# GAM Run 07-35

**by Andrew C. A. Donnelly, P.G.**
Texas Water Development Board
Groundwater Availability Modeling Section
(512) 463-3132
January 10, 2008

## EXECUTIVE SUMMARY:

We ran the groundwater availability model for the central part of the Gulf Coast Aquifer using a specified pumpage annually for a 60-year predictive simulation along with average recharge rates, evapotranspiration rates, and initial streamflows. The results of this model run indicated that using the specified pumpage in the model results in large areas of water level declines over the 60-year model run. These areas of water level declines occur in the Chicot, Evangeline, and the Jasper aquifers and are caused by increased pumping over most of the model area.

## REQUESTOR:

Mr. Scotty Bledsoe from the Live Oak Underground Water Conservation District (on behalf of Groundwater Management Area 16).

## DESCRIPTION OF REQUEST:

Mr. Bledsoe asked for a baseline model run using the groundwater availability model for the central part of the Gulf Coast Aquifer. This model run would be a 60-year simulation using initial water levels from the end of the historic calibration simulation and average recharge conditions. Each year of the model run would use a pumpage approved by members of Groundwater Management Area 16.

## METHODS:

Recharge and evapotranspiration rates and initial streamflows were averaged for the historic calibration-verification runs, representing 1981 to 1999. These averages were then used for each year of the 60-year predictive simulation along with the baseline pumpage. Resulting water levels and drawdowns were then evaluated and are described in the "Results" section below.

## PARAMETERS AND ASSUMPTIONS:

The groundwater availability model for the central part of the Gulf Coast Aquifer was used for this model run. The parameters and assumptions for this model are described below:

- We used Version 1.01 of the groundwater availability model for the central part of the Gulf Coast Aquifer. This model assumes that most of the wells in the

Evangeline Aquifer are partially penetrating in absence of adequate completion data in the lower portion of the aquifer.

- See Chowdhury and others (2004), and Waterstone and others (2003) for assumptions and limitations of the groundwater availability model for the central part of the Gulf Coast Aquifer.

- The mean absolute error (a measure of the difference between simulated and actual water levels during model calibration) in the entire model for 1999 is 26 feet, which is 4.6 percent of the hydraulic head drop across the model area (Chowdhury and others, 2004).

- The model includes four layers representing: the Chicot Aquifer (Layer 1), the Evangeline Aquifer (Layer 2), the Burkeville Confining Unit (Layer 3), and the Jasper Aquifer (Layer 4).

- Recharge rates, evapotranspiration rates, and initial streamflows are averages from the 1981 to 1999 calibration and verification time period.

- Pumpage used for each year of the 60-year predictive simulation was specified by members of Groundwater Management Areas 15 and 16. Details on this pumpage are given below.

**Specified Pumpage**

The pumpage specified by the members of Groundwater Management Area 16 was based on the baseline pumpage constructed for GAM Run 07-12 and GAM Run 07-14 (Donnelly, 2007a and 2007b). The assumptions used to create the baseline pumpage are detailed in the GAM Run 07-12 and 07-14 reports and will not be repeated in this report. The following modifications were made to the baseline pumpage to create the specified pumpage used in this simulation.

The baseline pumpage totals were increased in most counties in the model area. The total amount of pumpage used in each county in this simulation is shown in Table 1. Also included in Table 1 is the amount of pumpage assigned to each of the three aquifers (Chicot, Evangeline, and Jasper) within the Gulf Coast Aquifer System. The amount assigned to each aquifer was determined based on the percentages pumped from each aquifer in the baseline pumpage data set, unless the pumpage to each aquifer was specified by members of the Groundwater Management Area 16.

In addition to the total county pumpage, members of Groundwater Management Area 16 also had the option of specifying where the new pumpage would be allocated. The following specifications were made on where and how pumpage should be allocated.

- Bee County—ninety percent (90%) of the total pumpage was placed in the shaded area in the southern half of Bee County, as shown in Figure 1. Pumpage was allocated to the three aquifers within the Gulf Coast Aquifer System based on the percentage in the baseline pumpage data set.

Table 1. Pumpage used in this model simulation. Pumpage is reported in acre-feet per year.

| County | GAM Run 07-12 baseline pumpage | GAM Run 07-35 total pumpage | Additional pumpage | Additional Chicot pumpage | Additional Evangeline pumpage | Additional Jasper pumpage |
|---|---|---|---|---|---|---|
| Aransas | 1,827 | 1,827 | 0 | 0 | 0 | 0 |
| Bee | 4,694 | 18,654 | 13,960 | 6,282 | 7,399 | 279 |
| Brooks | 4,040 | 4,040 | 0 | 0 | 0 | 0 |
| Calhoun | 1,517 | 2,940 | 1,423 | 1,387 | 36 | 0 |
| Colorado | 33,236 | 47,857 | 14,621 | 7,448 | 6,898 | 275 |
| Dewitt | 4,587 | 15,866 | 11,279 | 3,384 | 6,767 | 1,128 |
| Duval | 7,749 | 14,063 | 6,314 | 338 | 3,585 | 2,390 |
| Fayette | 2,197 | 8,697 | 6,500 | 0 | 715 | 5,785 |
| Goliad | 6,143 | 12,810 | 6,667 | 706 | 5,961 | 0 |
| Jackson | 53,615 | 87,876 | 34,261 | 24,979 | 9,282 | 0 |
| Jim Hogg | 981 | 981 | 0 | 0 | 0 | 0 |
| Jim Wells | 4,774 | 15,013 | 10,239 | 2,560 | 7,679 | 0 |
| Karnes | 2,897 | 15,200 | 12,303 | 0 | 1,107 | 11,196 |
| Kenedy | 104 | 104 | 0 | 0 | 0 | 0 |
| Kleberg | 8,634 | 15,000 | 6,366 | 637 | 5,729 | 0 |
| Lavaca | 11,376 | 38,171 | 26,795 | 4,060 | 16,583 | 6,152 |
| Live Oak | 8,680 | 11,987 | 3,307 | 0 | 1,058 | 2,249 |
| Matagorda | 35,000 | 49,221 | 14,221 | 11,254 | 2,967 | 0 |
| McMullen | 29 | 150 | 121 | 0 | 1 | 120 |
| Nueces | 3,097 | 56,000 | 52,903 | 13,226 | 39,677 | 0 |
| Refugio | 1,068 | 24,825 | 23,757 | 6,257 | 17,500 | 0 |
| San Patricio | 3,748 | 16,290 | 12,542 | 6,271 | 6,271 | 0 |
| Victoria | 13,872 | 41,129 | 27,257 | 15,091 | 12,166 | 0 |
| Webb | 143 | 1,000 | 857 | 0 | 815 | 42 |
| Wharton | 180,000 | 182,793 | 2,793 | 1,734 | 1,059 | 0 |

- Jim Wells County—seventy-five percent (75%) of the total pumpage was allocated to the Evangeline Aquifer in the shaded area shown in Figure 2.

- Kleberg County—ninety percent (90%) of the total pumpage was allocated to the Evangeline Aquifer in the shaded area shown in Figure 2.

- Live Oak County—eighty percent (80%) of the total pumpage was placed in the shaded area in the southern half of Live Oak County, as shown in Figure 1. Pumpage was allocated to the three aquifers within the Gulf Coast Aquifer System based on the percentage in the baseline pumpage data set.

- Refugio County—17,500 acre-feet per year of pumpage was allocated to the Evangeline Aquifer and placed in two areas, shown in green in Figure 3. The remainder of the pumpage for the county, approximately 6,257 acre-feet per year, was allocated to the Chicot Aquifer and placed in the three red areas shown in Figure 3.

- San Patricio County- 15,000 acre-feet of pumpage was allocated to the area west of Highway 77, as shown in Figure 4.

If locations for pumpage were not specified by members of Groundwater Management Area 16, the additional pumpage was distributed evenly across the entire active portion of each aquifer within each county.

## RESULTS:

Included in Appendix A are estimates of the water budgets after running the model for 60 years. The components of the water budget are described below.

- Wells—water produced from wells in each aquifer. This component is always shown as "Outflow" from the water budget, because all wells included in the model produce (rather than inject) water. Wells are modeled using the MODFLOW Well package.

- Springs and wetlands—water that drains from an aquifer if water levels are above the elevation of the spring or wetland. This component is always shown as "Outflow", or discharge, from the water budget. Springs and wetlands are modeled using the MODFLOW Drain package.

- Recharge—simulates areally distributed recharge due to precipitation falling on the outcrop areas of aquifers. Recharge is always shown as "Inflow" into the water budget.

- Vertical Leakage (Upward or Downward)—describes the vertical flow, or leakage, between two aquifers. This flow is controlled by the water levels in each aquifer and aquifer properties of each aquifer that define the amount of leakage that can occur. "Inflow" to an aquifer from an overlying or underlying aquifer will always equal the "Outflow" from the other aquifer.

- Storage—water stored in the aquifer. The storage component that is included in "Inflow" is water that is removed from storage in the aquifer (that is, water levels decline). The storage component that is included in "Outflow" is water that is added back into storage in the aquifer (that is, water levels increase). This component of the budget is often seen as water both going into and out of the aquifer because this is a regional budget, and water levels will decline in some areas (water is being removed from storage) and will rise in others (water is being added to storage).

- Lateral flow—describes lateral flow within an aquifer between a county and adjacent counties.

- Evapotranspiration—water that flows out of an aquifer due to direct evaporation and plant transpiration. This component of the budget will always be shown as "Outflow". Evapotranspiration is modeled using the MODFLOW Evapotranspiration package.

- Rivers and Streams—water that flows between streams and rivers and an aquifer. The direction and amount of flow depends on the water level in the stream or river and the aquifer. In areas where water levels in the stream or river are above the water level in the aquifer, water flows into the aquifer and is shown as "Inflow" in the budget. In areas where water levels in the aquifer are above the water level in the stream or river, water flows out of the aquifer and into the stream and is shown as "Outflow" in the budget. Rivers and streams are modeled using the MODFLOW Stream package.

- General-Head Boundary—the model uses general-head boundaries to simulate the movement of water out of the Chicot Aquifer at the coast.

The results of the model run are described for the three aquifers in the model area; the Chicot (layer 1 in the model), the Evangeline (layer 2), and the Jasper (layer 4) aquifers. Results for the Burkeville Confining Unit (layer 3) are not discussed because this is not a major source of water in the region.

Initial water levels (which are from the end of the transient calibration run- the end of 1999) for the Chicot, Evangeline, and Jasper aquifers are shown in Figures 5, 6, and 7, respectively. These figures show the starting water levels for this 60-year predictive model run. These figures all show that water levels are the highest in the outcrop portions of the aquifers, located farthest from the coast, and that water levels decrease as groundwater flows downdip towards the coast. A cone of depression (an area of decreased water levels around an area of heavy pumpage) can be observed in the Evangeline Aquifer in south-central Wharton County, as well as around the cities of Victoria and Kingsville in Victoria and Kleberg counties, respectively (Figure 6). Small cones of depression can also be observed in the Jasper Aquifer in southern Duval County, central Live Oak County, central DeWitt County, and central Lavaca County.

Water levels at the end of the 60-year predictive simulation for the Chicot, Evangeline, and Jasper aquifers are shown in Figures 8, 9, and 10, respectively. These figures show the impact of the increased pumpage in many parts of the model area. Some areas of drawdown are evident in the water level map for the Chicot Aquifer (Figure 8), in particular an area of drawdown in Jackson and Wharton counties that was present in the initial water level map (Figure 5) has expanded because of the additional pumpage in Jackson County.

Water levels in the Evangeline Aquifer (Figure 9) also show the impact of the additional pumpage in some areas of the model. Significant areas of depression in the water levels can be seen in Figure 9 in Kleberg County. The impact of the additional pumpage in Refugio County in one of the two designated areas of the Evangeline can also be seen in Figure 9.

In the Jasper Aquifer, differences between initial water levels (Figure 7) and water levels after 60 years (Figure 10) are harder to discern because less pumpage was added to this aquifer than either the Chicot or Evangeline Aquifers.

In addition to water level maps, maps of water level changes for each aquifer were made. A water level change map shows the difference between the initial water levels and the

water levels at the end of the 60-year run. These figures will help evaluate the impact of pumpage on the water levels over the length of the model run. Water level changes over the 60-year predictive simulation for the Chicot, Evangeline, and Jasper aquifers are shown in Figures 11, 12, and 13, respectively. Average water level changes for each aquifer in each county of the model are provided in Table 2.

Table 2. Average water level changes by county and aquifer. Negative values indicates an average lowering of water levels between 1999 and 2060 while a positive value indicates an increase in water levels since 1999. A dashed line indicates the aquifer does not exist or was not modeled for a particular county.

| County | Average Water Level Change (feet) | | |
|---|---|---|---|
| | Chicot Aquifer (Layer 1) | Evangeline Aquifer (Layer 2) | Jasper Aquifer (Layer 4) |
| Aransas | 0.0 | -10.8 | -- |
| Austin | 3.5 | -2.6 | -11.1 |
| Bee | -5.9 | -10.2 | -5.6 |
| Brazoria | 0.5 | -11.5 | -15.1 |
| Brooks | 28.3 | 17.0 | 4.2 |
| Calhoun | 0.7 | -8.2 | -- |
| Colorado | -7.3 | -11.5 | -25.1 |
| De Witt | -7.7 | -6.2 | -17.4 |
| Duval | -1.8 | -10.8 | -32.8 |
| Fayette | -- | -13.8 | -45.4 |
| Fort Bend | 2.2 | -3.3 | -12.8 |
| Goliad | 0.7 | -5.0 | -13.6 |
| Gonzales | -- | -- | -14.7 |
| Jackson | -19.6 | -24.7 | -26.6 |
| Jim Hogg | 54.9 | 23.0 | 10.3 |
| Jim Wells | -2.5 | -22.6 | -9.5 |
| Karnes | -- | -28.0 | -52.6 |
| Kenedy | 7.0 | -16.5 | -- |
| Kleberg | -1.7 | -93.6 | -12.0 |
| Lavaca | -13.1 | -12.9 | -63.0 |
| Live Oak | -4.5 | -8.4 | -16.2 |
| McMullen | -- | -- | -11.4 |
| Matagorda | -3.8 | -23.1 | -- |
| Nueces | -8.0 | -82.2 | -11.3 |
| Refugio | -0.3 | -21.8 | -- |
| San Patricio | -8.7 | -26.0 | -14.5 |
| Victoria | 7.1 | 0.4 | -5.8 |
| Washington | -- | -- | -37.4 |
| Webb | -- | -13.7 | -19.1 |
| Wharton | -15.4 | -10.4 | -23.1 |

Water levels in the Chicot Aquifer (Figure 11) show a decline (drawdown) throughout much of the model area, including an area in Jackson and Wharton counties where the declines are in excess of 50 feet. Declines can also be observed in Bee, Colorado, Jim Wells, Matagorda, and Nueces counties where pumpage in the Chicot Aquifer was increased. Although pumpage in Victoria County was also increased in this model run,

water levels show a recovery across the county. This is due to the response of the aquifer to decreased pumping from the City of Victoria that was included in the baseline pumpage. A recovery in water levels can also be observed at the southern edge of the model in Brooks, Jim Hogg, and Kenedy counties. However, this is an unavoidable artifact of the way the model was constructed and should be ignored for management decisions.

