Conversion of Base Irrigation Groundwater Application Summary Conversion Based on Installation of Pivot System Bishop Farms, LTD. & KWB Management, L.L.C.

Permit Number: P101-993 (UV00550)

Purpose of Use: Irrigation

Place of Use:
Original Permitted Amount:
Irrigation Base Amount:
Irrigation Unrestricted Amount:
Date Board Issued Original IRP:
Uvalde County
1,588.000 acre-feet
794.300 acre-feet
794.300 acre-feet
February 12, 2002

EAA WELL NO.	LOCATION	MEASURING METHOD	WITHDRAWAL RATE
W101-647	29-20.00-8.87 /	Meter	2700 gpm
(UV00550-001)	99-37.00-26.75		
W101-648 (UV00550-002)	29-21.00-3.50 / 99-37.00-14.50	Meter	2000 gpm
W101-649 (UV00550-003)	29-21.00-13.50 / 99-36.00-41.50	Meter	2000 gpm
W101-650 (UV00550-004)	29-21.00-2.30 / 99-36.00-12.02	Meter	2000 gpm

On November 12, 2008, the Board approved an Application to Convert Base Irrigation Groundwater through conservation by the installation of a Center Pivot system covering 228.480 HIA. 125.458 acre-feet (94.080 due to conservation equipment and 31.378 due to corner credit) were converted from BIG to UIG.

On May 11, 2010, the Board approved an Application to Convert Base Irrigation Groundwater through conservation by the installation of a Center Pivot system covering 136.200 HIA. 80.631 acre-feet (60.473 due to conservation equipment and 20.158 due to corner credit) were converted from BIG to UIG.

Total BIG Converted: 206.089 acre-feet Current BIG Amount: 588.211 acre-feet Current UIG Amount: 453.389 acre-feet

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

95.355 acre-feet

(71.516 acre-feet due to installation of pivots, and 23.839 due to dryland farming of adjacent corners)

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

95.355 acre-feet

(71.516 acre-feet due to installation of pivots, and 23.839 due to dryland farming of adjacent corners)

Place of Use for Permit:

899.060 acres

The tract(s) of land more fully described in Warranty Deed dated 11/26/2001 as recorded with Clerk as Document # 2001003916, Volume 472, Pages 527 - 528, Official Public Records, Uvalde County, Texas, the tract(s) of land more fully described in Warranty Deed dated 11/27/2001 as recorded with Clerk as Document # 2001003917, Volume 472, Pages 529 - 530, Official Public Records, Uvalde County, Texas, the tract(s) of land more fully described in Warranty Deed dated 12/3/2001 as recorded with Clerk as Document # 2001003918, Volume 472, Pages 531 - 532, Official Public Records, Uvalde County, Texas, and the tract(s) of land more fully described in Warranty Deed dated 11/26/2001 as recorded with Clerk as Document # 2001003919, Volume 472, Pages 533 - 534, Official Public Records, Uvalde County, Texas.

Current Physical Description of Place of Use:

The original IRP was granted due to historical irrigation of 794.300 acres, located four miles north of Knippa, on the east side of FM 1049, in Uvalde county. On February 12, 2002, Permit No. IRP 2002-UV00550 (P101-993) was issued to Bishop Farms, LTD. & KWB Management, L.L.C. Currently, due to two previous conversions, there are 280.211 acre-feet BIG appurtenant to 486.300 HIA, and 308.000 acre-feet BIG appurtenant to 308.000 HIA.

In compliance with Authority Rule §711.340 (f); the applicant surveyed the pivots and pivot square areas to re-distribute the base acre-feet per acre ratio under the pivots and pivot squares related to the 2008 and 2010 conversions. The subject of this conversion is a 288.000 HIA tract with 288.000 appurtenant acre-feet BIG. Upon approval by the Board, the remaining BIG subject to this conversion will be spread pro rata over the 288.000 HIA.

Description of Conservation Equipment:

A Zimmatic Model 9500P 8 tower center pivot irrigation system was installed on the HIA on September 10, 2017. The pivot utilizes a Mid-Elevation Spray Application (MESA) to irrigate approximately 160.910 base acres.

Staff Calculations:

Staff calculated the area under the pivots and found that 160.910 base acres are currently being irrigated under the pivot system. EAA staff has calculated a projected savings of 71.516 acre-feet by the installation of the pivot system. In addition, staff calculated corner credit of 23.839 acre-feet. Corner credit is calculated on the standard calculation considering a less than 75 percent coverage (the 160.910 acres under the pivot divided by 3 (pivot square) equaling 53.637 acres, times the annual water savings amount of 0.444 acre-feet per acre which equals 23.839 acre-feet). The total conversion as calculated by EAA staff is 95.355.

Staff Recommendation:

Staff recommends a conversion be granted for 95.355 acre-feet. The application will be reviewed at the January 23, 2018 Permits/Enforcement Committee meeting and the February 13, 2018 Board Meeting.