### **Appendix 4-A**

# Water Demands, Supplies, and Needs for Major Water Providers

The new designation of "Major Water Providers" (MWPs) was established in rules for the development of the 2022 State Water Plan. Defining MWPs enables RWPGs to establish a more static list of large water providers for which they report information and to provide regional water planning groups with more flexibility in deciding which large water provider(s) they want to report information on in their regional water plans. MWPs represent wholesale water providers (WWPs) and/or water user groups (WUGs) that use, are responsible for developing, and/or are delivering significant quantities of water in the region. It is up to each region to decide which entities are designated as MWPs.

The East Texas Regional Water Planning Group (ETRWPG) identified 16 MWPs for the 2021 regional water plan, including:

- 1) Angelina and Neches River Authority (ANRA)
- 2) Angelina-Nacogdoches Water Control & Improvement District (A-N WCID) No. 1
- 3) Athens Municipal Water Authority (AMWA)
- 4) City of Beaumont
- 5) City of Carthage
- 6) City of Center
- 7) City of Jacksonville
- 8) City of Lufkin
- 9) City of Nacogdoches
- 10) City of Port Arthur
- 11) City of Tyler
- 12) Houston County Water Control & Improvement District (WCID) No. 1
- 13) Lower Neches Valley Authority (LNVA)
- 14) Panola County Freshwater Supply District (FWSD) No. 1
- 15) Sabine River Authority (SRA)
- 16) Upper Neches River Municipal Water Authority (UNRMWA)

Regional water plans must present the following data for MWPs, in accordance with the following Texas Water Code(s):

- a) Projected water demands by planning decade and category of use (31 TAC §357.31(b))
- b) Existing water supply analysis by category of use (31 TAC §357.32(g))
- c) Water supply needs analysis by category of use (31 TAC §357.33(b))
- d) Secondary water needs analysis where demand reduction and direct reuse WMSs are recommended, by MWP and decade (31 TAC §357.33(e))
- e) Recommended water management strategies (WMS) and recommended WMS projects, and results of all pfWMS evaluations (31 TAC §357.35(g)(1))



f) Calculated management supply factor by entity and decade (31 TAC §357.35(q)(2))

The following appendix includes a summary of a) – d) above (projected water demands, existing water supplies, and first and secondary needs analysis by planning decade and category of use) for each MWP in the ETRWPA. The other requirements will be addressed in Appendix 5B-C.



# Angelina and Neches River Authority (ANRA) Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	5,600	5,600	5,600	5,600	5,600	5,600
Irrigation	8,288	5,201	893	468	308	207
Livestock	65	36,838	45,389	45,389	45,389	75,470
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	8,000	15,000	20,000	20,000	20,000	20,000
TOTAL	21,953	62,639	71,882	71,457	71,297	101,277
Supplies						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	65	70	70	70	70	70
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	65	70	70	70	70	70
First Tier Needs						
Municipal	-5,600	-5,600	-5,600	-5,600	-5,600	-5,600
Irrigation	-8,288	-5,201	-893	-468	-308	-207
Livestock	0	-36,768	-45,319	-45,319	-45,319	-75,400
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	-8,000	-15,000	-20,000	-20,000	-20,000	-20,000
TOTAL	-21,888	-62,569	-71,812	-71,387	-71,227	-101,207
<b>Second Tier Needs</b>						
Municipal	-5,600	-5,600	-5,600	-5,600	-5,600	-5,600
Irrigation	-8,288	-5,201	-893	-468	-308	-207
Livestock	0	-36,768	-45,319	-45,319	-45,319	-75,400
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	-8,000	-15,000	-20,000	-20,000	-20,000	-20,000
TOTAL	-21,888	-62,569	-71,812	-71,387	-71,227	-101,207



# Angelina and Nacogdoches Water Control & Improvement District (AN WCID) #1 Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	0	0	8,289	8,289	8,289	8,289
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	5,000	5,000	5,000	5,000	5,000	5,000
TOTAL	5,000	5,000	13,289	13,289	13,289	13,289
Supplies						
Municipal	0	0	8,289	8,289	8,289	8,289
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	5,000	5,000	5,000	5,000	5,000	5,000
Surplus (Unallocated)	15,340	14,635	13,890	13,150	11,715	9,690
TOTAL	20,340	19,635	27,179	26,439	25,004	22,979
First Tier Needs						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0
<b>Second Tier Needs</b>						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0