In the Evangeline Aquifer (Figure 12) decreases in water levels are observed across most of the model area. Extremely high drawdowns are observed in Kleberg County where large amount of pumping from the Evangeline Aquifer were placed over limited areas. Other areas of higher water level decline are observed in two areas of Refugio and Nueces counties where pumpage was increased to the Evangeline Aquifer. Throughout most of the rest of the model area water level declines in the Evangeline Aquifer are less than 25 feet. Water levels recover in Victoria County due to decreased pumping from the Evangeline Aquifer for the City of Victoria. As with Figure 11, water level increases at the southern edge of the model are a result of the model construction and are not considered to be accurate.

In the Jasper Aquifer (Figure 13) significant declines in water levels occur throughout the model area. Several areas of significant decline in Fayette, Karnes, Lavaca, and Live Oak counties occur in Figure 13, all due to pumpage added to the Jasper Aquifer for this model run. Water-level declines of up to 30 feet can be observed in Figure 13 for much of the rest of the model area. An area of higher drawdown in southern Duval County can be seen, however this was also observed in the baseline model run (GAM Run 07-12) and is not due to additional pumpage used in this model run. A localized area of recovery can also be observed in Bee County, which was also observed in the baseline model run and is not due to pumpage used in this simulation. As with Figures 11 and 12, water level increases at the southern edge of the model are a result of the model construction and are not considered to be accurate.

Because some of the desired future conditions for the groundwater management area may be based on discharge to springs or baseflow to rivers and streams, we also pulled the water budgets for each of these components for each county in the model area. These budgets are provided in Appendix A. The components of the water budget are divided up into “In” and “Out”, representing water that is coming into and leaving from the budget. As might be expected, water from wells is only in the “Out” column, representing water that is pulled out of the budget or aquifer system from wells. Likewise, recharge is only found in the “In” column. Streams and rivers, however, have values in both the “In” and “Out” columns. This is because some streams lose water to the aquifer, and some gain water from the aquifer depending on the water levels in the aquifer. Also included in these budgets are values for vertical leakage to overlying and underlying formations as well as lateral inflow from adjacent counties. Future model runs can be compared to these budgets to determine the impact of additional pumpage compared to this baseline run.

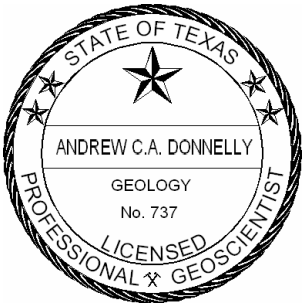
## REFERENCES:


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- Model Report, 114 p.

Donnelly, A.C.A., 2007a, GAM Run 07-12, Texas Water Development Board GAM Run Report, 39 p.

Donnelly, A.C.A., 2007b, GAM Run 07-14, Texas Water Development Board GAM Run Report, 26 p.

Waterstone Engineering, Inc., and Parsons, Inc., 2003, Groundwater Availability of the Central Gulf Coast Aquifer: Numerical Simulations to 2050 Central Gulf Coast, Texas- Final Report: contract report to the Texas Water Development Board, 158 p.


The seal appearing on this document was authorized by Andrew C.A. Donnelly, P.G. 737, on January 10, 2008.

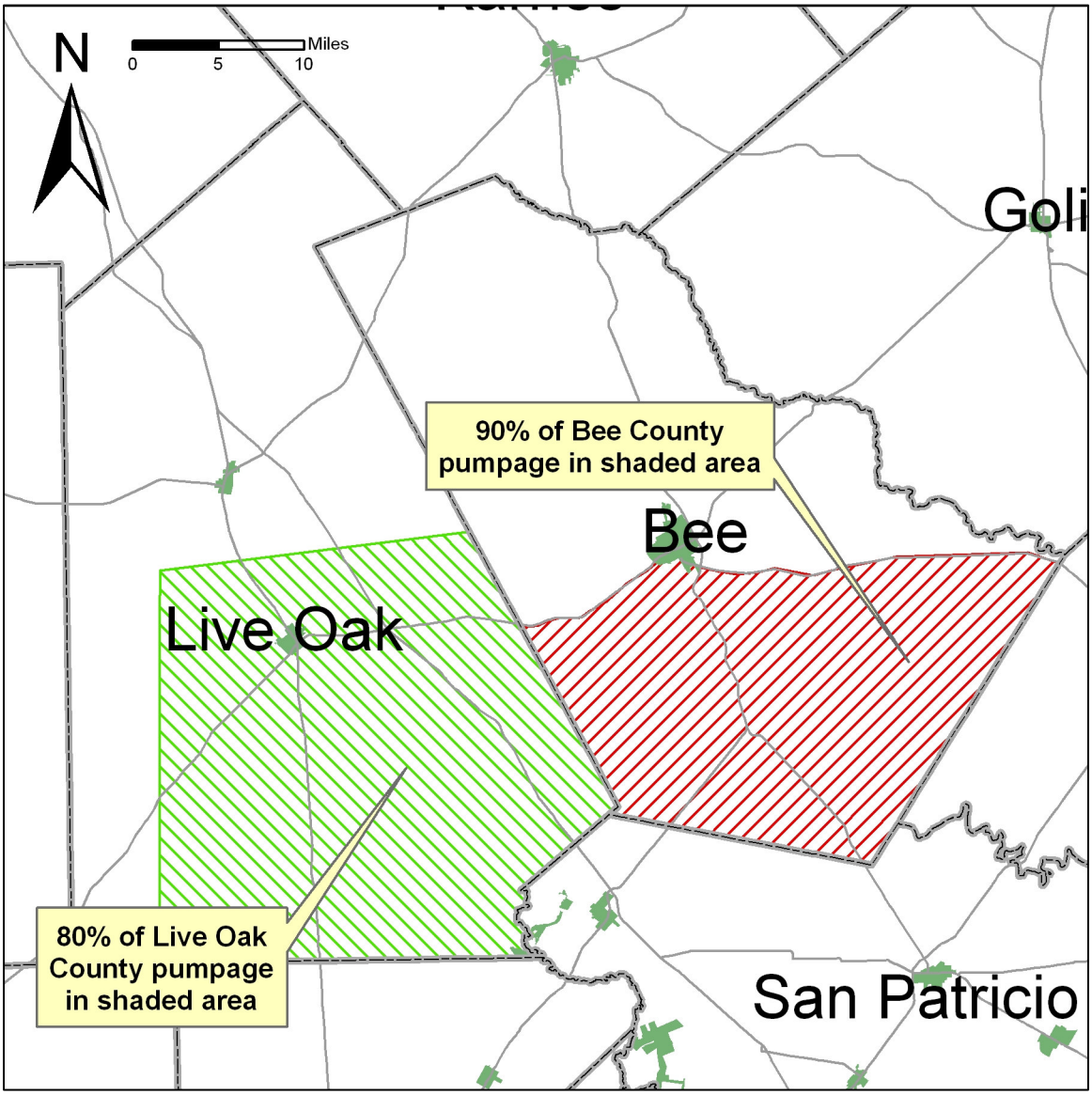


Figure 1. Location of additional pumpage in Bee and Live Oak counties. Pumpage in each county is concentrated in the shaded areas.

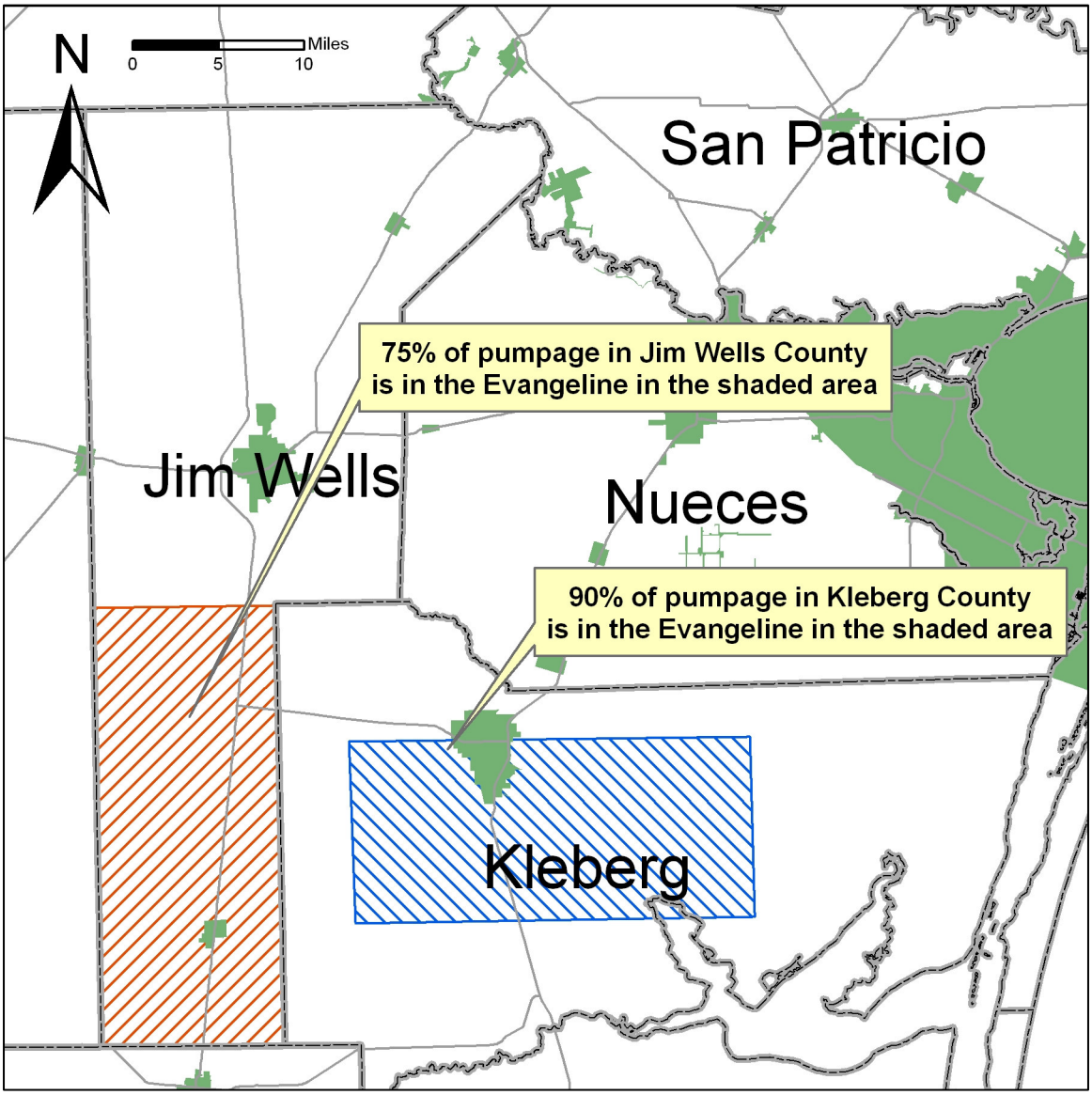


Figure 2. Location of additional pumpage in Jim Wells and Kleberg counties. Pumpage in each county is concentrated in the Evangeline Aquifer in the shaded areas.

