CITY OF BASTROP

WATER SUPPLY OPTIONS

CITY OF BASTROP'S

WATER SUPPLY FUNDAMENTALS AND AGREED ASSUMPTIONS

1. The Council and Management began the search for an additional public water supply, which work encompassed a water planning process with a stated goal of securing long-term water rights for the City, e.g., water supply for 50 years.

2. It is important that the Council and Manager develop a long-term (i.e., 30–50 year+), water supply for the City of Bastrop's citizens' health, safety and welfare, for the growth of the City's business community, and to enable a potential for extending the City's corporate limits, in the future, as demands require. [This report focuses on the long-term water supply issues for the City and specifically does not address the City's short-term water needs.]

3. The City must be ever mindful of the urgency it faces in obtaining water production permits from the Lost Pines Groundwater Conservation District (LPGCD), with permits in sufficient production amounts to meet the City's future water supply needs. (CH2MHill suggests ±6000 ac/ft.) The City currently has two (2) permits pending with the LPGCD, pursuant to the two MOUs that it entered into with XS and Ingram, and the staff anticipates the LPGCD holding hearings on these permits in the very near future, (e.g., *April or May*). The City must be prepared to present information and address the Board's questions, related to these permits, at that time, including the preparation of materials supporting both the City's present and anticipated future long-term water needs. Much of the work in this report will be useful in that preparation.

4. It is understood that there are *no guarantees* for future water production permits from LPGCD (or its successor) and that the City does not need the entire 6,000 acre feet at this moment in time. The City will develop and submit to LPGCD, a "phasing plan" to demonstrate how the City will utilize the 6,000 acre feet, envisioned in its long-range water usage plan.

5. The LPGCD issues its groundwater production permits for period of only 5 years and they must be renewed each 5-year period. The LPGCD will monitor and update the Desired Future Conditions (DFCs) process commencing in 2016 and may make adjustment to its permittees' withdrawal amounts, such as the City, as required to manage the resources available and be in compliance with the revised DFC..

6. CH2MHill's recommendation is that a municipality should have water supplies available to meet the projected demand that is ten years in the future. So, for example, in 2025, the City should have, on hand, a water supply sufficient to meet the 2035 projected demand. (See CH2MHill's Report) This 'cushion' provides for coverage of "what if" scenarios, such as having a new industry locate in town, experiencing a more severe

drought, or the failure of a well and/or well field, etc. [Currently several central Texas municipalities are 'rationing water' because their current supply isn't sufficient to handle drought demands.]

7. There is Council, Management and staff concurrence that for purposes of long-term planning and this report, the City will assume that the City's existing Willow Plant Well Field ("Willow Plant") will remain productive at fifty percent (50%) of its current level (which will be ±1027 ac/ft annually), for a period of 50 years, and that the City's water plan should assume replacement of that quantity at that time, i.e., 2055. At that time, however, the City will do a detailed analysis of the City's existing Willow Plant to determine its ongoing viability, if any, and whether continued use of the Willow Plant is possible/advisable, and if so, at what level.

8. There is Council, Management and staff concurrence that for purposes of long-term planning and this report, the City will assume that the City's existing Bob Bryant Well Field ("Bob Bryant Plant") will remain productive at one-hundred (100%) of the 2011 historical production for a 75 year period, as long as there is no significant reduction in the flows in the Colorado River (as compared to 2011 flows) or implementation of a substantial well field in the alluvial aquifer within a quarter mile of the nearest City well. Note: It is the view of CH2MHill that the Colorado River flows could be substantially reduced from 2011 rates if the City of Austin increases reuse of its wastewater or if LCRA continues to withhold irrigation water to the lower basin, as they are currently doing. Accordingly, the City's water plan should assume replacement of that quantity at that time, i.e., 2055. CH2MHill notes also that the Bob Bryant wells appear to have an 'approximate 40 year life', based on their apparent construction. In the future, e.g., 2045 to 2055, the City will do a detailed analysis of the City's existing Bob Bryant Plant to determine its ongoing viability, if any, and whether continued use of the Bob Bryant Plant is possible/advisable, and if so, at what level. Reliable and efficient production from the wells will require periodic disinfection and redevelopment of the wells and periodic maintenance of the well pumps and motors.

9. There is Council, Management and staff concurrence that for purposes of long-term planning and this report, that a combination of the Willow Plant capacity noted above in paragraph 7, and the Bob Bryant Plant capacity, noted in paragraph 8, will provide the City with a total long-term capacity (from the two existing City well fields) of 1887 ac/ft annually, until approximately 2055. This capacity is reflected on the charts and graphs contained in this report.

10. There is Council, Management and staff acceptance of CH2MHILL "City of Bastrop, Water Projections dated March 10, 2014 "Scenario Two Additional Conservation (acre feet/year). The City of Bastrop is committed to aggressive water conservation program.

11. It is the consensus of the Council and Management that the City can only afford to install infrastructure 'in one direction' (i.e., either to the east, via the Ingram/LCRA Route, or to the north, via the XS Ranch Well Field).

CITY OF BASTROP
FUTURE WATER SUPPLY - 6,000 ACRE FEET

6,000 acre ft. demand per CH2M Hill Report dated March 10, 2014	OPTION 1		OPTION 2	OPTION 3
	Ingram	**LCRA**	**LCRA**	**XS Ranch**
Own Property / Water Rights	Buy	Lease	Lease	Own Water Rights
MOU	Proposal submitted from Ingram 1/13/14 MOU signed	MOU under Negotiations	MOU under Negotiations	Amendment √ - Signed
Size of Tract	2.18 Acres	?	?	2,000 Acres
Environmental Constraints	Yes Toad issues/Materials delivered to Dr. Forrester	Yes Toad issues Habitat plan in place.	Yes Toad issues Habitat plan in place.	No
Legal Constraints	Yes	?	?	No
Restriction in Area / Property	Yes	?	?	No
Roads - Access	Yes	?	?	Yes
Easements	Yes-SH 21	?	?	Yes-SH 95
Flood Plain	No	No	No	No
Well Spacing Problems	No	No	No	No
Groundwater Hydrologist Comments	Report Submitted	N/A	N/A	Report Submitted
Groundwater District Comments	Permits Processed by Staff	No amendments submitted	No amendments submitted	Permits Processed by Staff

f

6,000 acre ft. demand per CH2M Hill Report dated March 10, 2014	OPTION 1		OPTION 2	OPTION 3
	Ingram	**LCRA**	**LCRA**	**XS Ranch**
Testing Performed	Yes - Test Wells	Yes	Yes	First Well drilled Second Well pending
Aquifers of Well Supply	Simsboro Calvert Bluff	Simsboro	Simsboro	Simsboro and others
Any Water Quality Issues	TDS and Chloride Treatment may be required.	?	?	Pending Results of Second Test Well Test Hole Permit Approved
Infrastructure by City / Supplier	City	Unknown- depends on delivery point	Unknown- depends on delivery point	City
Term of Water Supply	Perpetuity	75 year Lease	75 year Lease	Perpetuity
Cost Incurred by Provider Reimbursed by City	$200,000			$115,000
Acre Feet of Water / Report CH2M Hill *	1,400	1,000 reserved 1,000 future purchase	1,000 reserved 2,000 future purchase	2,000 purchase 1,500 future purchase / reserve
Distance to City Facilities	6,200'	29,300' **	29,300' **	12,400' (Phase 1)
Purchase Price for Water Rights **	$800,000 purchase price for water rights only	System Rate	System Rate	Purchase of Water Rights $3,900,000
Take or Pay / Reservation / Sup. Rate	0	Reservation Fee $75/AF Use Fee $151/AF	Reservation Fee $75/AF Use Fee $151/AF	No
Cost of Improvements Infrastructure	$3.1 M (18")	**** to be determined	**** to be determined	$3.7 M - 1st Phase

** Distance based on use of LCRA Wells 3 & 4 to LCRA Water Plant and LCRA Water Plant to Loop 150.

(07)

