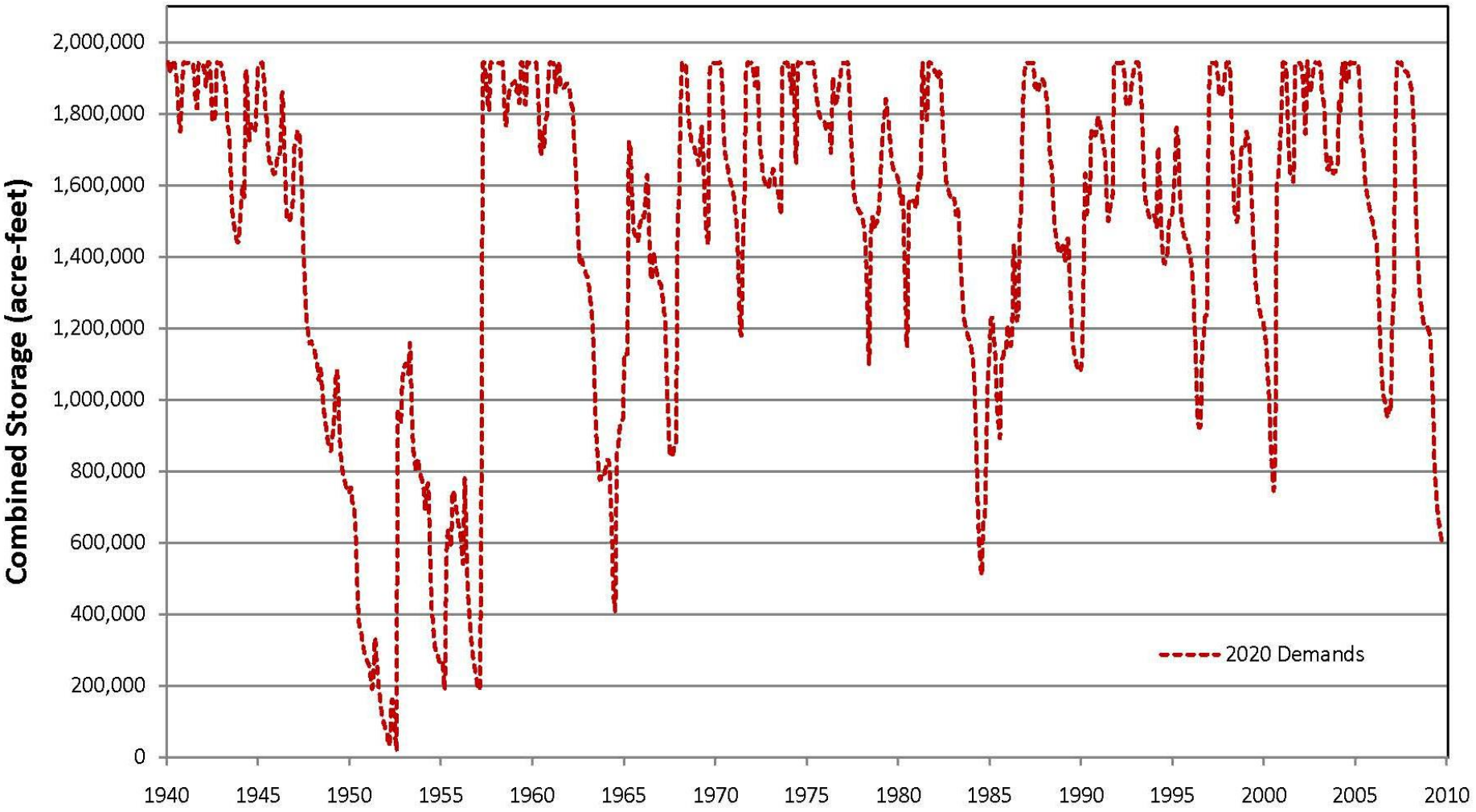
LCRA
ENERGY • WATER • COMMUNITY SERVICES
www.lcra.org

LCRA Water Use

Calendar Year 2009
Total 617,682 AF



2010 WATER MANAGEMENT PLAN BASELINE RUNS WITH 2020 DEMANDS
LAKES BUCHANAN AND TRAVIS COMBINED STORAGE
Prepared for WMP update meeting on 10/14/2010



This information is for Water Management Plan advisory committee discussion only and represents results from one of the many potential scenarios being evaluated.
This is not a forecast of future conditions.