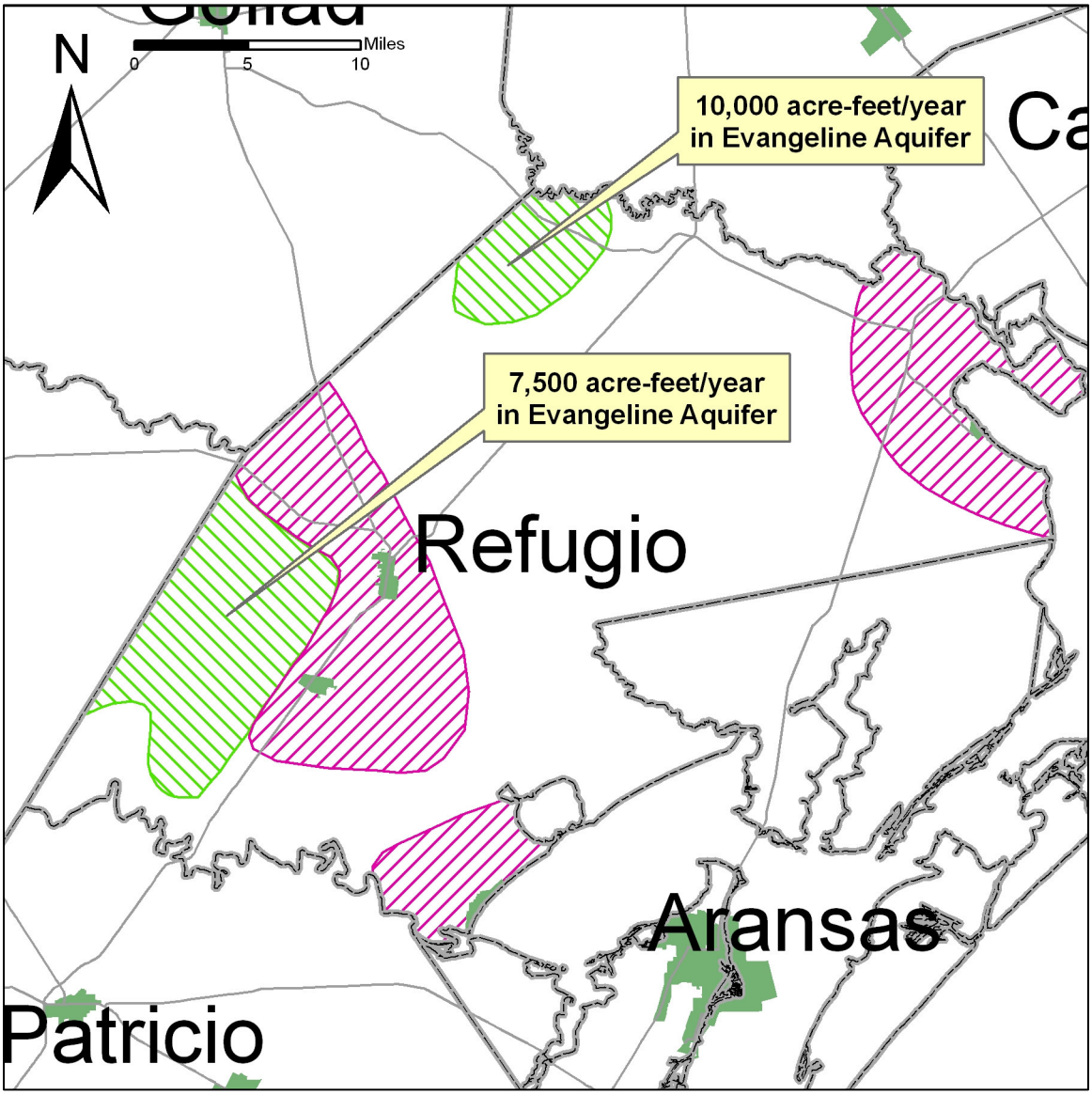


Figure 3. Location of additional pumpage in Refugio County. Pumpage in the Evangeline Aquifer is shown in the green areas, and pumpage in the Chicot Aquifer is shown in the red areas.

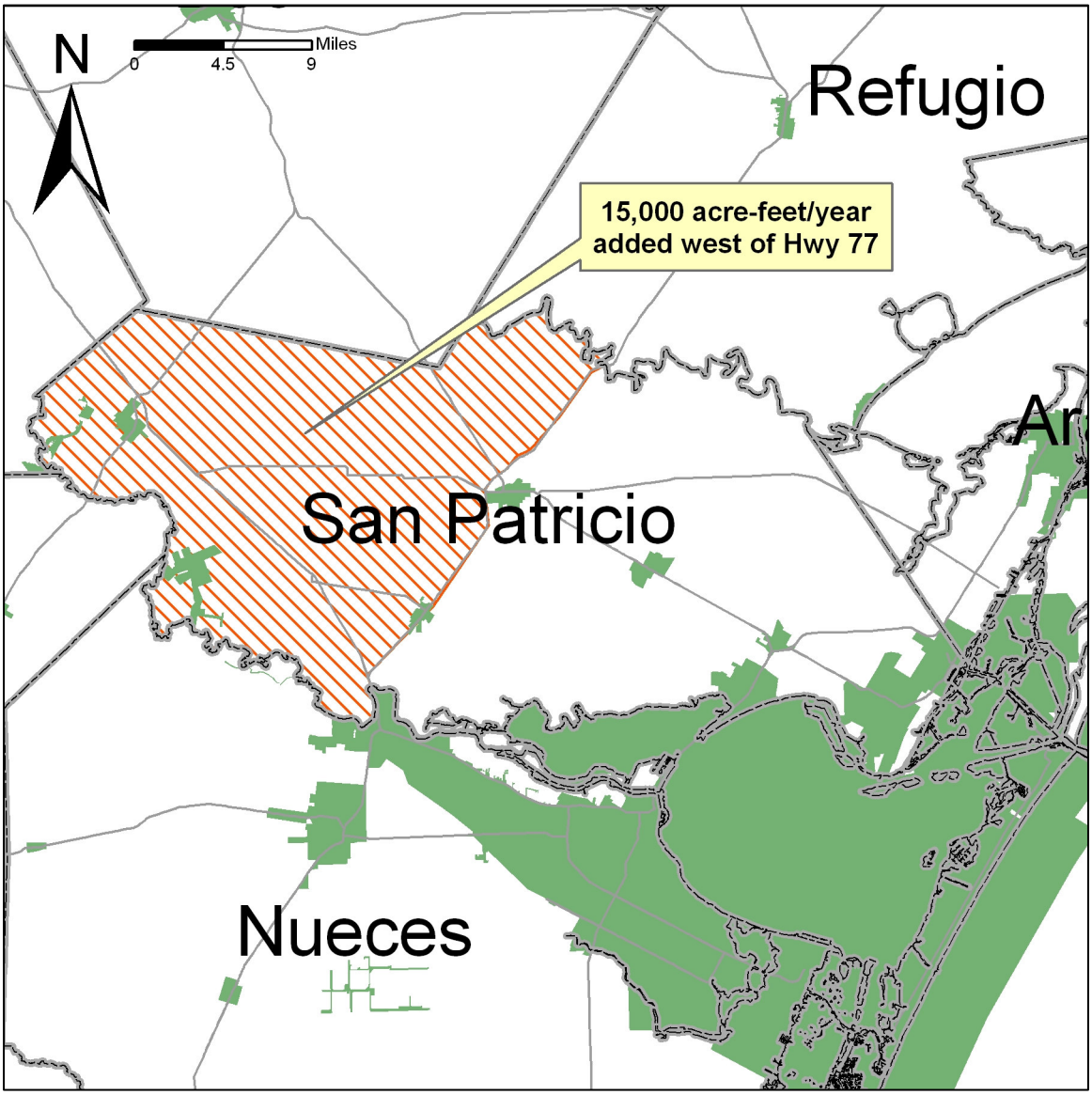


Figure 4. Location of additional pumpage in San Patricio County.

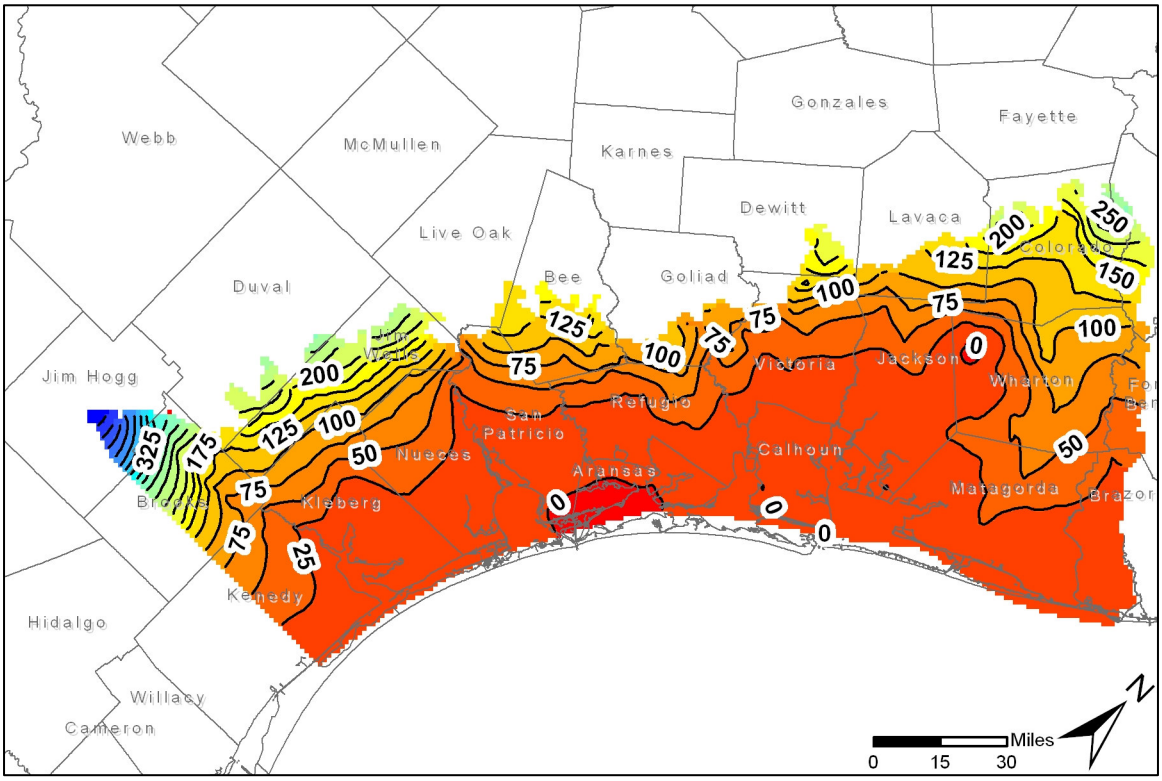



Figure 5. Initial water level elevations for the predictive model run in the Chicot Aquifer from the groundwater availability model for the central part of the Gulf Coast Aquifer. Water level elevations are in feet above mean sea level. Contour interval is 25 feet.

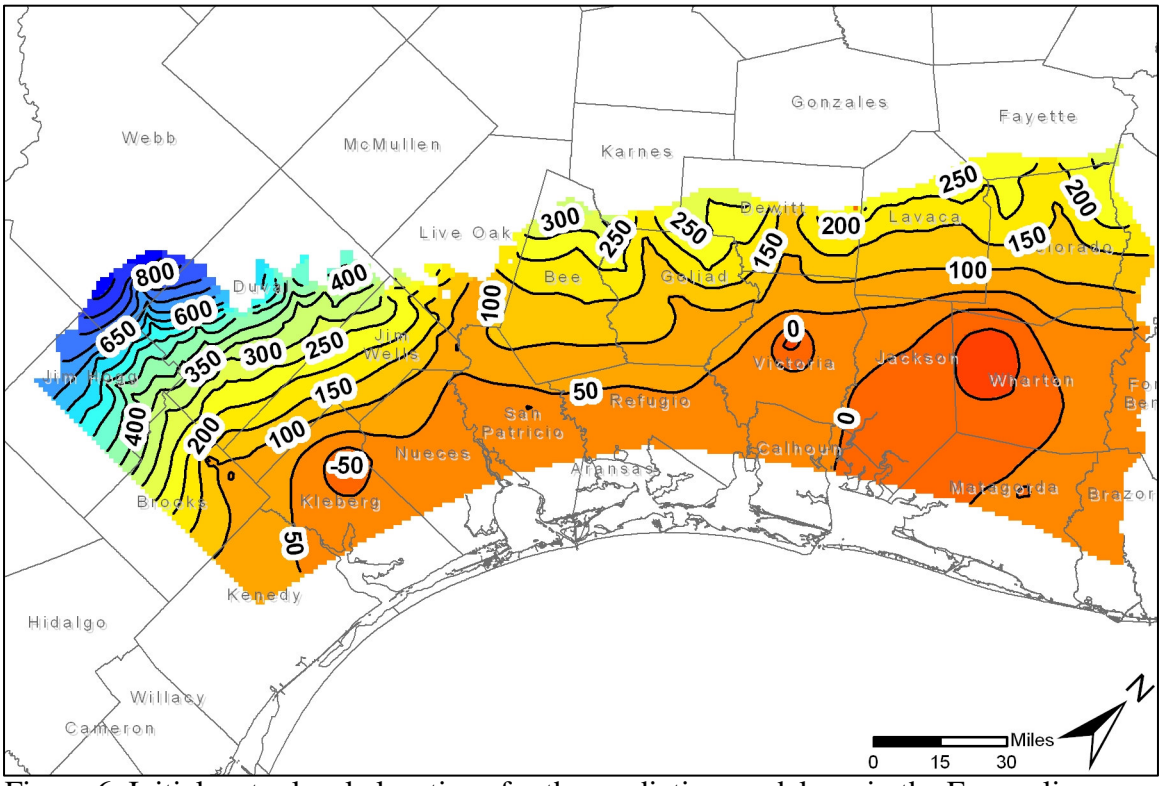



Figure 6. Initial water level elevations for the predictive model run in the Evangeline Aquifer from the groundwater availability model for the central part of the Gulf Coast Aquifer. Water level elevations are in feet above mean sea level. Contour interval is 50 feet.

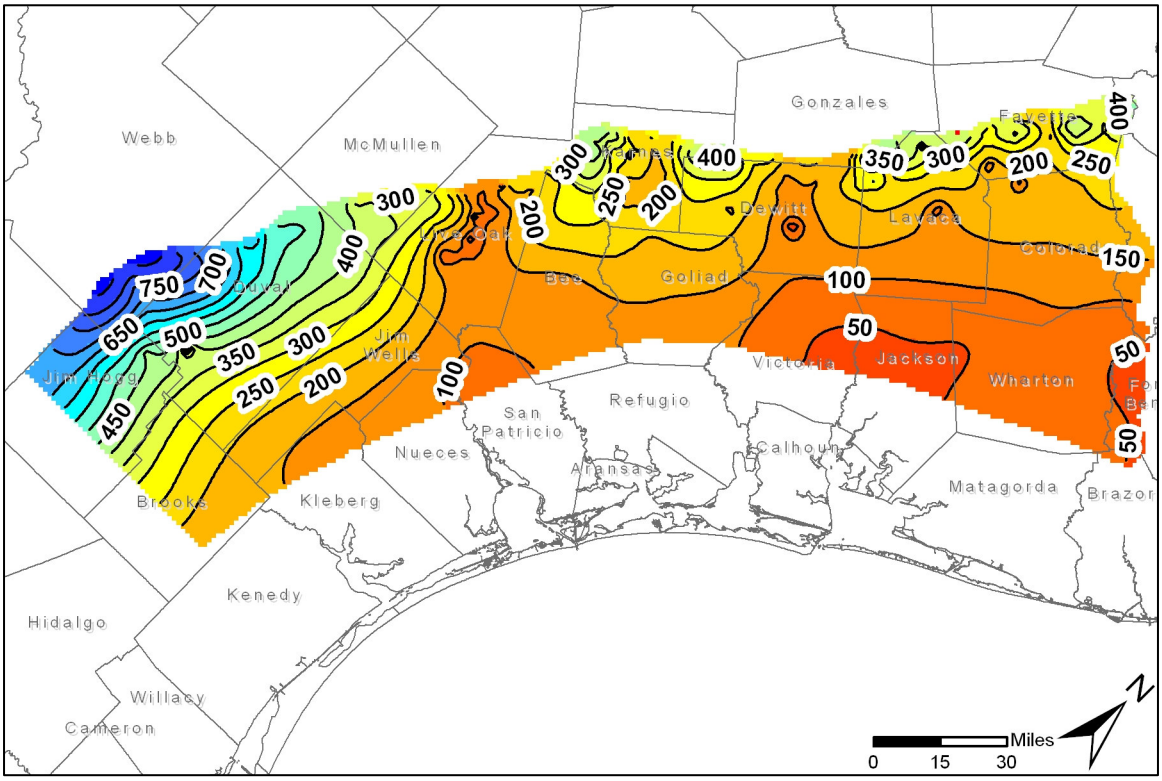



Figure 7. Initial water level elevations for the predictive model run in the Jasper Aquifer from the groundwater availability model for the central part of the Gulf Coast Aquifer. Water level elevations are in feet above mean sea level. Contour interval is 50 feet.

