GAM Run 05-01

by Richard M. Smith, P.G.

Texas Water Development Board Groundwater Availability Modeling Section (512) 936-0877 July 20, 2005

REQUESTOR:

Mr. Steve Petersen, associated with Malcolm Pirnie, Inc., Houston, Texas, on behalf of the San Patricio Municipal Water District (SPMWD).

DESCRIPTION OF REQUEST:

Mr. Petersen requested that we run the Groundwater Availability Model for the central part of the Gulf Coast aquifer (CGCGAM) for 60-year predictive simulations for Bee and San Patricio counties using the following three scenarios:

- **Scenario 1**: The effects of current pumpage and provide the following deliverables:
 - 1. locations of all wells simulated in the CGCGAM within Bee and San Patricio counties including their current pumpage rates and which aquifers are being pumped;
 - 2. water-level hydrographs for up to six actual (monitoring) well locations per county;
 - 3. water budgets for the two counties for the Evangeline and Chicot aquifers;
 - 4. the effects of pumping on stream flow baseline conditions in the major rivers near each newly simulated (future) well field; and
 - 5. maps of hydraulic head and drawdown in the two counties for the Evangeline and Chicot aquifers.
- Scenario 2: Two runs that reflect the effects of proposed pumping sites using 25,200 acre-feet per year from the Evangeline aquifer. The first run uses 11,200 acre-feet per year for SPMWD proposed pumping sites in Bee County and a total of 14,000 acre-feet for the Lower Guadalupe Water Supply Project (LGWSP) well fields in Goliad, Victoria, and Refugio counties. The second run uses 11,200 acre-feet per year for SPMWD proposed pumping sites in San Patricio County and a total of 14,000 acre-feet for the Lower Guadalupe Water Supply Project (LGWSP) well fields in Goliad, Victoria, and Refugio counties. Mr. Petersen provided locations of the proposed well fields and requested that we assume each well field includes up to seven wells screened between 500 and 800 feet below land surface. Requested deliverables for each run include:
 - 1. water budgets for the two counties for the Evangeline and Chicot aquifers;
 - 2. the effects of pumping on stream flow baseline conditions in the major rivers near each newly simulated (future) well field;

- 3. water-level hydrographs at up to six existing (monitoring) well locations per county; and
- 4. hydraulic head maps.
- Scenario 3: The same runs and deliverables as scenario 2 except that the total pumpage increases to 45,000 acre-feet per year, SPMWD pumps 31,000 acre-feet per year, and each well field includes up to 28 wells.

In addition, Mr. Petersen requested we provide the estimated rate of recharge to the Gulf Coast aquifer, particularly the Evangeline aquifer.

METHODS:

We used a variation of the GAM for the central part of the Gulf Coast aquifer that better represents fully penetrating wells completed in the Evangeline aquifer (see GAM run 05-04, http://www.twdb.state.tx.us/gam/GAMruns/GR05-04.pdf). We completed five different model simulations with average recharge to address the three scenarios. We extended the 50-year predictive model datasets an additional ten years to address the 60-year simulation period requested.

To estimate current pumpage we used a predictive pumpage dataset that was based on information from the 2002 State Water Plan and adjusted to more closely reflect boardapproved demands for the 2006 Regional Water Plans. We extracted spatial and vertical pumpage by usage category (Irrigation, Livestock, Rural Domestic, Municipal, Mining, and Manufacturing) from the model input files using ArcGIS. Municipal, mining, and manufacturing pumpage locations were spatially assigned using historical well locations and were vertically assigned using screen intervals. Irrigation and livestock pumpage locations were spatially assigned using landuse coverages and were vertically assigned using an analysis based on screen intervals for inventoried wells in the TWDB groundwater database that were assigned the same usage category. Rural domestic pumpage locations were spatially assigned using 2000 population census block information. We contoured water levels using Processing MODFLOW for Windows (PMWIN) and extracted water budgets from the model runs for 2005, 2010, 2020, 2030, 2040, 2050, and 2060. We calculated scenario 1 drawdowns using the difference between 2000 simulated water levels and water levels for the years listed above. We developed historical water-level hydrographs from TWDB groundwater database information and predictive hydrographs from each of the predictive runs beginning in 2001. For the effects of pumpage on nearby rivers, we looked at the changes in stream leakage in the different water budgets.

For scenarios 2 and 3, we used the same basic methodology. We developed four different pumpage datasets using the locations provided by Mr. Petersen and the combinations requested for the proposed strategies. We contoured water levels from each model run using PMWIN and extracted water budgets from the model runs for 2005, 2010, 2020, 2030, 2040, 2050, and 2060. We generated hydrographs for each of the pumpage datasets.

The estimated rate of recharge to the Gulf Coast aquifer was based on a literature search.

PARAMETERS AND ASSUMPTIONS:

- See Waterstone and Parsons (2003) and Chowdhury and others (2004) for assumptions and limitations of the GAM. Root mean squared error for the entire central part of the Gulf Coast aquifer model is up to 51 feet at the end of the transient model simulation in 1999 (see GAM run 05-04).
- The variation of the GAM used assumes that pumping in the Evangeline aquifer occurs throughout the entire depth of the Evangeline aquifer (see GAM run 05-04).
- We used annual stress periods for the predictive simulations, so discharge from the proposed well fields was based on annual withdrawal rates.
- For scenario 1, we used a predictive pumpage dataset based on information from the 2002 State Water Plan and adjusted to reflect board-approved demands for the 2006 Regional Water Plans. This assumes the pumpage volumes, categories of use, and trends reflect a reasonable transition 1999 to 2005. A comparison of pumpage in the predictive dataset and the data from the TWDB Water Use Survey for the year 2000 indicates the pumpage used for scenario 1 is slightly higher than surveyed and estimated use. For Bee County, we used 5,426 acre-feet in 2000 and the Water Use Survey estimated countywide use was 5,257 acre-feet. For San Patricio County we used 8,822 acre-feet in 2000 and the Water Use Survey estimated countywide use was 6,784 acre-feet.
- For scenarios 2 and 3, we assumed all proposed wells were drilled within the same one square mile grid where the proposed well fields were simulated.
- Model results reflect average recharge rates based on historical climate from 1960 to 1999 throughout the predictive period (2000 through 2060). For Bee County, this is approximately 18,829 acre-feet per year of recharge for the Chicot aquifer and 4,836 acre-feet per year for the Evangeline aquifer. For San Patricio County this is approximately 12,061 acre-feet per year for the Chicot aquifer and 152 acre-feet per year for the Evangeline aquifer.
- The model calculates stream-flow. These values can be examined within the water budget tables.

RESULTS:

The results of these model runs are shown in the attached figures and tables. Please note that all maps shown are oriented with north at the top, scale can be ascertained by observing the county boundaries shown, all elevations are in feet above mean sea level, and all numbers on tables are in acre-feet per year.

Scenario 1, the effects of current pumpage:

- Pumpage: Figures 1 to 4 show the location of pumpage used in the model. Also indicated is the aquifer associated with each of the pumpage categories. Layer 1 is the Chicot aquifer, layer 2 is the Evangeline aquifer, layer 3 is the Burkeville confining unit, and layer 4 is the Jasper aquifer. Table 1 gives the predictive pumping based on the 2006 demands developed by the Regional Water Planning Group used in the scenario 1 model simulation.
- Hydrographs: Figure 5 shows hydrographs developed from monitoring wells in Bee and San Patricio counties. Figures 6 and 7 show the locations of the monitoring wells used in the hydrographs.
- Water Budget and stream flow baseline conditions: Table 2 shows the water budgets for Bee and San Patricio counties using the 2006 demand pumpage shown in Table 1.
 Stream flow baseline conditions can be interpreted from the stream leakage results reported in the water budget.
- Hydraulic head and water-level drawdowns: Figures 8 through 21 show water levels in Bee County for selected years between 2005 to 2060; figures 22 through 35 show drawdown in Bee and San Patricio counties for selected years between 2005 to 2060; and figures 36 through 49 shows water levels in San Patricio county for selected years between 2005 to 2060.

Scenario 2, proposed pumping sites using 25,200 acre-feet per year from the Evangeline aquifer:

A. Bee County SPMWD pumping

- Water budget and stream flow conditions: Table 3 contains the water budgets for Bee and San Patricio counties showing the effects of pumping a combined 25,200 acre-feet per year with the SPMWD pumping occurring in Bee County. Stream flow conditions can be interpreted from the stream leakage results reported in the water budget and compared to values listed in Table 2.
- Hydrographs for the combined pumping of 25,200 acre-feet per year in Bee County are shown in Figure 50.
- Hydraulic heads: Figures 51 through 57 show the maps of hydraulic head levels for the 25,200 acre-feet per year combined pumping in Bee County.

B. San Patricio SPMWD pumping

- Hydraulic head: Maps on figures 58 through 64.
- Hydrographs: Figure 65.
- Water budget and stream flow conditions: Table 4 contains the water budgets for Bee and San Patricio counties showing the effects of pumping a combined 25,200 acre-feet per year with the SPMWD pumping occurring in San Patricio County. Stream flow conditions can be interpreted from the stream leakage results reported in the water budget and compared to values listed in Table 2.

Scenario 3, proposed pumping sites using 45,000 acre-feet per year from the Evangeline aquifer:

A. Bee County SPMWD pumping

- Hydraulic head: Maps on figures 66 through 72.
- Hydrographs: Figure 73.
- Water budget and stream flow conditions: Table 5 contains the water budgets for Bee and San Patricio counties showing the effects of pumping a combined 45,000 acre-feet per year with the SPMWD pumping occurring in Bee County. Stream flow conditions can be interpreted from the stream leakage results reported in the water budget and compared to values listed in Table 2.

B. San Patricio SPMWD pumping

- Hydraulic head: Maps on figures 74 through 80.
- Hydrographs: Figure 81.
- Water budget and stream flow conditions: Table 6 contains the water budgets for Bee and San Patricio counties showing the effects of pumping a combined 45,000 acre-feet per year with the SPMWD pumping occurring in San Patricio County. Stream flow conditions can be interpreted from the stream leakage results reported in the water budget and compared to values listed in Table 2.

Recharge: Table 7 shows estimated recharge rates from a literature search of the Gulf Coast aquifer.

REFERENCES:

Chowdhury, A. H., Wade, S., Mace, R. E., and Ridgeway, C., 2004, Groundwater availability model of the Central Gulf Coast aquifer system: Numerical simulations through 1999: Texas Water Development Board, draft report, 108 p.

Waterstone Environmental Hydrology and Engineering, Inc., and Parsons Engineering Science, Inc., 2003, Groundwater availability of the central Gulf Coast aquifer: Numerical simulations to 2050 central Gulf Coast, Texas: unpublished report prepared for the Texas Water Development Board, 156 p.

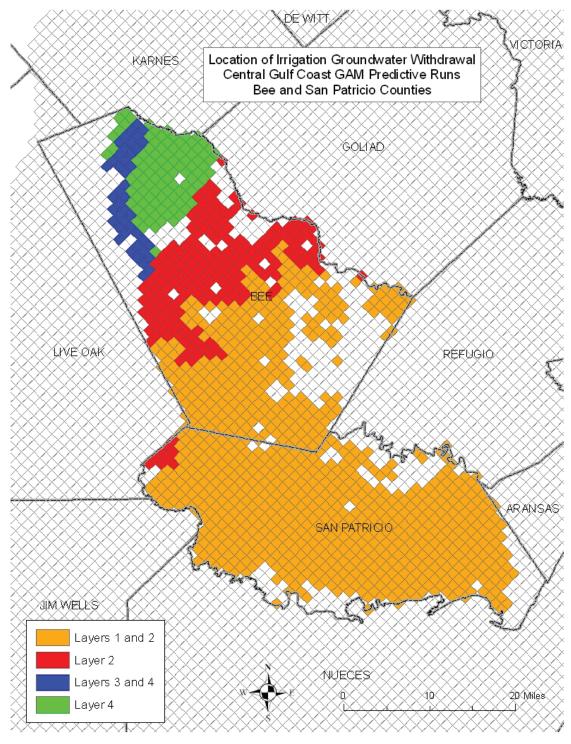


Figure 1. Location of irrigation wells and associated layers as described in text based on landuse and extracted using ArcGIS.

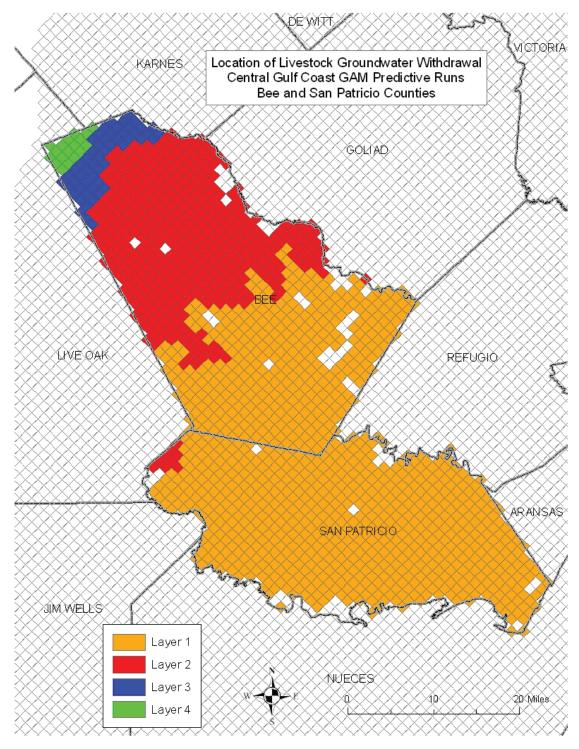


Figure 2. Location of livestock wells and associated layers as described in the text and extracted using ArcGIS.

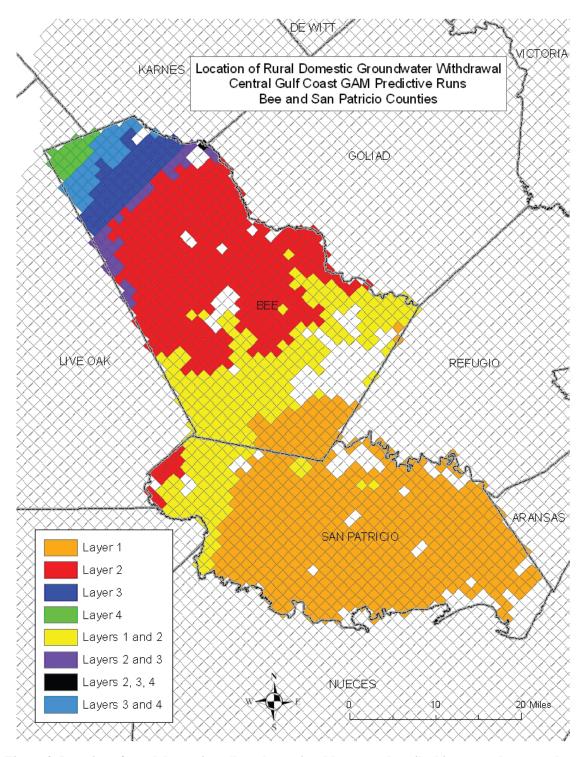


Figure 3. Location of rural domestic wells and associated layers as described in text and extracted using ArcGIS.

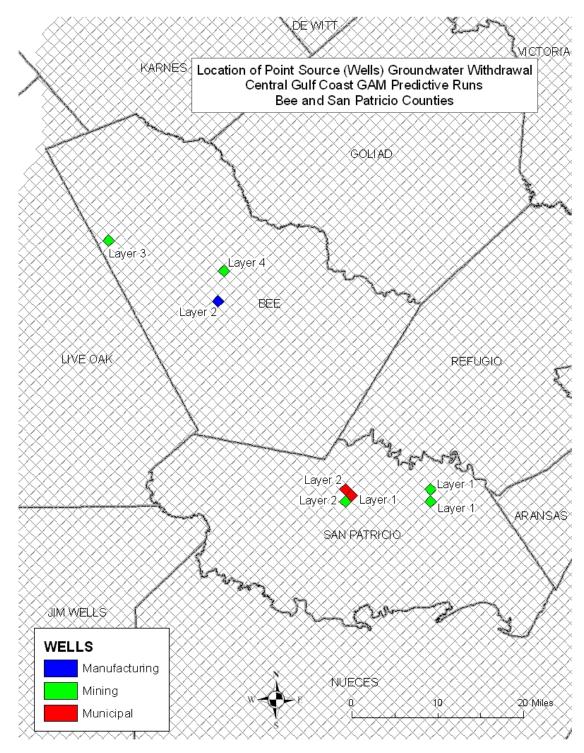


Figure 4. Location of point source wells and associated layers as described in text and extracted using ArcGIS.

Table 1. Predictive pumping for Bee and San Patricio counties – Units are in acre-feet per year (AFY).

0.0111111111111111111111111111111111111	(AFY).		22224	22424			22424514		22224 = 1/
	CATEGORY	LAYER	2000AFY	2010AFY	2020AFY	2030AFY	2040AFY	2050AFY	2060AFY
BEE	C-O	1	134.4	138.9	138.4	136.1	131.1	127.3	124.3
BEE	C-O	2	1660.5	1715.8	1709.6	1680.6	1619.5	1572.9	1535.0
BEE	C-O	3	25.2	26.1	25.9	25.5	24.6	24.0	23.4
BEE	C-O	4	36.8	38.0	37.8	37.2	36.0	35.2	34.3
BEE	IRR	1	247.0	216.7	190.1	166.8	146.3	128.3	112.5
BEE	IRR	2	2107.5	1849.1	1621.7	1422.8	1248.1	1094.4	959.6
BEE	IRR	3	24.4	21.4	18.8	16.5	14.4	12.7	11.1
BEE	IRR	4	656.4	575.9	505.1	443.1	388.7	340.8	298.9
BEE	MFG	2	1.0	1.0	1.0	1.0	1.0	1.0	1.0
BEE	MIN	3	13.3	12.9	15.0	14.0	1.5	1.5	1.6
BEE	MIN	4	15.7	23.1	25.0	28.0	2.9	3.1	3.2
BEE	STK	1	256.1	256.1	256.1	256.1	256.1	256.1	256.1
BEE	STK	2	197.2	197.2	197.2	197.2	197.2	197.2	197.2
BEE	STK	3	35.5	35.5	35.5	35.5	35.5	35.5	35.5
BEE	STK	4	14.6	14.6	14.6	14.6	14.6	14.6	14.6
BEE	ALL	ALL	5425.7	5122.4	4791.8	4475.0	4117.6	3844.7	3608.3
	•				-				
SAN				,					
PATRICIO	C-O	1	2259.8	2586.5	3038.6	3287.4	3488.4	3783.1	4084.3
SAN		_		'	l	'			
PATRICIO	C-O	2	407.0	470.2	556.5	604.4	643.4	702.6	758.5
SAN	IDD	1	2002.6	2626.4	0555.7	2224.6	2420.2	1045.0	1776 F
PATRICIO SAN	IRR	1	2892.6	2636.4	2555.7	2331.6	2130.2	1945.0	1776.5
PATRICIO	IRR	2	2014.7	1835.7	1779.8	1624.3	1483.9	1354.2	1236.8
SAN			2017.7	1000.7	1770.5	1024.0	1700.0	1004.2	1200.0
PATRICIO	MIN	1	37.8	43.7	45.5	46.2	47.0	48.1	49.4
SAN									
PATRICIO	MIN	2	26.6	30.8	32.1	32.6	33.1	33.9	34.8
SAN				<u> </u>		<u> </u>			
PATRICIO	MUN	1	118.3	128.4	149.7	163.5	174.8	187.3	202.2
SAN	NALINI	١	000.7	740.0	000 4	245.4	070.0	4040.0	4400.0
PATRICIO SAN	MUN	2	662.7	719.3	838.1	915.4	979.0	1048.8	1132.3
PATRICIO	STK	1	395.0	395.0	395.0	395.0	395.0	395.0	395.0
SAN	- 5110	<u>'</u>	333.0	333.0	333.0	333.0	333.0	333.0	333.0
PATRICIO	STK	2	7.3	7.3	7.3	7.3	7.3	7.3	7.3
SAN									
PATRICIO	ALL	ALL	8821.9	8853.4	9398.3	9407.6	9382.1	9505.4	9677.1

C-O = County-Other (Rural Domestic)

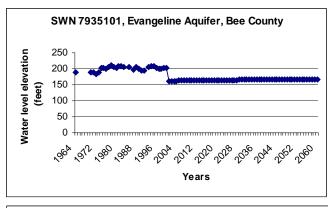
IRR = Irrigation

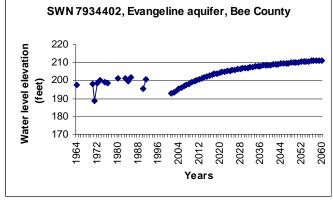
MFG = Manufacturing

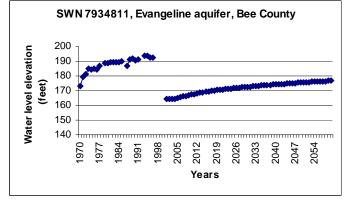
MIN = Mining

MUN = Municipal

STK = Livestock







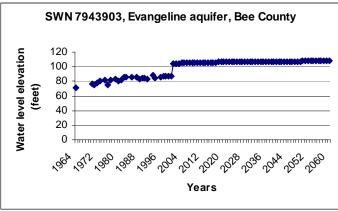
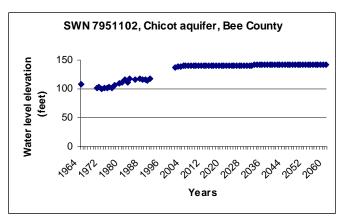
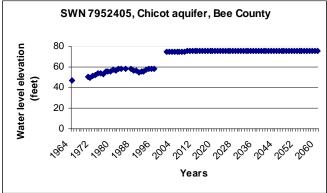
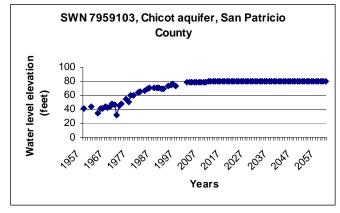


Figure 5. Scenario 1: Water-level hydrographs for monitoring wells in Bee and San Patricio counties.







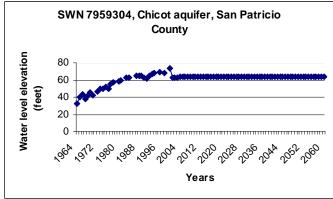


Figure 5 Continued.

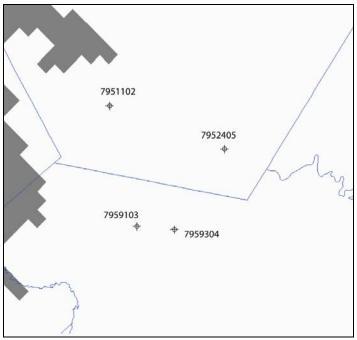


Figure 6. Location of Chicot aquifer monitoring wells used in the report.

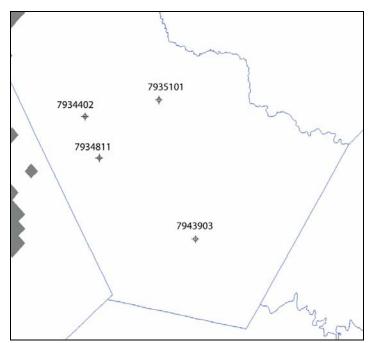


Figure 7. Location of Evangeline aquifer monitoring wells used in the report.

Table 2. Water budgets for Scenario 1 (values in acre-feet per year).

Bee County	Chicot Aquifer			
FLOW TERM		<u>IN</u>	OUT	IN-OUT
STORAGE		61	691	-630
CONSTANT HEAD		0	0	0
HORIZ. EXCHANGE		611	9,135	-8,525
EXCHANGE (UPPER)		0	0	0
EXCHANGE				
(LOWER)		684	3,885	-3,200
WELLS		0	1,602	-1,602
DRAINS		0	0	0
RECHARGE		18,829	0	18,829
ET		0	1,460	-1,460
RIVER LEAKAGE		0	0	0
HEAD DEP BOUNDS		0	0	0
STREAM LEAKAGE		5,324	8,736	-3,412
INTERBED			_	_
STORAGE		0	0	0
RESERV. LEAKAGE		0	0	0
SUM OF THE LAYER		25,509	25,509	0
DISCREPANCY [%]		0		
Bee County	Evangeline Aqui	fer		
FLOW TERM		<u>IN</u>	<u>out</u>	<u>IN-OUT</u>
STORAGE		44	765	-721
CONSTANT HEAD		0	0	0
LIABLE EVALIANCE		0.000	0.000	4 00 4

FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	44	765	-721
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,639	6,963	-4,324
EXCHANGE (UPPER)	3,885	684	3,200
EXCHANGE			
(LOWER)	108	852	-744
WELLS	0	3,369	-3,369
DRAINS	0	0	0
RECHARGE	4,836	0	4,836
ET	0	470	-470
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	4,502	2,910	1,592
INTERBED			
STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	16,014	16,014	-1
DISCREPANCY [%]	0		

Table 2: Continued.

Water Budget 2005

San Patricio County Chicot Aquifer

FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	936	302	634
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,175	3,099	4,076
EXCHANGE (UPPER)	0	0	0
EXCHANGE			
(LOWER)	1,056	1,440	-384
WELLS	0	5,943	-5,943
DRAINS	0	349	-349
RECHARGE	12,061	0	12,061
ET	0	698	-698
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	49	2,815	-2,765
STREAM LEAKAGE	3,208	9,841	-6,633
INTERBED			
STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,486	24,486	-1
DISCREPANCY [%]	0		

FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	14	4	10
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,667	906	1,761
EXCHANGE (UPPER)	1,440	1,056	384
EXCHANGE			
(LOWER)	373	5	368
WELLS	0	2,580	-2,580
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	906	0	906
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	990	-990
INTERBED			
STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,553	5,554	0
DISCREPANCY [%]	0		

Table 2: Continued. Water Budget -- 2010

Bee County	Chicot Aquifer		
FLOW TERM STORAGE	<u>IN</u> 23	<u>OUT</u> 253	<u>IN-OUT</u> -230
CONSTANT HEAD	23	255	-230 0
HORIZ. EXCHANGE	618	9166	-8549
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	722	3878	-3156
WELLS	0	1605	-1605
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1477	-1477
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5220	9033	-3813
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE SUM OF THE LAYER	0 25413	0 25413	0 -1
DISCREPANCY [%]	25413	25413	-1
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
•		<u>OUT</u> 535	<u>IN-OUT</u> -509
FLOW TERM	IN .		
FLOW TERM STORAGE	IN 26	535	-509
FLOW TERM STORAGE CONSTANT HEAD	IN 26 0	535 0	-509 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 26 0 2,635 3,878 101	535 0 7,021 722 879	-509 0 -4,386 3,156 -779
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	26 0 2,635 3,878 101 0	535 0 7,021 722 879 3,221	-509 0 -4,386 3,156
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	26 0 2,635 3,878 101 0	535 0 7,021 722 879 3,221 0	-509 0 -4,386 3,156 -779 -3,221 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 26 0 2,635 3,878 101 0 0 4,836	535 0 7,021 722 879 3,221 0 0	-509 0 -4,386 3,156 -779 -3,221 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 26 0 2,635 3,878 101 0 0 4,836 0	535 0 7,021 722 879 3,221 0 0 467	-509 0 -4,386 3,156 -779 -3,221 0 4,836 -467
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	LN 26 0 2,635 3,878 101 0 0 4,836 0 0	535 0 7,021 722 879 3,221 0 0 467 0	-509 0 -4,386 3,156 -779 -3,221 0 4,836 -467
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 26 0 2,635 3,878 101 0 0 4,836 0 0	535 0 7,021 722 879 3,221 0 0 467 0	-509 0 -4,386 3,156 -779 -3,221 0 4,836 -467 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 26 0 2,635 3,878 101 0 0 4,836 0 0 4,401	535 0 7,021 722 879 3,221 0 0 467 0 3,036	-509 0 -4,386 3,156 -779 -3,221 0 4,836 -467 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 26 0 2,635 3,878 101 0 4,836 0 0 0 4,401 0	535 0 7,021 722 879 3,221 0 0 467 0 3,036 0	-509 0 -4,386 3,156 -779 -3,221 0 4,836 -467 0 0 1,365
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 26 0 2,635 3,878 101 0 0 4,836 0 0 0 4,401 0	535 0 7,021 722 879 3,221 0 0 467 0 3,036	-509 0 -4,386 3,156 -779 -3,221 0 4,836 -467 0 0 1,365
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 26 0 2,635 3,878 101 0 4,836 0 0 0 4,401 0	535 0 7,021 722 879 3,221 0 0 467 0 3,036 0	-509 0 -4,386 3,156 -779 -3,221 0 4,836 -467 0 0 1,365

Table 2: Continued.