# Athens Municipal Water Authority (AMWA) Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	2,962	3,233	3,461	3,795	6,462	9,556
Irrigation	170	170	170	170	170	170
Livestock	3,023	3,023	3,023	3,023	3,023	3,023
Manufacturing	484	591	591	591	591	591
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	6,639	7,017	7,245	7,579	10,246	13,340
Supplies						
Municipal	2,962	3,233	3,461	3,795	5,030	5,593
Irrigation	170	170	170	170	119	85
Livestock	3,023	3,023	3,023	3,023	2,120	1,505
Manufacturing	484	591	591	591	591	591
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	6,639	7,017	7,245	7,579	7,860	7,774
First Tier Needs						
Municipal	0	0	0	0	-1,432	-3,963
Irrigation	0	0	0	0	-51	-85
Livestock	0	0	0	0	-903	-1,518
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	-2,386	-5,566
<b>Second Tier Needs</b>						
Municipal	0	0	0	0	-926	-3,183
Irrigation	0	0	0	0	-51	-85
Livestock	0	0	0	0	-903	-1,518
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	-1,880	-4,786



### City of Beaumont Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	32,827	34,793	37,098	39,676	42,173	45,018
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	1,642	1,658	1,675	1,692	1,709	1,726
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	34,469	36,451	38,773	41,368	43,882	46,743
Supplies						
Municipal	32,827	34,793	35,904	35,990	36,064	36,140
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	1,642	1,658	1,621	1,535	1,461	1,385
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	34,469	36,451	37,525	37,525	37,525	37,525
First Tier Needs						
Municipal	0	0	0	0	0	0
Irrigation	0	0	-54	-157	-248	-340
Livestock	0	0	0	0	0	0
Manufacturing	0	0	-1,194	-3,685	-6,109	-8,878
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	-1,248	-3,843	-6,357	-9,218
<b>Second Tier Needs</b>						
Municipal	0	0	0	0	0	-1,496
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	-54	-157	-248	-340
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	-54	-157	-248	-1,837



### City of Carthage Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	1,950	1,951	1,944	1,948	1,959	1,969
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	906	945	984	1,017	1,084	1,115
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	2,856	2,896	2,928	2,965	3,043	3,084
Supplies						
Municipal	1,950	1,951	1,944	1,948	1,959	1,969
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	906	945	984	1,017	1,084	1,115
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
Surplus (Unallocated)	2,708	2,668	2,636	2,599	2,522	2,481
TOTAL	5,564	5,564	5,564	5,564	5,565	5,565
First Tier Needs						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0
<b>Second Tier Needs</b>						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0



#### City of Center Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	1,944	2,057	2,159	2,265	2,373	2,474
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	1,696	1,696	1,696	1,696	1,696	1,696
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	3,640	3,753	3,855	3,961	4,069	4,170
Supplies						
Municipal	1,944	2,057	2,159	2,265	2,373	2,474
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	1,696	1,696	1,696	1,696	1,696	1,696
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
Surplus (Unallocated)	1,620	1,507	1,405	1,299	1,191	1,090
TOTAL	5,260	5,260	5,260	5,260	5,260	5,260
First Tier Needs						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0
Second Tier Needs						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0



# Houston County Water Control & Improvement District (WCID) #1 Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	2,097	2,097	2,097	2,097	2,097	2,097
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	169	232	232	232	232	232
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	2,266	2,329	2,329	2,329	2,329	2,329
Supplies						
Municipal	2,097	2,097	2,097	2,097	2,097	2,097
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	169	232	232	232	232	232
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
Surplus (Unallocated)	1,234	1,171	1,171	1,171	1,171	1,171
TOTAL	3,500	3,500	3,500	3,500	3,500	3,500
First Tier Needs						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0
<b>Second Tier Needs</b>						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0



### City of Jacksonville Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	4,462	4,739	5,031	5,443	5,921	6,448
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	115	129	129	129	129	129
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	4,577	4,868	5,160	5,572	6,050	6,577
Supplies						
Municipal	4,462	4,739	5,031	5,443	5,921	6,448
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	115	129	129	129	129	129
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
Surplus (Unallocated)	2,814	2,523	2,231	1,819	1,341	814
TOTAL	7,391	7,391	7,391	7,391	7,391	7,391
First Tier Needs						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0
<b>Second Tier Needs</b>						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0