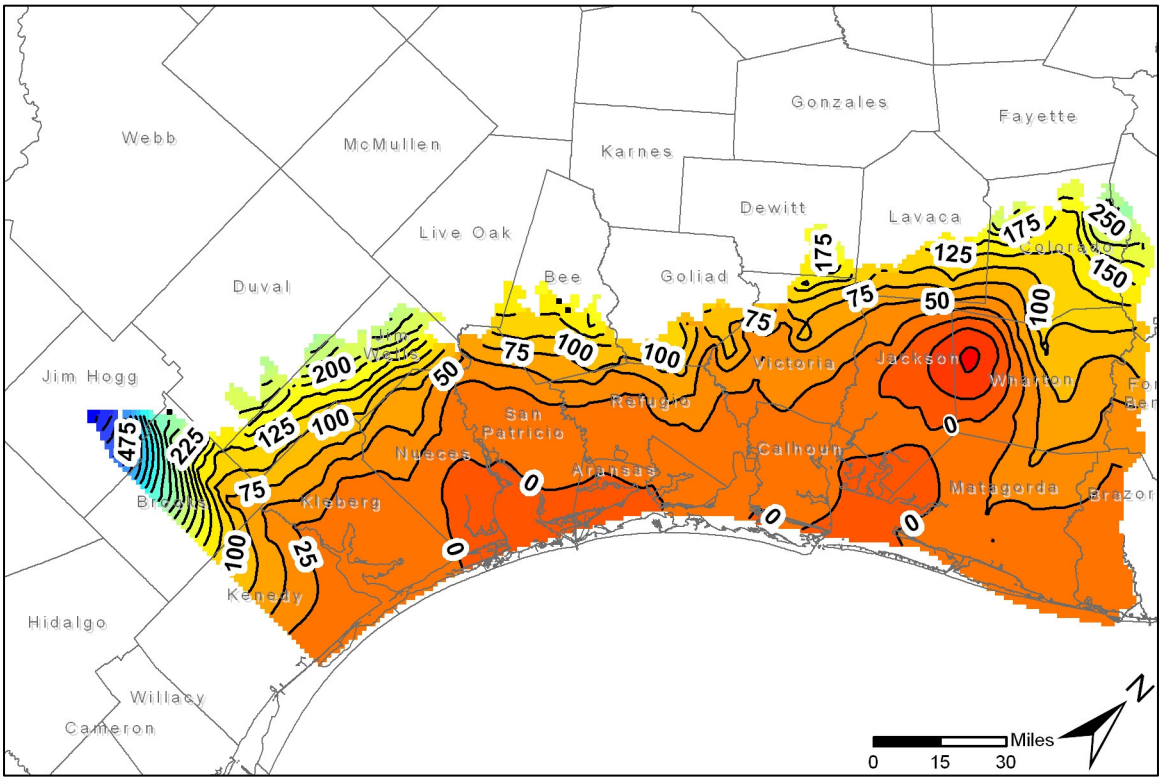



Figure 8. Water level elevations after 60 years using the specified pumpage in the Chicot Aquifer. Water level elevations are in feet above mean sea level. Contour interval is 25 feet.

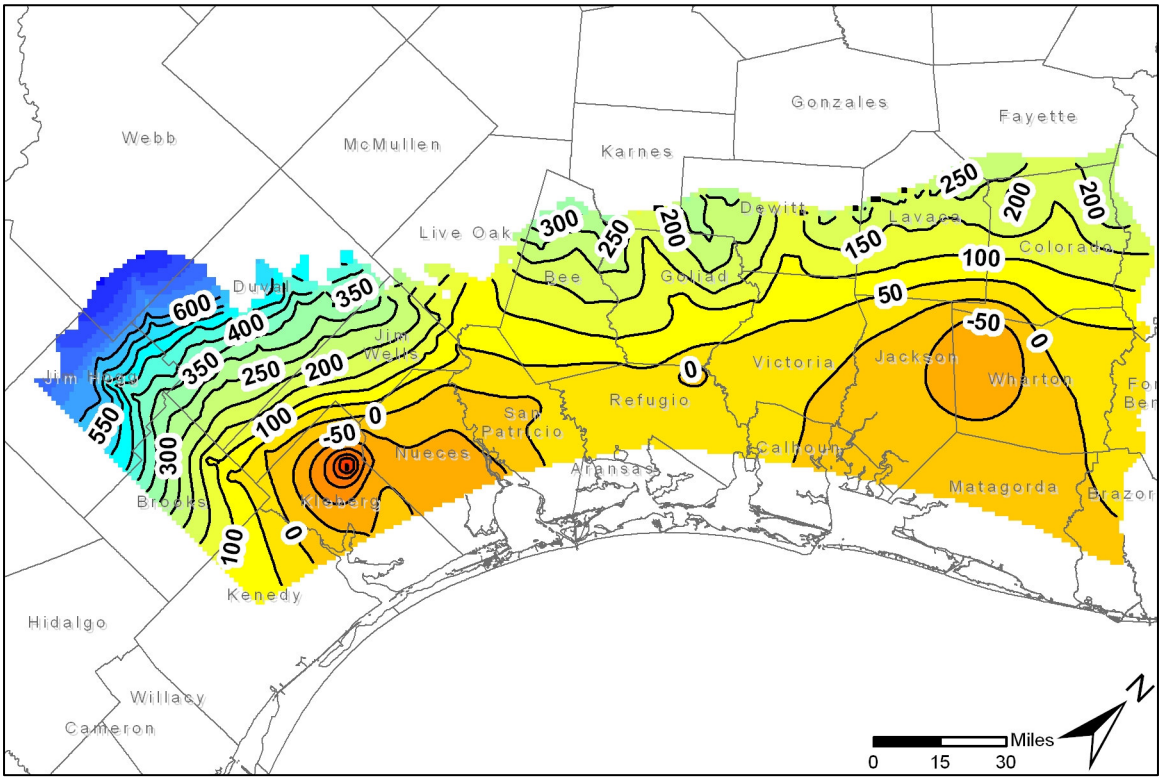



Figure 9. Water level elevations after 60 years using the specified pumpage in the Evangeline Aquifer. Water level elevations are in feet above mean sea level. Contour interval is 50 feet.

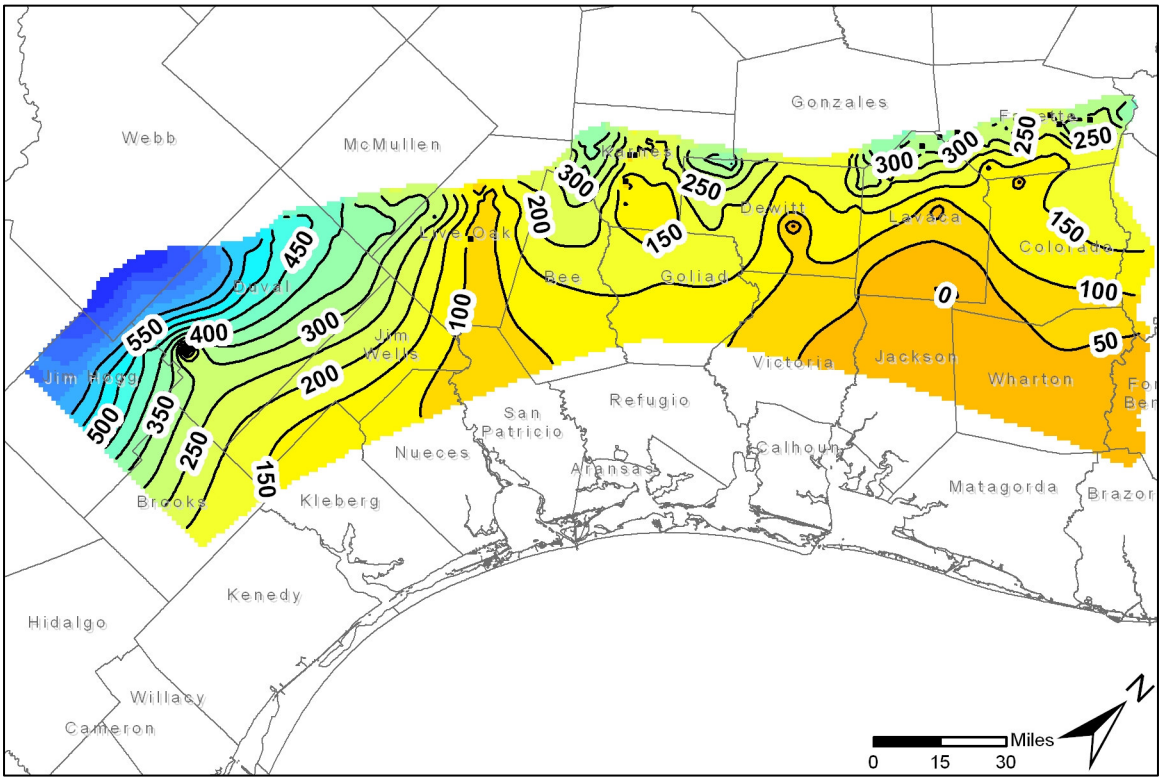



Figure 10. Water level elevations after 60 years using the specified pumpage in the Jasper Aquifer. Water level elevations are in feet above mean sea level. Contour interval is 50 feet.

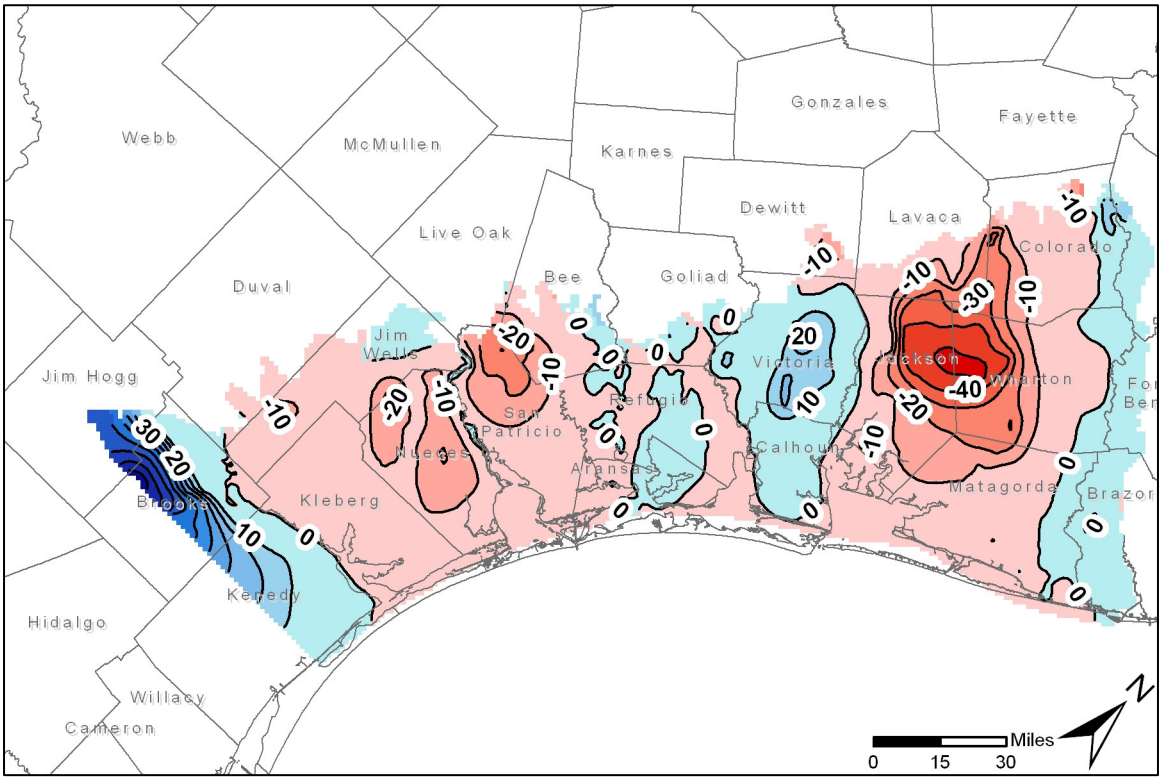



Figure 11. Changes in water levels after 60 years using the specified pumpage in Chicot Aquifer. Changes in water levels are in feet. Contour interval is 10 feet. Decreases in water levels (drawdowns) are shown in red. Increases in water levels are shown in blue.

