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# Estimated Historical Water Use And 2012 State Water Plan Datasets:

## Rusk County Groundwater Conservation District

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July 27, 2015

### ***GROUNDWATER MANAGEMENT PLAN DATA:***

This package of water data reports (part 1 of a 2-part package of information) is being provided to groundwater conservation districts to help them meet the requirements for approval of their five-year groundwater management plan. Each report in the package addresses a specific numbered requirement in the Texas Water Development Board's groundwater management plan checklist. The checklist can be viewed and downloaded from this web address:

<http://www.twdb.texas.gov/groundwater/docs/GCD/GMPChecklist0113.pdf>

The five reports included in part 1 are:

1. Estimated Historical Water Use (checklist Item 2)  
*from the TWDB Historical Water Use Survey (WUS)*
2. Projected Surface Water Supplies (checklist Item 6)
3. Projected Water Demands (checklist Item 7)
4. Projected Water Supply Needs (checklist Item 8)
5. Projected Water Management Strategies (checklist Item 9)

*reports 2-5 are from the 2012 Texas State Water Plan (SWP)*

Part 2 of the 2-part package is the groundwater availability model (GAM) report. The District should have received, or will receive, this report from the Groundwater Availability Modeling Section. Questions about the GAM can be directed to Dr. Shirley Wade, shirley.wade@twdb.texas.gov, (512) 936-0883.

***DISCLAIMER:***

The data presented in this report represents the most up-to-date WUS and 2012 SWP data available as of 7/27/2015. Although it does not happen frequently, neither of these datasets are static so they are subject to change pending the availability of more accurate WUS data or an amendment to the 2012 SWP. District personnel must review these datasets and correct any discrepancies in order to ensure approval of their groundwater management plan.

The WUS dataset can be verified at this web address:

<http://www.twdb.texas.gov/waterplanning/waterusesurvey/estimates/>

The 2012 SWP dataset can be verified by contacting Sabrina Anderson (sabrina.anderson@twdb.texas.gov or 512-936-0886).

For additional questions regarding this data, please contact Stephen Allen (stephen.allen@twdb.texas.gov or 512-463-7317) or Rima Petrossian (rima.petrossian@twdb.texas.gov or 512-936-2420).

# Estimated Historical Water Use

## TWDB Historical Water Use Survey (WUS) Data

Groundwater and surface water historical use estimates are currently unavailable for calendar year 2014. TWDB staff anticipates the calculation and posting of these estimates at a later date.

### **RUSK COUNTY**

All values are in acre-feet/year

<b>Year</b>	<b>Source</b>	<b>Municipal</b>	<b>Manufacturing</b>	<b>Mining</b>	<b>Steam Electric</b>	<b>Irrigation</b>	<b>Livestock</b>	<b>Total</b>
2013	GW	7,405	13	576	0	358	193	8,545
	SW	1,248	0	639	28,292	0	775	30,954
2012	GW	7,885	15	425	2,377	123	180	11,005
	SW	1,399	0	603	38,434	150	721	41,307
2011	GW	8,954	26	547	1,023	308	223	11,081
	SW	1,688	1	984	32,947	0	893	36,513
2010	GW	7,517	31	1,058	358	0	224	9,188
	SW	1,525	1	1,258	21,129	0	894	24,807
2009	GW	6,719	219	1,059	183	0	194	8,374
	SW	1,639	386	655	21,535	0	776	24,991
2008	GW	7,071	177	1,233	147	29	209	8,866
	SW	1,705	1	763	25,771	0	838	29,078
2007	GW	6,778	172	0	356	25	216	7,547
	SW	1,675	9	0	24,366	0	866	26,916
2006	GW	6,973	293	0	287	100	202	7,855
	SW	1,379	55	0	24,872	0	806	27,112
2005	GW	6,751	233	3	0	92	231	7,310
	SW	1,231	407	0	17,008	0	924	19,570
2004	GW	7,180	192	6	113	92	221	7,804
	SW	464	24	0	6,982	0	872	8,342
2003	GW	7,168	200	6	99	73	215	7,761
	SW	491	3	0	7,574	0	844	8,912
2002	GW	7,097	203	6	97	49	231	7,683
	SW	477	2	0	10,794	210	911	12,394
2001	GW	6,857	243	8	12	49	236	7,405
	SW	208	55	0	15,222	210	931	16,626
2000	GW	7,493	66	38	11	18	462	8,088
	SW	647	565	0	16,523	75	694	18,504