San Patricio County Chicot Aquifer

FLOW TERM	IN	OUT	<u>IN-OUT</u>
STORAGE	470	165	305
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,255	3,026	4,229
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	1,069	1,416	-347
WELLS	0	6,013	-6,013
DRAINS	0	349	-349
RECHARGE	12,061	0	12,061
ET	0	695	-695
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	67	2,734	-2,667
STREAM LEAKAGE	3,189	9,712	-6,524
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,111	24,111	0
DISCREPANCY [%]	0		

FLOW TERM	IN	OUT	IN-OUT
STORAGE	6	5	0
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,696	900	1,796
EXCHANGE (UPPER)	1,416	1,069	347
EXCHANGE (LOWER)	344	9	336
WELLS	0	2,542	-2,542
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	909	0	909
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	986	-986
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,523	5,523	0
DISCREPANCY [%]	0		

Table 2: Continued.

DISCREPANCY [%]

Bee County	Chicot Aquifer		
FLOW TERM	<u>IN</u>	OUT	<u>IN-OUT</u>
STORAGE	10	90	-79
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	624	9,221	-8,596
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	763	3,823	-3,060
WELLS	0	1,575	-1,575
DRAINS	0	0	0
RECHARGE	18,829	0	18,829
ET	0	1,485	-1,485
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5,190	9,223	-4,033
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,417	25,417	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
•		OUT	IN-OUT
Bee County FLOW TERM STORAGE	Evangeline Aquifer IN 8	<u>OUT</u> 266	<u>IN-OUT</u> -258
FLOW TERM	<u>IN</u>		
FLOW TERM STORAGE	IN 8 0	266	-258
FLOW TERM STORAGE CONSTANT HEAD	<u>IN</u> 8	266 0	-258 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 8 0 2,626	266 0 7,173	-258 0 -4,548
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 8 0 2,626 3,823	266 0 7,173 763	-258 0 -4,548 3,060
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 8 0 2,626 3,823 96	266 0 7,173 763 895	-258 0 -4,548 3,060 -799
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 8 0 2,626 3,823 96 0	266 0 7,173 763 895 2,939	-258 0 -4,548 3,060 -799 -2,939
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 8 0 2,626 3,823 96 0	266 0 7,173 763 895 2,939 0	-258 0 -4,548 3,060 -799 -2,939 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 8 0 2,626 3,823 96 0 0	266 0 7,173 763 895 2,939 0	-258 0 -4,548 3,060 -799 -2,939 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 8 0 2,626 3,823 96 0 0 4,836	266 0 7,173 763 895 2,939 0 0 464	-258 0 -4,548 3,060 -799 -2,939 0 4,836 -464
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	8 0 2,626 3,823 96 0 0 4,836 0	266 0 7,173 763 895 2,939 0 0 464	-258 0 -4,548 3,060 -799 -2,939 0 4,836 -464
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 8 0 2,626 3,823 96 0 0 4,836 0	266 0 7,173 763 895 2,939 0 0 464 0	-258 0 -4,548 3,060 -799 -2,939 0 4,836 -464 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 8 0 2,626 3,823 96 0 4,836 0 0 4,836 0 0	266 0 7,173 763 895 2,939 0 0 464 0 0 3,199	-258 0 -4,548 3,060 -799 -2,939 0 4,836 -464 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 8 0 2,626 3,823 96 0 4,836 0 0 4,836 0 0 4,311 0	266 0 7,173 763 895 2,939 0 0 464 0 0 3,199	-258 0 -4,548 3,060 -799 -2,939 0 4,836 -464 0 0 1,112

-0.01

Table 2: Continued.

San Patricio County Chicot	Aquifer
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FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	366	34	331
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,376	2,976	4,400
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	1,078	1,446	-368
WELLS	0	6,467	-6,467
DRAINS	0	348	-348
RECHARGE	12,061	0	12,061
ET	0	691	-691
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	90	2,647	-2,557
STREAM LEAKAGE	3,168	9,530	-6,362
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,139	24,140	0
DISCREPANCY [%]	0		

FLOW TERM	<u>IN</u>	OUT	<u>IN-OUT</u>
STORAGE	11	2	9
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,740	887	1,853
EXCHANGE (UPPER)	1,446	1,078	368
EXCHANGE (LOWER)	341	10	331
WELLS	0	2,642	-2,642
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	920	0	920
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	978	-978
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,610	5,610	0
DISCREPANCY [%]	0		

Table 2: Continued. Water Budget -- 2030

Bee County	Chicot Aquifer		
FLOW TERM	<u>IN</u>	OUT	<u>IN-OUT</u>
STORAGE	4	75	-71
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	631	9,255	-8,624
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	798	3,776	-2,978
WELLS	0	1,533	-1,533
DRAINS	0	0	0
RECHARGE	18,829	0	18,829
ET	0	1,491	-1,491
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5,188	9,320	-4,132
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,449	25,450	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	<u>IN-OUT</u>
•	-	<u>OUT</u> 181	<u>IN-OUT</u> -181
FLOW TERM	<u>IN</u>		· · · · · · · · · · · · · · · · · · ·
FLOW TERM STORAGE	<u>IN</u> 0	181	-181
FLOW TERM STORAGE CONSTANT HEAD	<u>IN</u> 0 0	181	-181 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	UN 0 0 2,623	181 0 7,242	-181 0 -4,619
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	UN 0 0 2,623 3,776	181 0 7,242 798	-181 0 -4,619 2,978
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	UN 0 0 2,623 3,776 94	181 0 7,242 798 901	-181 0 -4,619 2,978 -807
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	1N 0 0 2,623 3,776 94 0	181 0 7,242 798 901 2,680	-181 0 -4,619 2,978 -807 -2,680
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	UN 0 0 2,623 3,776 94 0	181 0 7,242 798 901 2,680 0	-181 0 -4,619 2,978 -807 -2,680 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	UN 0 0 2,623 3,776 94 0 0 4,836	181 0 7,242 798 901 2,680 0	-181 0 -4,619 2,978 -807 -2,680 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	UN 0 0 2,623 3,776 94 0 0 4,836 0 0	181 0 7,242 798 901 2,680 0 0 465	-181 0 -4,619 2,978 -807 -2,680 0 4,836 -465 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	UN 0 0 2,623 3,776 94 0 0 4,836 0	181 0 7,242 798 901 2,680 0 0 465	-181 0 -4,619 2,978 -807 -2,680 0 4,836 -465
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	UN 0 0 2,623 3,776 94 0 0 4,836 0 0	181 0 7,242 798 901 2,680 0 0 465 0	-181 0 -4,619 2,978 -807 -2,680 0 4,836 -465 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	UN 0 0 2,623 3,776 94 0 0 4,836 0 0 0 4,247 0 0	181 0 7,242 798 901 2,680 0 465 0 0 3,308	-181 0 -4,619 2,978 -807 -2,680 0 4,836 -465 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	UN 0 0 2,623 3,776 94 0 0 4,836 0 0 0 4,247 0	181 0 7,242 798 901 2,680 0 465 0 0 3,308	-181 0 -4,619 2,978 -807 -2,680 0 4,836 -465 0 0 939

Table 2: Continued.

San Patricio County Chicot Aquifer	San	Patricio	County	Chicot Aquifer
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FLOW TERM	IN	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	153	33	120
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,456	2,906	4,550
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	1,103	1,418	-315
WELLS	0	6,544	-6,544
DRAINS	0	346	-346
RECHARGE	12,061	0	12,061
ET	0	689	-689
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	101	2,636	-2,535
STREAM LEAKAGE	3,161	9,464	-6,303
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,036	24,036	0
DISCREPANCY [%]	0		

FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	3	4	-2
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,750	883	1,868
EXCHANGE (UPPER)	1,418	1,103	315
EXCHANGE (LOWER)	343	11	332
WELLS	0	2,598	-2,598
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	923	0	923
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	977	-977
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,588	5,588	0
DISCREPANCY [%]	0		

Table 2: Continued. Water Budget -- 2040

RESERV. LEAKAGE

SUM OF THE LAYER

DISCREPANCY [%]

Bee County	Chicot Aquifer			
FLOW TERM		IN	OUT	IN-OUT
STORAGE		1	84	-83
CONSTANT HEAD		0	0	0
HORIZ. EXCHANGE		637	9,277	-8,640
EXCHANGE (UPPER) EXCHANGE		0	0	0
(LOWER)		824	3,734	-2,910
WELLS		0	1,472	-1,472
DRAINS		0	0	0
RECHARGE		18,829	0	18,829
ET		0	1,498	-1,498
RIVER LEAKAGE		0	0	0
HEAD DEP BOUNDS		0	0	0
STREAM LEAKAGE INTERBED		5,192	9,419	-4,227
STORAGE		0	0	0

0

0

25,483

0

25,483

0

0

Bee County	Evangeline Aquifer		
FLOW TERM	<u>IN</u>	OUT	IN-OUT
STORAGE	0	158	-158
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,625	7,279	-4,655
EXCHANGE (UPPER)	3,734	824	2,910
EXCHANGE			
(LOWER)	94	907	-813
WELLS	0	2,437	-2,437
DRAINS	0	0	0
RECHARGE	4,836	0	4,836
ET	0	469	-469
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	4,191	3,404	786
INTERBED			
STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	15,479	15,480	-1
DISCREPANCY [%]	-0.01		

Table 2: Continued. Water Budget -- 2040

San Patricio County Chicot Aquifer

FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	72	52	20
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,504	2,861	4,643
EXCHANGE (UPPER)	0	0	0
EXCHANGE			
(LOWER)	1,127	1,390	-263
WELLS	0	6,588	-6,588
DRAINS	0	344	-344
RECHARGE	12,061	0	12,061
ET	0	688	-688
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	104	2,652	-2,548
STREAM LEAKAGE	3,144	9,437	-6,293
INTERBED			
STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,012	24,012	0
DISCREPANCY [%]	0		

FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	1	6	-4
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,754	879	1,875
EXCHANGE (UPPER) EXCHANGE	1,390	1,127	263
(LOWER)	344	11	333
WELLS	0	2,551	-2,551
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	922	0	922
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE INTERBED	0	978	-978
STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER DISCREPANCY [%]	5,564 0	5,564	0

Table 2: Continued. Water Budget -- 2050

DISCREPANCY [%]

Bee County	Chicot Aquifer		
FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	0	82	-82
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	641	9,298	-8,657
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	841	3,694	-2,853
WELLS	0	1,423	-1,423
DRAINS	0	0	0
RECHARGE	18,829	0	18,829
ET	0	1,503	-1,503
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5,197	9,508	-4,311
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE SUM OF THE LAYER	0	0 25 500	0
DISCREPANCY [%]	25,509 0	25,509	U
Bee County	Evangeline Aquifer		
Bee County	Evangeline Aquifer		
FLOW TERM	<u>IN</u>	<u>out</u>	IN-OUT
FLOW TERM STORAGE	<u>IN</u> 0	132	-132
FLOW TERM STORAGE CONSTANT HEAD	IN 0 0	132 0	-132 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	UN 0 0 2,623	132 0 7,323	-132 0 -4,700
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 0 0 2,623 3,694	132 0 7,323 841	-132 0 -4,700 2,853
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 0 0 2,623 3,694 96	132 0 7,323 841 908	-132 0 -4,700 2,853 -811
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	1N 0 0 2,623 3,694 96 0	132 0 7,323 841 908 2,227	-132 0 -4,700 2,853 -811 -2,227
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	UN 0 0 2,623 3,694 96 0	132 0 7,323 841 908 2,227 0	-132 0 -4,700 2,853 -811 -2,227
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	1N 0 0 2,623 3,694 96 0 0 4,836	132 0 7,323 841 908 2,227 0	-132 0 -4,700 2,853 -811 -2,227 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	UN 0 0 2,623 3,694 96 0	132 0 7,323 841 908 2,227 0	-132 0 -4,700 2,853 -811 -2,227
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	UN 0 0 2,623 3,694 96 0 0 4,836	132 0 7,323 841 908 2,227 0 0 474	-132 0 -4,700 2,853 -811 -2,227 0 4,836 -474
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	UN 0 0 2,623 3,694 96 0 0 4,836 0	132 0 7,323 841 908 2,227 0 0 474 0	-132 0 -4,700 2,853 -811 -2,227 0 4,836 -474
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	UN 0 0 2,623 3,694 96 0 0 4,836	132 0 7,323 841 908 2,227 0 0 474	-132 0 -4,700 2,853 -811 -2,227 0 4,836 -474 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	UN 0 0 2,623 3,694 96 0 4,836 0 0 4,836	132 0 7,323 841 908 2,227 0 0 474 0 0 3,486	-132 0 -4,700 2,853 -811 -2,227 0 4,836 -474 0 0

Table 2: Continued.

San Patricio County Chicot Aquifer

FLOW TERM	IN	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	94	42	52
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,556	2,824	4,732
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	1,151	1,374	-223
WELLS	0	6,755	-6,755
DRAINS	0	342	-342
RECHARGE	12,061	0	12,061
ET	0	687	-687
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	110	2,667	-2,557
STREAM LEAKAGE	3,129	9,410	-6,281
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,102	24,102	0
DISCREPANCY [%]	0		

FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	2	4	-2
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,757	873	1,884
EXCHANGE (UPPER)	1,374	1,151	223
EXCHANGE (LOWER)	347	11	336
WELLS	0	2,527	-2,527
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	924	0	924
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	978	-978
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,555	5,555	0
DISCREPANCY [%]	0		

Table 2: Continued.

Bee County

Water Budget -- 2060

INTERBED STORAGE

RESERV. LEAKAGE

SUM OF THE LAYER

DISCREPANCY [%]

Dec County	Onicot Aquilei		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1	62	-61
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	645	9,320	-8,675
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	859	3,664	-2,805
WELLS	0	1,382	-1,382
DRAINS	0	0	0
RECHARGE	18,829	0	18,829
ET	0	1,511	-1,511
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5,202	9,597	-4,395
INTERBED STORAGE RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,535	25,536	-1
DISCREPANCY [%]	25,555	25,556	-1
DISCILLI AINCT [70]	O .		
Bee County	Evangeline Aquifer		
FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	0	118	-118
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,621	7,361	-4,740
EXCHANGE (UPPER)	3,664	859	2,805
EXCHANGE (LOWER)	100	906	-807
WELLS	0	2,043	-2,043
DRAINS	0	0	0
RECHARGE	4,836	0	4,836
ET EAKAGE	0	480	-480
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	4,104	3,561	543

Chicot Aquifer

0

0

15,324

-0.03

0

0

15,328

0

0

-4

Table 2: Continued.

San Patricio County	Chicot Aquifer

FLOW TERM	IN	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	127	30	97
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,606	2,812	4,794
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	1,178	1,370	-192
WELLS	0	6,946	-6,946
DRAINS	0	341	-341
RECHARGE	12,061	0	12,061
ET	0	685	-685
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	117	2,663	-2,546
STREAM LEAKAGE	3,136	9,377	-6,241
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,225	24,225	0
DISCREPANCY [%]	0		

FLOW TERM	<u>IN</u>	<u>OUT</u>	<u>IN-OUT</u>
STORAGE	3	3	0
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,771	865	1,906
EXCHANGE (UPPER)	1,370	1,178	192
EXCHANGE (LOWER)	350	11	339
WELLS	0	2,526	-2,526
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	927	0	927
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	977	-977
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,572	5,572	0
DISCREPANCY [%]	0		

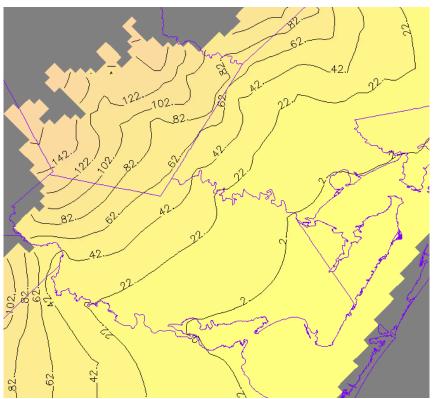


Figure 8: Scenario 1: 2005 water levels in the Chicot aquifer in Bee County. Contour interval is 20 feet.

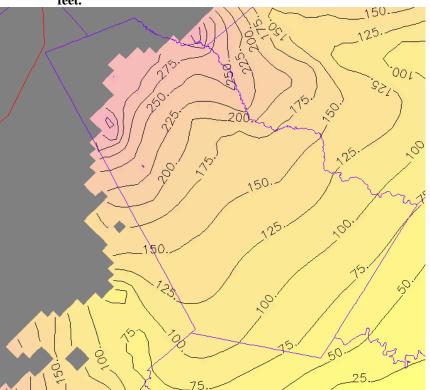


Figure 9: Scenario 1: 2005 water levels in the Evangeline aquifer in Bee County. Contour interval is 25 feet.

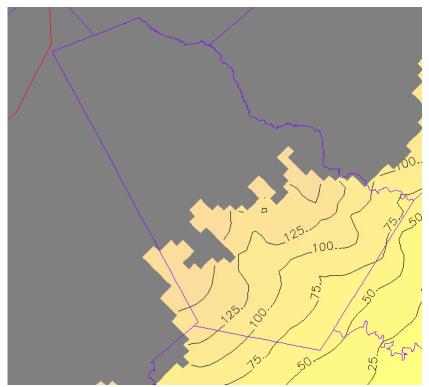


Figure 10: Scenario 1: 2010 water levels in Chicot aquifer in Bee County. Contour interval is 25 feet.

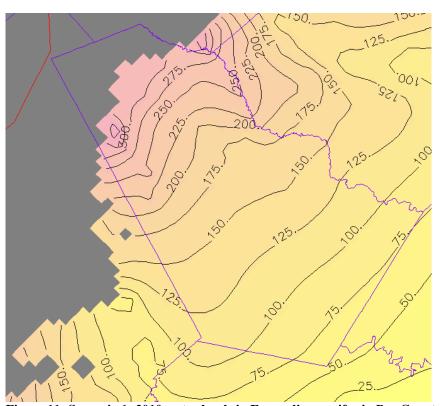
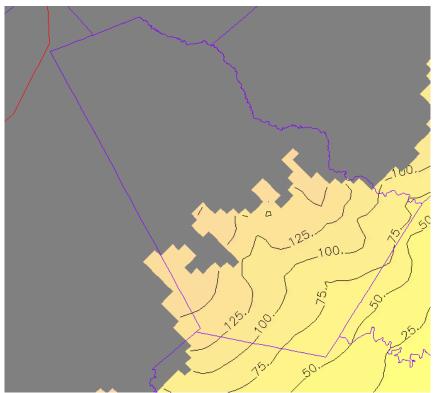


Figure 11: Scenario 1: 2010 water levels in Evangeline aquifer in Bee County. Contour interval is 25 feet.



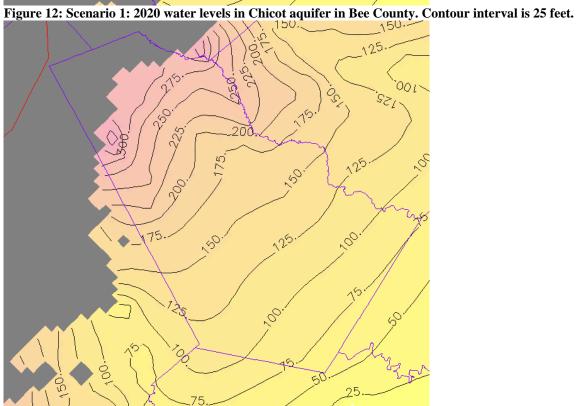


Figure 13: Scenario 1: 2020 water levels in Evangeline aquifer in Bee County. Contour interval is 25 feet.

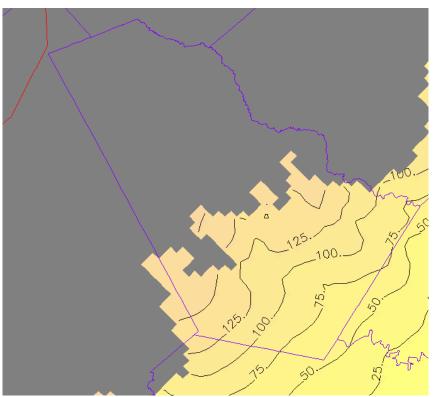


Figure 14: Scenario 1: 2030 water levels in Chicot aquifer in Bee County. Contour interval is 25 feet.

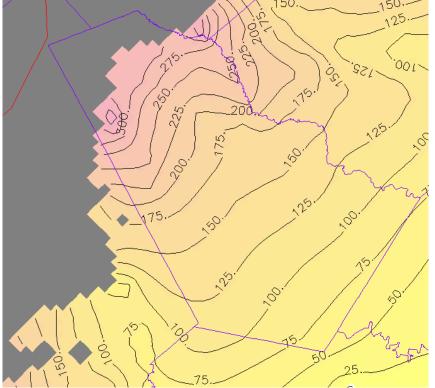


Figure 15: Scenario 1: 2030 water levels in Evangeline aquifer in Bee County. Contour interval is 25 feet.

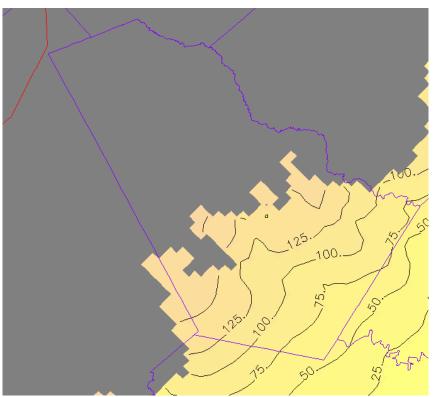


Figure 16: Scenario 1: 2040 water levels in Chicot aquifer in Bee County. Contour interval is 25 feet.

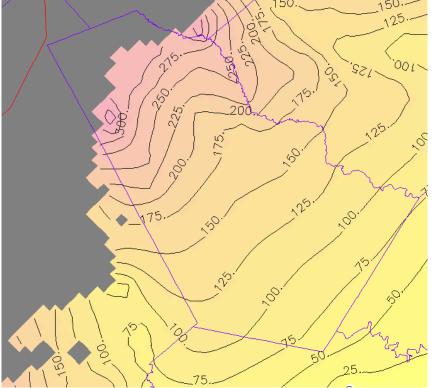


Figure 17: Scenario 1: 2040 water levels in Evangeline aquifer in Bee County. Contour interval is 25 feet.

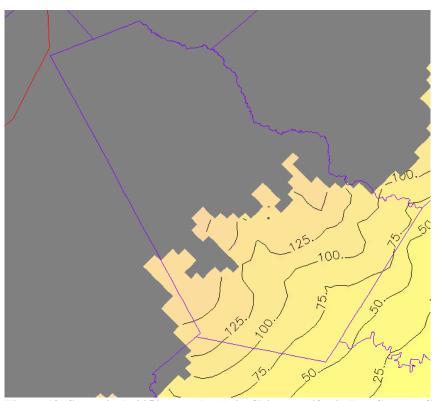
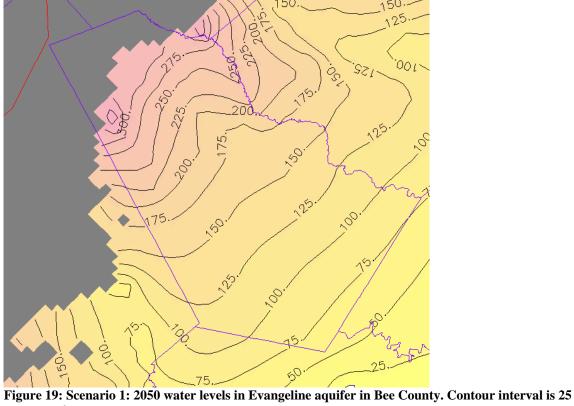


Figure 18: Scenario 1: 2050 water levels in Chicot aquifer in Bee County. Contour interval is 25 feet.



feet.

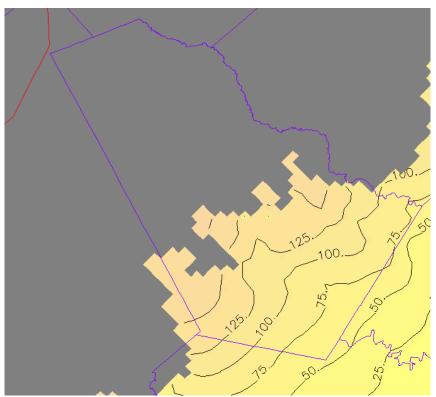


Figure 20: Scenario 1: 2060 water levels in Chicot aquifer in Bee County. Contour interval is 25 feet.

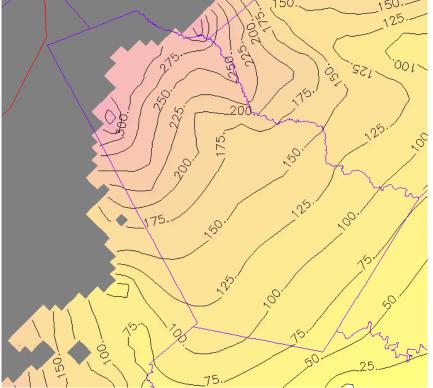


Figure 21: Scenario 1: 2060 water levels in Evangeline aquifer in Bee County. Contour interval is 25 feet.

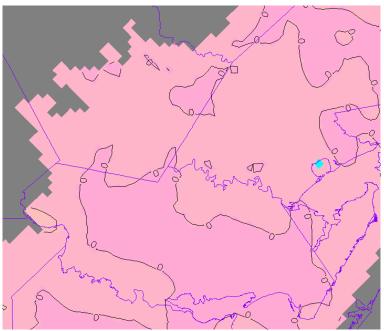


Figure 22: Scenario 1: drawdowns in the Chicot aquifer in 2005 in Bee and San Patricio counties.