Austin Area Population Histories and Forecasts

Year	City of Austin Total Area Population	City of Austin Full Purpose Population	City of Austin Limited Purpose Population	Travis County	Five County MSA (1)	Simple Growth Rate
1950	132,459			160,980	256,645	
1980	345,890			419,573	585,051	128 %
1990	465,622			576,407	846,227	45 %
2000	656,562	639,185	17,377	812,280	1,249,763	48 %
2010	790,390	777,953	12,437	1,024,266	1,716,289	37 %
2020	949,241	936,682	12,559	1,343,456	2,306,508	34 %

Source: Ryan Robinson, City Demographer, Department of Planning, City of Austin. March 2011.

NOTES: 1) The Five County Austin-Round Rock MSA wholly includes these counties: Bastrop, Caldwell, Hays, Travis and Williamson.
2) Population figures are as of April 1 of each year.
3) Historical and current period population figures for the City of Austin take into annexations that have occurred.
4) Forecasted population figures for the City of Austin do not assume any future annexation activity.

Fiscal Impact of Tourism in the Colorado River Basin

Counties	2008	2009
Travis	$3,827,700,000	$3,392,500,000
Williamson	$429,000,000	$385,000,000
Bastrop	$119,900,000	$117,800,000
Llano	$85,300,000	$86,900,000
Burnet	$74,900,000	$60,700,000
Colorado	$58,300,000	$44,500,000
Matagorda	$48,300,000	$49,300,000
Fayette	$38,300,000	$32,900,000
Wharton	$36,600,000	$28,900,000
San Saba	$4,020,000	$3,610,000
TOTALS	**$4,722,320,000**	**$4,202,110,000**

Source: State of Texas, Governor's office of Economic Development and Tourism

Colorado River Basin Property Valuations and School Taxes:

2009-2010 Chapter 41 "Robin Hood" Payments

County	ISD	Property Tax Base	School District Payment
Bastrop	Bastrop, Elgin, Smithville, McDade		
Subtotal			***$0***
Burnet			
	Burnet	$1,652,105,860	$0
	Marble Falls	$2,817,563,871	$3,076,289
Subtotal			***$3,076,289***
Colorado	Columbus, Rice, Weimar		
Subtotal			***$29,934***
Fayette	Flatonia, LaGrange, Schulenburg, Fayetteville		
Subtotal			***$82,720***

Source: Texas Education Agency

County	ISD	Property Tax Base	School District Payment
Llano	not available		
Matagorda	BayCity, Tidehaven, Matagorda, Palacios, Van Vleck		
Subtotal			***$9,025,293***
San Saba	San Saba, Richland Springs, Cherokee		**$0**
Subtotal			***$0***
Travis			
	Lake Travis	$7,055,548,113	$33,393,481
	Austin	$61,899,156,368	$132,271,140
	Lago Vista	$1,472,491,727	$6,037,313
	Eanes	$9,619,167,914	$58,512,006
	Del Valle		$0
	Manor		$0
	Pflugerville		$0
Subtotal			***$230,213,940***

Source: Texas Education Agency

County	ISD	Property Tax Base	School District Payment
Wharton	Boling, East Bernard, El Campo, Wharton, Louise		**$0**
Subtotal			***$0***
Williamson	Leander, Georgetown		
Subtotal			***$221,899***

Grand Total $239,461,132

Upper Basin contribution is approximately 72% of total.

Source: Texas Education Agency

Development of Waterfront Property & Associated Subdivisions Has Dramatically Increased since 1996

- Total assessed market values of direct waterfront properties and associated subdivisions now exceed $4.3Billion on Lake Travis in Travis County
  - Does not include lake view-related properties outside subdivisions
- Low lake levels threaten market values and associated property tax base
  - Cove properties ($0.4 Billion) are adversely impacted first
  - Loss of lake beauty, access (boat ramps, personal docks) & safety issues can significantly impact premium lake values

Assessed Market Values for Lake Travis Waterfront in Travis County*

	Main Body $MM	Coves $MM	Associated Subdivisions $MM	Total Waterfront Related $MM	Increase %
1996	$309.5	$66.1	$614.7	$990.3	
2002	$878.6	$196.6	$1,271.9	$2,347.1	+ 137% vs 1996
2010	$2,044.0	$384.4	$1,924.8	$4,353.2	+ 85% vs 2002

* Data provided by Travis County Appraisal District

Burnet County
Development of Waterfront Property & Associated Subdivisions Has Also Dramatically Increased since 2002