# Projected Surface Water Supplies

## TWDB 2012 State Water Plan Data

### RUSK COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	Source Name	2010	2020	2030	2040	2050	2060
I	EASTON	SABINE	CHEROKEE LAKE/RESERVOIR	61	83	96	102	120	163
I	ELDERVILLE WSC	SABINE	CHEROKEE LAKE/RESERVOIR	286	303	320	337	354	369
I	HENDERSON	NECHES	FORK LAKE/RESERVOIR	3,922	3,922	3,922	3,921	3,922	3,922
I	HENDERSON	SABINE	FORK LAKE/RESERVOIR	459	459	459	460	459	458
I	IRRIGATION	SABINE	SABINE RIVER COMBINED RUN-OF-RIVER IRRIGATION	127	127	127	127	127	127
I	KILGORE	SABINE	SABINE RIVER RUN-OF-RIVER	303	290	278	266	251	233
I	LIVESTOCK	NECHES	LIVESTOCK LOCAL SUPPLY	386	386	386	386	386	386
I	LIVESTOCK	SABINE	LIVESTOCK LOCAL SUPPLY	308	308	308	308	308	308
I	MANUFACTURING	NECHES	NECHES RIVER COMBINED RUN-OF-RIVER MANUFACTURING	2	2	2	2	2	2
I	MINING	SABINE	OTHER LOCAL SUPPLY	287	287	287	287	287	287
I	STEAM ELECTRIC POWER	SABINE	MARTIN LAKE/RESERVOIR	25,000	25,000	25,000	25,000	25,000	25,000
I	STEAM ELECTRIC POWER	SABINE	TOLEDO BEND LAKE/RESERVOIR	17,922	17,922	17,922	17,922	17,922	17,922
<b>Sum of Projected Surface Water Supplies (acre-feet/year)</b>				<b>49,063</b>	<b>49,089</b>	<b>49,107</b>	<b>49,118</b>	<b>49,138</b>	<b>49,177</b>

# Projected Water Demands

## TWDB 2012 State Water Plan Data

Please note that the demand numbers presented here include the plumbing code savings found in the Regional and State Water Plans.

### RUSK COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
I	MOUNT ENTERPRISE	NECHES	71	71	70	68	69	73
I	MINING	NECHES	961	1,048	1,099	1,149	1,199	1,246
I	LIVESTOCK	NECHES	655	665	676	689	704	718
I	MANUFACTURING	NECHES	78	86	93	99	103	111
I	COUNTY-OTHER	NECHES	1,225	1,258	1,270	1,243	1,283	1,422
I	HENDERSON	NECHES	2,164	2,145	2,119	2,088	2,077	2,105
I	OVERTON	NECHES	44	46	46	46	48	52
I	IRRIGATION	NECHES	19	19	19	19	19	19
I	NEW LONDON	NECHES	117	119	120	119	121	129
I	SOUTHERN UTILITIES COMPANY	NECHES	71	74	74	75	77	85
I	WEST GREGG WSC	SABINE	15	15	15	15	15	16
I	KILGORE	SABINE	532	520	512	503	500	500
I	EASTON	SABINE	8	11	12	13	15	21
I	ELDERVILLE WSC	SABINE	324	353	369	378	400	456
I	STEAM ELECTRIC POWER	SABINE	24,760	27,458	32,102	37,762	44,663	53,074
I	IRRIGATION	SABINE	107	107	107	107	107	107
I	LIVESTOCK	SABINE	516	523	531	542	553	565
I	COUNTY-OTHER	SABINE	1,435	1,475	1,489	1,457	1,504	1,666
I	NEW LONDON	SABINE	108	109	110	109	111	119
I	MANUFACTURING	SABINE	4	4	4	4	5	5
I	MINING	SABINE	579	631	662	692	722	750
I	TATUM	SABINE	122	118	115	112	110	110
I	HENDERSON	SABINE	253	251	248	245	243	246
I	OVERTON	SABINE	369	383	388	386	399	439
<b>Sum of Projected Water Demands (acre-feet/year)</b>			<b>34,537</b>	<b>37,489</b>	<b>42,250</b>	<b>47,920</b>	<b>55,047</b>	<b>64,034</b>