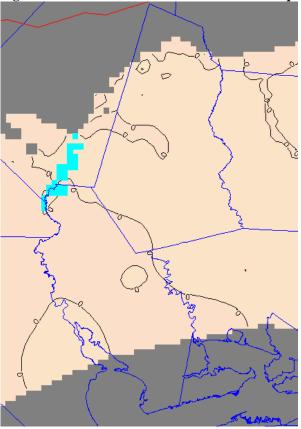


Figure 23: Scenario 1: Drawdowns in the Evangeline aquifer 2005 Bee and San Patricio counties.

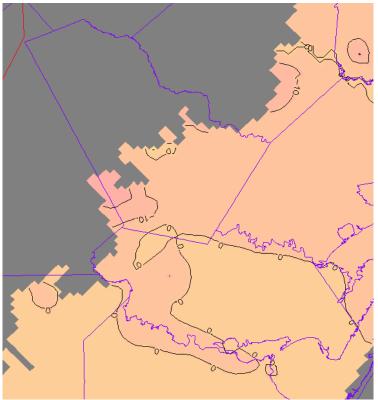


Figure 24: Scenario 1: Drawdowns in the Chicot aquifer in 2010 for Bee and San Patricio counties.

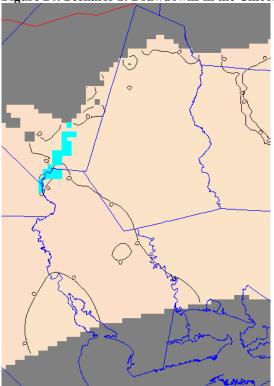


Figure 25: Scenario 1: Drawdowns in the Evangeline aquifer 2010 Bee and San Patricio counties.

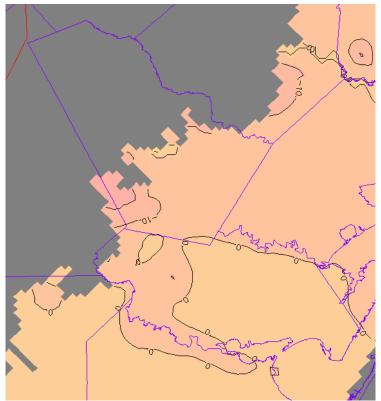


Figure 26: Scenario 1: Drawdowns in the Chicot aquifer in 2020 Bee and San Patricio counties.

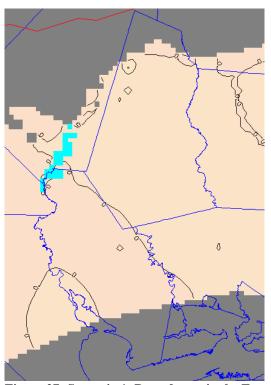


Figure 27: Scenario 1: Drawdowns in the Evangeline aquifer 2020 Bee and San Patricio counties.

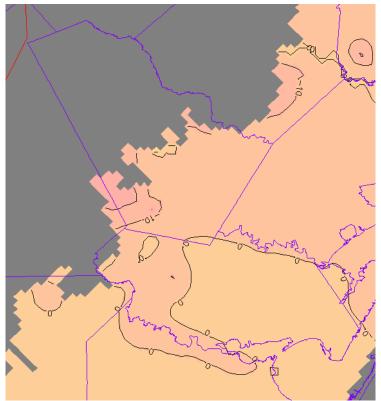


Figure 28: Scenario 1: Drawdowns in the Chicot aquifer in 2030 Bee and San Patricio counties.

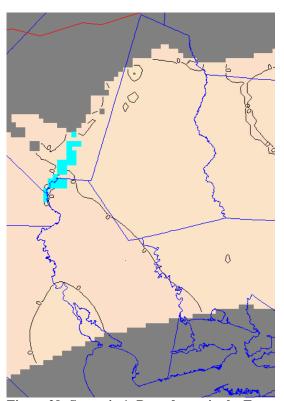


Figure 29: Scenario 1: Drawdowns in the Evangeline aquifer 2030 Bee and San Patricio counties.

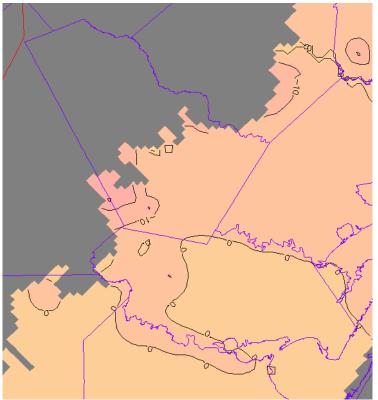


Figure 30: Scenario 1: Drawdowns in the Chicot aquifer in 2040 Bee and San Patricio counties.

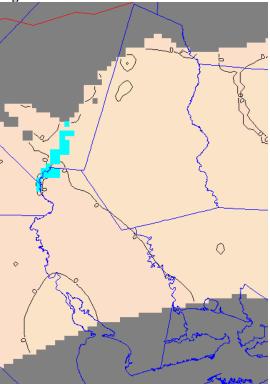


Figure 31: Scenario 1: Drawdowns in the Evangeline aquifer 2040 Bee and San Patricio counties.

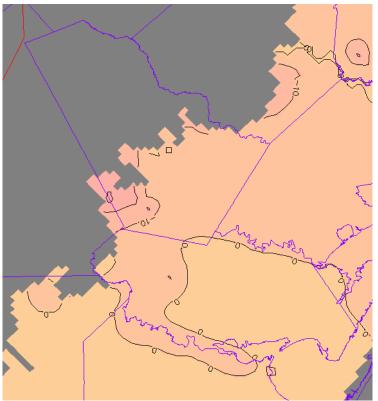


Figure 32: Scenario 1: Drawdowns in the Chicot aquifer in 2050 Bee and San Patricio counties.

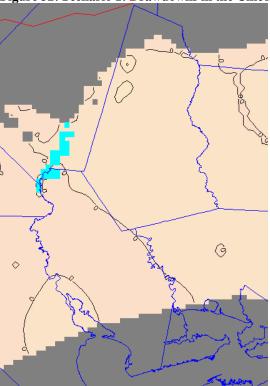


Figure 33: Scenario 1: Drawdowns in the Evangeline aquifer 2050 Bee and San Patricio counties.

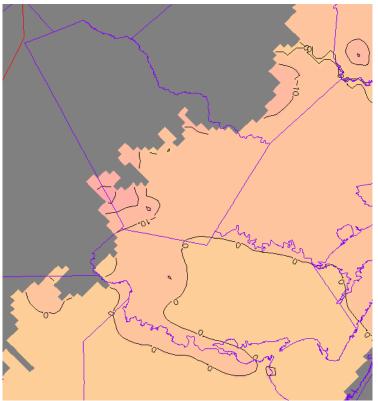


Figure 34: Scenario 1: Drawdowns in the Chicot aquifer in 2060 Bee and San Patricio counties.

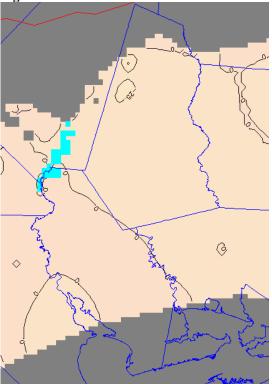


Figure 35: Scenario 1: Drawdowns in the Evangeline aquifer 2060 Bee and San Patricio counties.

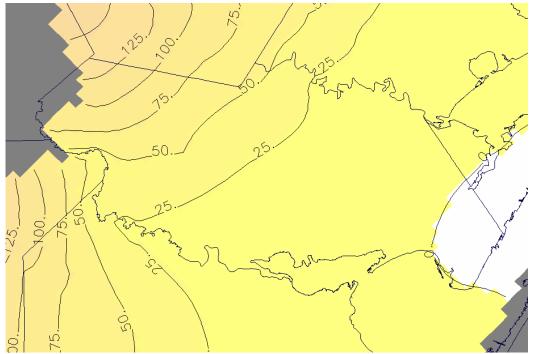


Figure 36: Scenario 1: Water levels in the Chicot aquifer in San Patricio County 2005. Contour interval is 25 feet.

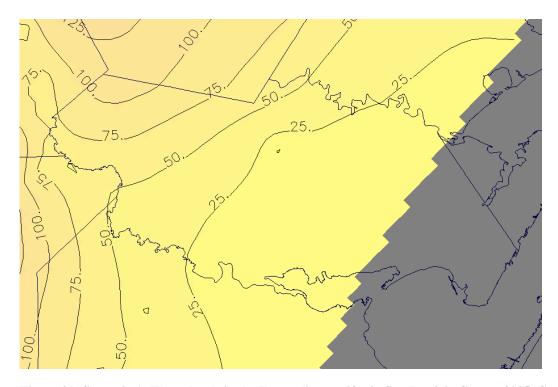


Figure 37: Scenario 1: Water levels in the Evangeline aquifer in San Patricio County 2005. Contour interval is 25 feet.

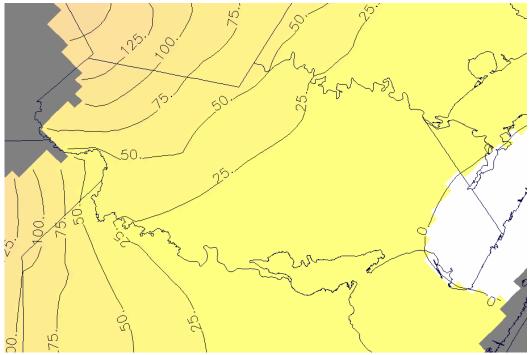
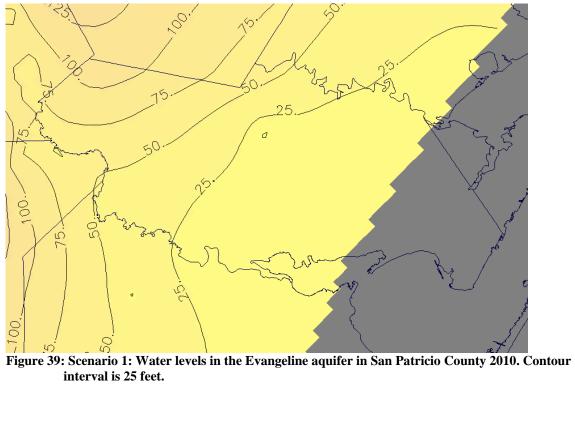


Figure 38: Scenario 1: Water levels in the Chicot aquifer in San Patricio County 2010. Contour interval is 25 feet.



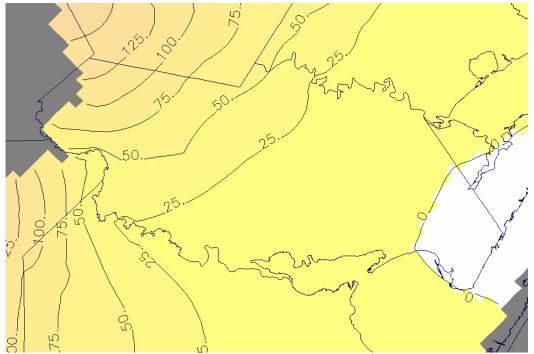
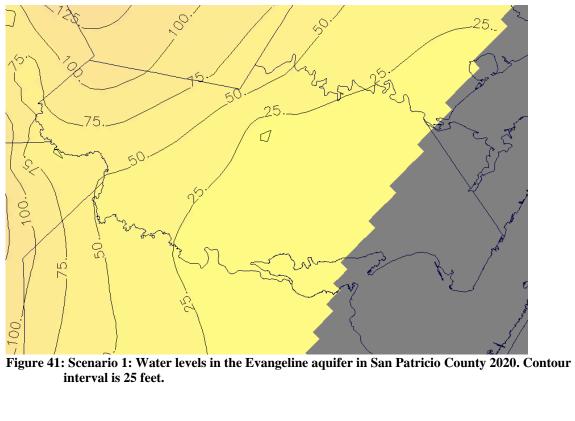


Figure 40: Scenario 1: Water levels in the Chicot aquifer in San Patricio County 2020. Contour interval is 25 feet.



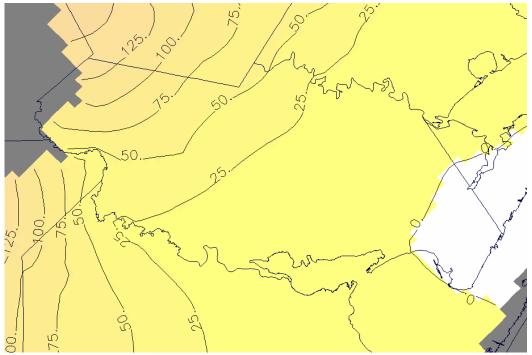
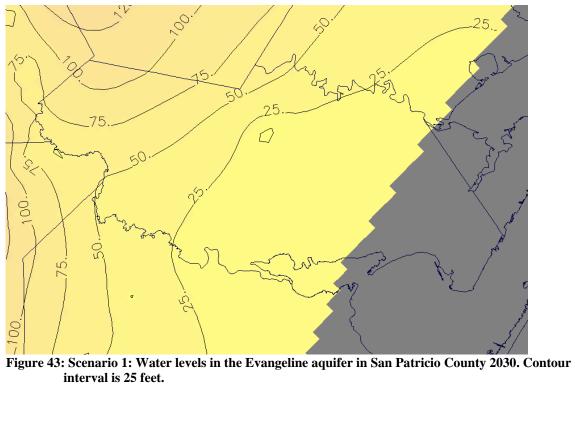


Figure 42: Scenario 1: Water levels in the Chicot aquifer in San Patricio County 2030. Contour interval is 25 feet.



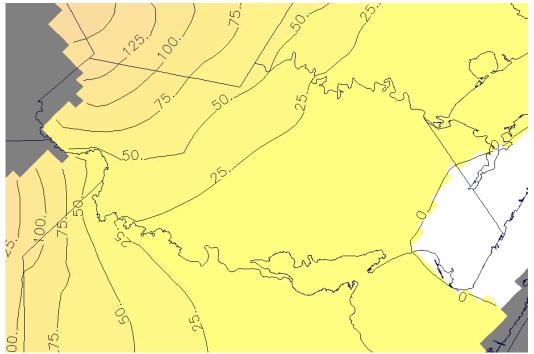


Figure 44: Scenario 1: Water levels in the Chicot aquifer in San Patricio County 2040. Contour interval is 25 feet.

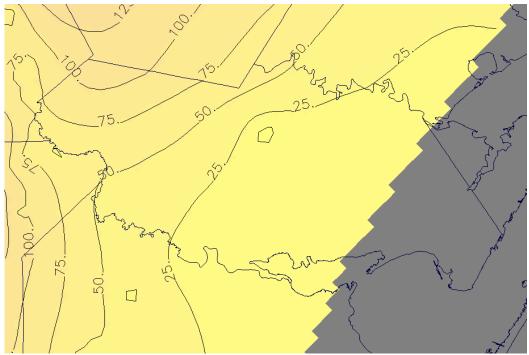


Figure 45: Scenario 1: Water levels in the Evangeline aquifer in San Patricio County 2040. Contour interval is 25 feet.

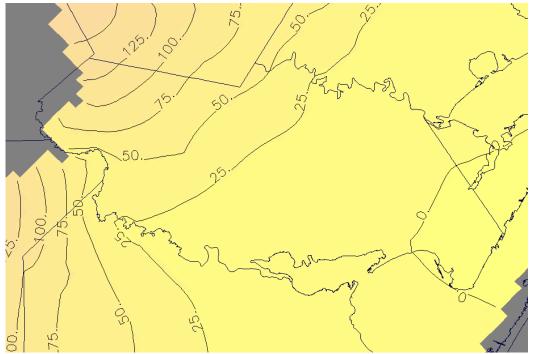


Figure 46: Scenario 1: Water levels in the Chicot aquifer in San Patricio County 2050. Contour interval is 25 feet.

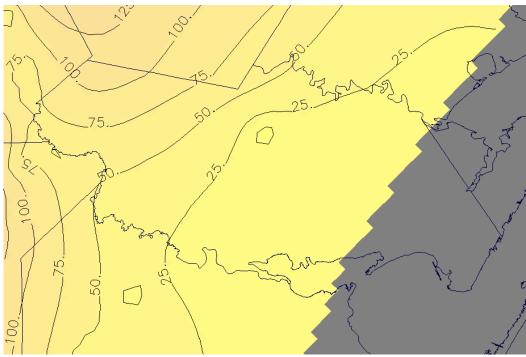


Figure 47: Scenario 1: Water levels in the Evangeline aquifer in San Patricio County 2050. Contour interval is 25 feet.

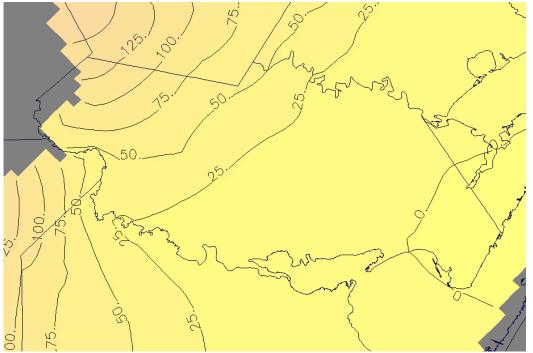


Figure 48: Scenario 1: Water levels in the Chicot aquifer in San Patricio County 2060. Contour interval is 25 feet.

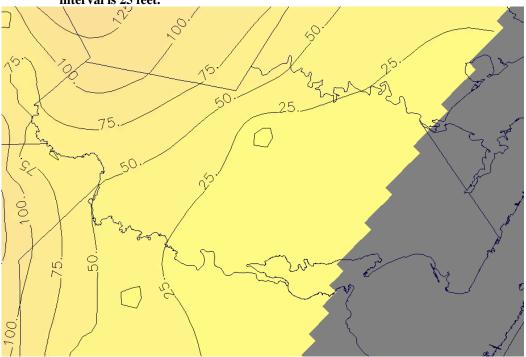


Figure 49: Scenario 1: Water levels in the Evangeline aquifer in San Patricio County 2060. Contour interval is 25 feet.

Table 3. Water budgets for Scenario 2 with 25,200 acre-feet per year pumping by SPMWD in Bee County (values in acre-feet per year).

Chicot Aquifer

Water Budget -- 2005

STREAM LEAKAGE INTERBED STORAGE

RESERV. LEAKAGE

SUM OF THE LAYER

DISCREPANCY [%]

Bee County

•	•		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	957	108	848
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	628	8994	-8366
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	47	9444	-9397
WELLS	0	1602	-1602
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1364	-1364
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6807	5755	1052
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	27267	27266	1
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	60	617	-558
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	5,200	5,841	-641
EXCHANGE (UPPER)	9,444	47	9,397
EXCHANGE (LOWER)	538	792	-254
WELLS	0	14,569	-14,569
DRAINS	0	0	0
RECHARGE	4,836	0	4,836
ET	0	470	-470
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0

5,078

25,156

0.01

0

0

2,818

25,155

0

0

2,260

0

2

Table 3. Continued.

RESERV. LEAKAGE

SUM OF THE LAYER

DISCREPANCY [%]

San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1,485	195	1,290
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,084	3,151	3,933
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	743	2,152	-1,409
WELLS	0	5,943	-5,943
DRAINS	0	348	-348
RECHARGE	12,061	0	12,061
ET	0	693	-693
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	50	2,797	-2,747
STREAM LEAKAGE	3,318	9,462	-6,144
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,742	24,741	1
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	38	0	38
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	1,888	1,260	629
EXCHANGE (UPPER)	2,152	743	1,409
EXCHANGE (LOWER)	442	2	440
WELLS	0	2,580	-2,580
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	912	0	912
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	987	-987
INTERBED STORAGE	0	0	0

0

0

5,584

0

5,585

0

0

Table 3. Continued. Water Budget -- 2010

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	447	25	422
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	637	9007	-8370
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	59	9398	-9340
WELLS	0	1605	-1605
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1356	-1356
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6950	5530	1420
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26922	26922	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
·		OUT 449	IN-OUT -417
FLOW TERM	IN		
FLOW TERM STORAGE	IN 33	449	-417
FLOW TERM STORAGE CONSTANT HEAD	IN 33 0	449 0	-417 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 33 0 5,212	449 0 5,877 59 812	-417 0 -665
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 33 0 5,212 9,398	449 0 5,877 59	-417 0 -665 9,340
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 33 0 5,212 9,398 507 0	449 0 5,877 59 812	-417 0 -665 9,340 -305 -14,421
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 33 0 5,212 9,398 507 0	449 0 5,877 59 812 14,421 0	-417 0 -665 9,340 -305 -14,421 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 33 0 5,212 9,398 507 0 4,836 0	449 0 5,877 59 812 14,421 0 0 467	-417 0 -665 9,340 -305 -14,421 0 4,836 -467
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 33 0 5,212 9,398 507 0 4,836 0 0	449 0 5,877 59 812 14,421 0 0 467	-417 0 -665 9,340 -305 -14,421 0 4,836 -467
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 33 0 5,212 9,398 507 0 4,836 0 0	449 0 5,877 59 812 14,421 0 0 467 0	-417 0 -665 9,340 -305 -14,421 0 4,836 -467 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 33 0 5,212 9,398 507 0 4,836 0 0 5,008	449 0 5,877 59 812 14,421 0 0 467 0 0 2,907	-417 0 -665 9,340 -305 -14,421 0 4,836 -467 0 0 2,101
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 33 0 5,212 9,398 507 0 4,836 0 0 5,008	449 0 5,877 59 812 14,421 0 0 467 0 0 2,907 0	-417 0 -665 9,340 -305 -14,421 0 4,836 -467 0 0 2,101
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 33 0 5,212 9,398 507 0 4,836 0 0 5,008 0	449 0 5,877 59 812 14,421 0 0 467 0 2,907 0	-417 0 -665 9,340 -305 -14,421 0 4,836 -467 0 0 2,101
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 33 0 5,212 9,398 507 0 4,836 0 0 5,008	449 0 5,877 59 812 14,421 0 0 467 0 0 2,907 0	-417 0 -665 9,340 -305 -14,421 0 4,836 -467 0 0 2,101

Table 3. Continued. Water Budget -- 2010

San Patricio County	Chicot Aquifer			
FLOW TERM		IN	OUT	IN-OUT
STORAGE		858	44	814
CONSTANT HEAD		0	0	0
HORIZ. EXCHANGE		7,165	3,067	4,099
EXCHANGE (UPPER)		0	0	0
EXCHANGE (LOWER)		740	2,128	-1,388
WELLS		0	6,013	-6,013
DRAINS		0	347	-347
RECHARGE		12.061	0	12.061

RECHARGE	12,061	U	12,061
ET	0	688	-688
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	69	2,702	-2,634
STREAM LEAKAGE	3,312	9,215	-5,903
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,205	24,204	1
DISCREPANCY [%]	0		

San Patricio County	Evangeline Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	16	1	15
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	1,906	1,251	656
EXCHANGE (UPPER)	2,128	740	1,388
EXCHANGE (LOWER)	414	5	409
WELLS	0	2,542	-2,542

EXCHANGE (UPPER)	2,128	740	1,388
EXCHANGE (LOWER)	414	5	409
WELLS	0	2,542	-2,542
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	917	0	917
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	983	-983
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,533	5,533	0
DISCREPANCY [%]	0		

Table 3. Continued. Water Budget -- 2020

DISCREPANCY [%]

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	90	152	-63
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	639	9058	-8420
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	28	9318	-9289
WELLS	0	1299	-1299
DRAINS	0	0	0
RECHARGE	18782	0	18782
ET	0	1354	-1354
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7061	5418	1643
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26601	26600	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
•	-	OUT 291	IN-OUT -282
FLOW TERM	IN		
FLOW TERM STORAGE	IN 9	291	-282
FLOW TERM STORAGE CONSTANT HEAD	IN 9	291 0	-282 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 9 0 5,200	291 0 6,011	-282 0 -811
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 9 0 5,200 9,318	291 0 6,011 28	-282 0 -811 9,289
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 9 0 5,200 9,318 453 0	291 0 6,011 28 832	-282 0 -811 9,289 -379
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 9 0 5,200 9,318 453 0 0 4,882	291 0 6,011 28 832 14,139 0	-282 0 -811 9,289 -379 -14,139 0 4,882
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 9 0 5,200 9,318 453 0 0 4,882	291 0 6,011 28 832 14,139 0 0 463	-282 0 -811 9,289 -379 -14,139
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 9 0 5,200 9,318 453 0 0 4,882	291 0 6,011 28 832 14,139 0	-282 0 -811 9,289 -379 -14,139 0 4,882 -463
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 9 0 5,200 9,318 453 0 0 4,882 0 0	291 0 6,011 28 832 14,139 0 0 463 0	-282 0 -811 9,289 -379 -14,139 0 4,882 -463 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 9 0 5,200 9,318 453 0 4,882 0 0 4,882 0 4,933	291 0 6,011 28 832 14,139 0 463 0 0 3,031	-282 0 -811 9,289 -379 -14,139 0 4,882 -463 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 9 0 5,200 9,318 453 0 0 4,882 0 0 0 4,882 0 0 0 4,933	291 0 6,011 28 832 14,139 0 0 463 0 0 3,031 0	-282 0 -811 9,289 -379 -14,139 0 4,882 -463 0 0 1,903
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 9 0 5,200 9,318 453 0 4,882 0 0 4,882 0 4,933	291 0 6,011 28 832 14,139 0 463 0 0 3,031	-282 0 -811 9,289 -379 -14,139 0 4,882 -463 0 0

Table 3. Continued. Water Budget -- 2020

San Patricio County C	Chicot Aquifer
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FLOW TERM	IN	OUT	IN-OUT
STORAGE	632	0	632
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,303	2,984	4,319
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	743	2,154	-1,411
WELLS	0	6,467	-6,467
DRAINS	0	344	-344
RECHARGE	12,061	0	12,061
ET	0	682	-682
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	97	2,596	-2,499
STREAM LEAKAGE	3,393	9,003	-5,610
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,229	24,229	0
DISCREPANCY [%]	0		

FLOW TERM	IN	OUT	IN-OUT
STORAGE	17	1	16
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	1,942	1,225	717
EXCHANGE (UPPER)	2,154	743	1,411
EXCHANGE (LOWER)	408	6	402
WELLS	0	2,642	-2,642
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	930	0	930
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	974	-974
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,602	5,602	0
DISCREPANCY [%]	0		

Table 3. Continued.

Water Budget -- 2030

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	9	55	-46
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	642	9100	-8458
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	29	9278	-9248
WELLS	0	1262	-1262
DRAINS	0	0	0
RECHARGE	18782	0	18782
ET	0	1376	-1376
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7094	5486	1608
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26556	26556	0
DISCREPANCY [%]	0		

Bee County

Evangeline Aquifer

FLOW TERM	IN	OUT	IN-OUT
STORAGE	1	189	-188
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	5,196	6,084	-888
EXCHANGE (UPPER)	9,278	29	9,248
EXCHANGE (LOWER)	410	853	-444
WELLS	0	13,880	-13,880
DRAINS	0	0	0
RECHARGE	4,882	0	4,882
ET	0	465	-465
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	4,859	3,125	1,734
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,625	24,626	-1
DISCREPANCY [%]	0		

Table 3. Continued.