3/18/14

6,000 acre ft. demand per CH2M Hill Report dated March 10, 2014	OPTION 1		OPTION 2	OPTION 3
	Ingram	**LCRA**	**LCRA**	**XS Ranch**
Maintenance of Improvements / yr	$200,000	$200,000	$200,000	$200,000
City Sole User	Yes	No	No	Yes
Operations City / Provider	City	LCRA	LCRA	City
Groundwater District Permits	Permits being processed by LPGW staff	Drilling 2 wells	Drilling 2 wells	Permits Filed Before Board in April 2014
Power - Bluebonnet or BPL	Bluebonnet	Bluebonnet	Bluebonnet	Bluebonnet
Infrastructure Projected Electrical Cost to Supply to City (poles, etc.)	Unknown	Unknown	Unknown	Unknown
Supplemented by Existing COB Well Supply	Yes	Declining	Declining	Yes / Declining
TCEQ Required Easement	Complies			Complies
Debt Service / yr	$245,000 (18") ***	Unknown to be determined	Unknown to be determined	$252,000 1st Phase
Energy Cost (16 hrs) / month *****	± $17,100	None	None	± $9,000 (phase 1)
Estimated Annual Rate Adjustment	N/A	Subject to annual adjustment by Board	Subject to annual adjustment by Board	N/A

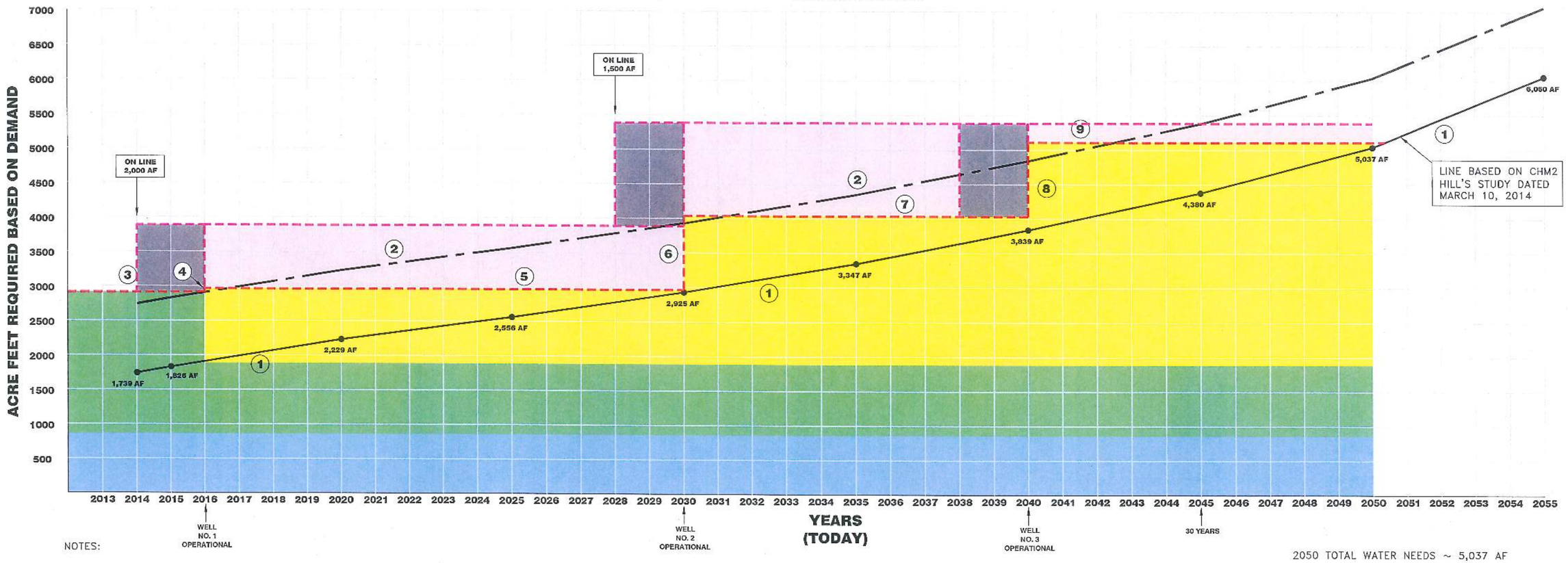
** Operate maximum of 16 hrs. per day unless a short term emergency exists.*
*** Successful negotiations with Ingram and XS Ranch. LCRA is NOT selling any water rights.*
**** Cost is based on all water from LCRA being delivered to Sim Gideon Power Plant infrastructure only.*
***** For example, cost from city's tank yard well to Sim Gideon Plant with an 18" line will cost approximately $3.6 M.*
****** Energy cost is for bringing water to surface at well head, plus chlorine, and Lost Pines GWCD. See breakdown of operational costs summary.*

6

3/18/14

XS RANCH

CITY OF BASTROP
WATER SUPPLY vs. GROWTH
XS RANCH PLAN



2050 TOTAL WATER NEEDS ~ 5,037 AF

NOTES:

1 GRAPH BASED ON CHM2 HILL'S STUDY DATED MARCH 10, 2014 – TABLE 6–SCENARIO TWO, ADDITIONAL CONSERVATION.

2 DASHED–DOT GRAPH LINE IS 1,000 ACRE FEET (AF) ABOVE THE CHM2 HILL GRAPH LINE

3 COMBINED PRODUCTION OF WILLOW PLANT (2,054 AF) PLUS BOB BRYANT (860 AF) EQUALS 2,914 AF

4 IN 2016, WILLOW PLANT DROPS TO 50% PRODUCTION (1,027 AF) FOR 30 YEARS. WELL NO. 1 COMES ON LINE TO INCREASE THE WATER SUPPLY TO 2,962 AF (1,075 AF + 1,027 AF + 860 AF)

5 PRODUCTION TO MAINTAIN AT 2,962 AF

6 IN 2030, WELL NO. 2 COMES ON LINE TO INCREASE THE WATER SUPPLY TO 4,037 AF (1,075 AF + 1,075 AF + 1,027 AF + 860 AF)

7 PRODUCTION TO MAINTAIN AT 4,037 AF

8 IN 2040, WELL NO. 3 COMES ON LINE TO INCREASE THE WATER SUPPLY TO 5,112 AF (1,075 AF + 1,075 AF + 1,075 AF + 1,027 AF + 860 AF)

9 PRODUCTION TO MAINTAIN AT 5,112 AF

10 TOTAL WATER RIGHTS PURCHASED IN 30 YEARS IS 3,500 ACRE FEET FROM XS RANCH

EXISTING WELL PRODUCTION

C –	375 gpm	
D >	300 gpm	Willow Plant
E		
F –	850 gpm	
G –	385 gpm	
H –	400 gpm	Bob Bryant
I –	400 gpm	
Total	2,710 gpm	

* D & E only pumps one at a time

*NOTE: CITY OF BASTROP GENERALLY OPERATES IT WATER WELLS FOR A MAXIMUM OF 16 HOURS PER DAY. ALL SUPPLIER WELLS REFLECT THIS ASSUMPTION FOR CONVERSION FROM ACRE FEET TO GPM.

- 2 YR TIME TABLE FOR NEGOTIATIONS, DESIGN, PERMITS, FUNDING, ENVIRONMENTAL, CONSTRUCTION
- XS RANCH
- WILLOW PLANT
- BOB BRYANT
- RESERVE WATER SUPPLY

XS RANCH
A-1

BEFCO ENGINEERING, INC.
P. O. Box 615
LaGrange, Texas 78945
(979) 968-6474
F-2011

F:\JULIANA\LAND PROJECTS 3\BASTROP\DWG\2013-BASTROP METER -WELL GROWTH CHART.DWG

REVISED 03/14/14

3/18/14

7

XS RANCH
City of Bastrop

YEAR	WATER RIGHTS	PV FACTOR	PV @ 3%	Phasing of Infrastructure	TEST WELL #2	TOTAL PV
2014	* $1,300,000				$115,000	$1,415,000
2015		0.9709	$3,592,330	Phase 1 $3,700,000		$3,592,330
2020						
2021						
2025						
2028	* $975,000	0.6611	$644,573			$644,573
2029		0.6419	$1,027,040	Phase 2 $1,600,000		$1,027,040
2030						
2035						
2039		0.4776	$1,194,000	Phase 3 $2,500,000		$1,194,000
2040						
2045						
						$7,872,943

** Counter proposal to be submitted by City.*

XS RANCH
CITY OF BASTROP
Water Demand Projections

YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	XS RANCH ACRE FT.	TOTAL ACRE FT.	NEED-XS ACRE FT.	XS RANCH OPER. COST	TOTAL	PV Factor	PV
2014	1,739	2,914		2,914	-1,175				
2015	1,826	2,914	2,000	4,914	-3,088			0.9709	
2016	1,907	1,887	2,000	3,887	20	$3,258	$3,258	0.9426	$3,070.99
2017	1,987	1,887	2,000	3,887	100	$16,290	$16,290	0.9151	$14,906.98
2018	2,068	1,887	2,000	3,887	181	$29,485	$29,485	0.8885	$26,197.33
2019	2,148	1,887	2,000	3,887	261	$42,517	$42,517	0.8625	$36,670.83
2020	2,229	1,887	2,000	3,887	342	$55,712	$55,712	0.8375	$46,658.63
2021	2,294	1,887	2,000	3,887	407	$66,300	$66,300	0.8131	$53,908.77
2022	2,360	1,887	2,000	3,887	473	$77,052	$77,052	0.7894	$60,824.61
2023	2,425	1,887	2,000	3,887	538	$87,640	$87,640	0.7664	$67,167.45
2024	2,491	1,887	2,000	3,887	604	$98,392	$98,392	0.7441	$73,213.19

