

**Conversion of Base Irrigation Groundwater Application Summary
 Conversion Based on Installation of Pivot System
 William T. Tschirhart, Jr., Trustee of the Billy T. Trust**

Permit Number: P100-223 (ME00348)
Purpose of Use: Irrigation
Place of Use: Uvalde County
Original Permitted Amount: 414.000 acre-feet
Irrigation Base Amount: 207.000 acre-feet
Irrigation Unrestricted Amount: 207.000 acre-feet
Date Board Issued Original IRP: September 25, 2001

EAA WELL NO.	LOCATION	MEASURING METHOD	WITHDRAWAL RATE
W101-022 (ME00348-001)	29-22.00-6.00 / 98-53.00-24.00	Meter	1500 gpm

Number of acre-feet applicant originally requested to be converted from base irrigation to unrestricted irrigation groundwater:

108.884 acre-feet

(63.260 acre-feet due to installation of pivots, and 36.883 due to dryland farming of adjacent corners)

Number of acre-feet staff recommends to be converted from base irrigation to unrestricted irrigation groundwater:

108.884 acre-feet

(63.260 acre-feet due to installation of pivots, and 36.883 due to dryland farming of adjacent corners)

Place of Use for Permit:

167.308 acres

The tract(s) of land more fully described in Deed dated 4/25/2016 as recorded with Clerk as Document # 2016002764, Official Public Records, Medina County, Texas, and the tract(s) of land more fully described in Irrevocable Designation of Historically Irrigated Lands Pertaining to Edwards Aquifer Groundwater Rights dated 1/25/2016 as recorded with Clerk as Document # 2016001817, Official Public Records, Medina County, Texas.

Current Physical Description of Place of Use:

The original IRP was granted due to historical irrigation of 207.000 acres, located one mile north of Castroville, on the west side of Hwy 471 in Medina county. On September

25, 2001, Permit No. IRP 2001-ME00348 (P100-223) was issued to William Terry Tschirhart and Alfrene B. Tschirhart. On May 10, 2016, the IRP was amended and P100-223 was issued to William T. Tschirhart, Jr., Trustee of the Billy T. Trust and the place of use included an Irrevocable Designation of Historically Irrigated Lands Pertaining to Edwards Aquifer Groundwater Rights. Currently, 207.000 acre-feet BIG are stacked on 167.308 historically irrigated acres (HIA) due to the irrigation of forty leased acres during the historical period. The subject of the Conversion of Base are 151.948 HIA with 188.000 stacked BIG.

Description of Conservation Equipment:

Two (2) center pivots, a 5-tower and a 6-tower Zimmatic Center Pivot, were installed in March 2016. The pivots utilize a Mid-Elevation Spray Application (MESA) to irrigate approximately 118.297 base acres.

Staff Calculations:

Staff calculated the area under the pivots and found that 118.297 base acres are currently being irrigated under the pivot system. The two pivots overlap by 3.232 acres, giving the total base acres under pivot(s) applicable for the conversion of 115.065 base acres. EAA staff has calculated a projected savings of 63.260 acre-feet by the installation of the pivot system. In addition, staff calculated corner credit of 45.624 acre-feet based on the standard calculation for the center pivots (115.065 acres under the pivots subtracted from the total 151.948 base acres). Corner credit is calculated on the standard based one acre-foot per acre (considering a 75 percent coverage of the base acres and a stacked base ratio of 1.237 acre-foot/acre). The total conversion as calculated by EAA staff is 108.884 acre-feet.

Staff Recommendation:

Staff recommends a conversion be granted for 108.884 acre-feet. The application will be reviewed at the June 28, 2016 Permits/Enforcement Committee meeting and the July 12, 2016 Board Meeting.