Water Budget -- 2030

San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	296	1	295
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,398	2,891	4,507
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	759	2,115	-1,356
WELLS	0	6,544	-6,544
DRAINS	0	340	-340
RECHARGE	12,061	0	12,061
ET	0	679	-679
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	109	2,574	-2,465
STREAM LEAKAGE	3,410	8,889	-5,479
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,034	24,033	0
DISCREPANCY [%]	0		

FLOW TERM	IN	OUT	IN-OUT
STORAGE	5	2	3
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	1,956	1,215	741
EXCHANGE (UPPER)	2,115	759	1,356
EXCHANGE (LOWER)	404	7	397
WELLS	0	2,598	-2,598
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	934	0	934
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	972	-972
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,565	5,565	0
DISCREPANCY [%]	0		

Table 3 continued Water Budget -- 2040

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1	66	-65
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	646	9127	-8481
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	28	9220	-9192
WELLS	0	1211	-1211
DRAINS	0	0	0
RECHARGE	18782	0	18782
ET	0	1386	-1386
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7103	5551	1552
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26560	26560	0
DISCREPANCY [%]	0		

Bee County Evangeline Aquifer FLOW TERM OUT **IN-OUT** IN 0 STORAGE 160 -160 **CONSTANT HEAD** 0 0 0 HORIZ. EXCHANGE 5,200 6,122 -922 **EXCHANGE (UPPER)** 9,220 28 9,192 **EXCHANGE (LOWER)** 377 -491 868 **WELLS** 0 13,637 -13,637 **DRAINS** 0 0 0 4,882 RECHARGE 0 4,882 ΕT 0 468 -468 RIVER LEAKAGE 0 0 0 **HEAD DEP BOUNDS** 0 0 0 1,604 STREAM LEAKAGE 4,801 3,197 INTERBED STORAGE 0 0 0 RESERV. LEAKAGE 0 0 0 SUM OF THE LAYER 24,480 24,481 -1 DISCREPANCY [%] 0

Table 3. Continued. Water Budget -- 2040

FLOW TERM	IN	OUT	IN-OUT
STORAGE	139	15	124
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,456	2,832	4,624
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	774	2,082	-1,308
WELLS	0	6,588	-6,588
DRAINS	0	337	-337
RECHARGE	12,061	0	12,061
ET	0	678	-678
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	113	2,584	-2,471
STREAM LEAKAGE	3,406	8,834	-5,428
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	23,950	23,950	0
DISCREPANCY [%]	0		

FLOW TERM	IN	OUT	IN-OUT
STORAGE	3	4	-1
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	1,963	1,211	752
EXCHANGE (UPPER)	2,082	774	1,308
EXCHANGE (LOWER)	399	7	392
WELLS	0	2,551	-2,551
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	934	0	934
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	973	-973
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,532	5,532	0
DISCREPANCY [%]	0		

Table 3. Continued.

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1	62	-61
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	649	9153	-8504
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	27	9172	-9145
WELLS	0	1169	-1169
DRAINS	0	0	0
RECHARGE	18782	0	18782
ET	0	1396	-1396
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7106	5613	1493
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26565	26565	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
•	-	OUT 132	IN-OUT -132
FLOW TERM	IN		
FLOW TERM STORAGE	IN 0	132	-132
FLOW TERM STORAGE CONSTANT HEAD	IN 0 0	132 0	-132 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 0 0 5,199	132 0 6,166	-132 0 -966 9,145 -524
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 0 0 5,199 9,172	132 0 6,166 27 876 13,427	-132 0 -966 9,145
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 0 0 5,199 9,172 353 0 0	132 0 6,166 27 876 13,427 0	-132 0 -966 9,145 -524 -13,427
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 0 0 5,199 9,172 353 0	132 0 6,166 27 876 13,427	-132 0 -966 9,145 -524 -13,427
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 0 0 5,199 9,172 353 0 0 4,882 0	132 0 6,166 27 876 13,427 0 0 473	-132 0 -966 9,145 -524 -13,427
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 0 0 5,199 9,172 353 0 0 4,882 0 0	132 0 6,166 27 876 13,427 0 0 473	-132 0 -966 9,145 -524 -13,427 0 4,882 -473
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 0 0 5,199 9,172 353 0 0 4,882 0 0	132 0 6,166 27 876 13,427 0 0 473 0	-132 0 -966 9,145 -524 -13,427 0 4,882 -473 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 0 0 5,199 9,172 353 0 0 4,882 0 0 0 4,751	132 0 6,166 27 876 13,427 0 0 473 0 0 3,256	-132 0 -966 9,145 -524 -13,427 0 4,882 -473 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 5,199 9,172 353 0 0 4,882 0 0 4,751 0	132 0 6,166 27 876 13,427 0 0 473 0 0 3,256 0	-132 0 -966 9,145 -524 -13,427 0 4,882 -473 0 0 1,496 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 0 0 5,199 9,172 353 0 0 4,882 0 0 4,751 0 0	132 0 6,166 27 876 13,427 0 0 473 0 0 3,256 0	-132 0 -966 9,145 -524 -13,427 0 4,882 -473 0 0 1,496 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 5,199 9,172 353 0 0 4,882 0 0 4,751 0	132 0 6,166 27 876 13,427 0 0 473 0 0 3,256 0	-132 0 -966 9,145 -524 -13,427 0 4,882 -473 0 0 1,496 0

Table 3. Continued.

DISCREPANCY [%]

San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	132	18	114
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,517	2,789	4,729
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	792	2,063	-1,271
WELLS	0	6,755	-6,755
DRAINS	0	334	-334
RECHARGE	12,061	0	12,061
ET	0	677	-677
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	119	2,595	-2,476
STREAM LEAKAGE	3,398	8,789	-5,391
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,020	24,020	0
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
San Patricio County FLOW TERM	IN	OUT	IN-OUT
•	-	OUT 2	IN-OUT 0
FLOW TERM	IN		
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 3	2 0 1,203	0
FLOW TERM STORAGE CONSTANT HEAD	IN 3 0 1,968 2,063	2 0 1,203 792	0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 3 0 1,968 2,063 395	2 0 1,203	0 0 765
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 3 0 1,968 2,063	2 0 1,203 792	0 0 765 1,271
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 3 0 1,968 2,063 395 0 0	2 0 1,203 792 7	0 765 1,271 388 -2,527
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 3 0 1,968 2,063 395 0	2 0 1,203 792 7 2,527	0 765 1,271 388 -2,527
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 3 0 1,968 2,063 395 0 0 152	2 0 1,203 792 7 2,527 0	0 765 1,271 388 -2,527 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 3 0 1,968 2,063 395 0 0 152 0 936	2 0 1,203 792 7 2,527 0 0 12	0 765 1,271 388 -2,527 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 3 0 1,968 2,063 395 0 0 152	2 0 1,203 792 7 2,527 0 0	0 765 1,271 388 -2,527 0 152 -12 936 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 3 0 1,968 2,063 395 0 0 152 0 936 0 0	2 0 1,203 792 7 2,527 0 0 12 0 0	0 765 1,271 388 -2,527 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 3 0 1,968 2,063 395 0 0 152 0 936 0	2 0 1,203 792 7 2,527 0 0 12 0	0 765 1,271 388 -2,527 0 152 -12 936 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 3 0 1,968 2,063 395 0 0 152 0 936 0 0 0	2 0 1,203 792 7 2,527 0 0 12 0 0 972 0	0 0 765 1,271 388 -2,527 0 152 -12 936 0 -972
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 3 0 1,968 2,063 395 0 0 152 0 936 0 0	2 0 1,203 792 7 2,527 0 0 12 0 0 972	0 765 1,271 388 -2,527 0 152 -12 936 0 -972

0

Table 3. Continued

RESERV. LEAKAGE

SUM OF THE LAYER

DISCREPANCY [%]

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1	55	-54
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	653	9,179	-8,526
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	28	9,130	-9,102
WELLS	0	1,135	-1,135
DRAINS	0	0	0
RECHARGE	18,782	0	18,782
ET	0	1,405	-1,405
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7,108	5,669	1,439
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26,571	26,572	-1
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	0	117	-117
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	5,198	6,203	-1,005
EXCHANGE (UPPER)	9,130	28	9,102
EXCHANGE (LOWER)	334	881	-547
WELLS	0	13,243	-13,243
DRAINS	0	0	0
RECHARGE	4,882	0	4,882
ET	0	479	-479
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	4,709	3,306	1,402
INTERBED STORAGE	0	0	0

0

24,257

24,253

-0.02

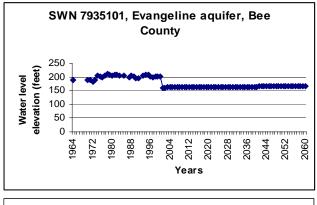
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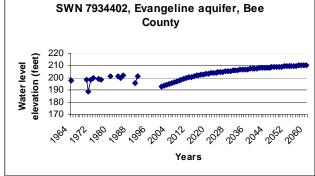
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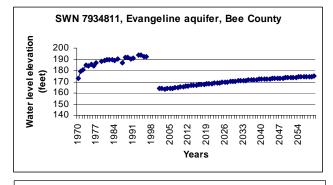
Table 3. Continued.

San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	156	17	139
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,575	2,774	4,801
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	814	2,060	-1,246
WELLS	0	6,946	-6,946
DRAINS	0	332	-332
RECHARGE	12,061	0	12,061
ET	0	675	-675
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	126	2,589	-2,462
STREAM LEAKAGE	3,409	8,748	-5,339
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,142	24,141	1
DISCREPANCY [%]	0		

FLOW TERM	IN	OUT	IN-OUT
STORAGE	3	2	1
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	1,982	1,194	788
EXCHANGE (UPPER)	2,060	814	1,246
EXCHANGE (LOWER)	391	7	384
WELLS	0	2,526	-2,526
DRAINS	0	0	0
RECHARGE	152	0	152
ET	0	12	-12
RIVER LEAKAGE	939	0	939
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	0	971	-971
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	5,527	5,527	0
DISCREPANCY [%]	0		







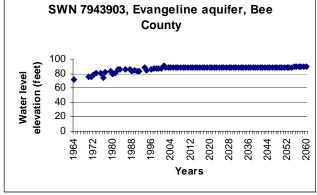
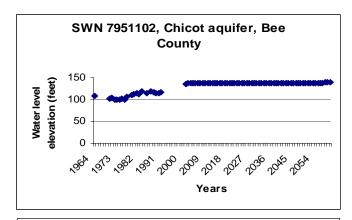
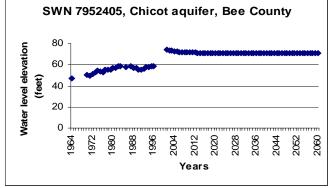
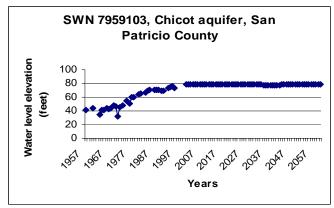


Figure 50. Scenario 2: Water-level hydrographs for monitoring wells in Bee and San Patricio counties with 25,200 acre-feet of pumping by the SPMWD in Bee County.







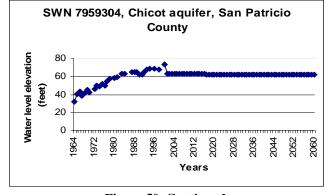


Figure 50. Continued.

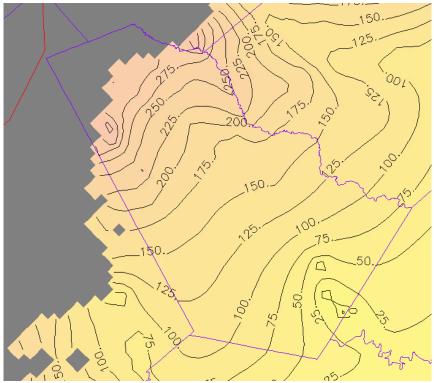


Figure 51. Scenario 2: Water levels in the Evangeline aquifer in Bee County 2005. Contour interval is 25 feet. Pumping of 25,200 acre-feet per year by SPMWD in Bee County.

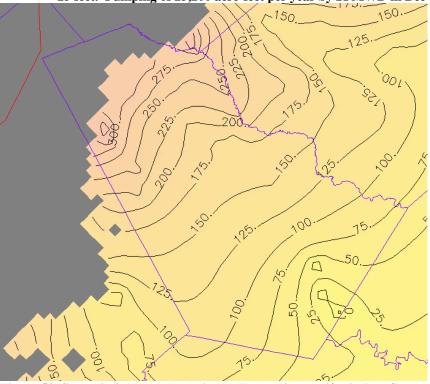


Figure 52. Scenario 2: Water levels in the Evangeline aquifer in Bee County 2010. Contour interval is 25 feet. Pumping of 25,200 acre-feet per year by SPMWD in Bee County.

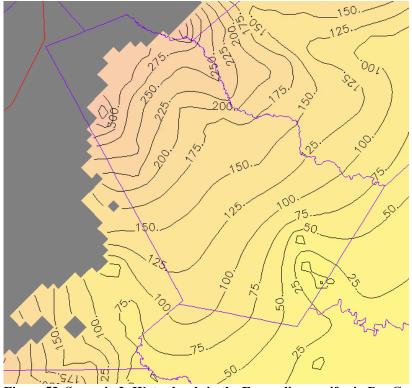


Figure 53. Scenario 2: Water levels in the Evangeline aquifer in Bee County 2020. Contour interval is 25 feet. Pumping of 25,200 acre-feet per year by SPMWD in Bee County.

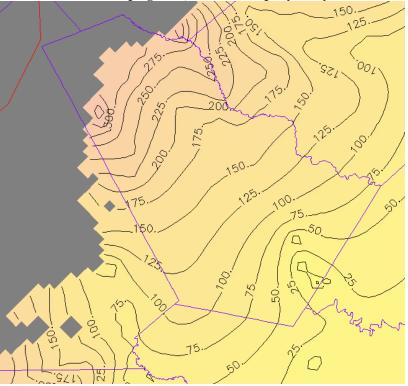


Figure 54. Scenario 2: Water levels in the Evangeline aquifer in Bee County 2030. Contour interval is 25 feet. Pumping of 25,200 acre-feet per year by SPMWD in Bee County.

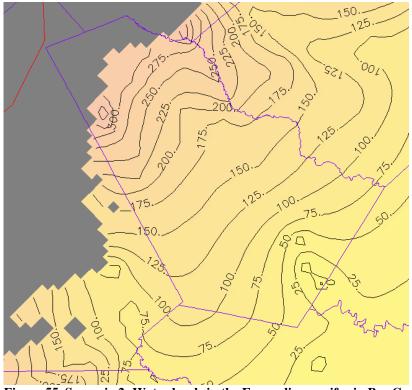


Figure 55. Scenario 2: Water levels in the Evangeline aquifer in Bee County 2040. Contour interval is 25 feet. Pumping of 25,200 acre-feet per year by SPMWD in Bee County.

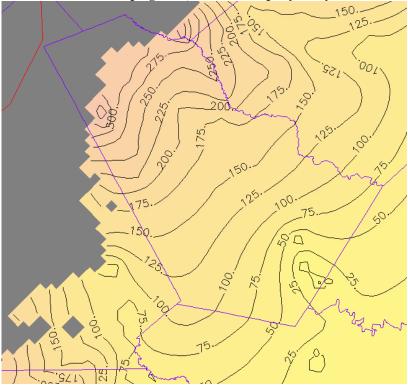


Figure 56. Scenario 2: Water levels in the Evangeline aquifer in Bee County 2050. Contour interval is 25 feet. Pumping of 25,200 acre-feet per year by SPMWD in Bee County.

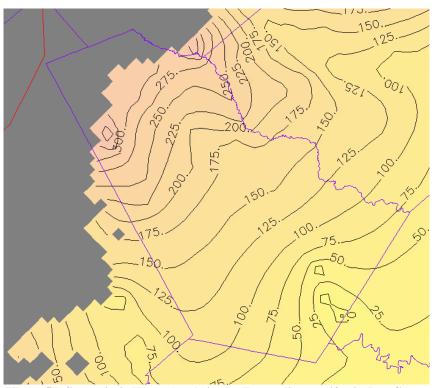


Figure 57. Scenario 2: Water levels in the Evangeline aquifer in Bee County 2060. Contour interval is 25 feet. Pumping of 25,200 acre-feet per year by SPMWD in Bee County.

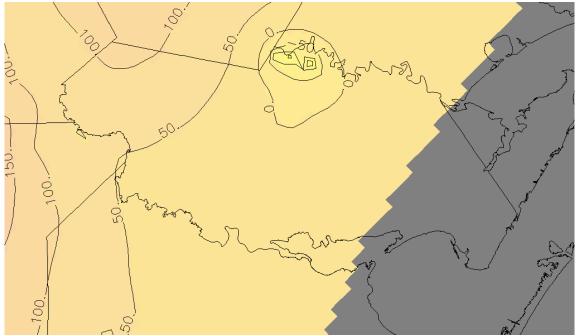


Figure 58. Scenario 2: Water levels in the Evangeline aquifer in San Patricio County 2005. Contour interval is 50 feet. Pumping of 25,200 acre-feet per year by SPMWD in San Patricio County.

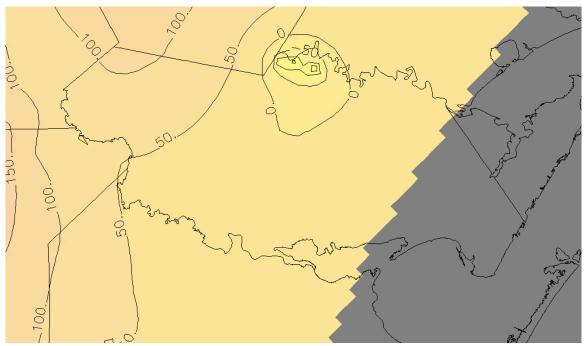


Figure 59. Scenario 2: Water levels in the Evangeline aquifer in San Patricio County 2010. Contour interval is 50 feet. Pumping of 25,200 acre-feet per year by SPMWD in San Patricio County.

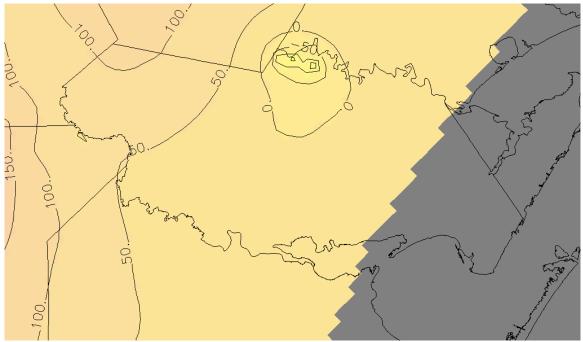


Figure 60. Scenario 2: Water levels in the Evangeline aquifer in San Patricio County 2020. Contour interval is 50 feet. Pumping of 25,200 acre-feet per year by SPMWD in San Patricio County.

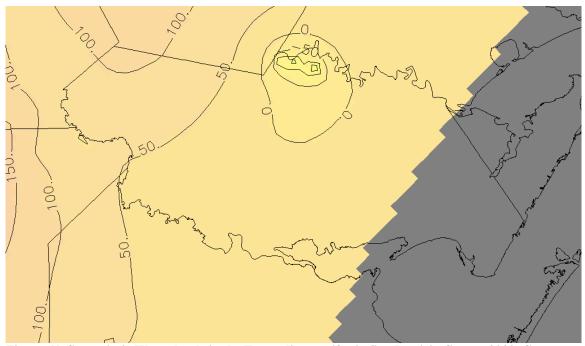


Figure 61. Scenario 2: Water levels in the Evangeline aquifer in San Patricio County 2030. Contour interval is 50 feet. Pumping of 25,200 acre-feet per year by SPMWD in San Patricio County.

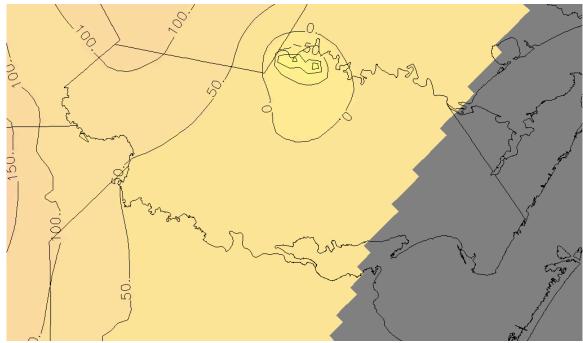


Figure 62. Scenario 2: Water levels in the Evangeline aquifer in San Patricio County 2040. Contour interval is 50 feet. Pumping of 25,200 acre-feet per year by SPMWD in San Patricio County.

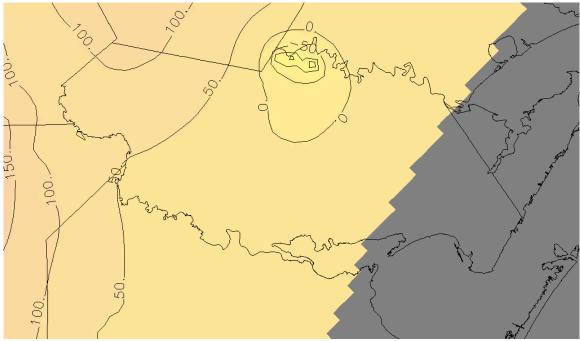
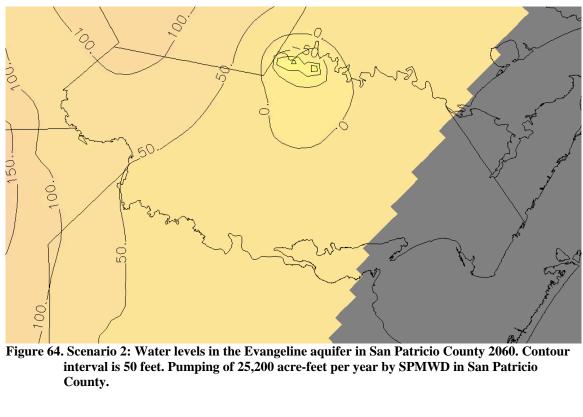


Figure 63. Scenario 2: Water levels in the Evangeline aquifer in San Patricio County 2050. Contour interval is 50 feet. Pumping of 25,200 acre-feet per year by SPMWD in San Patricio County.



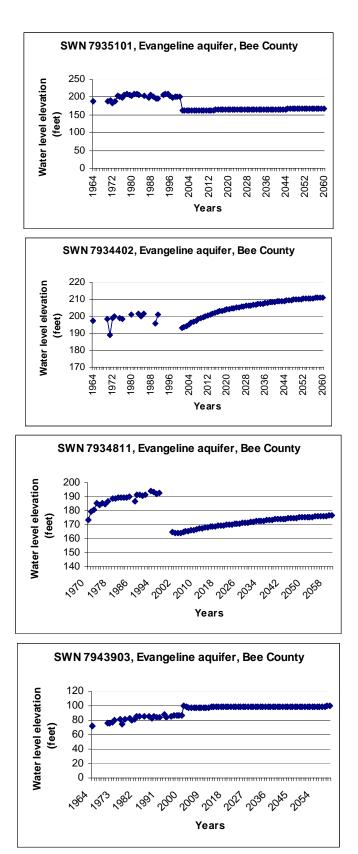
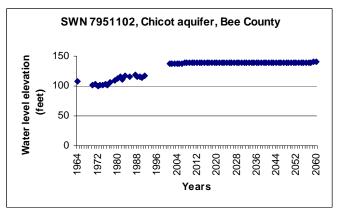
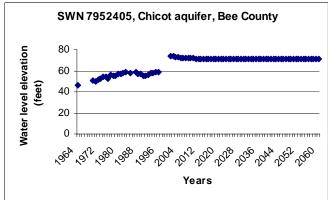
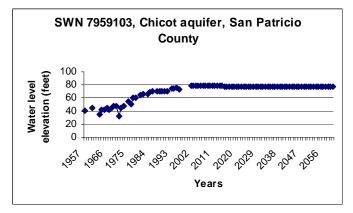


Figure 65. Scenario 2: Water level hydrographs for Bee and San Patricio counties with pumping of 25,200 acre-feet per year by SPMWD in San Patricio County.







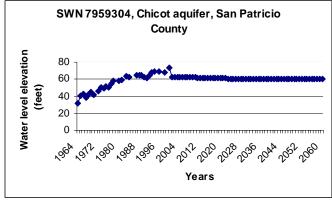


Figure 65. continued.

 $\begin{tabular}{ll} Table 4. Scenario 2: Water budgets with 25,200 acre-feet per year pumping by SPMWD from San Patricio County. \end{tabular}$

Water Budget – 2005		Units acre-feet/ye	ear
Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	452	252	200
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	629	9444	-8816
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	107	6587	-6480
WELLS	0	1602	-1602
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1430	-1430
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6632	7333	-701
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26648	26648	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	50	690	-639
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	3,852	12,016	-8,165
EXCHANGE (UPPER)	6,587	107	6,480
EXCHANGE (LOWER)	332	824	-492
WELLS	0	3,369	-3,369
DRAINS	0	0	0
RECHARGE	4,836	0	4,836
ET	0	470	-470
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0 4.701	2 880	1 820
STREAM LEAKAGE	4,701	2,880	1,820
INTERBED STORAGE RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	20.357	0 20.356	0
DISCREPANCY [%]	20,357	20,356	U
DISCREPANCT [%]	0		

Table 4 continued.

Water Budget 2005 San Patricio County	Chicot Aquifer		
can rather county	omoot Aquilor		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	2,666	127	2,539
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,421	2,892	4,530
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	627	5,404	-4,777
WELLS	0	5,943	-5,943
DRAINS	0	347	-347
RECHARGE	12,061	0	12,061
ET	0	683	-683
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	50	2,775	-2,725
STREAM LEAKAGE	4,017	8,673	-4,655
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26,844	26,843	0
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
·			
FLOW TERM	IN	OUT	IN-OUT
FLOW TERM STORAGE	IN 61	0	61
FLOW TERM STORAGE CONSTANT HEAD	IN 61 0	0 0	61 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 61 0 9,542	0 0 1,324	61 0 8,218
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 61 0 9,542 5,404	0 0 1,324 627	61 0 8,218 4,777
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 61 0 9,542 5,404 665	0 0 1,324 627 3	61 0 8,218 4,777 662
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 61 0 9,542 5,404 665	0 0 1,324 627 3 13,780	61 0 8,218 4,777 662 -13,780
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 61 0 9,542 5,404 665 0	0 0 1,324 627 3 13,780	61 0 8,218 4,777 662 -13,780 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 61 0 9,542 5,404 665 0 0	0 0 1,324 627 3 13,780 0	61 0 8,218 4,777 662 -13,780 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 61 0 9,542 5,404 665 0 0 152	0 0 1,324 627 3 13,780 0 0	61 0 8,218 4,777 662 -13,780 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 61 0 9,542 5,404 665 0 0 152 0	0 0 1,324 627 3 13,780 0 0	61 0 8,218 4,777 662 -13,780 0 152 -12 911
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 61 0 9,542 5,404 665 0 0 152 0 911	0 0 1,324 627 3 13,780 0 0 12 0	61 0 8,218 4,777 662 -13,780 0 152 -12 911 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 61 0 9,542 5,404 665 0 0 152 0 911 0	0 0 1,324 627 3 13,780 0 0 12 0 988	61 0 8,218 4,777 662 -13,780 0 152 -12 911 0 -988
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 61 0 9,542 5,404 665 0 0 152 0 911 0 0 0	0 0 1,324 627 3 13,780 0 0 12 0 988 0	61 0 8,218 4,777 662 -13,780 0 152 -12 911 0 -988 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 61 0 9,542 5,404 665 0 0 152 0 911 0 0 0	0 0 1,324 627 3 13,780 0 0 12 0 988 0	61 0 8,218 4,777 662 -13,780 0 152 -12 911 0 -988 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 61 0 9,542 5,404 665 0 0 152 0 911 0 0 0	0 0 1,324 627 3 13,780 0 0 12 0 988 0	61 0 8,218 4,777 662 -13,780 0 152 -12 911 0 -988 0

Table 4 continued.