9

3/18/14

YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	INGRAM ACRE FT.	TOTAL ACRE FT.	NEED ACRE FT.	XS RANCH OPER. COST	TOTAL	PV Factor	PV
2025	2,556	1,887	2,000	3,887	669	$108,980	$108,980	0.7224	$78,727.22
2026	2,630	1,887	2,000	3,887	743	$121,035	$121,035	0.7014	$84,893.74
2027	2,704	1,887	2,000	3,887	817	$133,089	$133,089	0.6810	$90,633.81
2028	2,777	1,887	2,000	3,887	890	$144,981	$144,981	0.6611	$95,846.94
2029	2,851	1,887	2,000	3,887	964	$157,036	$157,036	0.6419	$100,801.15
2030	2,925	1,887	3,500	5,387	1,038	$169,090	$169,090	0.6232	$105,377.01
2031	3,009	1,887	3,500	5,387	1,122	$182,774	$182,774	0.6050	$110,578.15
2032	3,094	1,887	3,500	5,387	1,207	$196,620	$196,620	0.5874	$115,494.76
2033	3,178	1,887	3,500	5,387	1,291	$210,304	$210,304	0.5703	$119,936.31
2034	3,263	1,887	3,500	5,387	1,376	$224,150	$224,150	0.5537	$124,112.08
2035	3,347	1,887	3,500	5,387	1,460	$237,834	$237,834	0.5375	$127,835.78
2036	3,445	1,887	3,500	5,387	1,558	$253,798	$253,798	0.5219	$132,457.28

10

YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	XS Ranch ACRE FT.	TOTAL ACRE FT.	NEED ACRE FT.	XS RANCH OPER. COST	TOTAL	PV Factor	PV
2037	3,544	1,887	3,500	5,387	1,657	$269,925	$269,925	0.5067	$136,771.15
2038	3,642	1,887	3,500	5,387	1,755	$285,890	$285,890	0.4919	$140,629.05
2039	3,741	1,887	3,500	5,387	1,854	$302,017	$302,017	0.4776	$144,243.13
2040	3,839	1,887	3,500	5,387	1,952	$317,981	$317,981	0.4637	$147,447.70
2041	3,947	1,887	3,500	5,387	2,060	$335,574	$335,574	0.4502	$151,075.41
2042	4,055	1,887	3,500	5,387	2,168	$353,167	$353,167	0.4371	$154,369.38
2043	4,164	1,887	3,500	5,387	2,277	$370,923	$370,923	0.4243	$157,382.76
2044	4,272	1,887	3,500	5,387	2,385	$388,517	$388,517	0.4120	$160,068.80
2045	4,380	1,887	3,500	5,387	2,493	$406,110	$406,110	0.4000	$162,443.88
									$3,023,744.28
2046	4,511	1,887	3,500	5,387	2,624	$427,450	$427,450		
2047	4,643	1,887	3,500	5,387	2,756	$448,952	$448,952		
2048	4,774	1,887	3,500	5,387	2,887	$470,292	$470,292		

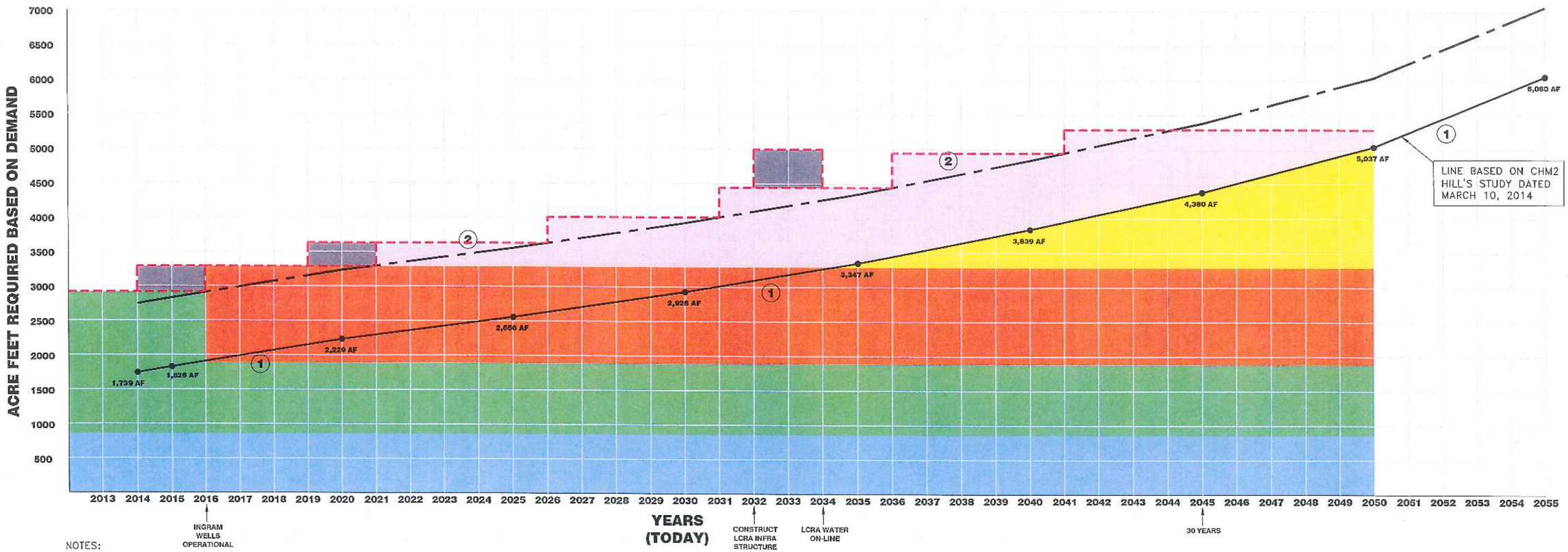
YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	XS Ranch ACRE FT.	TOTAL ACRE FT.	NEED ACRE FT.	XS RANCH OPER. COST	TOTAL	PV Factor	PV
2049	4,906	1,887	3,500	5,387	3,019	$491,795	$491,795		
2050	5,037	1,887	3,500	5,387	3,150	$513,135	$513,135		
2051	5,242	1,887	3,500	5,387	3,355	$546,530	$546,530		
2052	5,446	1,887			3,559	$579,761	$579,761		
2053	5,651	1,887			3,764	$613,156	$613,156		
2054	5,855	1,887			3,968	$646,387	$646,387		
2055	6,060	1,887			4,173	$679,782	$679,782		

**** No rate increase for electricity, chlorine or LPGWCD.***
Reflects 1.5% LCRA rate increase per year or 15% over 10 years.

12

INGRAM/ LCRA

CITY OF BASTROP
WATER SUPPLY vs. GROWTH
INGRAM/LCRA PLAN



NOTES:

1 GRAPH BASED ON CHM2 HILL'S STUDY DATED MARCH 10, 2014 – TABLE 6–SCENARIO TWO, ADDITIONAL CONSERVATION.

2 DASHED–DOT GRAPH LINE IS 1,000 ACRE FEET (AF) ABOVE THE CHM2 HILL GRAPH LINE

EXISTING WELL PRODUCTION

C –	375 gpm	
D >	300 gpm	Willow Plant
E		
F –	850 gpm	
G –	385 gpm	
H –	400 gpm	Bob Bryant
I –	400 gpm	
Total	2,710 gpm	

* D & E only pumps one at a time

*NOTE: CITY OF BASTROP GENERALLY OPERATES IT WATER WELLS FOR A MAXIMUM OF 16 HOURS PER DAY. ALL SUPPLIER WELLS REFLECT THIS ASSUMPTION FOR CONVERSION FROM ACRE FEET TO GPM.