### Lower Neches Valley Authority (LNVA) Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	56,285	57,902	59,626	61,764	63,812	64,549
Irrigation	200,000	200,000	200,000	200,000	200,000	200,000
Livestock	0	0	0	0	0	0
Manufacturing	147,754	147,754	147,754	147,754	147,754	147,754
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	404,039	405,656	407,380	409,518	411,566	412,303
Supplies						
Municipal	56,285	57,902	59,626	61,764	63,812	64,549
Irrigation	200,000	200,000	200,000	200,000	200,000	200,000
Livestock	0	0	0	0	0	0
Manufacturing	147,754	147,754	147,754	147,754	147,754	147,754
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
Surplus (Unallocated)	797,837	768,221	766,496	764,358	762,310	761,573
TOTAL	1,201,876	1,173,876	1,173,876	1,173,876	1,173,876	1,173,876
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First Tier Needs	, , , , , , , , , , , , , , , , , , , ,		, -,-	, ,		
	0	0	0	0	0	0
First Tier Needs						
First Tier Needs  Municipal	0	0	0	0	0	0
First Tier Needs  Municipal  Irrigation	0	0	0	0	0	0
First Tier Needs  Municipal Irrigation Livestock	0 0	0 0	0 0 0	0 0 0	0 0 0	0 0
First Tier Needs  Municipal Irrigation Livestock Manufacturing	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0
First Tier Needs  Municipal Irrigation Livestock Manufacturing Mining	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
First Tier Needs  Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
First Tier Needs  Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
First Tier Needs  Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0
First Tier Needs  Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs Municipal	0 0 0 0 0 0 <b>0</b>	0 0 0 0 0 0 0	0 0 0 0 0 0 <b>0</b>	0 0 0 0 0 0 <b>0</b>	0 0 0 0 0 0 <b>0</b>	0 0 0 0 0 0 0
First Tier Needs  Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs Municipal Irrigation	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0
First Tier Needs  Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs Municipal Irrigation Livestock	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 <b>0</b>	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0
First Tier Needs  Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs Municipal Irrigation Livestock Manufacturing	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0



### City of Lufkin Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	38,243	10,535	10,782	11,063	11,372	11,658
Irrigation	779	779	779	779	779	779
Livestock	0	0	0	0	0	0
Manufacturing	732	776	776	776	776	776
Mining	0	0	0	0	0	0
Steam Electric Power	16,802	16,802	16,802	16,802	16,802	16,802
TOTAL	56,555	28,891	29,138	29,419	29,728	30,014
Supplies						
Municipal	20,414	10,535	10,782	11,063	11,372	11,658
Irrigation	779	779	779	779	779	779
Livestock	0	0	0	0	0	0
Manufacturing	732	776	776	776	776	776
Mining	0	0	0	0	0	0
Steam Electric Power	16,802	16,802	16,802	16,802	16,802	16,802
Surplus (Unallocated)	0	9,836	9,589	9,308	8,999	8,713
TOTAL	38,727	38,727	38,727	38,727	38,727	38,727
First Tier Needs						
Municipal	-17,097	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	-17,097	0	0	0	0	0
<b>Second Tier Needs</b>						
Municipal	-16,946	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	-16,946	0	0	0	0	0



#### City of Nacogdoches Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	7,323	7,969	8,632	9,400	10,273	11,197
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	2,508	2,529	2,529	2,529	2,529	2,529
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	9,831	10,498	11,161	11,929	12,802	13,726
Supplies						
Municipal	7,323	7,969	8,632	9,400	10,273	11,197
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	2,508	2,529	2,529	2,529	2,529	2,529
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
Surplus (Unallocated)	12,861	11,794	10,731	9,563	8,290	6,966
TOTAL	22,692	22,292	21,892	21,492	21,092	20,692
First Tier Needs						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0
<b>Second Tier Needs</b>						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0



### Panola County Freshwater Supply District (FWSD) 1 Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070
Demands						
Municipal	13,452	13,452	13,452	13,452	13,452	13,452
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	3,550	3,515	3,029	2,561	2,172	2,363
Steam Electric Power	0	0	0	0	0	0
TOTAL	17,002	16,967	16,481	16,013	15,624	15,815
Supplies						
Municipal	13,452	13,452	13,452	13,452	13,452	13,452
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	3,550	3,515	3,029	2,561	2,172	2,363
Steam Electric Power	0	0	0	0	0	0
Surplus (Unallocated)	4,365	3,719	3,525	3,312	3,020	2,148
TOTAL	21,367	20,686	20,006	19,325	18,644	17,963
First Tier Needs						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0
<b>Second Tier Needs</b>						
Municipal	0	0	0	0	0	0
Irrigation	0	0	0	0	0	0
Livestock	0	0	0	0	0	0
Manufacturing	0	0	0	0	0	0
Mining	0	0	0	0	0	0
Steam Electric Power	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0



### City of Port Arthur Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070	
Demands							
Municipal	19,239	19,210	18,989	18,944	18,925	18,924	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Manufacturing	6,443	6,443	6,443	6,443	6,443	6,443	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	25,682	25,653	25,432	25,387	25,368	25,367	
Supplies							
Municipal	19,239	19,210	18,989	18,944	18,925	18,924	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Manufacturing	6,443	6,443	6,443	6,443	6,443	6,443	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	25,682	25,653	25,432	25,387	25,368	25,367	
First Tier Needs							
Municipal	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	0	0	0	0	0	0	
<b>Second Tier Needs</b>							
Municipal	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	0	0	0	0	0	0	