Water Budget – 2010

HEAD DEP BOUNDS

INTERBED STORAGE

STREAM LEAKAGE

RESERV. LEAKAGE

SUM OF THE LAYER

DISCREPANCY [%]

Units acre-feet/year

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	228	67	161
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	642	9495	-8853
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	126	6571	-6445
WELLS	0	1605	-1605
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1441	-1441
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6642	7288	-646
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26468	26468	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	29	494	-465
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	3,856	12,082	-8,226
EXCHANGE (UPPER)	6,571	126	6,445
EXCHANGE (LOWER)	313	847	-534
WELLS	0	3,221	-3,221
DRAINS	0	0	0
RECHARGE	4,836	0	4,836
ET	0	467	-467
RIVER LEAKAGE	0	0	0

0

0

0

0

4,611

20,216

0

0

0

2,980

20,217

0 1,631

0

0

-1

Table 4 continued.

Water Budget 2010 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1,671	11	1,660
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,577	2,769	4,808
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	618	5,357	-4,739
WELLS	0	6,013	-6,013
DRAINS	0	344	-344
RECHARGE	12,061	0	12,061
ET	0	677	-677
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	72	2,647	-2,574
STREAM LEAKAGE	4,181	8,361	-4,180
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26,181	26,180	1
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
San Patricio County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
•		out 0	IN-OUT 31
FLOW TERM	IN	_	
FLOW TERM STORAGE	IN 31	0	31
FLOW TERM STORAGE CONSTANT HEAD	IN 31 0	0 0	31 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 31 0 9,590	0 0 1,312	31 0 8,277
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 31 0 9,590 5,357	0 0 1,312 618	31 0 8,277 4,739
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 31 0 9,590 5,357 629	0 0 1,312 618 5	31 0 8,277 4,739 624
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 31 0 9,590 5,357 629 0	0 1,312 618 5 13,742	31 0 8,277 4,739 624 -13,742
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 31 0 9,590 5,357 629 0 0 152	0 0 1,312 618 5 13,742	31 0 8,277 4,739 624 -13,742 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 31 0 9,590 5,357 629 0 0	0 0 1,312 618 5 13,742 0	31 0 8,277 4,739 624 -13,742 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 31 0 9,590 5,357 629 0 0 152 0 915	0 0 1,312 618 5 13,742 0 0 12 0	31 0 8,277 4,739 624 -13,742 0 152 -12 915 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 31 0 9,590 5,357 629 0 152 0 915 0 0	0 0 1,312 618 5 13,742 0 0 12	31 0 8,277 4,739 624 -13,742 0 152 -12 915 0 -983
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 31 0 9,590 5,357 629 0 152 0 915 0 0	0 0 1,312 618 5 13,742 0 0 12 0	31 0 8,277 4,739 624 -13,742 0 152 -12 915 0 -983 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 31 0 9,590 5,357 629 0 0 152 0 915 0 0 0	0 0 1,312 618 5 13,742 0 0 12 0 983 0	31 0 8,277 4,739 624 -13,742 0 152 -12 915 0 -983 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 31 0 9,590 5,357 629 0 152 0 915 0 0	0 1,312 618 5 13,742 0 0 12 0 983 0	31 0 8,277 4,739 624 -13,742 0 152 -12 915 0 -983 0

Table 4 continued.

Water Budget – 2020

DISCREPANCY [%]

Units acrefeet/year

ELOW/TEDM	15.1	OUT	IN OUT
FLOW TERM	IN 405	OUT	IN-OUT
STORAGE	105	44	60
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	642	9532	-8891
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	149	6516	-6368
WELLS	0	1575	-1575
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1448	-1448
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6646	7253	-608
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26370	26370	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
•		OUT	IN-OUT
Bee County FLOW TERM STORAGE	Evangeline Aquifer IN 11	OUT 249	IN-OUT -238
FLOW TERM STORAGE	IN 11	249	-238
FLOW TERM STORAGE CONSTANT HEAD	IN 11 0	249 0	-238 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 11 0 3,842	249 0 12,244	-238 0 -8,402
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 11 0 3,842 6,516	249 0 12,244 149	-238 0 -8,402 6,368
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 11 0 3,842 6,516 284	249 0 12,244 149 862	-238 0 -8,402 6,368 -578
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 11 0 3,842 6,516 284	249 0 12,244 149 862 2,939	-238 0 -8,402 6,368 -578 -2,939
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 11 0 3,842 6,516 284 0	249 0 12,244 149 862 2,939 0	-238 0 -8,402 6,368 -578 -2,939
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 11 0 3,842 6,516 284 0 0 4,836	249 0 12,244 149 862 2,939 0	-238 0 -8,402 6,368 -578 -2,939 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 11 0 3,842 6,516 284 0 0 4,836	249 0 12,244 149 862 2,939 0 0 464	-238 0 -8,402 6,368 -578 -2,939 0 4,836 -464
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 11 0 3,842 6,516 284 0 0 4,836	249 0 12,244 149 862 2,939 0 0 464	-238 0 -8,402 6,368 -578 -2,939 0 4,836 -464
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 11 0 3,842 6,516 284 0 0 4,836 0 0	249 0 12,244 149 862 2,939 0 0 464 0	-238 0 -8,402 6,368 -578 -2,939 0 4,836 -464 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 11 0 3,842 6,516 284 0 0 4,836 0 4,836 0 4,531	249 0 12,244 149 862 2,939 0 0 464 0 0	-238 0 -8,402 6,368 -578 -2,939 0 4,836 -464 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 11 0 3,842 6,516 284 0 0 4,836 0 4,836 0 4,531	249 0 12,244 149 862 2,939 0 0 464 0 0 3,112	-238 0 -8,402 6,368 -578 -2,939 0 4,836 -464 0 0 1,419
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 11 0 3,842 6,516 284 0 0 4,836 0 4,836 0 4,531	249 0 12,244 149 862 2,939 0 0 464 0 0	-238 0 -8,402 6,368 -578 -2,939 0 4,836 -464 0

Chicot Aquifer

0

Table 4 continued.

Water Budget 2020 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1,071	0	1,071
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,766	2,635	5,132
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	618	5,366	-4,748
WELLS	0	6,467	-6,467
DRAINS	0	336	-336
RECHARGE	12,061	0	12,061
ET	0	671	-671
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	110	2,493	-2,383
STREAM LEAKAGE	4,356	8,015	-3,659
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,982	25,982	0
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 0	IN-OUT 26
FLOW TERM STORAGE		OUT 0 0	IN-OUT 26 0
FLOW TERM STORAGE CONSTANT HEAD	IN 26 0	0 0	26 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 26 0 9,660	0	26 0 8,374
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 26 0	0 0 1,286	26 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 26 0 9,660 5,366	0 0 1,286 618	26 0 8,374 4,748 601
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 26 0 9,660 5,366 607	0 0 1,286 618 7	26 0 8,374 4,748
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 26 0 9,660 5,366 607 0	0 0 1,286 618 7 13,842	26 0 8,374 4,748 601 -13,842
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 26 0 9,660 5,366 607 0	0 0 1,286 618 7 13,842	26 0 8,374 4,748 601 -13,842 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 26 0 9,660 5,366 607 0 0	0 0 1,286 618 7 13,842 0	26 0 8,374 4,748 601 -13,842 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 26 0 9,660 5,366 607 0 0 152	0 0 1,286 618 7 13,842 0 0 12 0	26 0 8,374 4,748 601 -13,842 0 152 -12 927 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 26 0 9,660 5,366 607 0 0 152 0 927	0 0 1,286 618 7 13,842 0 0	26 0 8,374 4,748 601 -13,842 0 152 -12 927
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 26 0 9,660 5,366 607 0 0 152 0 927 0	0 0 1,286 618 7 13,842 0 0 12 0	26 0 8,374 4,748 601 -13,842 0 152 -12 927 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 26 0 9,660 5,366 607 0 152 0 927 0 0 0	0 0 1,286 618 7 13,842 0 0 12 0 0 974 0	26 0 8,374 4,748 601 -13,842 0 152 -12 927 0 -974
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 26 0 9,660 5,366 607 0 0 152 0 927 0 0 0	0 0 1,286 618 7 13,842 0 0 12 0 0 974	26 0 8,374 4,748 601 -13,842 0 152 -12 927 0 -974

Table 4 continued.

Water Budget – 2030 Units acrefeet/year

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	27	93	-66
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	645	9578	-8934
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	114	6485	-6371
WELLS	0	1262	-1262
DRAINS	0	0	0
RECHARGE	18782	0	18782
ET	0	1474	-1474
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6663	7340	-677
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER DISCREPANCY [%]	26232 0	26232	0
	· ·		
Des Countr	Francisco Acrifor		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
FLOW TERM STORAGE	-	OUT 222	IN-OUT -221
FLOW TERM STORAGE CONSTANT HEAD	IN	222 0	-221 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 1 0 3,840	222 0 12,333	-221 0 -8,493
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 1 0 3,840 6,485	222 0 12,333 114	-221 0 -8,493 6,371
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 1 0 3,840 6,485 259	222 0 12,333 114 880	-221 0 -8,493 6,371 -621
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 1 0 3,840 6,485 259 0	222 0 12,333 114 880 2,680	-221 0 -8,493 6,371 -621 -2,680
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 1 0 3,840 6,485 259 0	222 0 12,333 114 880 2,680 0	-221 0 -8,493 6,371 -621 -2,680 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 1 0 3,840 6,485 259 0 0 4,882	222 0 12,333 114 880 2,680 0	-221 0 -8,493 6,371 -621 -2,680 0 4,882
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 1 0 3,840 6,485 259 0 4,882	222 0 12,333 114 880 2,680 0 0	-221 0 -8,493 6,371 -621 -2,680 0 4,882 -465
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 1 0 3,840 6,485 259 0 4,882 0 0	222 0 12,333 114 880 2,680 0 0 465	-221 0 -8,493 6,371 -621 -2,680 0 4,882 -465
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 1 0 3,840 6,485 259 0 0 4,882 0 0	222 0 12,333 114 880 2,680 0 0 465 0	-221 0 -8,493 6,371 -621 -2,680 0 4,882 -465 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 1 0 3,840 6,485 259 0 0 4,882 0 0 4,449	222 0 12,333 114 880 2,680 0 0 465 0 0 3,222	-221 0 -8,493 6,371 -621 -2,680 0 4,882 -465 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 1 0 3,840 6,485 259 0 4,882 0 0 4,449 0	222 0 12,333 114 880 2,680 0 0 465 0 0 3,222 0	-221 0 -8,493 6,371 -621 -2,680 0 4,882 -465 0 0 1,226
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 1 0 3,840 6,485 259 0 4,882 0 0 4,449 0	222 0 12,333 114 880 2,680 0 0 465 0 0 3,222 0 0	-221 0 -8,493 6,371 -621 -2,680 0 4,882 -465 0 0 1,226
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 1 0 3,840 6,485 259 0 4,882 0 0 4,449 0	222 0 12,333 114 880 2,680 0 0 465 0 0 3,222 0	-221 0 -8,493 6,371 -621 -2,680 0 4,882 -465 0 0 1,226

Table 4 continued.

Water Budget 2030 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	533	0	532
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,909	2,525	5,384
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	628	5,321	-4,694
WELLS	0	6,544	-6,544
DRAINS	0	329	-329
RECHARGE	12,061	0	12,061
ET	0	668	-668
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	126	2,446	-2,320
STREAM LEAKAGE	4,405	7,827	-3,423
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,661	25,661	1
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
-		OUT	IN-OUT
FLOW TERM	Evangeline Aquifer IN 9	OUT 1	IN-OUT 8
-	IN		
FLOW TERM STORAGE	IN 9 0	1 0	8 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 9 0 9,694	1	8 0 8,418
FLOW TERM STORAGE CONSTANT HEAD	IN 9 0	1 0 1,276	8 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 9 0 9,694 5,321	1 0 1,276 628	8 0 8,418 4,694
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 9 0 9,694 5,321 586	1 0 1,276 628 7	8 0 8,418 4,694 579
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 9 0 9,694 5,321 586 0	1 0 1,276 628 7 13,798	8 0 8,418 4,694 579 -13,798
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 9 0 9,694 5,321 586 0	1 0 1,276 628 7 13,798 0	8 0 8,418 4,694 579 -13,798
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 9 0 9,694 5,321 586 0 0	1 0 1,276 628 7 13,798 0	8 0 8,418 4,694 579 -13,798 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 9 0 9,694 5,321 586 0 0 152	1 0 1,276 628 7 13,798 0 0	8 0 8,418 4,694 579 -13,798 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 9 0 9,694 5,321 586 0 0 152 0 931	1 0 1,276 628 7 13,798 0 0	8 0 8,418 4,694 579 -13,798 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 9 0 9,694 5,321 586 0 0 152 0 931 0	1 0 1,276 628 7 13,798 0 0 12	8 0 8,418 4,694 579 -13,798 0 152 -12 931 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 9 0 9,694 5,321 586 0 0 152 0 931 0 0	1 0 1,276 628 7 13,798 0 0 12 0 0	8 0 8,418 4,694 579 -13,798 0 152 -12 931 0 -972
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 9 0 9,694 5,321 586 0 0 152 0 931 0 0	1 0 1,276 628 7 13,798 0 0 12 0 0 972	8 0 8,418 4,694 579 -13,798 0 152 -12 931 0 -972

Table 4 continued.

Water Budget – 2040

STREAM LEAKAGE

INTERBED STORAGE

RESERV. LEAKAGE

SUM OF THE LAYER

DISCREPANCY [%]

Units acrefeet/year

3,327

19,796

0

0

1,057

0

0

-1

FLOW TERM	IN	OUT	IN-OUT
STORAGE	8	51	-44
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	649	9610	-8961
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	118	6441	-6323
WELLS	0	1211	-1211
DRAINS	0	0	0
RECHARGE	18782	0	18782
ET	0	1486	-1486
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6682	7441	-759
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26240	26240	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	0	166	-165
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	3,846	12,385	-8,539
EXCHANGE (UPPER)	6,441	118	6,323
EXCHANGE (LOWER)	241	893	-652
WELLS	0	2,437	-2,437
DRAINS	0	0	0
RECHARGE	4,882	0	4,882
ET	0	469	-469
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0

Chicot Aquifer

4,384

19,795

0

0

Table 4 continued.

Water Budget 2040 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	263	4	259
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,991	2,455	5,536
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	638	5,288	-4,650
WELLS	0	6,588	-6,588
DRAINS	0	324	-324
RECHARGE	12,061	0	12,061
ET	0	666	-666
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	133	2,445	-2,312
STREAM LEAKAGE	4,415	7,731	-3,316
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,500	25,501	0
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 3	IN-OUT
FLOW TERM STORAGE	IN 5	3	2
FLOW TERM STORAGE CONSTANT HEAD	IN 5 0	3	2
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 5 0 9,714	3	2 0 8,443
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 5 0	3 0 1,271	2
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 5 0 9,714 5,288	3 0 1,271 638	2 0 8,443 4,650 558
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 5 0 9,714 5,288 565	3 0 1,271 638 8	2 0 8,443 4,650
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 5 0 9,714 5,288 565 0	3 0 1,271 638 8 13,751	2 0 8,443 4,650 558 -13,751
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 5 0 9,714 5,288 565 0	3 0 1,271 638 8 13,751	2 0 8,443 4,650 558 -13,751
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 5 0 9,714 5,288 565 0 0 152	3 0 1,271 638 8 13,751 0	2 0 8,443 4,650 558 -13,751 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 5 0 9,714 5,288 565 0 0 152	3 0 1,271 638 8 13,751 0 0	2 0 8,443 4,650 558 -13,751 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 5 0 9,714 5,288 565 0 0 152 0 931	3 0 1,271 638 8 13,751 0 0 12	2 0 8,443 4,650 558 -13,751 0 152 -12 931
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 5 0 9,714 5,288 565 0 0 152 0 931 0	3 0 1,271 638 8 13,751 0 0 12 0	2 0 8,443 4,650 558 -13,751 0 152 -12 931 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 5 0 9,714 5,288 565 0 0 152 0 931 0 0 0	3 0 1,271 638 8 13,751 0 0 12 0 0 973	2 0 8,443 4,650 558 -13,751 0 152 -12 931 0 -973 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 5 0 9,714 5,288 565 0 0 152 0 931 0 0 0	3 0 1,271 638 8 13,751 0 0 12 0 0 973	2 0 8,443 4,650 558 -13,751 0 152 -12 931 0 -973

Table 4 continued.

Water Budget – 2050

Units acre-feet/year

FLOW TERM	IN	OUT	IN-OUT
STORAGE	3	35	-33
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	653	9640	-8987
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	126	6404	-6278
WELLS	0	1169	-1169
DRAINS	0	0	0
RECHARGE	18782	0	18782
ET	0	1490	-1490
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6685	7510	-824
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26248	26248	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
•	- ,	OUT 131	IN-OUT -131
FLOW TERM	IN		
FLOW TERM STORAGE	IN 0	131	-131
FLOW TERM STORAGE CONSTANT HEAD	IN 0 0	131 0	-131 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 0 0 3,849	131 0 12,438	-131 0 -8,589
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 0 0 3,849 6,404	131 0 12,438 126	-131 0 -8,589 6,278
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 0 0 3,849 6,404 228	131 0 12,438 126 896	-131 0 -8,589 6,278 -668
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 0 0 3,849 6,404 228 0	131 0 12,438 126 896 2,227	-131 0 -8,589 6,278 -668 -2,227
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 0 0 3,849 6,404 228 0 0	131 0 12,438 126 896 2,227 0	-131 0 -8,589 6,278 -668 -2,227
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 0 0 3,849 6,404 228 0 0 4,882	131 0 12,438 126 896 2,227 0	-131 0 -8,589 6,278 -668 -2,227 0 4,882
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 0 0 3,849 6,404 228 0 4,882	131 0 12,438 126 896 2,227 0 0 474	-131 0 -8,589 6,278 -668 -2,227 0 4,882 -474
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 0 0 3,849 6,404 228 0 0 4,882 0 0	131 0 12,438 126 896 2,227 0 0 474	-131 0 -8,589 6,278 -668 -2,227 0 4,882 -474
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 0 0 3,849 6,404 228 0 0 4,882 0 0 0	131 0 12,438 126 896 2,227 0 0 474 0	-131 0 -8,589 6,278 -668 -2,227 0 4,882 -474 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 0 0 3,849 6,404 228 0 4,882 0 4,882 0 4,335	131 0 12,438 126 896 2,227 0 0 474 0 0 3,406	-131 0 -8,589 6,278 -668 -2,227 0 4,882 -474 0 0 929
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 3,849 6,404 228 0 4,882 0 4,882 0 4,335	131 0 12,438 126 896 2,227 0 0 474 0 0 3,406	-131 0 -8,589 6,278 -668 -2,227 0 4,882 -474 0 0 929
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 0 0 3,849 6,404 228 0 4,882 0 4,882 0 4,335 0 0 0	131 0 12,438 126 896 2,227 0 0 474 0 0 3,406	-131 0 -8,589 6,278 -668 -2,227 0 4,882 -474 0 0 929 0

Chicot Aquifer

Table 4 continued.

Water Budget 2050 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	200	6	194
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	8,070	2,409	5,660
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	651	5,271	-4,620
WELLS	0	6,755	-6,755
DRAINS	0	321	-321
RECHARGE	12,061	0	12,061
ET	0	664	-664
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	140	2,449	-2,310
STREAM LEAKAGE	4,417	7,662	-3,245
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,539	25,538	1
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 2	IN-OUT 3
FLOW TERM STORAGE			IN-OUT 3 0
FLOW TERM STORAGE CONSTANT HEAD	IN 5 0	2 0	3 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 5 0 9,728	2	3 0 8,464
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 5 0	2 0 1,264	3 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 5 0 9,728 5,271	2 0 1,264 651	3 0 8,464 4,620
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 5 0 9,728 5,271 547	2 0 1,264 651 8	3 0 8,464 4,620 539
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 5 0 9,728 5,271 547 0	2 0 1,264 651 8 13,727	3 0 8,464 4,620 539 -13,727
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 5 0 9,728 5,271 547 0	2 0 1,264 651 8 13,727	3 0 8,464 4,620 539 -13,727
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 5 0 9,728 5,271 547 0 0 152	2 0 1,264 651 8 13,727 0	3 0 8,464 4,620 539 -13,727 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 5 0 9,728 5,271 547 0 0 152	2 0 1,264 651 8 13,727 0 0	3 0 8,464 4,620 539 -13,727 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 5 0 9,728 5,271 547 0 0 152 0 934	2 0 1,264 651 8 13,727 0 0 12	3 0 8,464 4,620 539 -13,727 0 152 -12 934
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 5 0 9,728 5,271 547 0 0 152 0 934 0	2 0 1,264 651 8 13,727 0 0 12 0	3 0 8,464 4,620 539 -13,727 0 152 -12 934 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 5 0 9,728 5,271 547 0 0 152 0 934 0 0 0	2 0 1,264 651 8 13,727 0 0 12 0 973 0	3 0 8,464 4,620 539 -13,727 0 152 -12 934 0 -973 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 5 0 9,728 5,271 547 0 0 152 0 934 0 0 0	2 0 1,264 651 8 13,727 0 0 12 0 0 973	3 0 8,464 4,620 539 -13,727 0 152 -12 934 0 -973

Table 4 continued.

Water Budget – 2060 Units acrefeet/year

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	2	32	-30
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	656	9,667	-9,011
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	134	6,371	-6,238
WELLS	0	1,135	-1,135
DRAINS	0	0	0
RECHARGE	18,782	0	18,782
ET	0	1,492	-1,492
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6,689	7,565	-877
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26,262	26,263	-1
DISCREPANCY [%]	0		
Bee County	Evangeline Aguifer		
Bee County	Evangeline Aquifer		
FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
•		OUT 114	IN-OUT -114
FLOW TERM STORAGE CONSTANT HEAD	IN 0 0	114 0	-114 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 0 0 3,851	114 0 12,483	-114 0 -8,631
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 0 0 3,851 6,371	114 0 12,483 134	-114 0 -8,631 6,238
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 0 0 3,851 6,371 218	114 0 12,483 134 896	-114 0 -8,631 6,238 -678
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 0 0 3,851 6,371 218 0	114 0 12,483 134 896 2,043	-114 0 -8,631 6,238 -678 -2,043
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 0 0 3,851 6,371 218 0 0	114 0 12,483 134 896 2,043 0	-114 0 -8,631 6,238 -678 -2,043 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 0 0 3,851 6,371 218 0 0 4,882	114 0 12,483 134 896 2,043 0	-114 0 -8,631 6,238 -678 -2,043 0 4,882
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 0 0 3,851 6,371 218 0 0 4,882 0	114 0 12,483 134 896 2,043 0 0	-114 0 -8,631 6,238 -678 -2,043 0 4,882 -480
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 0 0 3,851 6,371 218 0 0 4,882 0 0	114 0 12,483 134 896 2,043 0 0 480	-114 0 -8,631 6,238 -678 -2,043 0 4,882 -480
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 0 0 3,851 6,371 218 0 0 4,882 0 0	114 0 12,483 134 896 2,043 0 0 480 0	-114 0 -8,631 6,238 -678 -2,043 0 4,882 -480 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 0 0 3,851 6,371 218 0 0 4,882 0 4,882 0 4,293	114 0 12,483 134 896 2,043 0 0 480 0 0 3,471	-114 0 -8,631 6,238 -678 -2,043 0 4,882 -480 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 3,851 6,371 218 0 0 4,882 0 0 4,882 0 4,293 0	114 0 12,483 134 896 2,043 0 0 480 0 0 3,471	-114 0 -8,631 6,238 -678 -2,043 0 4,882 -480 0 0 822
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 0 0 3,851 6,371 218 0 0 4,882 0 4,882 0 4,293 0 0	114 0 12,483 134 896 2,043 0 0 480 0 3,471 0	-114 0 -8,631 6,238 -678 -2,043 0 4,882 -480 0 0 822 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 3,851 6,371 218 0 0 4,882 0 0 4,882 0 4,293 0	114 0 12,483 134 896 2,043 0 0 480 0 0 3,471	-114 0 -8,631 6,238 -678 -2,043 0 4,882 -480 0 0 822

Table 4 continued.

Water Budget 2060 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	196	8	188
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	8,141	2,397	5,745
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	669	5,272	-4,603
WELLS	0	6,946	-6,946
DRAINS	0	318	-318
RECHARGE	12,061	0	12,061
ET	0	662	-662
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	148	2,440	-2,292
STREAM LEAKAGE	4,435	7,605	-3,170
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,650	25,649	2
DISCREPANCY [%]	0.01		
San Patricio County	Evangeline Aquifer		
San Patricio County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
-	-	OUT 2	IN-OUT 3
FLOW TERM	in .		
FLOW TERM STORAGE	IN 5	2	3
FLOW TERM STORAGE CONSTANT HEAD	IN 5 0	2 0	3 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 5 0 9,750	2 0 1,256	3 0 8,494
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 5 0 9,750 5,272	2 0 1,256 669	3 0 8,494 4,603
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 5 0 9,750 5,272 530	2 0 1,256 669 8	3 0 8,494 4,603 522
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 5 0 9,750 5,272 530 0	2 0 1,256 669 8 13,726	3 0 8,494 4,603 522 -13,726
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 5 0 9,750 5,272 530 0	2 0 1,256 669 8 13,726	3 0 8,494 4,603 522 -13,726
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 5 0 9,750 5,272 530 0 0 152	2 0 1,256 669 8 13,726 0	3 0 8,494 4,603 522 -13,726 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 5 0 9,750 5,272 530 0 0 152	2 0 1,256 669 8 13,726 0 0	3 0 8,494 4,603 522 -13,726 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 5 0 9,750 5,272 530 0 152 0 937	2 0 1,256 669 8 13,726 0 0	3 0 8,494 4,603 522 -13,726 0 152 -12 937
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 5 0 9,750 5,272 530 0 0 152 0 937	2 0 1,256 669 8 13,726 0 0 12	3 0 8,494 4,603 522 -13,726 0 152 -12 937 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 5 0 9,750 5,272 530 0 0 152 0 937 0 0 0	2 0 1,256 669 8 13,726 0 0 12 0 972 0	3 0 8,494 4,603 522 -13,726 0 152 -12 937 0 -972
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 5 0 9,750 5,272 530 0 0 152 0 937 0 0 0	2 0 1,256 669 8 13,726 0 0 12 0 0 972	3 0 8,494 4,603 522 -13,726 0 152 -12 937 0 -972

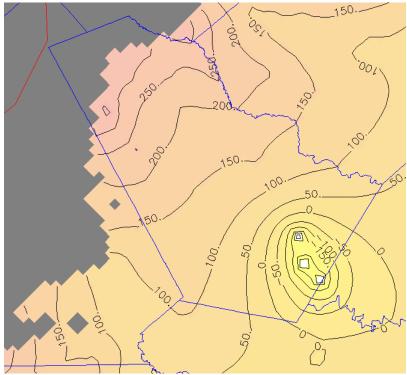


Figure 66. Scenario 3: Water levels in the Evangeline aquifer in Bee County 2005 with combined 45,000 acre-feet per year pumping by SPMWD in Bee County. Contour interval is 50 feet.