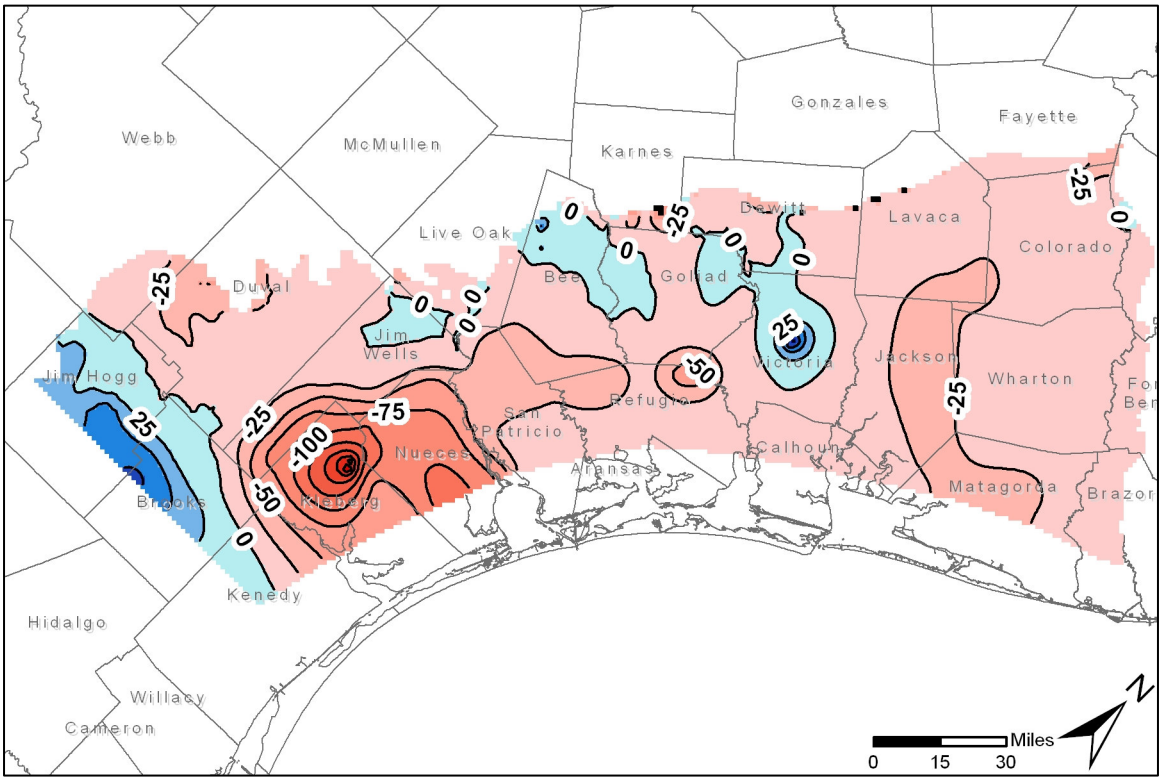



Figure 12. Changes in water levels after 60 years using the specified pumpage in the Evangeline Aquifer. Changes in water levels are in feet. Contour interval is 25 feet. Decreases in water levels (drawdowns) are shown in red. Increases in water levels are shown in blue.

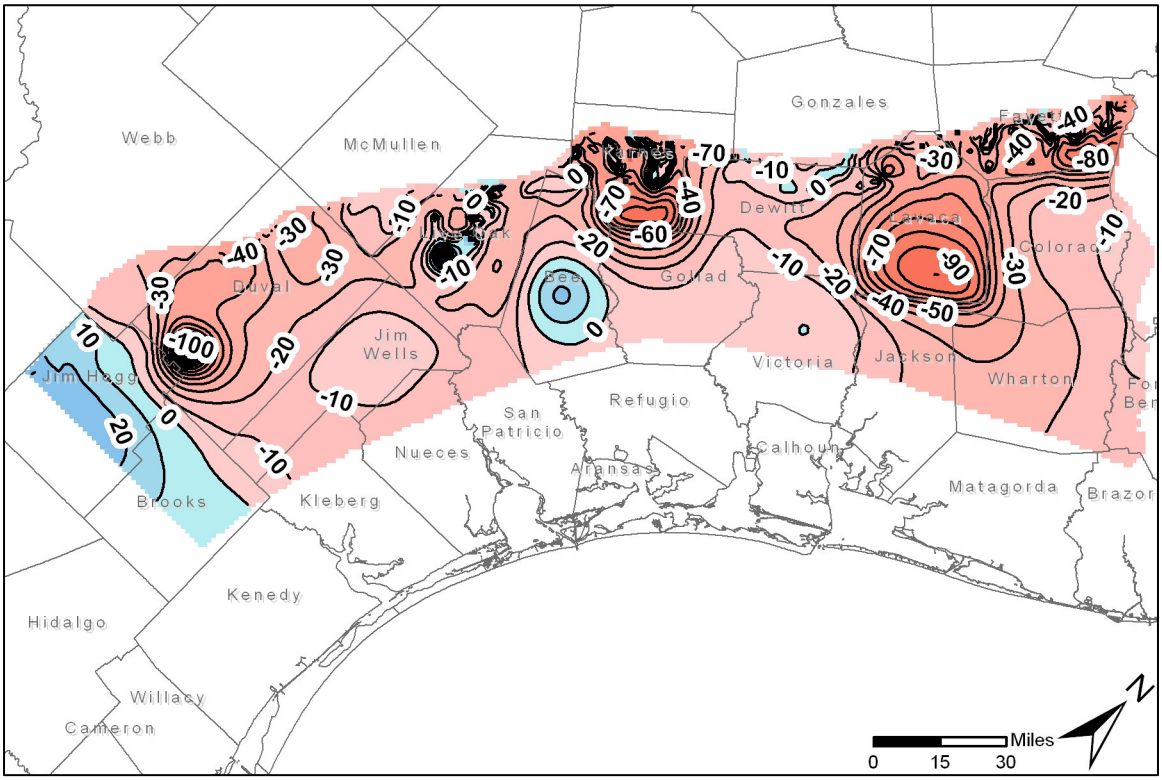



Figure 13. Changes in water levels after 60 years using the specified pumpage in the Jasper Aquifer. Changes in water levels are in feet. Contour interval is 10 feet. Decreases in water levels (drawdowns) are shown in red. Increases in water levels are shown in blue.

# Appendix A

# Summary of Water Budgets
# After 60 Years

Table A-1. Annual water budgets for each county at the end of the 60-year predictive model run using the specified pumpage in the groundwater availability model for the central part of the Gulf Coast Aquifer (in acre-feet per year). Water budgets for Jim Hogg, Brooks, Kenedy, Brazoria, Fort Bend, and Austin counties represent only the portions of those counties located in the active portion of the model.

| Aransas | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 0 | 0 | 1 | 0 | 1 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 11 | 0 | 11 | 0 | 11 |
| **General Head Boundaries** | 1,104 | 3,497 | 1,417 | 3,111 | 1,342 | 3,149 |
| **Wells** | 0 | 1,827 | 0 | 1,827 | 0 | 1,827 |
| **Streams and Rivers** | 2,351 | 669 | 2,456 | 646 | 2,425 | 655 |
| **Recharge** | 164 | 0 | 164 | 0 | 164 | 0 |
| **Evapotranspiration** | 0 | 741 | 0 | 729 | 0 | 730 |
| **Lateral Inflow** | 4,229 | 1,161 | 3,670 | 1,355 | 3,739 | 1,308 |
| **Vertical Leakage Downward** | 58 | 0 | 0 | 30 | 9 | 0 |
| **Evangeline** | | | | | | |
| **Storage** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 0 | 58 | 30 | 0 | 0 | 9 |
| **Lateral Inflow** | 105 | 47 | 136 | 166 | 64 | 56 |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Jasper** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |

Table A-1. (continued)

| Austin | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 2 | 0 | 8 | 0 | 8 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 3,118 | 0 | 3,118 | 0 | 3,118 |
| **Streams and Rivers** | 6,108 | 1,333 | 6,782 | 1,164 | 6,753 | 1,175 |
| **Recharge** | 6,758 | 0 | 6,758 | 0 | 6,758 | 0 |
| **Evapotranspiration** | 0 | 17 | 0 | 17 | 0 | 17 |
| **Lateral Inflow** | 2,481 | 4,051 | 2,300 | 4,190 | 2,303 | 4,186 |
| **Vertical Leakage Downward** | 0 | 6,830 | 0 | 7,359 | 0 | 7,325 |
| **Evangeline** | | | | | | |
| **Storage** | 2 | 0 | 9 | 0 | 9 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 3,931 | 0 | 3,931 | 0 | 3,931 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 90 | 0 | 90 | 0 | 90 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 6,830 | 0 | 7,359 | 0 | 7,325 | 0 |
| **Lateral Inflow** | 1,409 | 4,341 | 1,263 | 4,707 | 1,260 | 4,681 |
| **Vertical Leakage Downward** | 42 | 102 | 35 | 118 | 46 | 118 |
| **Jasper** | | | | | | |
| **Storage** | 16 | 0 | 48 | 0 | 44 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 23 | 0 | 23 | 0 | 23 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 97 | 40 | 121 | 27 | 121 | 39 |
| **Lateral Inflow** | 103 | 153 | 83 | 203 | 90 | 193 |

Table A-1. (continued)

| Bee | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| Storage | 0 | 15 | 1,424 | 0 | 514 | 0 |
| Reservoirs (River package) | 0 | 0 | 0 | 0 | 0 | 0 |
| Springs (Drain package) | 0 | 0 | 0 | 0 | 0 | 0 |
| General Head Boundaries | 0 | 0 | 0 | 0 | 0 | 0 |
| Wells | 0 | 1,383 | 0 | 9,620 | 0 | 6,934 |
| Streams and Rivers | 4,811 | 10,996 | 7,027 | 975 | 7,556 | 3,663 |
| Recharge | 18,921 | 0 | 18,825 | 0 | 18,825 | 0 |
| Evapotranspiration | 0 | 219 | 0 | 45 | 0 | 109 |
| Lateral Inflow | 775 | 8,671 | 972 | 5,568 | 720 | 8,570 |
| Vertical Leakage Downward | 937 | 4,160 | 0 | 12,041 | 0 | 8,339 |
| **Evangeline** | | | | | | |
| Storage | 0 | 41 | 173 | 0 | 74 | 0 |
| Reservoirs (River package) | 0 | 0 | 0 | 0 | 0 | 0 |
| Springs (Drain package) | 0 | 0 | 0 | 0 | 0 | 0 |
| General Head Boundaries | 0 | 0 | 0 | 0 | 0 | 0 |
| Wells | 0 | 2,973 | 0 | 13,553 | 0 | 10,370 |
| Streams and Rivers | 4,008 | 3,783 | 6,758 | 2,190 | 5,639 | 2,643 |
| Recharge | 4,993 | 0 | 5,089 | 0 | 5,089 | 0 |
| Evapotranspiration | 0 | 2 | 0 | 0 | 0 | 0 |
| Vertical Leakage Upward | 4,160 | 937 | 12,041 | 0 | 8,339 | 0 |
| Lateral Inflow | 2,354 | 6,841 | 5,104 | 13,006 | 3,061 | 8,533 |
| Vertical Leakage Downward | 96 | 1,031 | 612 | 1,023 | 367 | 1,019 |
| **Jasper** | | | | | | |
| Storage | 39 | 187 | 594 | 0 | 396 | 0 |
| Reservoirs (River package) | 0 | 0 | 0 | 0 | 0 | 0 |
| Springs (Drain package) | 0 | 0 | 0 | 0 | 0 | 0 |
| General Head Boundaries | 0 | 0 | 0 | 0 | 0 | 0 |
| Wells | 0 | 260 | 0 | 658 | 0 | 540 |
| Streams and Rivers | 94 | 96 | 159 | 58 | 145 | 69 |
| Recharge | 23 | 0 | 24 | 0 | 24 | 0 |
| Evapotranspiration | 0 | 0 | 0 | 0 | 0 | 0 |
| Vertical Leakage Upward | 884 | 148 | 1,152 | 270 | 1,069 | 210 |
| Lateral Inflow | 492 | 844 | 453 | 1,395 | 437 | 1,252 |

Table A-1. (continued)

| Brazoria | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 2 | 0 | 7 | 0 | 6 | 0 |
| **Reservoirs (River package)** | 338 | 0 | 341 | 0 | 341 | 0 |
| **Springs (Drain package)** | 0 | 72 | 0 | 63 | 0 | 64 |
| **General Head Boundaries** | 0 | 1,200 | 0 | 1,138 | 0 | 1,142 |
| **Wells** | 0 | 8,727 | 0 | 8,727 | 0 | 8,727 |
| **Streams and Rivers** | 9,469 | 19,328 | 9,872 | 18,989 | 9,850 | 19,003 |
| **Recharge** | 15,152 | 0 | 15,152 | 0 | 15,152 | 0 |
| **Evapotranspiration** | 0 | 1,338 | 0 | 1,320 | 0 | 1,322 |
| **Lateral Inflow** | 12,042 | 4,985 | 11,885 | 5,069 | 11,891 | 5,074 |
| **Vertical Leakage Downward** | 0 | 1,353 | 0 | 1,950 | 0 | 1,910 |
| **Evangeline** | | | | | | |
| **Storage** | 2 | 0 | 10 | 0 | 9 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 284 | 0 | 284 | 0 | 284 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 1,353 | 0 | 1,950 | 0 | 1,910 | 0 |
| **Lateral Inflow** | 480 | 1,662 | 543 | 2,347 | 582 | 2,346 |
| **Vertical Leakage Downward** | 102 | 0 | 126 | 0 | 127 | 0 |
| **Jasper** | | | | | | |
| **Storage** | 31 | 0 | 44 | 0 | 35 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 0 | 33 | 0 | 33 | 0 | 37 |
| **Lateral Inflow** | 8 | 5 | 0 | 11 | 8 | 6 |

Table A-1. (continued)

| Brooks | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 0 | 3 | 98 | 0 | 7 | 1 |
| **Reservoirs (River package)** | 3,431 | 0 | 3,431 | 0 | 3,431 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 359 | 0 | 359 | 0 | 359 |
| **Streams and Rivers** | 1,073 | 23,128 | 1,349 | 19,705 | 1,162 | 22,343 |
| **Recharge** | 23,402 | 0 | 23,402 | 0 | 23,402 | 0 |
| **Evapotranspiration** | 0 | 1,826 | 0 | 1,763 | 0 | 1,811 |
| **Lateral Inflow** | 5,005 | 4,877 | 4,674 | 4,580 | 4,911 | 4,822 |
| **Vertical Leakage Downward** | 1,365 | 4,081 | 507 | 7,051 | 1,045 | 4,621 |
| **Evangeline** | | | | | | |
| **Storage** | 1 | 3 | 574 | 0 | 10 | 2 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 3,681 | 0 | 3,681 | 0 | 3,681 |
| **Streams and Rivers** | 0 | 863 | 5 | 828 | 0 | 838 |
| **Recharge** | 340 | 0 | 340 | 0 | 340 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 4,081 | 1,365 | 7,051 | 507 | 4,621 | 1,045 |
| **Lateral Inflow** | 2,680 | 1,752 | 3,308 | 7,610 | 2,725 | 2,797 |
| **Vertical Leakage Downward** | 808 | 245 | 1,562 | 214 | 908 | 240 |
| **Jasper** | | | | | | |
| **Storage** | 1 | 208 | 282 | 58 | 43 | 133 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 197 | 785 | 188 | 998 | 199 | 798 |
| **Lateral Inflow** | 1,448 | 655 | 1,399 | 813 | 1,406 | 718 |