2 YR TIME TABLE FOR NEGOTIATIONS, DESIGN, PERMITS, FUNDING, ENVIRONMENTAL, CONSTRUCTION

LCRA

INGRAM

WILLOW PLANT

BOB BRYANT

RESERVE WATER SUPPLY

INGRAM/LCRA
B-1

BEFCO ENGINEERING, INC.
P. O. Box 615
LaGrange, Texas 78945
(979) 968-6474
F-2011

F:\JULIANA\LAND PROJECTS 3\BASTROP\DWG\2013-BASTROP METER -WELL GROWTH CHART.DWG

3/18/14

13

Ingram / LCRA
CITY OF BASTROP
Water Demand Projections

YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	INGRAM ACRE FT.	INGRAM NEED ACRE FT.	LCRA RESERVE ACRE FT.	LCRA TAKE ACRE FT.	LCRA WATER RESERVE $75/ACRE FT.	TAKE $151/ACRE FT.	INGRAM OPERATIONAL COSTS	LCRA OPERATIONAL COSTS	TOTAL	PV FACTOR	PV
2014	1,739	2,914		0	0	0	$0	$0	$0.00	$0.00	$0		$0
2015	1,826	2,914	1,400	0	0	0	$0	$0	$0.00	$0.00	$0		$0
2016	1,907	1,887	1,400	20	0	0	$0	$0	$2,932.20	$0.00	$2,932	0.9426	$2,764
2017	1,987	1,887	1,400	100	0	0	$0	$0	$14,661.00	$0.00	$14,661	0.9151	$13,416
2018	2,068	1,887	1,400	181	0	0	$0	$0	$26,536.41	$0.00	$26,536	0.8885	$23,578
2019	2,148	1,887	1,400	261	0	0	$0	$0	$38,265.21	$0.00	$38,265	0.8625	$33,004
2020	2,229	1,887	1,400	342	0	0	$0	$0	$50,140.62	$0.00	$50,141	0.8375	$41,993
2021	2,294	1,887	1,400	407	343	0	$25,725	$0	$59,670.27	$0.00	$85,395	0.8131	$69,435
2022	2,360	1,887	1,400	473	343	0	$25,725	$0	$69,346.53	$0.00	$95,072	0.7894	$75,049
2023	2,425	1,887	1,400	538	343	0	$25,725	$0	$78,876.18	$0.00	$104,601	0.7664	$80,166
2024	2,491	1,887	1,400	604	343	0	$25,725	$0	$88,552.44	$0.00	$114,277	0.7441	$85,034

3/18/14

INGRAM / LCRA
City of Bastrop

YEAR	PROPERTY	PV FACTOR	PV @ 3%	INGRAM	LCRA INFRASTRUCTURE	TOTAL PV
2014	* $1,000,000					$1,000,000
2015		0.9709	$3,100,000	$3,100,000		$3,009,790
2020						
2025						
2030						
2033		0.5703			** 3,600,000 $830,100	$2,526,486
2035						
2040						
2045						
						$6,536,276

** Counter proposal to be submitted by City.*
*** Based on water supply to be delivered at Sim Gideon Power Plant.*

3/18/14

F:\MSOFFICE\EXCEL\Bastrop, City of\Ingram - LCRA 031714

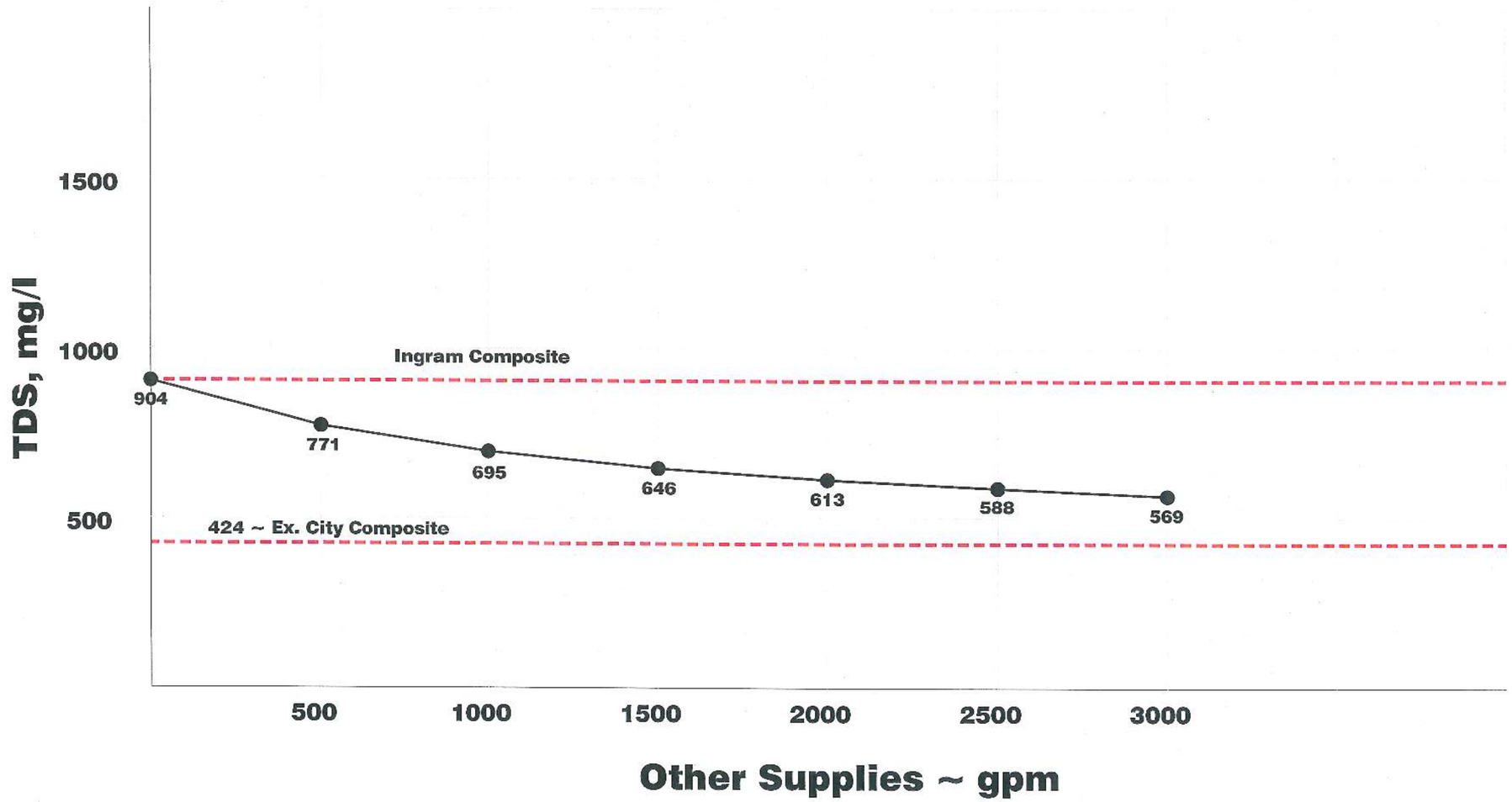
YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	INGRAM ACRE FT.	NEED ACRE FT.	LCRA RESERVE ACRE FT.	LCRA TAKE ACRE FT.	LCRA WATER RESERVE $86.25/ACRE FT.	TAKE $174/ACRE FT.	INGRAM OPERATIONAL COSTS	LCRA OPERATIONAL COSTS	TOTAL	PV FACTOR	PV
2025	2,556	1,887	1,400	669	343	0	$29,584	$0	$98,082.09	$0.00	$127,666	0.7224	$92,226
2026	2,630	1,887	1,400	743	722	0	$62,273	$0	$108,931.23	$0.00	$171,204	0.7014	$120,082
2027	2,704	1,887	1,400	817	722	0	$62,273	$0	$119,780.37	$0.00	$182,053	0.6810	$123,978
2028	2,777	1,887	1,400	890	722	0	$62,273	$0	$130,482.90	$0.00	$192,755	0.6611	$127,431
2029	2,851	1,887	1,400	964	722	0	$62,273	$0	$141,332.04	$0.00	$203,605	0.6419	$130,694
2030	2,925	1,887	1,400	1,038	722	0	$62,273	$0	$152,181.18	$0.00	$214,454	0.6232	$133,648
2031	3,009	1,887	1,400	1,122	1,158	0	$99,878	$0	$164,496.42	$0.00	$264,374	0.6050	$159,946
2032	3,094	1,887	1,400	1,207	1,158	0	$99,878	$0	$176,958.27	$0.00	$276,836	0.5874	$162,613
2033	3,178	1,887	1,400	1291	1158	0	$99,878	$0	$189,273.51	$0.00	$289,151	0.5703	$164,903
2034	3,263	1,887	1,400	1376	1158	0	$99,878	$0	$201,735.36	$0.00	$301,613	0.5537	$167,003

YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	INGRAM ACRE FT.	NEED ACRE FT.	LCRA RESERVE ACRE FT.	LCRA TAKE ACRE FT.	LCRA WATER RESERVE $99.19/ACRE FT.	TAKE $200/ACRE FT.	INGRAM OPERATIONAL COSTS	LCRA OPERATIONAL COSTS	TOTAL	PV FACTOR	PV
2035	3,347	1,887	1,400	1,400	1,098	60	$108,911	$12,000	$205,254.00	$4,105.08	$330,270	0.5375	$177,520
2036	3,445	1,887	1,400	1,400	1,502	158	$148,983	$31,600	$205,254.00	$10,810.04	$396,647	0.5219	$207,010
2037	3,544	1,887	1,400	1,400	1,403	257	$139,164	$51,400	$205,254.00	$17,583.43	$413,401	0.5067	$209,470
2038	3,642	1,887	1,400	1,400	1,305	355	$129,443	$71,000	$205,254.00	$24,288.39	$429,985	0.4919	$211,510
2039	3,741	1,887	1,400	1,400	1,206	454	$119,623	$90,800	$205,254.00	$31,061.77	$446,739	0.4776	$213,363
2040	3,839	1,887	1,400	1,400	1,108	552	$109,903	$110,400	$205,254.00	$37,766.74	$463,323	0.4637	$214,843
2041	3,947	1,887	1,400	1,400	1,325	660	$131,427	$132,000	$205,254.00	$45,155.88	$513,837	0.4502	$231,329
2042	4,055	1,887	1,400	1,400	1,217	768	$120,714	$153,600	$205,254.00	$52,545.02	$532,113	0.4371	$232,587
2043	4,164	1,887	1,400	1400	1108	877	$109,903	$175,400	$205,254.00	$60,002.59	$550,559	0.4243	$233,602
2044	4,272	1,887	1,400	1400	1000	985	$99,190	$197,000	$205,254.00	$67,391.73	$568,836	0.4120	$234,360

YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	INGRAM ACRE FT.	NEED ACRE FT.	LCRA RESERVE ACRE FT.	LCRA TAKE ACRE FT.	LCRA WATER RESERVE $114.07/ACRE FT.	TAKE $229.65/ACRE FT.	INGRAM OPERATIONAL COSTS	LCRA OPERATIONAL COSTS	TOTAL	PV FACTOR	PV
2045	4,380	1,887	1,400	1,400	892	1,093	$101,750	$251,007	$205,254.00	$74,780.87	$632,793	0.4000	$253,117
													$3,972,665
2046	4,511	1,887	1,400	1,400	761	1,224	$86,807	$281,092	$205,254.00	$83,743.63	$656,897		
2047	4,643	1,887	1,400	1,400	629	1,356	$71,750	$311,405	$205,254.00	$92,774.81	$681,184		
2048	4,774	1,887	1,400	1,400	498	1,487	$56,807	$341,490	$205,254.00	$101,737.57	$705,288		
2050	5,037	1,887	1,400	1,400	205	1,750	$23,384	$401,888	$205,254.00	$119,731.50	$750,257		
2051	5,242	1,887		1,400	30	1,955	$3,422	$448,966	$205,254.00	$133,757.19	$791,399		
2052	5,446	1,887		1,400		2,159	$0	$495,814	$205,254.00	$147,714.46	$643,529		
2053	5,651	1,887		1,400		2,364	$0	$542,893	$205,254.00	$161,740.15	$704,633		
2054	5,855	1,887		1400		2568	$0	$589,741	$205,254.00	$175,697.42	$765,439		
2055	6,060	1,887		1400		2773	$0	$636,819	$205,254.00	$189,723.11	$826,543		

Reflects 1.5% LCRA rate increase per year or 15% over 10 years.

CITY OF BASTROP
WATER SUPPLY
BLENDING INGRAM & SUPPLY



*ASSUME INGRAM WELLS – 1,000 gpm – 950 TDS
300 gpm – 750 TDS
COMBINED 904 TDS

CITY OF BASTROP COMPOSITE ~ 424 mg/l TDS

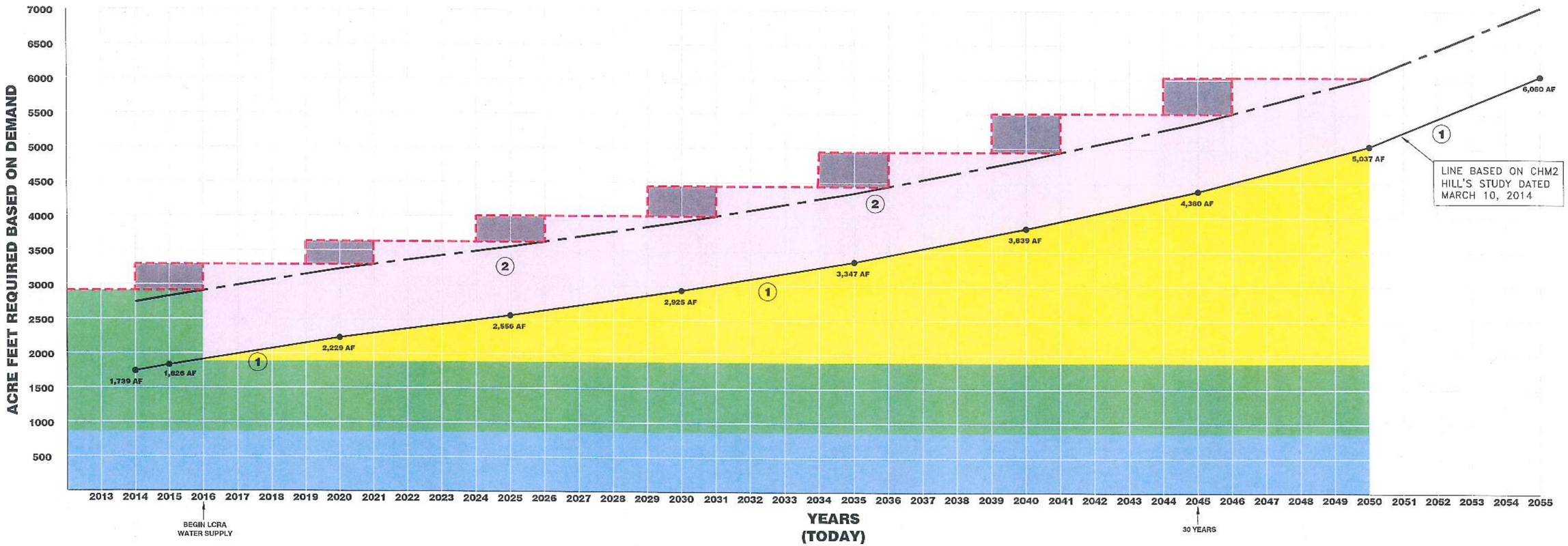
F:\JULIANA\LAND PROJECTS 3\BASTROP\DWG\2013-BASTROP METER -WELL GROWTH CHART.DWG

BEFCO ENGINEERING, INC.
P. O. Box 615
LaGrange, Texas 78945
(979) 968-6474
F-2011

3/18/14

LCRA

CITY OF BASTROP
WATER SUPPLY vs. GROWTH
LCRA PLAN



NOTES:

1 GRAPH BASED ON CHM2 HILL'S STUDY DATED MARCH 10, 2014 – TABLE 6–SCENARIO TWO, ADDITIONAL CONSERVATION.

2 DASHED–DOT GRAPH LINE IS 1,000 ACRE FEET (AF) ABOVE THE CHM2 HILL GRAPH LINE

EXISTING WELL PRODUCTION

C –	375 gpm	
D >	300 gpm	Willow Plant
E		
F –	850 gpm	
G –	385 gpm	
H –	400 gpm	Bob Bryant
I –	400 gpm	
Total	2,710 gpm	

* D & E only pumps one at a time

*NOTE: CITY OF BASTROP GENERALLY OPERATES IT WATER WELLS FOR A MAXIMUM OF 16 HOURS PER DAY. ALL SUPPLIER WELLS REFLECT THIS ASSUMPTION FOR CONVERSION FROM ACRE FEET TO GPM.