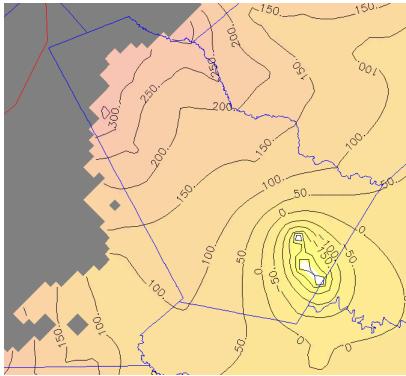


Figure 67. Scenario 3: Water levels in the Evangeline aquifer in Bee County 2010 with combined 45,000 acre-feet per year pumping by SPMWD in Bee County Contour interval is 50 feet.

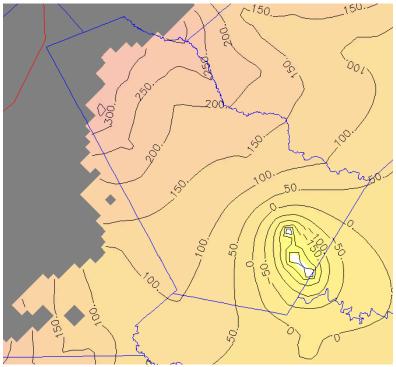


Figure 68. Scenario 3: Water levels in the Evangeline aquifer in Bee County 2020 with combined 45,000 acre-feet per year pumping by SPMWD in Bee County. Contour interval is 50 feet.

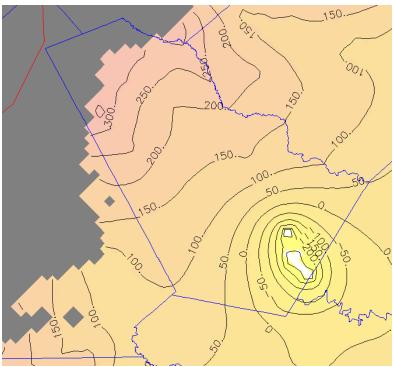


Figure 69. Scenario 3: Water levels in the Evangeline aquifer in Bee County 2030 with combined 45,000 acre-feet per year pumping by SPMWD in Bee County. Contour interval is 50 feet.

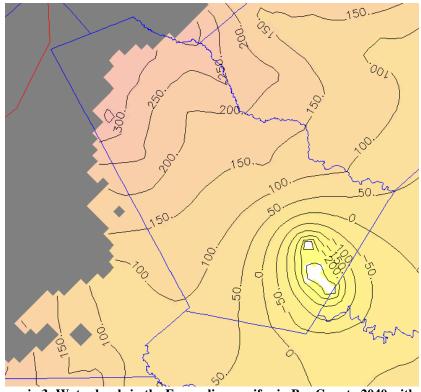


Figure 70. Scenario 3: Water levels in the Evangeline aquifer in Bee County 2040 with combined 45,000 acre-feet per year pumping by SPMWD in Bee County. Contour interval is 50 feet.

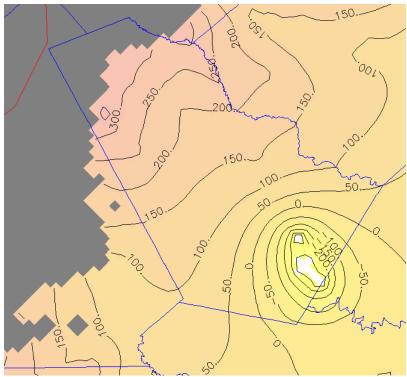


Figure 71. Scenario 3: Water levels in the Evangeline aquifer in Bee County 2050 with combined 45,000 acre-feet per year pumping by SPMWD in Bee County. Contour interval is 50 feet.

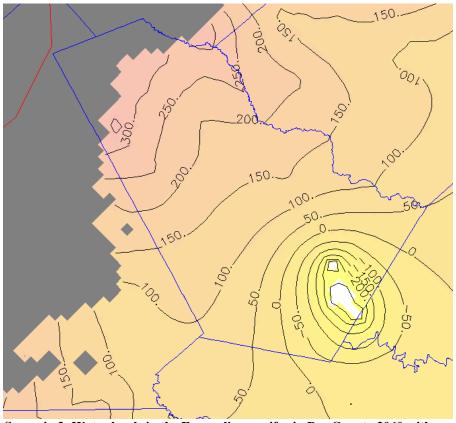
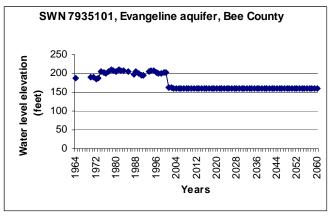
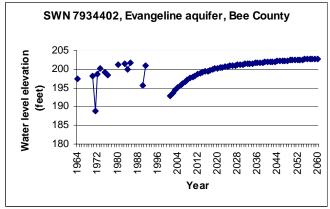
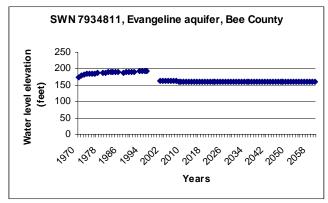


Figure 72. Scenario 3: Water levels in the Evangeline aquifer in Bee County 2060 with combined 45,000 acre-feet per year pumping by SPMWD in Bee County. Contour interval is 50 feet.







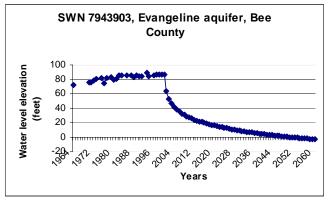
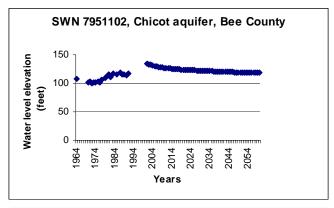
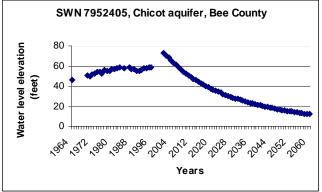
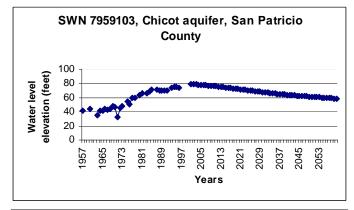


Figure 73. Scenario 3: Hydrographs of Bee and San Patricio counties with 45,000 acre-feet per year combined pumping by SPMWD in Bee County.







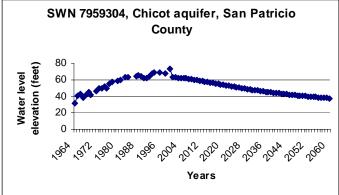


Figure 73 Continued.

Table 5. Scenario 3: Water budgets for Bee and San Patricio counties with 45,000 acre-feet per year combined pumping by SPMWD in Bee County.

Water Budget 2005	Units acre-feet/year
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Trator Buagot 2000		Critic dolo loca your	
Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	9,353	1	9,352
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	896	6,922	-6,025
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	15	24,304	-24,289
WELLS	0	1,602	-1,602
DRAINS	0	0	0
RECHARGE	18,829	0	18,829
ET	0	1,145	-1,145
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7,216	2,337	4,878
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	36,309	36,311	-2
DISCREPANCY [%]	-0.01		
Bee County	Evangeline Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	117		
	3 152		
	3,152	477	2,675
CONSTANT HEAD	0	477 0	2,675 0
CONSTANT HEAD HORIZ. EXCHANGE	0 17,785	477 0 6,062	2,675 0 11,723
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	0 17,785 24,304	477 0 6,062 15	2,675 0 11,723 24,289
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	0 17,785 24,304 2,002	477 0 6,062 15 713	2,675 0 11,723 24,289 1,289
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	0 17,785 24,304 2,002	477 0 6,062 15 713 48,369	2,675 0 11,723 24,289 1,289 -48,369
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	0 17,785 24,304 2,002 0 0	477 0 6,062 15 713 48,369 0	2,675 0 11,723 24,289 1,289 -48,369 0
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	0 17,785 24,304 2,002 0 0 4,836	477 0 6,062 15 713 48,369 0	2,675 0 11,723 24,289 1,289 -48,369 0 4,836
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	0 17,785 24,304 2,002 0 0 4,836	477 0 6,062 15 713 48,369 0 0	2,675 0 11,723 24,289 1,289 -48,369 0 4,836 -469
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	0 17,785 24,304 2,002 0 0 4,836 0	477 0 6,062 15 713 48,369 0 0 469	2,675 0 11,723 24,289 1,289 -48,369 0 4,836
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	0 17,785 24,304 2,002 0 0 4,836 0 0	477 0 6,062 15 713 48,369 0 0 469 0	2,675 0 11,723 24,289 1,289 -48,369 0 4,836 -469 0
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	0 17,785 24,304 2,002 0 0 4,836 0	477 0 6,062 15 713 48,369 0 0 469	2,675 0 11,723 24,289 1,289 -48,369 0 4,836 -469
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	0 17,785 24,304 2,002 0 0 4,836 0 0 0	477 0 6,062 15 713 48,369 0 0 469 0	2,675 0 11,723 24,289 1,289 -48,369 0 4,836 -469 0 0 4,028
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	0 17,785 24,304 2,002 0 0 4,836 0 0 0 6,616	477 0 6,062 15 713 48,369 0 0 469 0 2,588	2,675 0 11,723 24,289 1,289 -48,369 0 4,836 -469 0 0 4,028
CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	0 17,785 24,304 2,002 0 4,836 0 0 0 6,616	477 0 6,062 15 713 48,369 0 0 469 0 2,588	2,675 0 11,723 24,289 1,289 -48,369 0 4,836 -469 0 0 4,028

Table 5 continued.

Water Budget – 2005	
San Patricio County	Chicot Aquifer

FLOW TERM	IN	OUT	IN-OUT
STORAGE	4,476	68	4,409
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	6,084	3,011	3,073
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	524	4,953	-4,429
WELLS	0	5,943	-5,943
DRAINS	0	346	-346
RECHARGE	12,061	0	12,061
ET	0	681	-681
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	51	2,766	-2,715
STREAM LEAKAGE	2,914	8,342	-5,428
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	26,110	26,108	2
DISCREPANCY [%]	0.01		

San Patricio County Evangeline Aquifer

IN	OUT	IN-OUT
184	0	184
0	0	0
1,634	4,420	-2,786
4,953	524	4,429
665	0	665
0	2,580	-2,580
0	0	0
152	0	152
0	12	-12
928	0	928
0	0	0
0	980	-980
0	0	0
0	0	0
8,516	8,515	0
0.01		
	184 0 1,634 4,953 665 0 0 152 0 928 0 0 0	184 0 0 0 1,634 4,420 4,953 524 665 0 0 2,580 0 0 152 0 0 12 928 0 0 0 0 980 0 0 0 0 0 0 0 0 8,516 8,515

Table 5 continued.

Water Budget -- 2010

Units acrefeet/year

FLOW TERM	IN	OUT	IN-OUT
STORAGE	7706	0	7706
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	1264	6028	-4764
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	30	24429	-24399
WELLS	0	1605	-1605
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1046	-1046
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	6887	1603	5284
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	34716	34712	4
DISCREPANCY [%]	0.01		
Bee County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 263	IN-OUT 1.242
FLOW TERM STORAGE	IN 1,505	263	1,242
FLOW TERM STORAGE CONSTANT HEAD	IN 1,505 0	263 0	1,242 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 1,505 0 18,637	263 0 6,033	1,242 0 12,604
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 1,505 0 18,637 24,429	263 0	1,242 0 12,604 24,399
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 1,505 0 18,637	263 0 6,033 30 709	1,242 0 12,604 24,399 1,344
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 1,505 0 18,637 24,429 2,053	263 0 6,033 30	1,242 0 12,604 24,399
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 1,505 0 18,637 24,429 2,053 0	263 0 6,033 30 709 48,221	1,242 0 12,604 24,399 1,344 -48,221
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 1,505 0 18,637 24,429 2,053	263 0 6,033 30 709 48,221 0	1,242 0 12,604 24,399 1,344 -48,221
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 1,505 0 18,637 24,429 2,053 0 0 4,836	263 0 6,033 30 709 48,221 0	1,242 0 12,604 24,399 1,344 -48,221 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 1,505 0 18,637 24,429 2,053 0 0 4,836	263 0 6,033 30 709 48,221 0 0	1,242 0 12,604 24,399 1,344 -48,221 0 4,836 -466
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 1,505 0 18,637 24,429 2,053 0 0 4,836	263 0 6,033 30 709 48,221 0 0 466	1,242 0 12,604 24,399 1,344 -48,221 0 4,836 -466
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 1,505 0 18,637 24,429 2,053 0 0 4,836 0	263 0 6,033 30 709 48,221 0 0 466 0	1,242 0 12,604 24,399 1,344 -48,221 0 4,836 -466 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 1,505 0 18,637 24,429 2,053 0 4,836 0 0 6,866	263 0 6,033 30 709 48,221 0 0 466 0 0	1,242 0 12,604 24,399 1,344 -48,221 0 4,836 -466 0 0 4,285
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 1,505 0 18,637 24,429 2,053 0 4,836 0 0 6,866 0	263 0 6,033 30 709 48,221 0 0 466 0 0 2,581	1,242 0 12,604 24,399 1,344 -48,221 0 4,836 -466 0 0 4,285
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 1,505 0 18,637 24,429 2,053 0 4,836 0 0 6,866 0 0	263 0 6,033 30 709 48,221 0 0 466 0 0 2,581	1,242 0 12,604 24,399 1,344 -48,221 0 4,836 -466 0 0 4,285

Chicot Aquifer

Table 5 continued.

Water Budget 2010 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	4,182	0	4,182
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	5,812	3,078	2,734
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	497	5,114	-4,617
WELLS	0	6,013	-6,013
DRAINS	0	343	-343
RECHARGE	12,061	0	12,061
ET	0	672	-672
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	73	2,636	-2,562
STREAM LEAKAGE	2,950	7,717	-4,767
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,576	25,573	3
DISCREPANCY [%]	0.01		
San Patricio County	Evangeline Aquifer		
·		OUT	IN-OUT
FLOW TERM	IN	OUT	IN-OUT 119
FLOW TERM STORAGE	IN 119	0	119
FLOW TERM STORAGE CONSTANT HEAD	IN 119 0	0 0	119 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 119 0 1,671	0 0 4,640	119 0 -2,969
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 119 0 1,671 5,114	0 0	119 0 -2,969 4,617
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 119 0 1,671	0 0 4,640 497 0	119 0 -2,969 4,617 666
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 119 0 1,671 5,114 666	0 0 4,640 497	119 0 -2,969 4,617
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 119 0 1,671 5,114 666 0	0 4,640 497 0 2,542	119 0 -2,969 4,617 666 -2,542
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 119 0 1,671 5,114 666 0	0 4,640 497 0 2,542	119 0 -2,969 4,617 666 -2,542
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 119 0 1,671 5,114 666 0 0	0 4,640 497 0 2,542 0	119 0 -2,969 4,617 666 -2,542 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 119 0 1,671 5,114 666 0 0 152	0 4,640 497 0 2,542 0 0	119 0 -2,969 4,617 666 -2,542 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 119 0 1,671 5,114 666 0 0 152 0	0 0 4,640 497 0 2,542 0 0 12	119 0 -2,969 4,617 666 -2,542 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 119 0 1,671 5,114 666 0 0 152 0 943 0	0 4,640 497 0 2,542 0 0 12 0	119 0 -2,969 4,617 666 -2,542 0 152 -12 943 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 119 0 1,671 5,114 666 0 0 152 0 943 0 0 0	0 4,640 497 0 2,542 0 0 12 0 0 972	119 0 -2,969 4,617 666 -2,542 0 152 -12 943 0 -972 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 119 0 1,671 5,114 666 0 0 152 0 943 0 0 0	0 0 4,640 497 0 2,542 0 0 12 0 0 972 0	119 0 -2,969 4,617 666 -2,542 0 152 -12 943 0 -972

Table 5 continued.

Water Budget -- 2020

Chicot Aquifer

Units acrefeet/year

FLOW TERM	IN	OUT	IN-OUT
STORAGE	4,715	55	4,659
CONSTANT HEAD	4,713	0	4,039
HORIZ. EXCHANGE	1,638	5,101	-3,464
EXCHANGE (UPPER)	0	0,101	0,404
EXCHANGE (LOWER)	0	23,911	-23,911
WELLS	0	871	-871
DRAINS	0	0	0
RECHARGE	18,736	0	18,736
ET	0	946	-946
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7,059	1,265	5,794
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	32,147	32,150	-3
DISCREPANCY [%]	-0.01		
Bee County	Evangeline Aquifer		
•		OUT	IN OUT
FLOW TERM	IN	OUT	IN-OUT
FLOW TERM STORAGE	IN 747	103	644
FLOW TERM STORAGE CONSTANT HEAD	IN 747 0	103	644
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 747 0 19,372	103 0 6,097	644 0 13,276
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 747 0 19,372 23,911	103 0 6,097 0	644 0 13,276 23,911
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 747 0 19,372 23,911 1,966	103 0 6,097 0 717	644 0 13,276 23,911 1,249
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 747 0 19,372 23,911	103 0 6,097 0	644 0 13,276 23,911
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 747 0 19,372 23,911 1,966	103 0 6,097 0 717 47,939	644 0 13,276 23,911 1,249 -47,939
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 747 0 19,372 23,911 1,966 0	103 0 6,097 0 717 47,939 0	644 0 13,276 23,911 1,249 -47,939
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 747 0 19,372 23,911 1,966 0 0 4,929	103 0 6,097 0 717 47,939 0	644 0 13,276 23,911 1,249 -47,939 0 4,929
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 747 0 19,372 23,911 1,966 0 4,929 0	103 0 6,097 0 717 47,939 0 0	644 0 13,276 23,911 1,249 -47,939 0 4,929 -463
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 747 0 19,372 23,911 1,966 0 4,929 0	103 0 6,097 0 717 47,939 0 0 463	644 0 13,276 23,911 1,249 -47,939 0 4,929 -463 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 747 0 19,372 23,911 1,966 0 4,929 0 0 0	103 0 6,097 0 717 47,939 0 0 463 0	644 0 13,276 23,911 1,249 -47,939 0 4,929 -463 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 747 0 19,372 23,911 1,966 0 4,929 0 0 7,016 0 0	103 0 6,097 0 717 47,939 0 0 463 0 0 2,615 0	644 0 13,276 23,911 1,249 -47,939 0 4,929 -463 0 0 4,401
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 747 0 19,372 23,911 1,966 0 4,929 0 0 7,016	103 0 6,097 0 717 47,939 0 0 463 0 0 2,615	644 0 13,276 23,911 1,249 -47,939 0 4,929 -463 0 0 4,401

Table 5 continued.

Water Budget 2020 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	3,779	0	3,779
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	5,671	3,142	2,528
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	473	5,226	-4,753
WELLS	0	6,467	-6,467
DRAINS	0	329	-329
RECHARGE	12,061	0	12,061
ET	0	659	-659
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	115	2,445	-2,330
STREAM LEAKAGE	3,019	6,851	-3,832
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25,117	25,119	-1
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 0	IN-OUT 98
FLOW TERM STORAGE		_	IN-OUT 98 0
FLOW TERM	IN 98 0	0 0	98 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 98	0	98 0 -3,055
FLOW TERM STORAGE CONSTANT HEAD	IN 98 0 1,756	0 0 4,811	98 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 98 0 1,756 5,226	0 0 4,811 473	98 0 -3,055 4,753
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 98 0 1,756 5,226 697	0 0 4,811 473 0	98 0 -3,055 4,753 697
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 98 0 1,756 5,226 697 0	0 4,811 473 0 2,642	98 0 -3,055 4,753 697 -2,642
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 98 0 1,756 5,226 697 0	0 4,811 473 0 2,642	98 0 -3,055 4,753 697 -2,642
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 98 0 1,756 5,226 697 0 0 152	0 4,811 473 0 2,642 0	98 0 -3,055 4,753 697 -2,642 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 98 0 1,756 5,226 697 0 0 152 0	0 4,811 473 0 2,642 0 0	98 0 -3,055 4,753 697 -2,642 0 152 -11
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	98 0 1,756 5,226 697 0 0 152 0	0 0 4,811 473 0 2,642 0 0 11	98 0 -3,055 4,753 697 -2,642 0 152 -11
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	98 0 1,756 5,226 697 0 0 152 0 967	0 0 4,811 473 0 2,642 0 0 11	98 0 -3,055 4,753 697 -2,642 0 152 -11 967 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 98 0 1,756 5,226 697 0 0 152 0 967 0 0	0 0 4,811 473 0 2,642 0 0 11 0 0 957 0	98 0 -3,055 4,753 697 -2,642 0 152 -11 967 0 -957
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 98 0 1,756 5,226 697 0 0 152 0 967 0 0	0 4,811 473 0 2,642 0 0 11 0 0 957	98 0 -3,055 4,753 697 -2,642 0 152 -11 967 0 -957

Table 5 continued.

Water Budget -- 2030

Units acrefeet/year

FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE SUM OF THE LAYER DISCREPANCY [%]	IN 3,265 0 1,921 0 0 0 18,736 0 0 7,199 0 31,121 0.01	OUT 1 0 4,742 0 23,495 841 0 0 891 0 1,147 0 31,117	IN-OUT 3,264 0 -2,821 0 -23,495 -841 0 18,736 -891 0 6,052 0 4
Bee County	Evangeline Aquifer		
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE SUM OF THE LAYER DISCREPANCY [%]	IN 527 0 19,805 23,495 1,847 0 0 4,929 0 7,091 0 0 57,694 0.01	OUT 52 0 6,118 0 730 47,680 0 0 464 0 0 2,646 0 0 57,691	IN-OUT 475 0 13,686 23,495 1,117 -47,680 0 4,929 -464 0 0 4,446 0 0 3

Chicot Aquifer

DISCREPANCY [%]

Water Budget 2030 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	2,953	0	2,953
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	5,686	3,122	2,564
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	458	5,194	-4,735
WELLS	0	6,544	-6,544
DRAINS	0	311	-311
RECHARGE	12,061	0	12,061
ET	0	648	-648
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	142	2,337	-2,195
STREAM LEAKAGE	3,072	6,212	-3,140
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER DISCREPANCY [%]	24,372 0.02	24,368	4
DIOUNE! ANO! [70]	0.02		
San Patricio County	Evangeline Aquifer		
•		OUT	IN OUT
FLOW TERM	IN	OUT	IN-OUT
FLOW TERM STORAGE	IN 71	0	71
FLOW TERM STORAGE CONSTANT HEAD	IN 71 0	0 0	71 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 71 0 1,820	0 0 4,910	71 0 -3,090
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 71 0 1,820 5,194	0 0 4,910 458	71 0 -3,090 4,735
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 71 0 1,820 5,194 712	0 0 4,910 458 0	71 0 -3,090 4,735 712
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 71 0 1,820 5,194	0 0 4,910 458	71 0 -3,090 4,735
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 71 0 1,820 5,194 712 0	0 0 4,910 458 0 2,598	71 0 -3,090 4,735 712 -2,598
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 71 0 1,820 5,194 712 0	0 0 4,910 458 0 2,598	71 0 -3,090 4,735 712 -2,598 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 71 0 1,820 5,194 712 0 0 152	0 0 4,910 458 0 2,598 0	71 0 -3,090 4,735 712 -2,598 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 71 0 1,820 5,194 712 0 0 152	0 0 4,910 458 0 2,598 0 0	71 0 -3,090 4,735 712 -2,598 0 152 -11
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 71 0 1,820 5,194 712 0 0 152 0 980	0 0 4,910 458 0 2,598 0 0 11	71 0 -3,090 4,735 712 -2,598 0 152 -11
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 71 0 1,820 5,194 712 0 0 152 0 980 0	0 0 4,910 458 0 2,598 0 0 11	71 0 -3,090 4,735 712 -2,598 0 152 -11 980 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 71 0 1,820 5,194 712 0 0 152 0 980 0	0 0 4,910 458 0 2,598 0 0 11 0 0 951	71 0 -3,090 4,735 712 -2,598 0 152 -11 980 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 71 0 1,820 5,194 712 0 0 152 0 980 0 0 0	0 0 4,910 458 0 2,598 0 0 11 0 951	71 0 -3,090 4,735 712 -2,598 0 152 -11 980 0 -951

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Table 5 continued.

Water Budget -- 2040

Chicot Aquifer

Units acrefeet/year

Dec County	omoot Aquilei		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	2,352	0	2,352
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,106	4,554	-2,449
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	0	23,186	-23,186
WELLS	0	806	-806
DRAINS	0	0	0
RECHARGE	18,736	0	18,736
ET	0	854	-854
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7,245	1,037	6,208
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	30,438	30,437	1
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
- -		OUT 48	IN-OUT 344
FLOW TERM	IN		
FLOW TERM STORAGE	IN 391	48	344
FLOW TERM STORAGE CONSTANT HEAD	IN 391 0	48 0	344 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 391 0 20,117	48 0 6,122	344 0 13,995
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 391 0 20,117 23,186	48 0 6,122 0	344 0 13,995 23,186
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 391 0 20,117 23,186 1,731	48 0 6,122 0 745	344 0 13,995 23,186 986
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 391 0 20,117 23,186 1,731	48 0 6,122 0 745 47,437	344 0 13,995 23,186 986 -47,437
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 391 0 20,117 23,186 1,731 0 0	48 0 6,122 0 745 47,437 0	344 0 13,995 23,186 986 -47,437
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 391 0 20,117 23,186 1,731 0 4,929	48 0 6,122 0 745 47,437 0 0	344 0 13,995 23,186 986 -47,437 0 4,929
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 391 0 20,117 23,186 1,731 0 4,929 0	48 0 6,122 0 745 47,437 0 0	344 0 13,995 23,186 986 -47,437 0 4,929 -467
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 391 0 20,117 23,186 1,731 0 4,929 0 0	48 0 6,122 0 745 47,437 0 0 467	344 0 13,995 23,186 986 -47,437 0 4,929 -467
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 391 0 20,117 23,186 1,731 0 4,929 0 0 0	48 0 6,122 0 745 47,437 0 0 467 0	344 0 13,995 23,186 986 -47,437 0 4,929 -467 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 391 0 20,117 23,186 1,731 0 4,929 0 0 7,139	48 0 6,122 0 745 47,437 0 0 467 0 2,672	344 0 13,995 23,186 986 -47,437 0 4,929 -467 0 0 4,467
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE SUM OF THE LAYER	IN 391 0 20,117 23,186 1,731 0 4,929 0 0 7,139 0	48 0 6,122 0 745 47,437 0 0 467 0 0 2,672	344 0 13,995 23,186 986 -47,437 0 4,929 -467 0 0 4,467
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 391 0 20,117 23,186 1,731 0 4,929 0 0 7,139 0 0	48 0 6,122 0 745 47,437 0 0 467 0 0 2,672	344 0 13,995 23,186 986 -47,437 0 4,929 -467 0 0 4,467

Table 5 continued.