Table A-1. (continued)

| Calhoun | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 2 | 1 | 23 | 0 | 23 | 0 |
| **Reservoirs (River package)** | 2,993 | 0 | 3,269 | 0 | 3,266 | 0 |
| **Springs (Drain package)** | 0 | 1,151 | 0 | 1,021 | 0 | 1,022 |
| **General Head Boundaries** | 144 | 12,828 | 1,694 | 8,289 | 1,678 | 8,308 |
| **Wells** | 0 | 1,464 | 0 | 2,853 | 0 | 2,853 |
| **Streams and Rivers** | 6,370 | 3,564 | 3,899 | 2,066 | 3,910 | 2,079 |
| **Recharge** | 3,039 | 0 | 3,039 | 0 | 3,039 | 0 |
| **Evapotranspiration** | 0 | 1,282 | 0 | 1,224 | 0 | 1,224 |
| **Lateral Inflow** | 11,465 | 3,826 | 9,871 | 4,707 | 9,870 | 4,699 |
| **Vertical Leakage Downward** | 337 | 234 | 13 | 1,648 | 17 | 1,617 |
| **Evangeline** | | | | | | |
| **Storage** | 1 | 0 | 7 | 0 | 6 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 27 | 0 | 64 | 0 | 64 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 234 | 337 | 1,648 | 13 | 1,617 | 17 |
| **Lateral Inflow** | 1,033 | 906 | 190 | 1,773 | 222 | 1,769 |
| **Vertical Leakage Downward** | 1 | 0 | 4 | 0 | 4 | 0 |
| **Jasper** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |

Table A-1. (continued)

| Colorado | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 183 | 15 | 1,463 | 0 | 1,438 | 0 |
| **Reservoirs (River package)** | 1,408 | 0 | 1,408 | 0 | 1,408 | 0 |
| **Springs (Drain package)** | 0 | 6 | 0 | 5 | 0 | 5 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 16,930 | 0 | 24,378 | 0 | 24,378 |
| **Streams and Rivers** | 28,347 | 12,482 | 33,916 | 8,349 | 33,750 | 8,389 |
| **Recharge** | 35,074 | 0 | 35,074 | 0 | 35,074 | 0 |
| **Evapotranspiration** | 0 | 57 | 0 | 54 | 0 | 54 |
| **Lateral Inflow** | 8,838 | 21,384 | 8,743 | 20,894 | 8,726 | 20,765 |
| **Vertical Leakage Downward** | 703 | 23,677 | 322 | 27,245 | 323 | 27,126 |
| **Evangeline** | | | | | | |
| **Storage** | 5 | 4 | 70 | 0 | 69 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 15,681 | 0 | 22,580 | 0 | 22,580 |
| **Streams and Rivers** | 3,928 | 3,103 | 5,238 | 1,978 | 5,237 | 1,979 |
| **Recharge** | 2,515 | 0 | 2,515 | 0 | 2,515 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 23,677 | 703 | 27,245 | 322 | 27,126 | 323 |
| **Lateral Inflow** | 8,786 | 19,394 | 8,880 | 18,816 | 8,849 | 18,677 |
| **Vertical Leakage Downward** | 473 | 508 | 565 | 813 | 581 | 814 |
| **Jasper** | | | | | | |
| **Storage** | 112 | 1 | 481 | 0 | 460 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 624 | 0 | 900 | 0 | 900 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 485 | 226 | 1,029 | 59 | 1,009 | 89 |
| **Lateral Inflow** | 595 | 341 | 268 | 819 | 276 | 757 |

Table A-1. (continued)

| De Witt | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 0 | 0 | 11 | 0 | 11 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 98 | 0 | 3,482 | 0 | 3,482 |
| **Streams and Rivers** | 2,094 | 1,229 | 4,183 | 246 | 4,182 | 246 |
| **Recharge** | 4,569 | 0 | 4,569 | 0 | 4,569 | 0 |
| **Evapotranspiration** | 0 | 25 | 0 | 0 | 0 | 0 |
| **Lateral Inflow** | 0 | 1,467 | 89 | 1,214 | 89 | 1,214 |
| **Vertical Leakage Downward** | 0 | 3,845 | 0 | 3,910 | 0 | 3,910 |
| **Evangeline** | | | | | | |
| **Storage** | 4 | 0 | 63 | 0 | 63 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 970 | 0 | 7,662 | 0 | 7,662 |
| **Streams and Rivers** | 8,294 | 8,747 | 12,430 | 5,692 | 12,429 | 5,692 |
| **Recharge** | 5,786 | 0 | 5,773 | 0 | 5,773 | 0 |
| **Evapotranspiration** | 0 | 60 | 0 | 56 | 0 | 56 |
| **Vertical Leakage Upward** | 3,845 | 0 | 3,910 | 0 | 3,910 | 0 |
| **Lateral Inflow** | 987 | 7,133 | 1,143 | 7,413 | 1,143 | 7,412 |
| **Vertical Leakage Downward** | 87 | 2,090 | 43 | 2,539 | 43 | 2,539 |
| **Jasper** | | | | | | |
| **Storage** | 562 | 2 | 1,326 | 0 | 1,326 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 2,674 | 0 | 3,801 | 0 | 3,801 |
| **Streams and Rivers** | 780 | 643 | 1,053 | 454 | 1,053 | 454 |
| **Recharge** | 243 | 0 | 243 | 0 | 243 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 2,322 | 160 | 2,934 | 72 | 2,934 | 72 |
| **Lateral Inflow** | 663 | 1,090 | 459 | 1,688 | 459 | 1,688 |

Table A-1. (continued)

| Duval | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 1 | 0 | 106 | 0 | 22 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 394 | 0 | 733 | 0 | 733 |
| **Streams and Rivers** | 1,544 | 3,215 | 3,451 | 1,230 | 2,026 | 2,417 |
| **Recharge** | 5,270 | 0 | 5,270 | 0 | 5,270 | 0 |
| **Evapotranspiration** | 0 | 34 | 0 | 17 | 0 | 25 |
| **Lateral Inflow** | 671 | 3,467 | 666 | 3,184 | 653 | 3,475 |
| **Vertical Leakage Downward** | 339 | 715 | 40 | 4,368 | 133 | 1,454 |
| **Evangeline** | | | | | | |
| **Storage** | 72 | 0 | 859 | 0 | 218 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 4,363 | 0 | 7,949 | 0 | 7,949 |
| **Streams and Rivers** | 2,962 | 8,272 | 6,070 | 4,955 | 4,064 | 5,833 |
| **Recharge** | 14,506 | 0 | 14,506 | 0 | 14,506 | 0 |
| **Evapotranspiration** | 0 | 335 | 0 | 28 | 0 | 56 |
| **Vertical Leakage Upward** | 715 | 339 | 4,368 | 40 | 1,454 | 133 |
| **Lateral Inflow** | 1,410 | 3,973 | 1,769 | 12,000 | 1,469 | 4,834 |
| **Vertical Leakage Downward** | 1,001 | 3,384 | 1,032 | 3,632 | 625 | 3,530 |
| **Jasper** | | | | | | |
| **Storage** | 866 | 0 | 2,131 | 0 | 1,765 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 2,892 | 0 | 5,283 | 0 | 5,283 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 189 | 0 | 189 | 0 | 189 | 0 |
| **Evapotranspiration** | 0 | 412 | 0 | 371 | 0 | 374 |
| **Vertical Leakage Upward** | 3,597 | 940 | 4,188 | 431 | 4,051 | 371 |
| **Lateral Inflow** | 2,256 | 2,663 | 2,127 | 2,550 | 2,399 | 2,376 |

Table A-1. (continued)

| Fayette | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Evangeline** | | | | | | |
| **Storage** | 5 | 0 | 43 | 0 | 43 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 169 | 0 | 884 | 0 | 884 |
| **Streams and Rivers** | 94 | 773 | 803 | 59 | 803 | 59 |
| **Recharge** | 1,737 | 0 | 1,737 | 0 | 1,737 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | 108 | 700 | 51 | 565 | 51 | 565 |
| **Vertical Leakage Downward** | 56 | 356 | 0 | 1,126 | 0 | 1,126 |
| **Jasper** | | | | | | |
| **Storage** | 1,107 | 0 | 3,693 | 0 | 3,693 | 0 |
| **Reservoirs (River package)** | 117 | 0 | 201 | 0 | 201 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 1,583 | 0 | 7,308 | 0 | 7,308 |
| **Streams and Rivers** | 677 | 452 | 1,241 | 19 | 1,241 | 19 |
| **Recharge** | 355 | 0 | 354 | 0 | 354 | 0 |
| **Evapotranspiration** | 0 | 11 | 0 | 5 | 0 | 5 |
| **Vertical Leakage Upward** | 507 | 314 | 1,769 | 9 | 1,769 | 9 |
| **Lateral Inflow** | 145 | 549 | 361 | 278 | 361 | 278 |

Table A-1. (continued)

| Fort Bend | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 5 | 0 | 13 | 0 | 11 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 5,921 | 0 | 5,921 | 0 | 5,921 |
| **Streams and Rivers** | 8,234 | 6,299 | 8,309 | 5,980 | 8,291 | 6,051 |
| **Recharge** | 884 | 0 | 884 | 0 | 884 | 0 |
| **Evapotranspiration** | 0 | 18 | 0 | 17 | 0 | 17 |
| **Lateral Inflow** | 10,575 | 4,483 | 10,552 | 4,473 | 10,566 | 4,469 |
| **Vertical Leakage Downward** | 0 | 2,976 | 0 | 3,368 | 0 | 3,295 |
| **Evangeline** | | | | | | |
| **Storage** | 2 | 0 | 8 | 0 | 6 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 2,882 | 0 | 2,882 | 0 | 2,882 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 2,976 | 0 | 3,368 | 0 | 3,295 | 0 |
| **Lateral Inflow** | 2,298 | 2,654 | 2,281 | 3,015 | 2,286 | 2,991 |
| **Vertical Leakage Downward** | 251 | 0 | 240 | 0 | 285 | 0 |
| **Jasper** | | | | | | |
| **Storage** | 135 | 0 | 206 | 0 | 159 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 0 | 226 | 0 | 202 | 0 | 254 |
| **Lateral Inflow** | 107 | 16 | 49 | 53 | 113 | 17 |

Table A-1. (continued)

| Goliad | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 0 | 0 | 15 | 0 | 5 | 0 |
| **Reservoirs (River package)** | 1,500 | 0 | 1,547 | 0 | 1,546 | 0 |
| **Springs (Drain package)** | 0 | 12 | 0 | 5 | 0 | 5 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 650 | 0 | 1,383 | 0 | 1,383 |
| **Streams and Rivers** | 2,234 | 8,879 | 3,297 | 6,652 | 3,250 | 6,846 |
| **Recharge** | 10,556 | 0 | 10,556 | 0 | 10,556 | 0 |
| **Evapotranspiration** | 0 | 218 | 0 | 163 | 0 | 166 |
| **Lateral Inflow** | 912 | 4,690 | 773 | 3,406 | 768 | 3,804 |
| **Vertical Leakage Downward** | 783 | 1,535 | 105 | 4,684 | 117 | 4,039 |
| **Evangeline** | | | | | | |
| **Storage** | 2 | 0 | 59 | 0 | 56 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 5,493 | 0 | 11,457 | 0 | 11,457 |
| **Streams and Rivers** | 16,678 | 15,202 | 18,789 | 9,515 | 18,107 | 9,829 |
| **Recharge** | 7,979 | 0 | 7,979 | 0 | 7,979 | 0 |
| **Evapotranspiration** | 0 | 43 | 0 | 31 | 0 | 31 |
| **Vertical Leakage Upward** | 1,535 | 783 | 4,684 | 105 | 4,039 | 117 |
| **Lateral Inflow** | 3,800 | 8,457 | 4,612 | 14,976 | 4,269 | 12,936 |
| **Vertical Leakage Downward** | 437 | 454 | 574 | 613 | 529 | 609 |
| **Jasper** | | | | | | |
| **Storage** | 19 | 14 | 355 | 0 | 331 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 387 | 377 | 663 | 287 | 655 | 283 |
| **Lateral Inflow** | 526 | 540 | 376 | 1,107 | 384 | 1,086 |

Table A-1. (continued)

| Gonzales | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Evangeline** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Jasper** | | | | | | |
| **Storage** | 396 | 0 | 451 | 0 | 451 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 1 | 0 | 1 | 0 | 1 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 4 | 0 | 4 | 0 | 4 |
| **Streams and Rivers** | 12 | 164 | 20 | 160 | 20 | 160 |
| **Recharge** | 139 | 0 | 139 | 0 | 139 | 0 |
| **Evapotranspiration** | 0 | 70 | 0 | 68 | 0 | 68 |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | 43 | 350 | 21 | 398 | 21 | 398 |