- 2 YR TIME TABLE FOR NEGOTIATIONS, DESIGN, PERMITS, FUNDING, ENVIRONMENTAL, CONSTRUCTION
- LCRA
- WILLOW PLANT
- BOB BRYANT
- RESERVE WATER SUPPLY

LCRA
C-1

BEFCO ENGINEERING, INC.
P. O. Box 615
LaGrange, Texas 78945
F-2011 (979) 968-6474

F:\JULIANA\LAND PROJECTS 3\BASTROP\DWG\2013-BASTROP METER -WELL GROWTH CHART.DWG

3/18/14

LCRA

City of Bastrop

Year	LCRA Infrastructure	PV Factor	PV @ 3%	Phasing of LCRA/Infrastructure	TOTAL PV
2014					
2015	$3,600,000 * $830,000	0.9709	$4,301,184		$4,301,184
2020					
2025					
2030					
2035					
2040					
2045					
					$4,301,184

** Based on water supply to be delivered at Sim Gideon Power Plant.*

3/18/14 F:\MSOFFICE\EXCEL\Bastrop, City of\LCRA 031714

LCRA
CITY OF BASTROP
Water Demand Projections

YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	NEED ACRE FT.	LCRA ACRE FT.	RESERVE $75/ACRE FT.	TAKE $151/ACRE FT.	LCRA OPER. COST	TOTAL	PV FACTOR	PV
2014	1,739	2,914	-1,175		$0	$0	$0	$0		
2015	1,826	2,914	-1,088		$0	$0	$0	$0		
2016	1,907	1,887	20	1,387	$104,025	$3,020	$1,368	$108,413	0.9426	$102,190.43
2017	1,987	1,887	100	1,307	$98,025	$15,100	$6,842	$119,967	0.9151	$109,781.62
2018	2,068	1,887	181	1,226	$91,950	$27,331	$12,384	$131,665	0.8885	$116,984.05
2019	2,148	1,887	261	1,146	$85,950	$39,411	$17,857	$143,218	0.8625	$123,525.61
2020	2,229	1,887	342	1,065	$79,875	$51,642	$23,399	$154,916	0.8375	$129,742.11
2021	2,294	1,887	407	1,000	$75,000	$61,457	$27,846	$164,303	0.8131	$133,594.87
2022	2,360	1,887	473	1,270	$95,250	$71,423	$32,362	$199,035	0.7894	$157,118.00
2023	2,425	1,887	538	1,205	$90,375	$81,238	$36,809	$208,422	0.7664	$159,734.53
2024	2,491	1,887	604	1,139	$85,425	$91,204	$41,324	$217,953	0.7441	$162,179.18

3/18/14

22

YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	NEED ACRE FT.	LCRA ACRE FT.	RESERVE $86.25/AC. FT.	TAKE $173.65/AC. FT.	LCRA OPER. COST	TOTAL	PV FACTOR	PV
2025	2,556	1,887	669	1,074	$92,633	$116,172	$45,772	$254,576	0.7224	$183,905.70
2026	2,630	1,887	743	1,000	$86,250	$129,022	$50,835	$266,107	0.7014	$186,647.12
2027	2,704	1,887	817	1,305	$112,556	$141,872	$55,898	$310,326	0.6810	$211,331.87
2028	2,777	1,887	890	1,232	$106,260	$154,549	$60,892	$321,701	0.6611	$212,676.21
2029	2,851	1,887	964	1,158	$99,878	$167,399	$65,955	$333,231	0.6419	$213,901.01
2030	2,925	1,887	1,038	1,084	$93,495	$180,249	$71,018	$344,762	0.6232	$214,855.42
2031	3,009	1,887	1,122	1,000	$86,250	$194,835	$76,765	$357,850	0.6050	$216,499.43
2032	3,094	1,887	1,207	1,351	$116,524	$209,596	$82,581	$408,700	0.5874	$240,070.28
2033	3,178	1,887	1,291	1,267	$109,279	$224,182	$88,328	$421,789	0.5703	$240,546.00
2034	3,263	1,887	1,376	1,182	$101,948	$238,942	$94,143	$435,033	0.5537	$240,877.81

3/18/14

23

YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	NEED ACRE FT.	LCRA ACRE FT.	RESERVE $99.19/AC. FT.	TAKE $199.70/AC. FT.	LCRA OPER. COST	TOTAL	PV FACTOR	PV
2035	3,347	1,887	1,460	1,098	$108,911	$291,562	$99,890	$500,363	0.5375	$268,945.06
2036	3,445	1,887	1,558	1,000	$99,190	$311,133	$106,595	$516,918	0.5219	$269,779.42
2037	3,544	1,887	1,657	1,403	$139,164	$330,903	$113,369	$583,435	0.5067	$295,626.56
2038	3,642	1,887	1,755	1,305	$129,443	$350,474	$120,074	$599,990	0.4919	$295,135.10
2039	3,741	1,887	1,854	1,206	$119,623	$370,244	$126,847	$616,714	0.4776	$294,542.56
2040	3,839	1,887	1,952	1,108	$109,903	$389,814	$133,552	$633,269	0.4637	$293,646.77
2041	3,947	1,887	2,060	1,000	$99,190	$411,382	$140,941	$651,513	0.4502	$293,311.19
2042	4,055	1,887	2,168	1,456	$144,421	$432,950	$148,330	$725,700	0.4371	$317,203.67
2043	4,164	1,887	2,277	1,347	$133,609	$454,717	$155,788	$744,114	0.4243	$315,727.41
2044	4,272	1,887	2,385	1,239	$122,896	$476,285	$163,177	$762,358	0.4120	$314,091.43

3/18/14

24

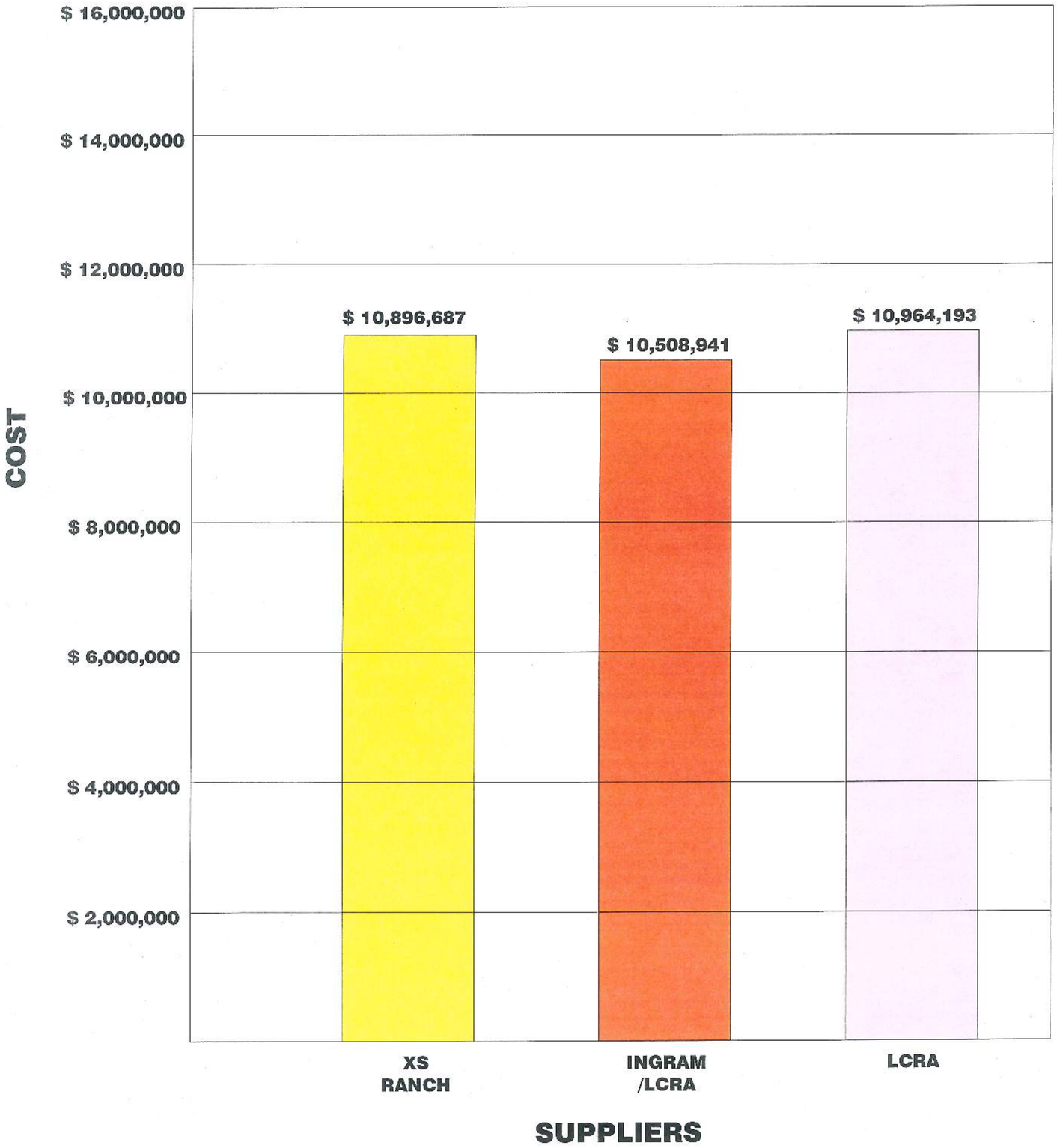
YEAR	DEMAND ACRE FT.	EXISTING ACRE FT.	NEED ACRE FT.	LCRA ACRE FT.	RESERVE $114.07/AC.	TAKE $229.65/AC. FT.	LCRA OPER. COST	TOTAL	PV FACTOR	PV
2045	4,380	1,887	2,493	1,131	$129,013	$572,517	$170,566	$872,097	0.4000	$348,838.68
										$6,663,009.11
2046	4,511	1,887	2,624	1,000	$114,070	$602,602	$179,529	$896,200		
2047	4,643	1,887	2,756	1,599	$182,398	$632,915	$188,560	$1,003,873		
2048	4,774	1,887	2,887	1,468	$167,455	$663,000	$197,523	$1,027,977		
2049	4,906	1,887	3,019	1,336	$152,398	$693,313	$206,554	$1,052,265		
2050	5,037	1,887	3,150	1,205	$137,454	$723,398	$215,517	$1,076,369		
2051	5,242	1,887	3,355	1,000	$114,070	$770,476	$229,542	$1,114,088		
2052	5,446	1,887	3,559	2,000	$228,140	$817,324	$243,500	$1,288,964		
2053	5,651	1,887	3,764	2,000	$228,140	$864,403	$257,525	$1,350,068		
2054	5,855	1,887	3,968	2,000	$228,140	$911,251	$271,483	$1,410,874		
2055	6,060	1,887	4,173	2,000	$228,140	$958,329	$285,508	$1,471,978		