Assessed Market Values for Waterfront Properties in Burnet County*

•Waterfront property now represents 22% of entire Burnet County Market Value

	2010 Market Values			2002 Market Values		
	Waterfront $MM	Associated Subdivisions $MM		Waterfront $MM	Associated Subdivisions $MM	Waterfront Increase vs 2002, %
Lake Travis	$97.5	$96.3		$45.3	$47.2	115%
Lake Buchanan	$218.6	$59.5		$114.7	$34.5	91%
Inks Lake Lake Marble Falls	$44.1 $84.0			$18.0 $38.7		145% 117%
Lake LBJ	$815.7			$297.4		174%
Other waterfront	$180.4			$35.1		414%
Total Waterfront	$1,440.2			$549.2		162%
Total Burnet Co	$6,529.5			$3,058.4		113%

* Data provided by Burnet County Appraisal District

Economic Impact of Marinas

2009 Study of Lake Travis

	Sales ($MM)	Jobs	Labor Income ($MM)	Value Added ($MM)
Marina Services	$14.0	218.1	$5.2	$8.7
Repairs & Maintenance	$12.0	75.3	$2.5	$5.6
Restaurant	$11.8	274.2	$4.9	$5.6
Other Retail Trade	$8.9	184.4	$4.2	$5.7
Fuel	$6.0	62.9	$2.5	$3.3
All Other	$7.2	104.0	$3.0	$5.2
Total Direct Effects	$59.8	918.9	$22.2	$34.0
Secondary Effects	$37.0	363.5	$12.8	$21.5
TOTAL EFFECTS	**$96.7**	**1,282.4**	**$35.0**	**$55.5**

Source: Online Boating Economic Impact Tool, by Recreational Marine Research Center

Goals for the 2010+ WMP

- Raise all trigger points
  - Raise trigger point for complete curtailment of interruptible and environmental releases
- Add trigger point for 2nd crop
  - If 2nd crop is curtailed, allow for lake level recovery before it is re-instated
- Maintain a minimum of 1 year firm demand, plus dead pool, plus estimated evaporation during drought of record (approx 430,000—600,000AF) –WAM 23 or WAM 11
- Trigger points will be tied to equalizing economic impact to the entire basin
- Emphasize the need for new water supply now!

Upper trigger Curtailment

- Using the lower of the “recreational” levels of Travis and Buchanan
  - 660 for Travis
  - 1012 for Buchanan
- Curtailment of irrigation should be started at 10% over this level
- These levels yield storage of 1.639 MAF
- At this level economic impact is affected
  - Boat ramps are closing
  - Marinas are moving
  - Tax base revenue affected
- **This would be fair to the entire basin**

Lower trigger (complete curtailment)

- .9 MAF would be ~45% of capacity
  - Firm customers are affected already
    - Water intakes must be moved
    - Water quality suffers
    - Some municipalities have a hard time with access
  - Marinas are moved out of their moorings
  - Resorts suffer
  - Restaurants are closed
  - Severe financial impact to lakes area businesses
  - Severe financial impact to State—e.g. sales tax, Robin Hood
- Firm reserves get perilously risky
- **Interruptible should be curtailed before Firm customers are cut back**

Solutions

- All interests working together for the common good
- Raise awareness and sense of urgency in the public and government of looming critical water issues
- Water conservation should be consistent and mandatory with stronger enforcement for agricultural, commercial and residential consumers
- Conserved water to stay in lakes and/or supplement critical flows to bays/estuaries.
- New Water Contracts should be negotiated with new sources of water
- New off channel water reservoirs should be built –start immediately!
- Desalination of brackish water used for new power and industrial plant.
- Water supply plan should have same stakeholder committee as WMP to eliminate "education" time
- LCRA planning committees should have collaborative meetings or overlapping members

Solutions

- Water reuse projects need increased focus and budgeting
- Lake intake pumping by private property owners needs to be calculated and charged a market rate
- Central Pivot and other agricultural irrigation should be explored
  - Agricultural interest should get credit for environmental releases when fields are drained
- Convert more acreage to rice seed crop, row crops
- Downstream agricultural interests need plan for curtailment of interruptible supplies
- Trigger point times need to be set at shorter intervals and/or at multiple lake levels –minimum 2 crop triggers
- Recovery times for lake recharges should be established in the planning methodology


Location of Hurst Harbor Marina
and Johnny Fins Restaurant