Table A-1. (continued)

| Jackson | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 481 | 1 | 3,128 | 0 | 3,060 | 0 |
| **Reservoirs (River package)** | 4,149 | 0 | 4,213 | 0 | 4,213 | 0 |
| **Springs (Drain package)** | 0 | 100 | 0 | 36 | 0 | 37 |
| **General Head Boundaries** | 80 | 610 | 1,733 | 142 | 1,713 | 143 |
| **Wells** | 0 | 39,090 | 0 | 64,067 | 0 | 64,067 |
| **Streams and Rivers** | 55,771 | 26,417 | 53,223 | 8,086 | 53,249 | 8,178 |
| **Recharge** | 11,805 | 0 | 11,805 | 0 | 11,805 | 0 |
| **Evapotranspiration** | 0 | 529 | 0 | 385 | 0 | 386 |
| **Lateral Inflow** | 21,348 | 16,126 | 24,456 | 10,085 | 24,454 | 9,999 |
| **Vertical Leakage Downward** | 23 | 10,791 | 0 | 15,760 | 0 | 15,690 |
| **Evangeline** | | | | | | |
| **Storage** | 9 | 0 | 77 | 0 | 73 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 14,417 | 0 | 23,697 | 0 | 23,697 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 10,791 | 23 | 15,760 | 0 | 15,690 | 0 |
| **Lateral Inflow** | 13,015 | 10,172 | 14,774 | 8,214 | 14,721 | 8,087 |
| **Vertical Leakage Downward** | 760 | 0 | 1,296 | 1 | 1,296 | 1 |
| **Jasper** | | | | | | |
| **Storage** | 174 | 3 | 461 | 0 | 425 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 0 | 390 | 51 | 385 | 48 | 411 |
| **Lateral Inflow** | 261 | 42 | 101 | 228 | 106 | 168 |

Table A-1. (continued)

| Jim Hogg | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 0 | 2 | 0 | 2 | 0 | 2 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 14 | 0 | 14 | 0 | 14 |
| **Streams and Rivers** | 0 | 2,024 | 0 | 2,009 | 0 | 2,021 |
| **Recharge** | 6,440 | 0 | 6,440 | 0 | 6,440 | 0 |
| **Evapotranspiration** | 0 | 443 | 0 | 442 | 0 | 443 |
| **Lateral Inflow** | 382 | 3,251 | 377 | 3,261 | 382 | 3,253 |
| **Vertical Leakage Downward** | 313 | 1,399 | 310 | 1,399 | 311 | 1,401 |
| **Evangeline** | | | | | | |
| **Storage** | 4 | 42 | 30 | 17 | 9 | 29 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 371 | 0 | 371 | 0 | 371 |
| **Streams and Rivers** | 342 | 4,069 | 412 | 3,655 | 371 | 3,885 |
| **Recharge** | 7,165 | 0 | 7,165 | 0 | 7,165 | 0 |
| **Evapotranspiration** | 0 | 657 | 0 | 584 | 0 | 622 |
| **Vertical Leakage Upward** | 1,399 | 313 | 1,399 | 310 | 1,401 | 311 |
| **Lateral Inflow** | 504 | 1,996 | 321 | 2,037 | 427 | 2,012 |
| **Vertical Leakage Downward** | 549 | 2,514 | 408 | 2,761 | 474 | 2,616 |
| **Jasper** | | | | | | |
| **Storage** | 11 | 399 | 51 | 269 | 26 | 350 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 594 | 0 | 594 | 0 | 594 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 155 | 0 | 155 | 0 | 155 | 0 |
| **Evapotranspiration** | 0 | 172 | 0 | 162 | 0 | 171 |
| **Vertical Leakage Upward** | 2,370 | 533 | 2,628 | 392 | 2,476 | 457 |
| **Lateral Inflow** | 1,355 | 2,194 | 865 | 2,284 | 1,200 | 2,285 |

Table A-1. (continued)

| Jim Wells | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 8 | 0 | 281 | 0 | 87 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 14 | 0 | 5 | 0 | 9 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 2,257 | 0 | 13,567 | 0 | 4,816 |
| **Streams and Rivers** | 5,557 | 18,173 | 14,515 | 6,284 | 9,294 | 11,917 |
| **Recharge** | 25,328 | 0 | 25,328 | 0 | 25,328 | 0 |
| **Evapotranspiration** | 0 | 237 | 0 | 157 | 0 | 183 |
| **Lateral Inflow** | 3,722 | 9,291 | 3,316 | 8,293 | 3,603 | 9,272 |
| **Vertical Leakage Downward** | 568 | 5,212 | 209 | 15,340 | 132 | 12,247 |
| **Evangeline** | | | | | | |
| **Storage** | 5 | 0 | 4,994 | 0 | 158 | 0 |
| **Reservoirs (River package)** | 562 | 0 | 562 | 0 | 562 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 2,491 | 0 | 36,421 | 0 | 10,169 |
| **Streams and Rivers** | 561 | 4,370 | 1,019 | 3,410 | 730 | 3,603 |
| **Recharge** | 2,234 | 0 | 2,234 | 0 | 2,234 | 0 |
| **Evapotranspiration** | 0 | 8 | 0 | 5 | 0 | 6 |
| **Vertical Leakage Upward** | 5,212 | 568 | 15,340 | 209 | 12,247 | 132 |
| **Lateral Inflow** | 3,693 | 5,521 | 18,266 | 7,387 | 4,892 | 8,208 |
| **Vertical Leakage Downward** | 865 | 175 | 5,254 | 237 | 1,511 | 216 |
| **Jasper** | | | | | | |
| **Storage** | 100 | 3 | 1,410 | 0 | 562 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 7 | 0 | 7 | 0 | 7 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 132 | 735 | 245 | 1,971 | 200 | 895 |
| **Lateral Inflow** | 1,765 | 1,251 | 1,625 | 1,302 | 1,519 | 1,380 |

Table A-1. (continued)

| Karnes | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
|---|---|---|---|---|---|---|
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Evangeline** | | | | | | |
| **Storage** | 0 | 0 | 61 | 3 | 66 | 3 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 104 | 0 | 1,147 | 0 | 1,163 |
| **Streams and Rivers** | 280 | 581 | 486 | 3 | 485 | 3 |
| **Recharge** | 884 | 0 | 839 | 0 | 850 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | 214 | 539 | 358 | 305 | 358 | 304 |
| **Vertical Leakage Downward** | 36 | 190 | 0 | 286 | 0 | 286 |
| **Jasper** | | | | | | |
| **Storage** | 1,497 | 8 | 7,538 | 21 | 7,525 | 21 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 2,231 | 0 | 12,607 | 0 | 12,607 |
| **Streams and Rivers** | 747 | 551 | 2,239 | 0 | 2,236 | 0 |
| **Recharge** | 417 | 0 | 417 | 0 | 417 | 0 |
| **Evapotranspiration** | 0 | 78 | 0 | 1 | 0 | 1 |
| **Vertical Leakage Upward** | 395 | 97 | 936 | 0 | 935 | 0 |
| **Lateral Inflow** | 560 | 652 | 1,877 | 379 | 1,885 | 369 |

Table A-1. (continued)

| Kenedy | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 1 | 0 | 110 | 0 | 11 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 18,999 | 0 | 17,601 | 0 | 18,690 |
| **Wells** | 0 | 41 | 0 | 41 | 0 | 41 |
| **Streams and Rivers** | 897 | 6,442 | 952 | 4,947 | 899 | 6,139 |
| **Recharge** | 25,221 | 0 | 25,221 | 0 | 25,221 | 0 |
| **Evapotranspiration** | 0 | 2,283 | 0 | 2,169 | 0 | 2,262 |
| **Lateral Inflow** | 4,224 | 2,619 | 3,919 | 2,580 | 4,163 | 2,603 |
| **Vertical Leakage Downward** | 214 | 175 | 0 | 2,859 | 9 | 569 |
| **Evangeline** | | | | | | |
| **Storage** | 3 | 0 | 158 | 0 | 19 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 62 | 0 | 62 | 0 | 62 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 175 | 214 | 2,859 | 0 | 569 | 9 |
| **Lateral Inflow** | 728 | 663 | 1,406 | 4,983 | 871 | 1,534 |
| **Vertical Leakage Downward** | 33 | 1 | 623 | 0 | 147 | 0 |
| **Jasper** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |

Table A-1. (continued)

| Kleberg | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 6 | 0 | 431 | 0 | 88 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 1 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 16,786 | 3,803 | 7,454 | 17 | 12,537 |
| **Wells** | 0 | 948 | 0 | 5,086 | 0 | 1,583 |
| **Streams and Rivers** | 19,863 | 12,407 | 26,367 | 7,961 | 21,566 | 10,739 |
| **Recharge** | 4,486 | 0 | 4,486 | 0 | 4,486 | 0 |
| **Evapotranspiration** | 0 | 1,137 | 0 | 933 | 0 | 1,050 |
| **Lateral Inflow** | 12,640 | 4,515 | 12,126 | 5,964 | 11,693 | 5,924 |
| **Vertical Leakage Downward** | 55 | 1,256 | 0 | 19,816 | 0 | 6,015 |
| **Evangeline** | 0 | 0 | 0 | 0 | | |
| **Storage** | 20 | 0 | 6,479 | 0 | 170 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 7,682 | 0 | 44,910 | 0 | 13,410 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 1,256 | 55 | 19,816 | 0 | 6,015 | 0 |
| **Lateral Inflow** | 5,789 | 427 | 15,229 | 4,062 | 6,769 | 1,933 |
| **Vertical Leakage Downward** | 1,095 | 0 | 7,448 | 0 | 2,391 | 0 |
| **Jasper** | | | | | | |
| **Storage** | 100 | 0 | 817 | 0 | 294 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 0 | 431 | 0 | 1,089 | 0 | 610 |
| **Lateral Inflow** | 388 | 57 | 321 | 48 | 378 | 62 |

Table A-1. (continued)

| Lavaca | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 89 | 0 | 1,349 | 0 | 1,326 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 1,726 | 0 | 5,784 | 0 | 5,784 |
| **Streams and Rivers** | 8,823 | 5,526 | 12,585 | 1,454 | 12,580 | 1,462 |
| **Recharge** | 18,276 | 0 | 18,276 | 0 | 18,276 | 0 |
| **Evapotranspiration** | 0 | 3 | 0 | 1 | 0 | 1 |
| **Lateral Inflow** | 1,537 | 15,123 | 1,176 | 16,680 | 1,173 | 16,659 |
| **Vertical Leakage Downward** | 85 | 6,433 | 4 | 9,469 | 4 | 9,451 |
| **Evangeline** | | | | | | |
| **Storage** | 6 | 0 | 61 | 9 | 60 | 9 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 6,907 | 0 | 23,405 | 0 | 23,405 |
| **Streams and Rivers** | 9,941 | 6,149 | 21,548 | 1,624 | 21,528 | 1,626 |
| **Recharge** | 6,093 | 0 | 6,051 | 0 | 6,051 | 0 |
| **Evapotranspiration** | 0 | 4 | 0 | 2 | 0 | 2 |
| **Vertical Leakage Upward** | 6,433 | 85 | 9,469 | 4 | 9,451 | 4 |
| **Lateral Inflow** | 4,055 | 13,064 | 3,892 | 13,715 | 3,890 | 13,673 |
| **Vertical Leakage Downward** | 189 | 513 | 73 | 2,331 | 74 | 2,331 |
| **Jasper** | | | | | | |
| **Storage** | 1,331 | 1 | 3,021 | 0 | 3,016 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 2,404 | 0 | 8,533 | 0 | 8,533 |
| **Streams and Rivers** | 597 | 0 | 879 | 0 | 879 | 0 |
| **Recharge** | 170 | 0 | 169 | 0 | 169 | 0 |
| **Evapotranspiration** | 0 | 5 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 669 | 179 | 3,502 | 14 | 3,495 | 14 |
| **Lateral Inflow** | 478 | 656 | 1,278 | 302 | 1,291 | 302 |

Table A-1. (continued)

| Live Oak | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 0 | 0 | 63 | 0 | 7 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 88 | 0 | 88 | 0 | 88 |
| **Streams and Rivers** | 177 | 0 | 177 | 0 | 177 | 0 |
| **Recharge** | 1,194 | 0 | 1,194 | 0 | 1,194 | 0 |
| **Evapotranspiration** | 0 | 6 | 0 | 4 | 0 | 6 |
| **Lateral Inflow** | 242 | 190 | 92 | 301 | 137 | 300 |
| **Vertical Leakage Downward** | 0 | 1,328 | 0 | 1,133 | 0 | 1,121 |
| **Evangeline** | 0 | 0 | 0 | 0 | | |
| **Storage** | 0 | 8 | 123 | 0 | 31 | 0 |
| **Reservoirs (River package)** | 2,634 | 0 | 2,890 | 0 | 2,851 | 0 |
| **Springs (Drain package)** | 0 | 5 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 1,802 | 0 | 4,140 | 0 | 2,861 |
| **Streams and Rivers** | 635 | 8,684 | 1,106 | 5,915 | 810 | 6,715 |
| **Recharge** | 4,205 | 0 | 4,205 | 0 | 4,205 | 0 |
| **Evapotranspiration** | 0 | 68 | 0 | 38 | 0 | 42 |
| **Vertical Leakage Upward** | 1,328 | 0 | 1,133 | 0 | 1,121 | 0 |
| **Lateral Inflow** | 2,561 | 767 | 1,550 | 693 | 1,712 | 1,020 |
| **Vertical Leakage Downward** | 254 | 284 | 30 | 251 | 122 | 213 |
| **Jasper** | | | | | | |
| **Storage** | 1,386 | 65 | 2,949 | 0 | 2,104 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 2,744 | 0 | 7,705 | 0 | 4,988 |
| **Streams and Rivers** | 441 | 394 | 997 | 90 | 653 | 186 |
| **Recharge** | 527 | 0 | 528 | 0 | 527 | 0 |
| **Evapotranspiration** | 0 | 56 | 0 | 39 | 0 | 47 |
| **Vertical Leakage Upward** | 386 | 949 | 1,151 | 268 | 592 | 464 |
| **Lateral Inflow** | 1,955 | 488 | 2,684 | 207 | 2,151 | 342 |