Note: Reflects 1.5% LCRA rate increase per year or 15% over 10 years.

3/18/14

25

SUMMARY SHEET
WATER SUPPLY
OPTIONS PRESENT WORTH COST



3/18/14

NOTE: COSTS SHOWN INCLUDE ALL WELLS, INFRASTRUCTURE, WATER RIGHTS, ELECTRICAL, CHLORINE AND LOST PINE GCD COSTS.

PRESENT VALUE USED 3% INTEREST RATE

MISCELLANEOUS

Proposed firm water rates

Acre-foot: The amount of water it would take to cover one acre of land in one foot of water. It is 325,851 gallons.

Firm water: Water purchased mainly by municipal and industrial customers. It is available without cutback through a repeat of the worst drought in the region's history, currently the 1947-57 drought.

Interruptible water: Water purchased mostly for agricultural irrigation at a lower cost than firm water; can be cut back or cut off during severe drought. For example, water from the Highland Lakes was withheld for most downstream irrigation in 2012 and 2013, and may be again in 2014.

Firm water rates: Rates paid by customers such as cities and industry and domestic users along the Highland Lakes.

Proposed rate increases: The information here reflects LCRA staff's preliminary rate proposal and is subject to change.

Jan. 14, 2014

LCRA.org

Background

LCRA provides water for more than a million people in Central Texas, as well as businesses, industries, agriculture and the environment throughout the lower Colorado River basin. Most cities and industries purchase ***firm water*** from LCRA, while farmers buy ***interruptible water*** (see definitions in left column).

LCRA does not make a profit on its rates, nor does it have the ability to levy taxes. LCRA's firm water rate is designed to cover LCRA's river management activities, such as:

- Daily operations, including monitoring supply and releasing water to meet customer demand;
- Water supply planning, permitting and development;
- Water conservation;
- Flood management; and
- Some dam safety and maintenance.

The LCRA Board is considering increasing rates for both firm and interruptible customers.

Firm rates and rate structure

LCRA is proposing to increase its firm water rate in 2015, beginning in the January billing cycle, to cover existing costs and the costs of increasing LCRA's water supply to serve the future needs of a growing and drought-prone region. Specifically, the proposed firm rate and rate projections include the costs of five groundwater wells in Bastrop County and building a new reservoir downstream of Austin in Wharton County.

Proposed rate structure

LCRA staff is recommending the LCRA Board of Directors approve a new rate that would become effective in January 2015. The firm water rate would be set to cover the entire cost of water operations. This includes the costs of river management, new water supply and costs LCRA incurs to maintain agricultural irrigation operations even when not providing interruptible water. The firm rate would be set to cover all these costs because firm customers receive water every year, but interruptible customers, mostly rice farmers, can have their water cut off, as they did in 2012, 2013 and possibly 2014.

In years that interruptible customers do receive water, the revenue generated by those customers would be used for the benefit of firm customers. Possible uses of interruptible revenues collected may include building equity, firm rate mitigation and other lawful purposes. If LCRA is able to provide interruptible water, LCRA's firm rates may not have to increase as much. The table below shows a range of estimated projected firm rates for each year through 2019. From 2016 to 2019, rates are projected with and without the remaining cost of new water supply included.

Proposed projected firm water rates in dollars per acre-foot*

	Current	2015	2016	2017	2018	2019
Projections**	$151	$179	$192	$219	$224	$251
			$185	$193	$180	$186
Annual projected increase with remaining new supply costs		19 percent	7 percent	14 percent	2 percent	12 percent
Annual projected increase without remaining new supply costs			3 percent	4 percent	-7 percent	3 percent

* Customers would pay this amount for the water they use. This assumes the LCRA Board also maintains a reservation fee that is set at half this rate for water that customers have contracted for, but don't use, in a given year.

** The higher projections beginning in 2016 include remaining new water supply costs for the lower basin reservoir. The lower projections are without remaining new supply costs. Assumes no interruptible sales.

3/18/14

CITY OF BASTROP
Operational Costs Summary
Cost / 1,000 Gallons

	LCRA	INGRAM	XS RANCH
* Electricity to wellhead	** —None—	$0.37	$0.21
Electricity to City Plant	$0.16	None	$0.21
Chlorine	$0.05	$0.05	$0.05
Lost Pines GWCD	—None—	$0.03	$0.03
TOTAL	**$0.21**	**$0.45**	**$0.50**

** Electricity is only calculated for pumping water to surface at wellhead and to City facilities.*
*** LCRA to pay for electricty to bring water to surface at wellhead.*

All costs to deliver water at wellhead is included in system rate.

3/18/14

CITY OF BASTROP
COST ESTIMATE

TRANSMISSION LINE
WITHIN SIM GIDEON PLANT

TRANSMISSION LINE

7,000 LF OF 18" PVC, C-905, DR-21 at $65.00/lf		$455,000
300 LF of 22" bore/uncased @ $220/lf		$ 66,000
Master Meter Run		$ 30,000
5- Gate Valves @ $6,000/each		$ 30,000
Tie-In @ Plant Site at LCRA		$ 7,500
SCADA (Well and Plant)		$ 50,000
	Subtotal	$638,500
	15% Cont.	$ 95,800
	15% Engineering	$ 95,800
	TOTAL	$830,100

Estimate length from Plant (Sim Gideon) well LCRA-SB-4 to Water Plant (City)