Water Budget 2040 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	2,338	0	2,338
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	5,749	3,094	2,654
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	447	5,157	-4,710
WELLS	0	6,588	-6,588
DRAINS	0	295	-295
RECHARGE	12,061	0	12,061
ET	0	638	-638
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	164	2,279	-2,115
STREAM LEAKAGE	2,996	5,700	-2,704
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	23,755	23,752	4
DISCREPANCY [%]	0.02		
San Patricio County	Evangeline Aquifer		
·		OUT	IN-OUT
FLOW TERM	IN	OUT	IN-OUT 54
FLOW TERM STORAGE	IN 54	0	54
FLOW TERM STORAGE CONSTANT HEAD	IN 54 0	0 0	54 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 54 0 1,871	0	54 0 -3,107
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 54 0	0 0 4,979	54 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 54 0 1,871 5,157	0 0 4,979 447	54 0 -3,107 4,710 713
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 54 0 1,871 5,157 713	0 0 4,979 447 0	54 0 -3,107 4,710
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 54 0 1,871 5,157 713 0	0 4,979 447 0 2,551	54 0 -3,107 4,710 713 -2,551
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 54 0 1,871 5,157 713 0	0 4,979 447 0 2,551	54 0 -3,107 4,710 713 -2,551
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 54 0 1,871 5,157 713 0 0	0 0 4,979 447 0 2,551 0	54 0 -3,107 4,710 713 -2,551 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 54 0 1,871 5,157 713 0 0 152	0 0 4,979 447 0 2,551 0 0	54 0 -3,107 4,710 713 -2,551 0 152 -11
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 54 0 1,871 5,157 713 0 0 152 0 989	0 0 4,979 447 0 2,551 0 0 11	54 0 -3,107 4,710 713 -2,551 0 152 -11 989
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 54 0 1,871 5,157 713 0 0 152 0 989 0	0 0 4,979 447 0 2,551 0 0 11	54 0 -3,107 4,710 713 -2,551 0 152 -11 989 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 54 0 1,871 5,157 713 0 0 152 0 989 0 0	0 0 4,979 447 0 2,551 0 0 11 0 0	54 0 -3,107 4,710 713 -2,551 0 152 -11 989 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 54 0 1,871 5,157 713 0 0 152 0 989 0 0 0	0 0 4,979 447 0 2,551 0 0 11 0 0 947	54 0 -3,107 4,710 713 -2,551 0 152 -11 989 0 -947

Table 5 continued.

Water Budget -- 2050

Units acrefeet/year

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1,743	0	1,743
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,234	4,443	-2,209
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	0	22,957	-22,957
WELLS	0	776	-776
DRAINS	0	0	0
RECHARGE	18,736	0	18,736
ET	0	827	-827
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7,261	966	6,295
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	29,973	29,969	4
DISCREPANCY [%]	0.01		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
•		OUT 42	IN-OUT 265
FLOW TERM	IN		
FLOW TERM STORAGE	IN 307	42	265
FLOW TERM STORAGE CONSTANT HEAD	IN 307 0	42 0	265 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 307 0 20,342	42 0 6,138	265 0 14,204
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 307 0 20,342 22,957	42 0 6,138 0	265 0 14,204 22,957
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 307 0 20,342 22,957 1,624	42 0 6,138 0 757	265 0 14,204 22,957 867
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 307 0 20,342 22,957 1,624 0	42 0 6,138 0 757 47,227	265 0 14,204 22,957 867 -47,227
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 307 0 20,342 22,957 1,624 0 0	42 0 6,138 0 757 47,227 0	265 0 14,204 22,957 867 -47,227
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 307 0 20,342 22,957 1,624 0 0 4,929	42 0 6,138 0 757 47,227 0	265 0 14,204 22,957 867 -47,227 0 4,929
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 307 0 20,342 22,957 1,624 0 0 4,929 0	42 0 6,138 0 757 47,227 0 0 472	265 0 14,204 22,957 867 -47,227 0 4,929 -472
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 307 0 20,342 22,957 1,624 0 4,929 0	42 0 6,138 0 757 47,227 0 0 472	265 0 14,204 22,957 867 -47,227 0 4,929 -472
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 307 0 20,342 22,957 1,624 0 0 4,929 0 0	42 0 6,138 0 757 47,227 0 0 472 0	265 0 14,204 22,957 867 -47,227 0 4,929 -472 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 307 0 20,342 22,957 1,624 0 0 4,929 0 0 7,174 0 0	42 0 6,138 0 757 47,227 0 0 472 0 0 2,699 0	265 0 14,204 22,957 867 -47,227 0 4,929 -472 0 0 4,475
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 307 0 20,342 22,957 1,624 0 4,929 0 0 7,174	42 0 6,138 0 757 47,227 0 0 472 0 0 2,699	265 0 14,204 22,957 867 -47,227 0 4,929 -472 0 0 4,475

Table 5 continued.

Water Budget -- 2050

San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1,941	0	1,941
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	5,898	3,058	2,840
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	441	5,132	-4,691
WELLS	0	6,755	-6,755
DRAINS	0	281	-281
RECHARGE	12,061	0	12,061
ET	0	627	-627
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	188	2,234	-2,047
STREAM LEAKAGE	2,927	5,366	-2,439
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	23,456	23,454	2
DISCREPANCY [%]	0.01		
San Patricio County	Evangeline Aquifer		
San Patricio County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
•		OUT 0	IN-OUT 46
FLOW TERM	IN		
FLOW TERM STORAGE	IN 46	0	46
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 46 0 1,912 5,132	0	46 0 -3,108 4,691
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 46 0 1,912	0 0 5,020 441 0	46 0 -3,108 4,691 704
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 46 0 1,912 5,132 704	0 0 5,020 441	46 0 -3,108 4,691
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 46 0 1,912 5,132 704 0	0 0 5,020 441 0	46 0 -3,108 4,691 704 -2,527 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 46 0 1,912 5,132 704	0 0 5,020 441 0 2,527	46 0 -3,108 4,691 704 -2,527
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 46 0 1,912 5,132 704 0 0 152	0 0 5,020 441 0 2,527 0 0	46 0 -3,108 4,691 704 -2,527 0 152 -11
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 46 0 1,912 5,132 704 0 0 152 0	0 0 5,020 441 0 2,527 0 0 11	46 0 -3,108 4,691 704 -2,527 0 152 -11 998
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 46 0 1,912 5,132 704 0 0 152 0 998 0	0 0 5,020 441 0 2,527 0 0 11	46 0 -3,108 4,691 704 -2,527 0 152 -11 998 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 46 0 1,912 5,132 704 0 0 152 0 998 0 0	0 0 5,020 441 0 2,527 0 0 11 0 0 943	46 0 -3,108 4,691 704 -2,527 0 152 -11 998 0 -943
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 46 0 1,912 5,132 704 0 0 152 0 998 0 0 0	0 0 5,020 441 0 2,527 0 0 11 0 0 943	46 0 -3,108 4,691 704 -2,527 0 152 -11 998 0 -943 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 46 0 1,912 5,132 704 0 0 152 0 998 0 0 0	0 0 5,020 441 0 2,527 0 0 11 0 0 943 0	46 0 -3,108 4,691 704 -2,527 0 152 -11 998 0 -943 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 46 0 1,912 5,132 704 0 0 152 0 998 0 0 0	0 0 5,020 441 0 2,527 0 0 11 0 0 943	46 0 -3,108 4,691 704 -2,527 0 152 -11 998 0 -943 0

Table 5 continued.

	Units acre
Water Budget 2060	feet/year

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1,326	0	1,326
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,322	4,360	-2,038
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	0	22,797	-22,797
WELLS	0	751	-751
DRAINS	0	0	0
RECHARGE	18,736	0	18,736
ET	0	808	-808
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	7,269	927	6,342
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	29,653	29,643	10
DISCREPANCY [%]	0.03		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
•		OUT 39	IN-OUT 209
FLOW TERM	IN		
FLOW TERM STORAGE	IN 248	39	209
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 248 0	39 0	209 0 14,362 22,797
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 248 0 20,512	39 0 6,150 0 767	209 0 14,362 22,797 760
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 248 0 20,512 22,797 1,527 0	39 0 6,150 0	209 0 14,362 22,797 760 -47,043
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 248 0 20,512 22,797 1,527 0 0	39 0 6,150 0 767 47,043	209 0 14,362 22,797 760 -47,043 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 248 0 20,512 22,797 1,527 0 0 4,929	39 0 6,150 0 767 47,043 0	209 0 14,362 22,797 760 -47,043 0 4,929
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 248 0 20,512 22,797 1,527 0 0 4,929 0	39 0 6,150 0 767 47,043 0 0	209 0 14,362 22,797 760 -47,043 0 4,929 -477
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 248 0 20,512 22,797 1,527 0 0 4,929 0 0	39 0 6,150 0 767 47,043 0 0 477	209 0 14,362 22,797 760 -47,043 0 4,929 -477
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 248 0 20,512 22,797 1,527 0 0 4,929 0 0 0	39 0 6,150 0 767 47,043 0 0 477 0	209 0 14,362 22,797 760 -47,043 0 4,929 -477 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 248 0 20,512 22,797 1,527 0 0 4,929 0 0 7,199	39 0 6,150 0 767 47,043 0 0 477 0 0 2,722	209 0 14,362 22,797 760 -47,043 0 4,929 -477 0 0 4,477
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 248 0 20,512 22,797 1,527 0 0 4,929 0 0 7,199 0	39 0 6,150 0 767 47,043 0 0 477 0 0 2,722	209 0 14,362 22,797 760 -47,043 0 4,929 -477 0 0 4,477
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 248 0 20,512 22,797 1,527 0 0 4,929 0 7,199 0 0	39 0 6,150 0 767 47,043 0 0 477 0 0 2,722	209 0 14,362 22,797 760 -47,043 0 4,929 -477 0 0 4,477
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 248 0 20,512 22,797 1,527 0 0 4,929 0 0 7,199 0	39 0 6,150 0 767 47,043 0 0 477 0 0 2,722	209 0 14,362 22,797 760 -47,043 0 4,929 -477 0 0 4,477

Water Budget 2060 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1,649	0	1,649
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	6,002	3,052	2,950
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	442	5,131	-4,689
WELLS	0	6,946	-6,946
DRAINS	0	270	-270
RECHARGE	12,061	0	12,061
ET	0	618	-618
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	211	2,184	-1,973
STREAM LEAKAGE	2,952	5,097	-2,145
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	23,318	23,298	20
DISCREPANCY [%]	0.09		
San Patricio County	Evangeline Aquifer		
·		OUT	IN-OUT
FLOW TERM	IN	OUT	IN-OUT 41
FLOW TERM STORAGE	IN 41	0	41
FLOW TERM STORAGE CONSTANT HEAD	IN 41 0	0 0	41 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 41 0 1,953	0	41 0 -3,095
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 41 0	0 0 5,048	41 0 -3,095 4,689
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 41 0 1,953 5,131	0 0 5,048 442	41 0 -3,095 4,689 689
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 41 0 1,953 5,131 689	0 0 5,048 442 0	41 0 -3,095 4,689
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 41 0 1,953 5,131 689 0	0 5,048 442 0 2,526	41 0 -3,095 4,689 689 -2,526
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 41 0 1,953 5,131 689 0	0 5,048 442 0 2,526	41 0 -3,095 4,689 689 -2,526
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 41 0 1,953 5,131 689 0 0	0 0 5,048 442 0 2,526 0	41 0 -3,095 4,689 689 -2,526 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 41 0 1,953 5,131 689 0 0 152	0 5,048 442 0 2,526 0 0	41 0 -3,095 4,689 689 -2,526 0 152 -11
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 41 0 1,953 5,131 689 0 0 152 0	0 0 5,048 442 0 2,526 0 0 11	41 0 -3,095 4,689 689 -2,526 0 152 -11 1,006
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 41 0 1,953 5,131 689 0 152 0 1,006 0	0 0 5,048 442 0 2,526 0 0 11	41 0 -3,095 4,689 689 -2,526 0 152 -11 1,006
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 41 0 1,953 5,131 689 0 152 0 1,006 0 0	0 0 5,048 442 0 2,526 0 0 11 0 0 939	41 0 -3,095 4,689 689 -2,526 0 152 -11 1,006 0 -939 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 41 0 1,953 5,131 689 0 152 0 1,006 0 0	0 0 5,048 442 0 2,526 0 0 11 0 0 939	41 0 -3,095 4,689 689 -2,526 0 152 -11 1,006 0 -939

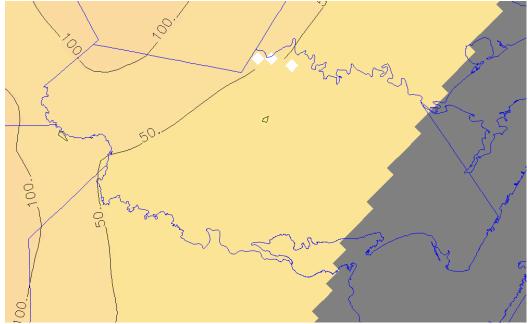


Figure 74. Scenario 3: Water levels in the Evangeline aquifer in San Patricio County 2005 with combined 45,000 acre-feet per year pumping by SPMWD in San Patricio County. Contour interval is 50 feet.

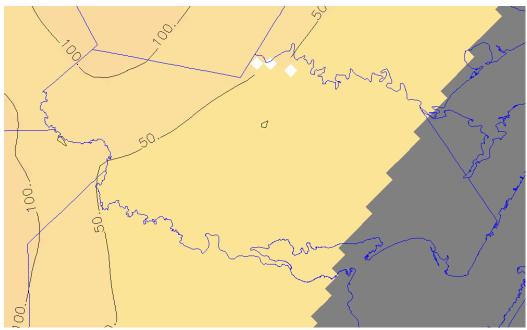


Figure 75. Scenario 3: Water levels in the Evangeline aquifer in San Patricio County 2010 with combined 45,000 acre-feet per year pumping by SPMWD in San Patricio County. Contour interval is 50 feet.

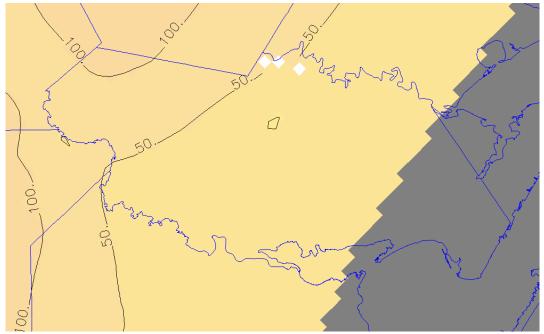


Figure 76. Scenario 3: Water levels in the Evangeline aquifer in San Patricio County 2020 with combined 45,000 acre-feet per year pumping by SPMWD in San Patricio County. Contour interval is 50 feet.

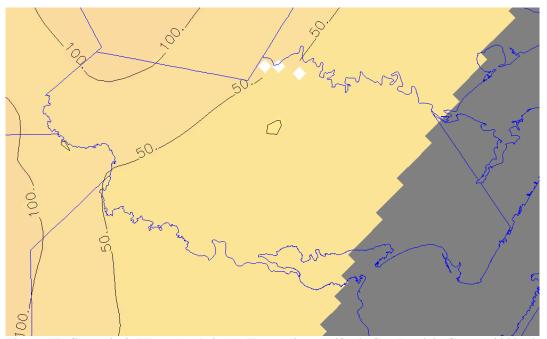


Figure 77. Scenario 3: Water levels in the Evangeline aquifer in San Patricio County 2030 with combined 45,000 acre-feet per year pumping by SPMWD in San Patricio County. Contour interval is 50 feet.

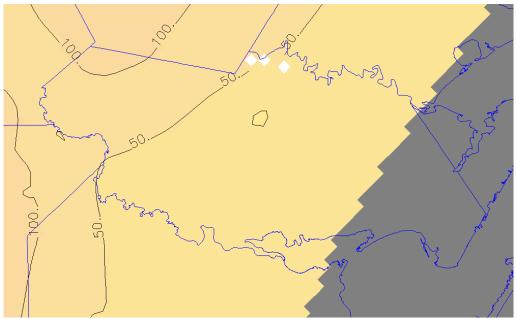


Figure 78. Scenario 3: Water levels in the Evangeline aquifer in San Patricio County 2040 with combined 45,000 acre-feet per year pumping by SPMWD in San Patricio County. Contour interval is 50 feet.

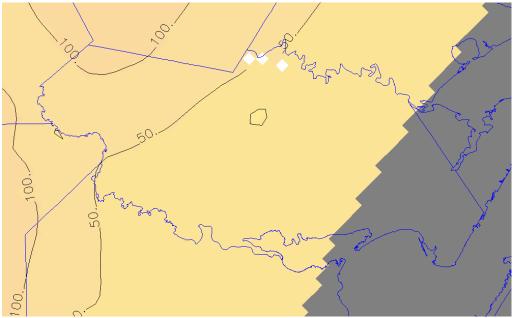


Figure 79. Scenario 3: Water levels in the Evangeline aquifer in San Patricio County 2050 with combined 45,000 acre-feet per year pumping by SPMWD in San Patricio County. Contour interval is 50 feet.

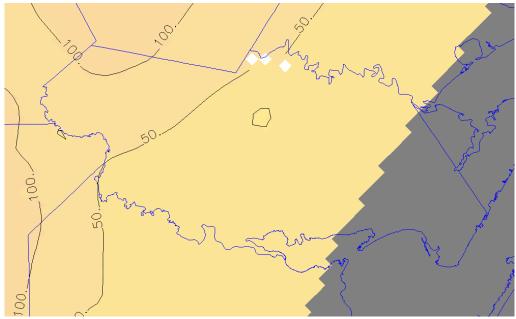
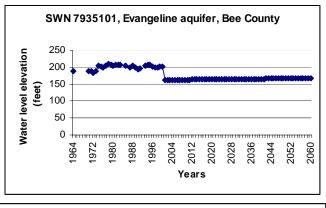
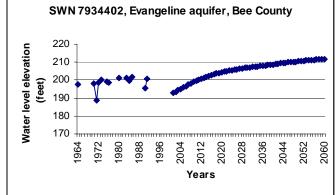
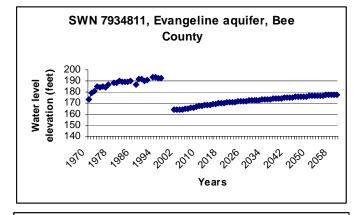


Figure 80. Scenario 3: Water levels in the Evangeline aquifer in San Patricio County 2060 with combined 45,000 acre-feet per year pumping by SPMWD in San Patricio County. Contour interval is 50 feet.







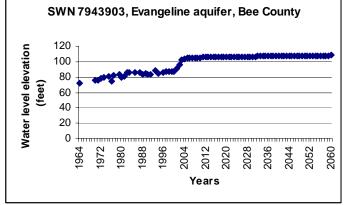
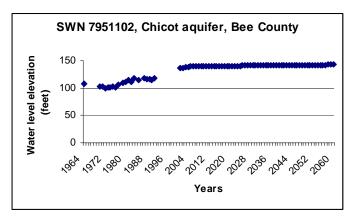
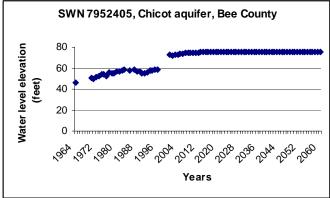
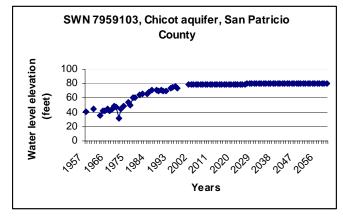


Figure 81. Scenario 3: Water-level hydrographs for Bee and San Patricio counties with 45,000 acrefeet per year combined pumping by the SPMWD in San Patricio County.







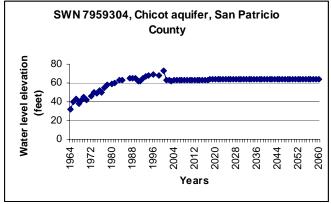


Figure 81 continued.

Table 6: Scenario 3: Water budgets in Bee and San Patricio counties with 45,000 acre-feet per year combined pumping by SPMWD in San Patricio County.

Water Budget 2005		_	nits acre- et/year
Bee County	Chicot Aquifer		
FLOW TERM	IN		OUT
CTODACE		60	1201

FLOW TERM	IN	OUT	IN-OUT
STORAGE	62	1281	-1219
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	624	9246	-8622
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	658	3950	-3292
WELLS	0	1602	-1602
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1445	-1445
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5579	8229	-2650
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25751	25752	-1
DISCREPANCY [%]	0		

Bee County	Evangeline Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	44	805	-761
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	2,705	7,189	-4,484
EXCHANGE (UPPER)	3,950	658	3,292
EXCHANGE (LOWER)	110	847	-738
WELLS	0	3,369	-3,369
DRAINS	0	0	0
RECHARGE	4,836	0	4,836
ET	0	470	-470
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	4,585	2,894	1,691
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	16,229	16,232	-4

DISCREPANCY [%]

-0.02

Table 6 continued.

Water Budget – 2005 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	841	815	26
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,292	3,031	4,262
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	952	1,491	-539
WELLS	0	5,943	-5,943
DRAINS	0	347	-347
RECHARGE	12,061	0	12,061
ET	0	689	-689
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	51	2,780	-2,729
STREAM LEAKAGE	3,223	9,328	-6,105
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,421	24,424	-2
DISCREPANCY [%]	-0.01		
San Patricio County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 43	IN-OUT -42
FLOW TERM STORAGE	IN 1	OUT 43 0	IN-OUT -42 0
FLOW TERM STORAGE CONSTANT HEAD	IN 1 0	43 0	-42 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 1 0 2,595	43	-42
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 1 0	43 0 946	-42 0 1,649
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 1 0 2,595 1,491	43 0 946 952	-42 0 1,649 539
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 1 0 2,595 1,491 379	43 0 946 952 6	-42 0 1,649 539 373
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 1 0 2,595 1,491 379 0	43 0 946 952 6 2,578	-42 0 1,649 539 373 -2,578
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 1 0 2,595 1,491 379 0 0	43 0 946 952 6 2,578	-42 0 1,649 539 373 -2,578
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 1 0 2,595 1,491 379 0 0 152	43 0 946 952 6 2,578 0	-42 0 1,649 539 373 -2,578 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 1 0 2,595 1,491 379 0 0 152	43 0 946 952 6 2,578 0 0	-42 0 1,649 539 373 -2,578 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 1 0 2,595 1,491 379 0 0 152 0 908	43 0 946 952 6 2,578 0 0 12	-42 0 1,649 539 373 -2,578 0 152 -12 908
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 1 0 2,595 1,491 379 0 0 152 0 908 0	43 0 946 952 6 2,578 0 0 12 0	-42 0 1,649 539 373 -2,578 0 152 -12 908 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 1 0 2,595 1,491 379 0 0 152 0 908 0 0 0 0	43 0 946 952 6 2,578 0 0 12 0 989 0	-42 0 1,649 539 373 -2,578 0 152 -12 908 0 -989
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 1 0 2,595 1,491 379 0 0 152 0 908 0 0 0	43 0 946 952 6 2,578 0 0 12 0 989	-42 0 1,649 539 373 -2,578 0 152 -12 908 0 -989

Table 6 continued.

Units acrefeet/year

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	23	464	-440
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	610	9220	-8609
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	697	3943	-3245
WELLS	0	1605	-1605
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1472	-1472
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5329	8787	-3458
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25489	25490	-1
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
·	-	OUT 547	IN-OUT -521
FLOW TERM	IN		
FLOW TERM STORAGE	IN 26	547	-521
FLOW TERM STORAGE CONSTANT HEAD	IN 26 0	547 0	-521 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 26 0 2,697	547 0 7,250	-521 0 -4,553
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 26 0 2,697 3,943	547 0 7,250 697	-521 0 -4,553 3,245
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 26 0 2,697 3,943 99	547 0 7,250 697 879	-521 0 -4,553 3,245 -779
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 26 0 2,697 3,943 99 0	547 0 7,250 697 879 3,221	-521 0 -4,553 3,245 -779 -3,221
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 26 0 2,697 3,943 99 0	547 0 7,250 697 879 3,221 0	-521 0 -4,553 3,245 -779 -3,221
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 26 0 2,697 3,943 99 0 0	547 0 7,250 697 879 3,221 0	-521 0 -4,553 3,245 -779 -3,221 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 26 0 2,697 3,943 99 0 4,836 0	547 0 7,250 697 879 3,221 0 0	-521 0 -4,553 3,245 -779 -3,221 0 4,836 -467
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 26 0 2,697 3,943 99 0 0 4,836	547 0 7,250 697 879 3,221 0 0 467	-521 0 -4,553 3,245 -779 -3,221 0 4,836 -467 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 26 0 2,697 3,943 99 0 4,836 0 0 0	547 0 7,250 697 879 3,221 0 0 467 0	-521 0 -4,553 3,245 -779 -3,221 0 4,836 -467 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 26 0 2,697 3,943 99 0 4,836 0 0 4,472	547 0 7,250 697 879 3,221 0 0 467 0 3,016	-521 0 -4,553 3,245 -779 -3,221 0 4,836 -467 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 26 0 2,697 3,943 99 0 4,836 0 0 4,472 0	547 0 7,250 697 879 3,221 0 0 467 0 3,016	-521 0 -4,553 3,245 -779 -3,221 0 4,836 -467 0 0 1,456

Table 6 continued.

Water Budget – 2010 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	263	307	-43
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,330	2,958	4,371
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	984	1,455	-471
WELLS	0	6,013	-6,013
DRAINS	0	346	-346
RECHARGE	12,061	0	12,061
ET	0	690	-690
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	71	2,691	-2,621
STREAM LEAKAGE	3,184	9,433	-6,249
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	23,893	23,894	-1
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 9	IN-OUT -7
FLOW TERM STORAGE	IN 2	9	-7
FLOW TERM STORAGE CONSTANT HEAD	IN 2 0	9 0	-7 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 2 0 2,615	9 0 939	-7
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 2 0 2,615 1,455	9 0	-7 0 1,676
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 2 0 2,615	9 0 939 984	-7 0 1,676 471
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 2 0 2,615 1,455 346	9 0 939 984 10	-7 0 1,676 471 336
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 2 0 2,615 1,455 346 0	9 0 939 984 10 2,540	-7 0 1,676 471 336 -2,540
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 2 0 2,615 1,455 346 0	9 0 939 984 10 2,540	-7 0 1,676 471 336 -2,540
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 2 0 2,615 1,455 346 0 0 152	9 0 939 984 10 2,540 0	-7 0 1,676 471 336 -2,540 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 2 0 2,615 1,455 346 0 0 152	9 0 939 984 10 2,540 0 0	-7 0 1,676 471 336 -2,540 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 2 0 2,615 1,455 346 0 0 152 0 910	9 0 939 984 10 2,540 0 0	-7 0 1,676 471 336 -2,540 0 152 -12 910
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 2 0 2,615 1,455 346 0 0 152 0 910 0	9 0 939 984 10 2,540 0 0 12 0	-7 0 1,676 471 336 -2,540 0 152 -12 910 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 2 0 2,615 1,455 346 0 0 152 0 910 0 0 0	9 0 939 984 10 2,540 0 0 12 0 0 986	-7 0 1,676 471 336 -2,540 0 152 -12 910 0 -986
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 2 0 2,615 1,455 346 0 0 152 0 910 0 0 0	9 0 939 984 10 2,540 0 0 12 0 0 986	-7 0 1,676 471 336 -2,540 0 152 -12 910 0 -986

Table 6 continued.