Table A-1. (continued)

| Matagorda | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 92 | 0 | 337 | 0 | 329 | 0 |
| **Reservoirs (River package)** | 795 | 0 | 804 | 0 | 804 | 0 |
| **Springs (Drain package)** | 0 | 215 | 0 | 189 | 0 | 190 |
| **General Head Boundaries** | 897 | 10,747 | 2,496 | 8,702 | 2,480 | 8,711 |
| **Wells** | 0 | 27,682 | 0 | 38,931 | 0 | 38,931 |
| **Streams and Rivers** | 58,043 | 30,017 | 65,190 | 25,697 | 65,028 | 25,741 |
| **Recharge** | 23,061 | 0 | 23,061 | 0 | 23,061 | 0 |
| **Evapotranspiration** | 0 | 3,095 | 0 | 2,981 | 0 | 2,983 |
| **Lateral Inflow** | 12,254 | 14,546 | 11,547 | 15,560 | 11,588 | 15,459 |
| **Vertical Leakage Downward** | 0 | 8,845 | 0 | 11,374 | 0 | 11,275 |
| **Evangeline** | | | | | | |
| **Storage** | 7 | 0 | 36 | 0 | 32 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 7,240 | 0 | 10,207 | 0 | 10,207 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 8,845 | 0 | 11,374 | 0 | 11,275 | 0 |
| **Lateral Inflow** | 2,565 | 4,431 | 3,057 | 4,569 | 3,050 | 4,457 |
| **Vertical Leakage Downward** | 229 | 0 | 303 | 0 | 300 | 0 |
| **Jasper** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |

Table A-1. (continued)

| McMullen | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Evangeline** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Jasper** | | | | | | |
| **Storage** | 401 | 0 | 624 | 0 | 513 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 19 | 0 | 286 | 0 | 139 |
| **Streams and Rivers** | 368 | 590 | 465 | 520 | 415 | 555 |
| **Recharge** | 249 | 0 | 249 | 0 | 249 | 0 |
| **Evapotranspiration** | 0 | 116 | 0 | 105 | 0 | 110 |
| **Vertical Leakage Upward** | 258 | 0 | 333 | 0 | 309 | 0 |
| **Lateral Inflow** | 205 | 756 | 190 | 950 | 177 | 859 |

Table A-1. (continued)

| Nueces | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 9 | 0 | 1,217 | 0 | 215 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 89 | 0 | 59 | 0 | 35 |
| **General Head Boundaries** | 91 | 4,039 | 4,137 | 467 | 3,592 | 406 |
| **Wells** | 0 | 1,862 | 0 | 15,935 | 0 | 15,091 |
| **Streams and Rivers** | 11,348 | 11,049 | 36,234 | 1,836 | 37,253 | 1,393 |
| **Recharge** | 4,795 | 0 | 4,795 | 0 | 4,795 | 0 |
| **Evapotranspiration** | 0 | 372 | 0 | 281 | 0 | 293 |
| **Lateral Inflow** | 8,976 | 6,697 | 10,109 | 5,722 | 10,240 | 5,891 |
| **Vertical Leakage Downward** | 1,235 | 2,345 | 5 | 32,198 | 0 | 32,987 |
| **Evangeline** | | | | | | |
| **Storage** | 2 | 0 | 88 | 0 | 19 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 1,083 | 0 | 33,913 | 0 | 40,761 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 2,345 | 1,235 | 32,198 | 5 | 32,987 | 0 |
| **Lateral Inflow** | 2,047 | 2,501 | 6,217 | 6,302 | 8,053 | 1,902 |
| **Vertical Leakage Downward** | 424 | 0 | 1,715 | 0 | 1,604 | 0 |
| **Jasper** | 0 | 0 | 0 | 0 | | |
| **Storage** | 26 | 1 | 265 | 0 | 235 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 0 | 330 | 0 | 567 | 0 | 584 |
| **Lateral Inflow** | 402 | 98 | 396 | 93 | 465 | 116 |

Table A-1. (continued)

| Refugio | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 0 | 1 | 58 | 0 | 39 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 129 | 0 | 92 | 0 | 100 |
| **General Head Boundaries** | 0 | 7,900 | 19 | 6,266 | 0 | 6,525 |
| **Wells** | 0 | 597 | 0 | 6,800 | 0 | 6,800 |
| **Streams and Rivers** | 27,574 | 39,589 | 36,727 | 21,749 | 33,173 | 28,539 |
| **Recharge** | 14,669 | 0 | 14,669 | 0 | 14,669 | 0 |
| **Evapotranspiration** | 0 | 1,906 | 0 | 1,725 | 0 | 1,790 |
| **Lateral Inflow** | 14,002 | 10,469 | 10,226 | 8,717 | 12,436 | 9,967 |
| **Vertical Leakage Downward** | 4,671 | 325 | 34 | 16,385 | 363 | 6,958 |
| **Evangeline** | | | | | | |
| **Storage** | 0 | 0 | 9 | 0 | 4 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 466 | 0 | 35,465 | 0 | 17,966 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 325 | 4,671 | 16,385 | 34 | 6,958 | 363 |
| **Lateral Inflow** | 6,615 | 1,818 | 19,299 | 751 | 11,980 | 900 |
| **Vertical Leakage Downward** | 18 | 2 | 559 | 0 | 288 | 0 |
| **Jasper** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |

Table A-1. (continued)

| San Patricio | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| Storage | 0 | 63 | 623 | 0 | 946 | 0 |
| Reservoirs (River package) | 0 | 0 | 0 | 0 | 0 | 0 |
| Springs (Drain package) | 0 | 376 | 0 | 250 | 0 | 104 |
| General Head Boundaries | 30 | 4,366 | 654 | 2,651 | 557 | 2,333 |
| Wells | 0 | 2,404 | 0 | 3,877 | 0 | 8,701 |
| Streams and Rivers | 3,004 | 12,018 | 3,593 | 6,015 | 4,400 | 5,174 |
| Recharge | 12,704 | 0 | 12,704 | 0 | 12,704 | 0 |
| Evapotranspiration | 0 | 515 | 0 | 440 | 0 | 411 |
| Lateral Inflow | 7,138 | 3,500 | 4,558 | 3,439 | 7,334 | 2,496 |
| Vertical Leakage Downward | 1,601 | 1,234 | 44 | 5,503 | 59 | 6,782 |
| **Evangeline** | | | | | | |
| Storage | 0 | 2 | 21 | 0 | 24 | 0 |
| Reservoirs (River package) | 676 | 0 | 823 | 0 | 931 | 0 |
| Springs (Drain package) | 0 | 0 | 0 | 0 | 0 | 0 |
| General Head Boundaries | 0 | 0 | 0 | 0 | 0 | 0 |
| Wells | 0 | 1,304 | 0 | 2,110 | 0 | 7,575 |
| Streams and Rivers | 0 | 657 | 0 | 584 | 0 | 451 |
| Recharge | 148 | 0 | 148 | 0 | 148 | 0 |
| Evapotranspiration | 0 | 13 | 0 | 10 | 0 | 9 |
| Vertical Leakage Upward | 1,234 | 1,601 | 5,503 | 44 | 6,782 | 59 |
| Lateral Inflow | 2,429 | 1,225 | 1,116 | 5,408 | 2,430 | 3,049 |
| Vertical Leakage Downward | 326 | 11 | 546 | 1 | 827 | 0 |
| **Jasper** | | | | | | |
| Storage | 0 | 26 | 157 | 0 | 155 | 0 |
| Reservoirs (River package) | 0 | 0 | 0 | 0 | 0 | 0 |
| Springs (Drain package) | 0 | 0 | 0 | 0 | 0 | 0 |
| General Head Boundaries | 0 | 0 | 0 | 0 | 0 | 0 |
| Wells | 0 | 0 | 0 | 0 | 0 | 0 |
| Streams and Rivers | 0 | 0 | 0 | 0 | 0 | 0 |
| Recharge | 0 | 0 | 0 | 0 | 0 | 0 |
| Evapotranspiration | 0 | 0 | 0 | 0 | 0 | 0 |
| Vertical Leakage Upward | 5 | 315 | 5 | 320 | 0 | 512 |
| Lateral Inflow | 358 | 23 | 280 | 122 | 384 | 28 |

Table A-1. (continued)

| Victoria | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 0 | 20 | 165 | 0 | 163 | 0 |
| **Reservoirs (River package)** | 1,046 | 0 | 1,056 | 0 | 1,056 | 0 |
| **Springs (Drain package)** | 0 | 1,653 | 0 | 1,383 | 0 | 1,384 |
| **General Head Boundaries** | 0 | 594 | 0 | 389 | 0 | 390 |
| **Wells** | 0 | 7,680 | 0 | 22,769 | 0 | 22,769 |
| **Streams and Rivers** | 40,668 | 38,578 | 50,301 | 24,469 | 50,243 | 24,581 |
| **Recharge** | 24,830 | 0 | 24,830 | 0 | 24,830 | 0 |
| **Evapotranspiration** | 0 | 1,022 | 0 | 875 | 0 | 876 |
| **Lateral Inflow** | 7,789 | 19,437 | 7,198 | 19,289 | 7,225 | 19,271 |
| **Vertical Leakage Downward** | 1,250 | 6,601 | 56 | 14,434 | 59 | 14,306 |
| **Evangeline** | | | | | | |
| **Storage** | 0 | 1 | 12 | 0 | 12 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 6,191 | 0 | 18,360 | 0 | 18,360 |
| **Streams and Rivers** | 1,611 | 4,238 | 2,021 | 2,465 | 2,019 | 2,467 |
| **Recharge** | 743 | 0 | 743 | 0 | 743 | 0 |
| **Evapotranspiration** | 0 | 27 | 0 | 26 | 0 | 26 |
| **Vertical Leakage Upward** | 6,601 | 1,250 | 14,434 | 56 | 14,306 | 59 |
| **Lateral Inflow** | 8,988 | 6,572 | 9,909 | 6,952 | 9,939 | 6,842 |
| **Vertical Leakage Downward** | 386 | 49 | 778 | 37 | 773 | 37 |
| **Jasper** | | | | | | |
| **Storage** | 0 | 99 | 150 | 0 | 149 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 39 | 393 | 48 | 516 | 48 | 516 |
| **Lateral Inflow** | 637 | 184 | 556 | 238 | 557 | 237 |

Table A-1. (continued)

| Washington | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Evangeline** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Jasper** | | | | | | |
| **Storage** | 11 | 0 | 21 | 0 | 21 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 6 | 0 | 6 | 0 | 6 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 1 | 0 | 1 | 0 | 1 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | 2 | 8 | 0 | 17 | 0 | 17 |

Table A-1. (continued)

| Webb | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | -- | -- | -- | -- | -- | -- |
| **Reservoirs (River package)** | -- | -- | -- | -- | -- | -- |
| **Springs (Drain package)** | -- | -- | -- | -- | -- | -- |
| **General Head Boundaries** | -- | -- | -- | -- | -- | -- |
| **Wells** | -- | -- | -- | -- | -- | -- |
| **Streams and Rivers** | -- | -- | -- | -- | -- | -- |
| **Recharge** | -- | -- | -- | -- | -- | -- |
| **Evapotranspiration** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | -- | -- | -- | -- | -- | -- |
| **Vertical Leakage Downward** | -- | -- | -- | -- | -- | -- |
| **Evangeline** | | | | | | |
| **Storage** | 0 | 0 | 372 | 0 | 1 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 135 | 0 | 2,786 | 0 | 950 |
| **Streams and Rivers** | 0 | 770 | 79 | 32 | 0 | 491 |
| **Recharge** | 3,008 | 0 | 2,996 | 0 | 3,008 | 0 |
| **Evapotranspiration** | 0 | 471 | 0 | 0 | 0 | 107 |
| **Vertical Leakage Upward** | -- | -- | -- | -- | -- | -- |
| **Lateral Inflow** | 43 | 315 | 72 | 81 | 41 | 262 |
| **Vertical Leakage Downward** | 331 | 1,692 | 13 | 632 | 208 | 1,448 |
| **Jasper** | | | | | | |
| **Storage** | 5 | 5 | 141 | 0 | 38 | 1 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 7 | 0 | 148 | 0 | 50 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 46 | 0 | 46 | 0 | 46 | 0 |
| **Evapotranspiration** | 0 | 88 | 0 | 59 | 0 | 78 |
| **Vertical Leakage Upward** | 1,680 | 325 | 651 | 12 | 1,440 | 204 |
| **Lateral Inflow** | 151 | 1,457 | 190 | 810 | 161 | 1,354 |

Table A-1. (continued)

| Wharton | | | | | | |
|---|---|---|---|---|---|---|
| | GAM07-12 Baseline | | GAM07-14 Availability | | GAM07-35 New Pumpage | |
| | In | Out | In | Out | In | Out |
| **Chicot** | | | | | | |
| **Storage** | 740 | 0 | 2,450 | 0 | 2,392 | 0 |
| **Reservoirs (River package)** | 537 | 0 | 537 | 0 | 537 | 0 |
| **Springs (Drain package)** | 0 | 9 | 0 | 8 | 0 | 8 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 111,755 | 0 | 114,552 | 0 | 113,490 |
| **Streams and Rivers** | 121,457 | 13,331 | 127,760 | 12,631 | 126,907 | 12,774 |
| **Recharge** | 21,792 | 0 | 21,792 | 0 | 21,792 | 0 |
| **Evapotranspiration** | 0 | 243 | 0 | 233 | 0 | 235 |
| **Lateral Inflow** | 36,668 | 19,087 | 34,606 | 19,369 | 34,255 | 19,439 |
| **Vertical Leakage Downward** | 0 | 36,773 | 0 | 40,353 | 0 | 39,938 |
| **Evangeline** | | | | | | |
| **Storage** | 18 | 0 | 81 | 0 | 73 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 68,245 | 0 | 69,980 | 0 | 69,306 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 36,773 | 0 | 40,353 | 0 | 39,938 | 0 |
| **Lateral Inflow** | 32,102 | 2,925 | 30,172 | 3,062 | 29,764 | 3,098 |
| **Vertical Leakage Downward** | 2,208 | 0 | 2,429 | 0 | 2,621 | 0 |
| **Jasper** | | | | | | |
| **Storage** | 803 | 0 | 1,277 | 0 | 967 | 0 |
| **Reservoirs (River package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Springs (Drain package)** | 0 | 0 | 0 | 0 | 0 | 0 |
| **General Head Boundaries** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Wells** | 0 | 0 | 0 | 1,062 | 0 | 0 |
| **Streams and Rivers** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Recharge** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Evapotranspiration** | 0 | 0 | 0 | 0 | 0 | 0 |
| **Vertical Leakage Upward** | 0 | 970 | 45 | 595 | 0 | 1,024 |
| **Lateral Inflow** | 274 | 105 | 370 | 35 | 188 | 131 |