# Projected Water Supply Needs

## TWDB 2012 State Water Plan Data

Negative values (in red) reflect a projected water supply need, positive values a surplus.

### RUSK COUNTY

All values are in acre-feet/year

RWPG	WUG	WUG Basin	2010	2020	2030	2040	2050	2060
I	COUNTY-OTHER	NECHES	294	261	249	276	236	97
I	COUNTY-OTHER	SABINE	265	225	211	243	196	34
I	EASTON	SABINE	53	72	84	89	105	142
I	ELDERVILLE WSC	SABINE	69	57	58	66	61	20
I	HENDERSON	NECHES	4,190	4,209	4,235	4,265	4,277	4,249
I	HENDERSON	SABINE	511	513	516	520	521	517
I	IRRIGATION	NECHES	74	74	74	74	74	74
I	IRRIGATION	SABINE	116	116	116	116	116	116
I	KILGORE	SABINE	231	211	189	167	133	87
I	LIVESTOCK	NECHES	89	79	68	55	40	26
I	LIVESTOCK	SABINE	78	71	63	52	41	29
I	MANUFACTURING	NECHES	45	37	30	24	20	12
I	MANUFACTURING	SABINE	6	6	6	6	5	5
I	MINING	NECHES	293	206	155	105	55	8
I	MINING	SABINE	83	31	0	-30	-60	-88
I	MOUNT ENTERPRISE	NECHES	300	300	301	303	302	298
I	NEW LONDON	NECHES	317	317	316	317	314	305
I	NEW LONDON	SABINE	293	290	289	290	289	282
I	OVERTON	NECHES	24	23	22	22	21	16
I	OVERTON	SABINE	179	164	160	160	145	104
I	SOUTHERN UTILITIES COMPANY	NECHES	24	21	21	20	18	10
I	STEAM ELECTRIC POWER	SABINE	18,402	15,704	11,060	5,400	-1,501	-9,912
I	TATUM	SABINE	252	256	259	262	264	264
I	WEST GREGG WSC	SABINE	0	0	0	0	0	0
<b>Sum of Projected Water Supply Needs (acre-feet/year)</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>-30</b>	<b>-1,561</b>	<b>-10,000</b>

# Projected Water Management Strategies

## TWDB 2012 State Water Plan Data

### **RUSK COUNTY**

**WUG, Basin (RWPG)**

All values are in acre-feet/year

Water Management Strategy	Source Name [Origin]	2010	2020	2030	2040	2050	2060
<b>MINING, SABINE (I)</b>							
NEW WELLS - CARRIZO WILCOX AQUIFER	CARRIZO-WILCOX AQUIFER [RUSK]	0	0	0	158	158	158
<b>STEAM ELECTRIC POWER, SABINE (I)</b>							
PURCHASE WATER FROM PROVIDER (2)	COLUMBIA LAKE/RESERVOIR [RESERVOIR]	0	0	0	0	0	8,500
PURCHASE WATER FROM PROVIDER (2)	TOLEDO BEND LAKE/RESERVOIR [RESERVOIR]	0	0	0	0	1,501	1,500
<b>Sum of Projected Water Management Strategies (acre-feet/year)</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>158</b>	<b>1,659</b>	<b>10,158</b>