Units acrefeet/year

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	11	133	-122
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	604	9250	-8645
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	736	3897	-3161
WELLS	0	1575	-1575
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1483	-1483
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5251	9094	-3843
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25432	25432	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	ОИТ	IN-OUT
•		OUT 271	IN-OUT -263
FLOW TERM	IN		
FLOW TERM STORAGE	IN 8	271	-263
FLOW TERM STORAGE CONSTANT HEAD	IN 8 0	271 0	-263 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 8 0 2,680	271 0 7,413	-263 0 -4,733
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 8 0 2,680 3,897	271 0 7,413 736	-263 0 -4,733 3,161
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 8 0 2,680 3,897 94	271 0 7,413 736 896	-263 0 -4,733 3,161 -802
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 8 0 2,680 3,897 94 0	271 0 7,413 736 896 2,939	-263 0 -4,733 3,161 -802 -2,939
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 8 0 2,680 3,897 94 0	271 0 7,413 736 896 2,939 0	-263 0 -4,733 3,161 -802 -2,939 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 8 0 2,680 3,897 94 0 0 4,836	271 0 7,413 736 896 2,939 0	-263 0 -4,733 3,161 -802 -2,939 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 8 0 2,680 3,897 94 0 0 4,836 0	271 0 7,413 736 896 2,939 0 0	-263 0 -4,733 3,161 -802 -2,939 0 4,836 -464
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 8 0 2,680 3,897 94 0 0 4,836 0	271 0 7,413 736 896 2,939 0 0 464	-263 0 -4,733 3,161 -802 -2,939 0 4,836 -464
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 8 0 2,680 3,897 94 0 0 4,836 0 0	271 0 7,413 736 896 2,939 0 0 464 0	-263 0 -4,733 3,161 -802 -2,939 0 4,836 -464 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 8 0 2,680 3,897 94 0 0 4,836 0 4,836 0 4,378 0	271 0 7,413 736 896 2,939 0 0 464 0 0 3,174	-263 0 -4,733 3,161 -802 -2,939 0 4,836 -464 0 0 1,204 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE SUM OF THE LAYER	IN 8 0 2,680 3,897 94 0 0 4,836 0 4,836 0 4,378 0 15,892	271 0 7,413 736 896 2,939 0 0 464 0 0 3,174	-263 0 -4,733 3,161 -802 -2,939 0 4,836 -464 0 0 1,204
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 8 0 2,680 3,897 94 0 0 4,836 0 4,836 0 4,378 0	271 0 7,413 736 896 2,939 0 0 464 0 0 3,174	-263 0 -4,733 3,161 -802 -2,939 0 4,836 -464 0 0 1,204 0

Table 6 continued.

Water Budget 2020 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	230	65	165
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,417	2,927	4,490
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	999	1,499	-500
WELLS	0	6,467	-6,467
DRAINS	0	345	-345
RECHARGE	12,061	0	12,061
ET	0	688	-688
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	95	2,620	-2,526
STREAM LEAKAGE	3,200	9,391	-6,191
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,001	24,001	0
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
San Patricio County	Evangeline Aquifer		
San Patricio County FLOW TERM	Evangeline Aquifer	оит	IN-OUT
•		OUT 2	IN-OUT 6
FLOW TERM STORAGE CONSTANT HEAD	IN		
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 8	2	6
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 8 0 2,652 1,499	2 0 928 999	6 0 1,724 500
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 8 0 2,652	2 0 928 999 12	6 0 1,724 500 328
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 8 0 2,652 1,499 340 0	2 0 928 999 12 2,640	6 0 1,724 500 328 -2,640
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 8 0 2,652 1,499 340 0	2 0 928 999 12 2,640	6 0 1,724 500 328 -2,640 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 8 0 2,652 1,499 340 0 0	2 0 928 999 12 2,640 0	6 0 1,724 500 328 -2,640 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 8 0 2,652 1,499 340 0 0 152 0	2 0 928 999 12 2,640 0 0	6 0 1,724 500 328 -2,640 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 8 0 2,652 1,499 340 0 0 152 0 920	2 0 928 999 12 2,640 0 0 12	6 0 1,724 500 328 -2,640 0 152 -12 920
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 8 0 2,652 1,499 340 0 0 152 0 920 0	2 0 928 999 12 2,640 0 0 12 0	6 0 1,724 500 328 -2,640 0 152 -12 920 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 8 0 2,652 1,499 340 0 0 152 0 920 0 0	2 0 928 999 12 2,640 0 12 0 0 978	6 0 1,724 500 328 -2,640 0 152 -12 920 0 -978
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 8 0 2,652 1,499 340 0 0 152 0 920 0 0 0	2 0 928 999 12 2,640 0 0 12 0 0 978	6 0 1,724 500 328 -2,640 0 152 -12 920 0 -978
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 8 0 2,652 1,499 340 0 0 152 0 920 0 0 0 0	2 0 928 999 12 2,640 0 0 12 0 0 978 0	6 0 1,724 500 328 -2,640 0 152 -12 920 0 -978 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 8 0 2,652 1,499 340 0 0 152 0 920 0 0 0	2 0 928 999 12 2,640 0 0 12 0 0 978	6 0 1,724 500 328 -2,640 0 152 -12 920 0 -978

Table 6 continued.

Bee County

Water Budget -- 2030

Units acrefeet/year

FLOW TERM	IN	OUT	IN-OUT
STORAGE	16	96	-80
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	608	9277	-8669
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	774	3854	-3081
WELLS	0	1533	-1533
DRAINS	0	0	0
RECHARGE	18829	0	18829
ET	0	1491	-1491
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5241	9217	-3976
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25468	25469	0
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 184	IN-OUT -184
FLOW TERM STORAGE	IN 0	184	-184
FLOW TERM STORAGE CONSTANT HEAD	IN 0 0	184 0	-184 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 0 0 2,676	184 0 7,485	-184 0 -4,809
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 0 0 2,676 3,854	184 0 7,485 774	-184 0 -4,809 3,081
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 0 0 2,676 3,854 93	184 0 7,485 774 903	-184 0 -4,809 3,081 -810
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 0 0 2,676 3,854 93 0	184 0 7,485 774 903 2,680	-184 0 -4,809 3,081 -810 -2,680
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 0 0 2,676 3,854 93 0	184 0 7,485 774 903 2,680	-184 0 -4,809 3,081 -810 -2,680
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 0 0 2,676 3,854 93 0 0 4,836	184 0 7,485 774 903 2,680 0	-184 0 -4,809 3,081 -810 -2,680 0 4,836
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 0 0 2,676 3,854 93 0 0 4,836	184 0 7,485 774 903 2,680 0 0	-184 0 -4,809 3,081 -810 -2,680 0 4,836 -465
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 0 0 2,676 3,854 93 0 0 4,836 0	184 0 7,485 774 903 2,680 0 0 465	-184 0 -4,809 3,081 -810 -2,680 0 4,836 -465
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 0 0 2,676 3,854 93 0 0 4,836 0 0	184 0 7,485 774 903 2,680 0 0 465 0	-184 0 -4,809 3,081 -810 -2,680 0 4,836 -465 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 0 0 2,676 3,854 93 0 4,836 0 0 4,836	184 0 7,485 774 903 2,680 0 0 465 0 0	-184 0 -4,809 3,081 -810 -2,680 0 4,836 -465 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 2,676 3,854 93 0 0 4,836 0 0 4,836 0 0	184 0 7,485 774 903 2,680 0 0 465 0 0 3,279	-184 0 -4,809 3,081 -810 -2,680 0 4,836 -465 0 0 1,031
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 0 0 2,676 3,854 93 0 4,836 0 4,836 0 4,310 0 0	184 0 7,485 774 903 2,680 0 0 465 0 0 3,279	-184 0 -4,809 3,081 -810 -2,680 0 4,836 -465 0 0 1,031
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 2,676 3,854 93 0 0 4,836 0 0 4,836 0 0	184 0 7,485 774 903 2,680 0 0 465 0 0 3,279	-184 0 -4,809 3,081 -810 -2,680 0 4,836 -465 0 0 1,031

Chicot Aquifer

Water Budget 2030 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	97	58	39
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,484	2,872	4,612
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	1,024	1,477	-453
WELLS	0	6,544	-6,544
DRAINS	0	344	-344
RECHARGE	12,061	0	12,061
ET	0	687	-687
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	104	2,620	-2,516
STREAM LEAKAGE	3,187	9,355	-6,168
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	23,957	23,957	0
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
-		OUT	IN-OUT
FLOW TERM	IN	OUT 5	IN-OUT -3
-		OUT 5 0	IN-OUT -3 0
FLOW TERM STORAGE	IN 2 0	5	-3 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 2	5 0 925	-3
FLOW TERM STORAGE CONSTANT HEAD	IN 2 0 2,658	5 0	-3 0 1,733
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 2 0 2,658 1,477	5 0 925 1,024	-3 0 1,733 453
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 2 0 2,658 1,477 340	5 0 925 1,024 12	-3 0 1,733 453 328
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 2 0 2,658 1,477 340 0	5 0 925 1,024 12 2,597	-3 0 1,733 453 328 -2,597
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 2 0 2,658 1,477 340 0	5 0 925 1,024 12 2,597	-3 0 1,733 453 328 -2,597 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 2 0 2,658 1,477 340 0 0 152	5 0 925 1,024 12 2,597 0 0	-3 0 1,733 453 328 -2,597 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 2 0 2,658 1,477 340 0 152 0	5 0 925 1,024 12 2,597 0 0	-3 0 1,733 453 328 -2,597 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 2 0 2,658 1,477 340 0 152 0 923	5 0 925 1,024 12 2,597 0 0 12	-3 0 1,733 453 328 -2,597 0 152 -12 923
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 2 0 2,658 1,477 340 0 0 152 0 923 0	5 0 925 1,024 12 2,597 0 0 12 0	-3 0 1,733 453 328 -2,597 0 152 -12 923 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 2 0 2,658 1,477 340 0 152 0 923 0 0	5 0 925 1,024 12 2,597 0 0 12 0 0	-3 0 1,733 453 328 -2,597 0 152 -12 923 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE SUM OF THE LAYER	IN 2 0 2,658 1,477 340 0 152 0 923 0 0 0	5 0 925 1,024 12 2,597 0 0 12 0 0 977	-3 0 1,733 453 328 -2,597 0 152 -12 923 0 -977
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 2 0 2,658 1,477 340 0 152 0 923 0 0 0 0	5 0 925 1,024 12 2,597 0 0 12 0 0 977 0	-3 0 1,733 453 328 -2,597 0 152 -12 923 0 -977 0

Table 6 continued.

Units acrefeet/year

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	0	132	-132
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	613	9297	-8684
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	761	3853	-3092
WELLS	0	1211	-1211
DRAINS	0	0	0
RECHARGE	18782	0	18782
ET	0	1515	-1515
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5261	9411	-4150
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25417	25418	-1
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
·		OUT 219	IN-OUT -219
FLOW TERM	IN		
FLOW TERM STORAGE	IN 0	219	-219
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 0 0	219 0	-219 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 0 0 2,678	219 0 7,533	-219 0 -4,855 3,092 -826
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 0 0 2,678 3,853	219 0 7,533 761	-219 0 -4,855 3,092
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 0 0 2,678 3,853 92	219 0 7,533 761 918	-219 0 -4,855 3,092 -826
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 0 0 2,678 3,853 92 0	219 0 7,533 761 918 2,437	-219 0 -4,855 3,092 -826 -2,437 0 4,882
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 0 0 2,678 3,853 92 0 0 4,882 0	219 0 7,533 761 918 2,437 0	-219 0 -4,855 3,092 -826 -2,437 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 0 0 2,678 3,853 92 0 0 4,882	219 0 7,533 761 918 2,437 0	-219 0 -4,855 3,092 -826 -2,437 0 4,882
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 0 0 2,678 3,853 92 0 0 4,882 0 0 0	219 0 7,533 761 918 2,437 0 0 470 0	-219 0 -4,855 3,092 -826 -2,437 0 4,882 -470 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 0 0 2,678 3,853 92 0 0 4,882 0 0	219 0 7,533 761 918 2,437 0 0 470	-219 0 -4,855 3,092 -826 -2,437 0 4,882 -470
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 2,678 3,853 92 0 4,882 0 0 4,234 0	219 0 7,533 761 918 2,437 0 0 470 0 0 3,403 0	-219 0 -4,855 3,092 -826 -2,437 0 4,882 -470 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 0 0 2,678 3,853 92 0 0 4,882 0 0 4,234 0 0	219 0 7,533 761 918 2,437 0 0 470 0 0 3,403 0 0	-219 0 -4,855 3,092 -826 -2,437 0 4,882 -470 0 0 831 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 2,678 3,853 92 0 4,882 0 0 4,234 0	219 0 7,533 761 918 2,437 0 0 470 0 0 3,403 0	-219 0 -4,855 3,092 -826 -2,437 0 4,882 -470 0 0 831

Table 6 continued.

Water Budget 2040 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	49	75	-26
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,526	2,834	4,692
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	1,049	1,453	-403
WELLS	0	6,588	-6,588
DRAINS	0	343	-343
RECHARGE	12,061	0	12,061
ET	0	687	-687
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	106	2,640	-2,534
STREAM LEAKAGE	3,167	9,340	-6,173
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	23,959	23,959	0
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
•	-	OUT	IN-OUT
FLOW TERM	Evangeline Aquifer IN 1	OUT 7	IN-OUT -6
FLOW TERM STORAGE	IN		IN-OUT -6 0
FLOW TERM	IN 1 0	7	-6 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 1 0 2,662	7 0 922	-6
FLOW TERM STORAGE CONSTANT HEAD	IN 1 0	7 0	-6 0 1,739
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 1 0 2,662 1,453	7 0 922 1,049	-6 0 1,739 403
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 1 0 2,662 1,453 341	7 0 922 1,049 13	-6 0 1,739 403 329
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 1 0 2,662 1,453 341 0	7 0 922 1,049 13 2,550	-6 0 1,739 403 329 -2,550
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 1 0 2,662 1,453 341 0	7 0 922 1,049 13 2,550	-6 0 1,739 403 329 -2,550 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 1 0 2,662 1,453 341 0 0 152	7 0 922 1,049 13 2,550 0	-6 0 1,739 403 329 -2,550 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 1 0 2,662 1,453 341 0 0 152	7 0 922 1,049 13 2,550 0 0	-6 0 1,739 403 329 -2,550 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 1 0 2,662 1,453 341 0 0 152 0 922	7 0 922 1,049 13 2,550 0 0 12	-6 0 1,739 403 329 -2,550 0 152 -12 922
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 1 0 2,662 1,453 341 0 0 152 0 922 0 0 0	7 0 922 1,049 13 2,550 0 0 12 0 978	-6 0 1,739 403 329 -2,550 0 152 -12 922 0 -978
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 1 0 2,662 1,453 341 0 0 152 0 922 0 0 0 0	7 0 922 1,049 13 2,550 0 0 12 0 0 978 0	-6 0 1,739 403 329 -2,550 0 152 -12 922 0 -978 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 1 0 2,662 1,453 341 0 0 152 0 922 0 0 0	7 0 922 1,049 13 2,550 0 0 12 0 978	-6 0 1,739 403 329 -2,550 0 152 -12 922 0 -978

Table 6 continued.

Bee County

Water Budget -- 2050

Units acrefeet/year

FLOW TERM	IN	OUT	IN-OUT
STORAGE	0	58	-58
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	617	9318	-8701
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	792	3815	-3023
WELLS	0	1169	-1169
DRAINS RECHARGE	0	0	40700
ET ET	18782	0 1530	18782
RIVER LEAKAGE	0	1520 0	-1520
HEAD DEP BOUNDS			0
STREAM LEAKAGE	0 5229	0	-4312
INTERBED STORAGE		9541	-4312 0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25421	25421	0
DISCREPANCY [%]	25421	23421	U
DISCREPANCY [%]	U		
Bee County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 146	IN-OUT -146
FLOW TERM STORAGE		OUT 146 0	-146
FLOW TERM STORAGE CONSTANT HEAD	IN 0 0	146 0	-146 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 0 0 2,677	146	-146 0 -4,908
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 0 0	146 0 7,586	-146 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 0 0 2,677 3,815	146 0 7,586 792 922	-146 0 -4,908 3,023 -828
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 0 0 2,677 3,815 94	146 0 7,586 792	-146 0 -4,908 3,023
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 0 0 2,677 3,815 94 0	146 0 7,586 792 922 2,227	-146 0 -4,908 3,023 -828 -2,227
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 0 0 2,677 3,815 94 0	146 0 7,586 792 922 2,227 0	-146 0 -4,908 3,023 -828 -2,227
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 0 0 2,677 3,815 94 0 0 4,882	146 0 7,586 792 922 2,227 0	-146 0 -4,908 3,023 -828 -2,227 0 4,882
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 0 0 2,677 3,815 94 0 0 4,882	146 0 7,586 792 922 2,227 0 0 475	-146 0 -4,908 3,023 -828 -2,227 0 4,882 -475
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 0 0 2,677 3,815 94 0 0 4,882 0	146 0 7,586 792 922 2,227 0 0 475	-146 0 -4,908 3,023 -828 -2,227 0 4,882 -475
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 0 0 2,677 3,815 94 0 0 4,882 0 0	146 0 7,586 792 922 2,227 0 0 475 0	-146 0 -4,908 3,023 -828 -2,227 0 4,882 -475 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 0 0 2,677 3,815 94 0 4,882 0 0 4,181	146 0 7,586 792 922 2,227 0 0 475 0 0 3,501	-146 0 -4,908 3,023 -828 -2,227 0 4,882 -475 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 0 0 2,677 3,815 94 0 4,882 0 0 4,181 0	146 0 7,586 792 922 2,227 0 0 475 0 0 3,501	-146 0 -4,908 3,023 -828 -2,227 0 4,882 -475 0 0 679
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 0 0 2,677 3,815 94 0 0 4,882 0 0 4,181 0 0	146 0 7,586 792 922 2,227 0 0 475 0 0 3,501	-146 0 -4,908 3,023 -828 -2,227 0 4,882 -475 0 0 679 0

Chicot Aquifer

Table 6 continued.

Water Budget 2050 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	82	55	27
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,577	2,801	4,776
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	1,074	1,438	-364
WELLS	0	6,755	-6,755
DRAINS	0	342	-342
RECHARGE	12,061	0	12,061
ET	0	686	-686
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	111	2,657	-2,546
STREAM LEAKAGE	3,151	9,323	-6,172
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,056	24,056	0
DISCREPANCY [%]	0		
San Patricio County	Evangeline Aquifer		
•		OUT	IN-OUT
FLOW TERM	IN	OUT 4	IN-OUT -2
FLOW TERM STORAGE			_
FLOW TERM STORAGE CONSTANT HEAD	IN 2 0	4 0	-2 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 2	4	-2
FLOW TERM STORAGE CONSTANT HEAD	IN 2 0 2,664	4 0 917	-2 0 1,747
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 2 0 2,664 1,438	4 0 917 1,074	-2 0 1,747 364
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 2 0 2,664 1,438 344	4 0 917 1,074 12	-2 0 1,747 364 331
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 2 0 2,664 1,438 344 0	4 0 917 1,074 12 2,526	-2 0 1,747 364 331 -2,526
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 2 0 2,664 1,438 344 0	4 0 917 1,074 12 2,526 0	-2 0 1,747 364 331 -2,526 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 2 0 2,664 1,438 344 0 0 152	4 0 917 1,074 12 2,526 0	-2 0 1,747 364 331 -2,526 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 2 0 2,664 1,438 344 0 0 152	4 0 917 1,074 12 2,526 0 0	-2 0 1,747 364 331 -2,526 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 2 0 2,664 1,438 344 0 0 152 0 924	4 0 917 1,074 12 2,526 0 0 12	-2 0 1,747 364 331 -2,526 0 152 -12 924
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 2 0 2,664 1,438 344 0 0 152 0 924 0	4 0 917 1,074 12 2,526 0 0 12 0	-2 0 1,747 364 331 -2,526 0 152 -12 924 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE RESERV. LEAKAGE	IN 2 0 2,664 1,438 344 0 0 152 0 924 0 0 0 0	4 0 917 1,074 12 2,526 0 0 12 0 0 978 0	-2 0 1,747 364 331 -2,526 0 152 -12 924 0 -978 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE INTERBED STORAGE	IN 2 0 2,664 1,438 344 0 0 152 0 924 0 0 0	4 0 917 1,074 12 2,526 0 0 12 0 0 978	-2 0 1,747 364 331 -2,526 0 152 -12 924 0 -978 0

Table 6 continued.

SUM OF THE LAYER

DISCREPANCY [%]

Units acrefeet/year

Bee County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	1	44	-43
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	622	9339	-8718
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	818	3783	-2965
WELLS	0	1135	-1135
DRAINS	0	0	0
RECHARGE	18782	0	18782
ET	0	1522	-1522
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	0	0	0
STREAM LEAKAGE	5220	9620	-4400
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	25443	25444	-1
DISCREPANCY [%]	0		
Bee County	Evangeline Aquifer		
Bee County FLOW TERM	Evangeline Aquifer	OUT	IN-OUT
·	-	OUT 122	IN-OUT -122
FLOW TERM	IN		
FLOW TERM STORAGE	IN 0	122	-122
FLOW TERM STORAGE CONSTANT HEAD	IN 0 0	122 0	-122 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 0 0 2,676	122 0 7,626	-122 0 -4,949
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 0 0 2,676 3,783	122 0 7,626 818	-122 0 -4,949 2,965
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 0 0 2,676 3,783 98	122 0 7,626 818 919	-122 0 -4,949 2,965 -821
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 0 0 2,676 3,783 98 0	122 0 7,626 818 919 2,043	-122 0 -4,949 2,965 -821 -2,043
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 0 0 2,676 3,783 98 0	122 0 7,626 818 919 2,043	-122 0 -4,949 2,965 -821 -2,043
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE	IN 0 0 2,676 3,783 98 0 0 4,882	122 0 7,626 818 919 2,043 0 0 481	-122 0 -4,949 2,965 -821 -2,043 0 4,882 -481
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 0 0 2,676 3,783 98 0 0 4,882 0 0	122 0 7,626 818 919 2,043 0 0 481 0	-122 0 -4,949 2,965 -821 -2,043 0 4,882 -481 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 0 0 2,676 3,783 98 0 0 4,882 0 0 4,482	122 0 7,626 818 919 2,043 0 0 481 0 0 3,575	-122 0 -4,949 2,965 -821 -2,043 0 4,882 -481 0 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 0 0 2,676 3,783 98 0 0 4,882 0 0	122 0 7,626 818 919 2,043 0 0 481 0	-122 0 -4,949 2,965 -821 -2,043 0 4,882 -481 0

15,580

-0.03

15,584

-4

Table 6 continued.

DISCREPANCY [%]

Water Budget2060 San Patricio County	Chicot Aquifer		
FLOW TERM	IN	OUT	IN-OUT
STORAGE	121	36	85
CONSTANT HEAD	0	0	0
HORIZ. EXCHANGE	7,626	2,792	4,834
EXCHANGE (UPPER)	0	0	0
EXCHANGE (LOWER)	1,103	1,437	-334
WELLS	0	6,946	-6,946
DRAINS	0	340	-340
RECHARGE	12,061	0	12,061
ET	0	684	-684
RIVER LEAKAGE	0	0	0
HEAD DEP BOUNDS	118	2,654	-2,536
STREAM LEAKAGE	3,157	9,294	-6,137
INTERBED STORAGE	0	0	0
RESERV. LEAKAGE	0	0	0
SUM OF THE LAYER	24,186	24,183	2
DISCREPANCY [%]	0.01		
San Patricio County	Evangeline Aquifer		
-	-	OUT	IN-OUT
San Patricio County FLOW TERM STORAGE	Evangeline Aquifer IN 2	о ит 3	IN-OUT -1
FLOW TERM	IN		
FLOW TERM STORAGE	IN 2	3	-1
FLOW TERM STORAGE CONSTANT HEAD	IN 2 0	3 0	-1 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE	IN 2 0 2,677	3 0 910	-1 0 1,767
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER)	IN 2 0 2,677 1,437	3 0 910 1,103	-1 0 1,767 334
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER)	IN 2 0 2,677 1,437 347	3 0 910 1,103 12	-1 0 1,767 334 335
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS	IN 2 0 2,677 1,437 347 0	3 0 910 1,103 12 2,525	-1 0 1,767 334 335 -2,525
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS	IN 2 0 2,677 1,437 347 0	3 0 910 1,103 12 2,525 0	-1 0 1,767 334 335 -2,525 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE	IN 2 0 2,677 1,437 347 0 0	3 0 910 1,103 12 2,525 0	-1 0 1,767 334 335 -2,525 0 152
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET	IN 2 0 2,677 1,437 347 0 0 152	3 0 910 1,103 12 2,525 0 0	-1 0 1,767 334 335 -2,525 0 152 -12
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 2 0 2,677 1,437 347 0 0 152 0 927	3 0 910 1,103 12 2,525 0 0 12	-1 0 1,767 334 335 -2,525 0 152 -12 927
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS	IN 2 0 2,677 1,437 347 0 0 152 0 927 0	3 0 910 1,103 12 2,525 0 0 12 0	-1 0 1,767 334 335 -2,525 0 152 -12 927 0
FLOW TERM STORAGE CONSTANT HEAD HORIZ. EXCHANGE EXCHANGE (UPPER) EXCHANGE (LOWER) WELLS DRAINS RECHARGE ET RIVER LEAKAGE HEAD DEP BOUNDS STREAM LEAKAGE	IN 2 0 2,677 1,437 347 0 0 152 0 927 0 0	3 0 910 1,103 12 2,525 0 0 12 0 0 977	-1 0 1,767 334 335 -2,525 0 152 -12 927 0 -977

0

Table 7. Recharge rates and methodologies for the Texas Gulf Coast area (Chowdhury and others, 2004).

Source	Recharge Rate (in/yr)	Study Area	Recharge Method
Groschen (1985)	0.06	San Patricio to Jim Hogg counties	Constant head
Ryder (1988)	0 to 6	Texas Gulf Coast	Specified head, top layer of the model
Dutton and Richter (1990)	0.1 to 0.4	Matagorda and Wharton counties	Head-dependent flux boundary, top layer of the model
Noble and others (1996)	6	Harris, Montgomery and Walker counties	Isotopes
Hay (1999)	0.078	Navidad River to Willacy County	Constant head
Harden and Associates (2001)	0.1 to 0.2	Brownsville and vicinity	Used maximum potential recharge (3 inches) and MODFLOW's River Package
Ryder and Ardis (2002)	0.12^{1} - 0.25^{2}	Texas Gulf Coast	Specified head, top layer of the model
Kasmarek and Strom (2004)	0.32 ³ -0.43 ⁴	Northern Gulf Coast GAM	Specified head, top layer of the model
Chowdhury and Mace (2004)	0.09 to 0.15	Southern Gulf Coast GAM	Calibrated recharge as a percent of distributed rainfall

1 = average recharge for the predevelopment model, 2 = average recharge for 1982 3 = average recharge for 1977, 4 = average recharge for 2000