March 15, 2014
GK

3/18/14

VERY PRELIMINARY PROPOSED WATER RATES

BONDED FUNDS FOR WATER SUPPLY	RESIDENTIAL/COMMERCIAL	FY 13-14	2014	2015	2016	2017	2018	2019	ESTIMATED BILL (CURRENT) USING 20K	ESTIMATED BILL 2014 USING 20K	ESTIMATED BILL 2016 USING 20K	ESTIMATED BILL 2018 USING 20K	ESTIMATED BILL 2019 USING 20K
$2,000,000.00	Current Minimum	24.02	24.74	25.49	26.26	27.05	28.41	29.27	**$80.26**	**$82.72**	**$88.03**	**$95.31**	**$98.24**
	0-3000 Gallons	2.47	2.55	2.63	2.71	2.80	2.94	3.03					
	3001-5000 Gallons	2.64	2.72	2.81	2.92	2.99	3.14	3.24					
	5001-10,000 Gallons	2.79	2.88	2.97	3.06	3.16	3.32	3.42					
	10,001-20,000 Gallons	2.96	3.05	3.15	3.25	3.35	3.52	3.63					
	20,001-50,000 Gallons	3.20	3.30	3.40	3.51	3.62	3.81	3.93					
	Over 50,000 Gallons	3.35	3.45	3.56	3.67	3.78	3.97	4.09					
$4,000,000.00	Current Minimum	24.02	24.74	25.49	26.26	27.58	29.10	29.98	**$80.26**	**$82.43**	**$87.59**	**$97.72**	**$100.17**
	0-3000 Gallons	2.47	2.55	2.63	2.71	2.85	3.01	3.10					
	3001-5000 Gallons	2.64	2.72	2.81	2.90	3.05	3.22	3.32					
	5001-10,000 Gallons	2.79	2.88	2.97	3.06	3.22	3.40	3.51					
	10,001-20,000 Gallons	2.96	3.02	3.11	3.21	3.37	3.56	3.67					
	20,001-50,000 Gallons	3.20	3.30	3.40	3.51	3.69	3.90	4.02					
	Over 50,000 Gallons	3.35	3.48	3.56	3.67	3.86	4.08	4.21					
$6,000,000.00	Current Minimum	24.02	24.74	25.49	26.51	28.24	29.80	30.70	**$80.26**	**$82.73**	**$88.84**	**$99.99**	**$103.14**
	0-3000 Gallons	2.47	2.55	2.63	2.74	2.92	3.08	3.18					
	3001-5000 Gallons	2.64	2.72	2.81	2.93	3.12	3.30	3.40					
	5001-10,000 Gallons	2.79	2.88	2.97	3.09	3.29	3.47	3.58					
	10,001-20,000 Gallons	2.96	3.05	3.15	3.28	3.50	3.70	3.82					
	20,001-50,000 Gallons	3.20	3.30	3.40	3.54	3.77	3.98	4.10					
	Over 50,000 Gallons	3.35	3.45	3.56	3.71	3.96	4.18	4.31					
$8,000,000.00	Current Minimum	24.02	27.39	27.39	27.39	29.04	30.50	30.96	**$80.26**	**$91.57**	**$91.57**	**$102.02**	**$103.63**
	0-3000 Gallons	2.47	2.82	2.82	2.82	2.99	3.14	3.19					
	3001-5000 Gallons	2.64	3.01	3.01	3.01	3.19	3.35	3.40					
	5001-10,000 Gallons	2.79	3.18	3.18	3.18	3.37	3.54	3.60					
	10,001-20,000 Gallons	2.96	3.38	3.38	3.38	3.59	3.77	3.83					
	20,001-50,000 Gallons	3.20	3.65	3.65	3.65	3.87	4.07	4.14					
	Over 50,000 Gallons	3.35	3.82	3.82	3.82	4.05	4.26	4.33					

3/18/14

30

VERY PRELIMINARY PROPOSED WATER RATES

BONDED FUNDS FOR WATER SUPPLY	RESIDENTIAL/COMMERCIAL	FY 13-14	2014	2015	2016	2017	2018	2019	ESTIMATED BILL (CURRENT) USING 20K	ESTIMATED BILL 2014 USING 20K	ESTIMATED BILL 2016 USING 20K	ESTIMATED BILL 2018 USING 20K	ESTIMATED BILL 2019 USING 20K
$10,000,000.00	Current Minimum	24.02	28.11	28.11	28.11	29.72	31.21	31.68	**$80.26**	**$94.01**	**$94.01**	**$104.55**	**$106.19**
	0-3000 Gallons	2.47	2.89	2.89	2.89	3.06	3.22	3.27					
	3001-5000 Gallons	2.64	3.09	3.09	3.09	3.27	3.44	3.50					
	5001-10,000 Gallons	2.79	3.27	3.27	3.27	3.46	3.64	3.70					
	10,001-20,000 Gallons	2.96	3.47	3.47	3.47	3.67	3.86	3.92					
	20,001-50,000 Gallons	3.20	3.75	3.75	3.75	3.97	4.17	4.24					
	Over 50,000 Gallons	3.35	3.92	3.92	3.92	4.15	4.36	4.43					
$2,000,000.00			3.00%	3.00%	3.00%	3.00%	5.00%	3.00%					
$4,000,000.00			3.00%	3.00%	3.00%	5.00%	5.50%	3.00%					
$6,000,000.00			3.00%	3.00%	4.00%	6.50%	5.50%	3.00%					
$8,000,000.00			14.00%	0.00%	0.00%	6.00%	5.00%	1.50%					
$10,000,000.00			17.00%	0.00%	0.00%	5.70%	5.00%	1.50%					

3/18/14

NAME OF CITY	POPULATION	WATER COST 20,000 GALLONS	SEWER COST 20,000 GALLONS	TOTAL BILL FOR 20, 000 GALLONS W/WW	20,000 GALS.WATER RATES HIGHEST TO LOWEST	20,000 GALLONS SEWER RATES HIGHEST TO LOWEST	TOTAL BILL FOR 20,000 W/WW HIGHEST TO LOWEST	
BELTON	19,409	$72.50	$74.00	$146.50	KYLE	BOERNE	KYLE	$252.82
BLANCO	1,765	$284.00	$96.00	$380.00	HUTTO	TAYLOR	HUTTO	$245.24
BOERNE	11,534	$105.74	$127.63	$233.37	LEANDER	KERRVILLE	BOERNE	$233.37
BUDA	9,381	$106.14	$101.33	$207.47	SAN MARCOS	BUDA	TAYLOR	$226.70
CEDAR PARK	57,957	$106.37	$93.52	$199.89	FREDRICKSBURG	HUTTO	BUDA	$207.47
DRIPPING SPRINGS	1,788	$114.00	$84.50	$198.50	TAYLOR	LOCKHART	LEANDER	$206.93
ELGIN	9,916			$0.00	DRIPPING SPRINGS	BLANCO	MANOR	$206.36
FREDRICKSBURG	11,305	$127.98	$69.76	$197.74	CEDAR PARK	TEMPLE	SAN MARCOS	$203.62
GEORGETOWN	52,303	$65.00	$63.15	$128.15	BUDA	CEDAR PARK	LOCKHART	$203.17
HARKER HEIGHTS	27,826	$72.18	$69.16	$141.34	BOERNE	KYLE	CEDAR PARK	$199.89
HUTTO	18,765	$144.67	$100.57	$245.24	LOCKHART	DRIPPING SPRINGS	DRIPPING SPRINGS	$198.50
KERRVILLE	22,946	$83.23	$111.95	$195.18	PFLUGERVILLE	LAGRANGE	FREDRICKSBURG	$197.74
KYLE	30,875	$165.23	$87.59	$252.82	LAKEWAY	LAKEWAY	KERRVILLE	$195.18
LAGRANGE	4,675	$91.60	$84.00	$175.60	LAGRANGE	SCHULENBURG	LAKEWAY	$183.75
LAKEWAY	12,459	$99.75	$84.00	$183.75	SCHULENBURG	NEW BRAUNFELS	PFLUGERVILLE	$180.93
LEANDER	30,605	$135.55	$71.38	$206.93	SEGUIN	ROUND ROCK	LAGRANGE	$175.60
LOCKHART	14,237	$104.95	$98.22	$203.17	SCHERTZ	PFLUGERVILLE	SCHULENBURG	$172.60
LULING	5,502			$0.00	KERRVILLE	SMITHVILLE	SEGUIN	$163.00
MANOR	6,440	$78.25	$128.11	$206.36	BASTROP	BELTON	TEMPLE	$162.60
NEW BRAUNFELS	60,761	$76.48	$82.11	$158.59	MANOR	SEGUIN	NEW BRAUNFELS	$158.59
PFLUGERVILLE	51,894	$102.76	$78.17	$180.93	NEW BRAUNFELS	BASTROP	BASTROP	$154.23
ROUND ROCK	106,573	$60.84	$81.08	$141.92	BELTON	LEANDER	BELTON	$146.50
SAN MARCOS	53,205	$132.53	$71.09	$203.62	HARKER HEIGHTS	SAN MARCOS	SCHERTZ	$145.14
SCHERTZ	34,883	$86.87	$58.27	$145.14	TEMPLE	FREDRICKSBURG	ROUND ROCK	$141.92
SCHULENBURG	2,872	$89.35	$83.25	$172.60	GEORGETOWN	HARKER HEIGHTS	HARKER HEIGHTS	$141.34
SEGUIN	26,842	$89.00	$74.00	$163.00	ROUND ROCK	GEORGETOWN	SMITHVILLE	$133.66
SMITHVILLE	4,539	$59.56	$74.10	$133.66	SMITHVILLE	SCHERTZ	GEORGETOWN	$128.15
TAYLOR	16,000	$114.72	$111.98	$226.70	ELGIN	ELGIN	ELGIN	$0.00
TEMPLE	69,148	$67.60	$95.00	$162.60	LULING	LULING	LULING	$0.00

3/18/14

32

34