### Sabine River Authority (SRA) Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070		
Demands								
Municipal	2,020	2,020	2,020	2,020	2,020	2,020		
Irrigation	1,255	1,255	1,255	1,255	1,255	1,255		
Livestock	0	0	0	0	0	0		
Manufacturing	57,111	57,111	57,111	57,111	57,111	57,111		
Mining	7,500	7,500	7,500	7,500	7,500	7,500		
Steam Electric Power	35,845	35,845	35,845	35,845	35,845	35,845		
TOTAL	103,731	103,731	103,731	103,731	103,731	103,731		
Supplies								
Municipal	2,020	2,020	2,020	2,020	2,020	2,020		
Irrigation	1,255	1,255	1,255	1,255	1,255	1,255		
Livestock	0	0	0	0	0	0		
Manufacturing	57,111	57,111	57,111	57,111	57,111	57,111		
Mining	7,500	7,500	7,500	7,500	7,500	7,500		
Steam Electric Power	35,845	35,845	35,845	35,845	35,845	35,845		
Surplus (Unallocated)	999,279	999,279	999,279	999,279	999,279	999,279		
TOTAL	1,103,010	1,103,010	1,103,010	1,103,010	1,103,010	1,103,010		
First Tier Needs								
rirst Her Needs								
Municipal	0	0	0	0	0	0		
	0	0	0	0	0	0		
Municipal								
Municipal Irrigation	0	0	0	0	0	0		
Municipal Irrigation Livestock	0	0	0	0	0	0		
Municipal Irrigation Livestock Manufacturing	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0		
Municipal Irrigation Livestock Manufacturing Mining	0 0 0	0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0		
Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0		
Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0		
Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0		
Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs Municipal Irrigation Livestock	0 0 0 0 0 <b>0</b>	0 0 0 0 0 <b>0</b>	0 0 0 0 0 <b>0</b>	0 0 0 0 0 <b>0</b>	0 0 0 0 0 <b>0</b>	0 0 0 0 0 <b>0</b>		
Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs Municipal Irrigation	0 0 0 0 0 <b>0</b>	0 0 0 0 0 0	0 0 0 0 0 <b>0</b>	0 0 0 0 0 <b>0</b>	0 0 0 0 0 <b>0</b>	0 0 0 0 0 0		
Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs Municipal Irrigation Livestock	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0		
Municipal Irrigation Livestock Manufacturing Mining Steam Electric Power TOTAL Second Tier Needs Municipal Irrigation Livestock Manufacturing	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0		



### City of Tyler Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070	
Demands							
Municipal	23,002	24,315	25,716	27,397	29,261	31,216	
Irrigation	400	400	400	400	400	400	
Livestock	0	0	0	0	0	0	
Manufacturing	1,774	2,009	2,009	2,009	2,009	2,009	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	25,176	26,724	28,124	29,806	31,670	33,625	
Supplies							
Municipal	23,002	24,315	25,716	27,397	29,261	31,216	
Irrigation	400	400	400	400	400	400	
Livestock	0	0	0	0	0	0	
Manufacturing	1,774	2,009	2,009	2,009	2,009	2,009	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
Surplus (Unallocated)	15,580	14,032	12,632	10,950	9,086	7,131	
TOTAL	40,756	40,756	40,756	40,756	40,756	40,756	
First Tier Needs							
Municipal	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	0	0	0	0	0	0	
<b>Second Tier Needs</b>							
Municipal	0	0	0	0	0	0	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	0	0	0	0	0	0	



# Upper Neches River Municipal Water Authority (UNRMWA) Demands, Supplies, and Needs

Water Use Type	2020	2030	2040	2050	2060	2070	
Demands							
Municipal	209,537	209,537	209,537	209,537	209,537	209,537	
Irrigation	610	587	565	547	532	532	
Livestock	0	0	0	0	0	0	
Manufacturing	100	100	100	100	100	100	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	210,247	210,224	210,202	210,184	210,169	210,169	
Supplies							
Municipal	197,000	195,423	193,945	192,363	190,678	188,378	
Irrigation	610	587	565	547	532	532	
Livestock	0	0	0	0	0	0	
Manufacturing	100	100	100	100	100	100	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	197,710	196,110	194,610	193,010	191,310	189,010	
First Tier Needs							
Municipal	-12,537	-14,114	-15,592	-17,174	-18,859	-21,159	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	-12,537	-14,114	-15,592	-17,174	-18,859	-21,159	
Second Tier Needs							
Municipal	-12,537	-14,114	-15,592	-17,174	-18,859	-21,159	
Irrigation	0	0	0	0	0	0	
Livestock	0	0	0	0	0	0	
Manufacturing	0	0	0	0	0	0	
Mining	0	0	0	0	0	0	
Steam Electric Power	0	0	0	0	0	0	
TOTAL	-12,537	-14,114	-15,592	-17,174	-18,859	-21,159	

