

Application ID:

Texana Groundwater Conservation District

P.O. Box 69, Victoria, Texas 77902

Phone: (361) 781-0624 | Email: admin@texanagcd.org | Website: www.texanagcd.org

APPLICATION TO REQUEST THE PROTECTION OF HISTORIC USE OF A GRANDFATHERED WELL FIELD

Submit this application to request the validation of evidence of historic use and protection of the historic use of a grandfathered water well field.

Item 1: Specify the name and address of the applicant:

BILL + TRACI ECKMANN 724 CR 423 LOUISA, TX 77911

Item 2: Specify the name and address of the person that owns the subject well field:

DIXIE II INVESTMENTS LTD 724 CR 423 LOUISA, TX 77911

Item 3: Specify the geographic coordinate of each of the subject wells:

Latitude: 28°-54'-18.5" N, Longitude: 96°-29'-56.3" W

Latitude: 28°-55'-05" N, Longitude: 96°-29'-23" W

Latitude: _____ N, Longitude: _____ W

Latitude: _____ N, Longitude: _____ W

Latitude: _____ N, Longitude: _____ W

Item 4: Specify the historic use validation year:

1963

Item 5: Specify the volume of groundwater, in acre-feet, produced by the subject well field during the historic use validation year (note: 1 acre-foot = 325,851 gallons):

5,664 acft

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Item 6: Specify the purpose of use of the groundwater resources produced by the subject well field during the historic use validation year:

CROP IRRIGATION

Item 7: Describe the evidence of historic use supplied with the application to be used by the district to validate the historic use of the subject well field:

PLAT OF LAND IRRIGATED, SINGLE WELL REPORT, CALCULATIONS

Item 8: Required Statements and Signature of the Applicant

I confirm the subject well field was used in a manner that qualifies as non-exempt use during the historic use validation period;

I certify, under penalty of law, that the well field owner possesses the legal authority to produce groundwater resources from the subject well field; and

I certify, under penalty of law, that the information reported on and attached to the application was prepared under the direction or supervision of the applicant and is, to the best of the knowledge and belief of the applicant, true, accurate and complete; and

I certify, under penalty of law, that the subject well field shall be operated in accordance with the rules of the district and regulations of the State of Texas.



Signature of Applicant

4-23-25

Date of Signature

Note 1: The district may request additional information not requested in this application in order to evaluate the request relative to the rules of the district.

Note 2: The applicant is required to submit an affidavit confirming that the evidence of historic use submitted to support the validation of the historic use of the water wells of the subject well field is to the best of the knowledge and belief of the person providing the evidence of historic use true and correct and that all available information concerning groundwater production of the subject well field during the historic use validation year has been provided to the district.

received
5.23.25

Texana Groundwater Conservation District

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AFFIDAVIT REGARDING EVIDENCE OF HISTORIC USE OF A WELL FIELD

I, William Thomas Eckmann, who having been duly sworn state the following:

"I am 18 years of age or older and competent to submit this affidavit."

"The evidence of historic use submitted to support the validation of the historic use of the well field with wells located at:

Latitude: 28° 54' 18.5" N, Longitude: -96° 29' 56.3" W
28° 55' 05" -96° 29' 23"

is to the best of my knowledge and belief true and correct and that all available information concerning groundwater production of the subject well during the historic use validation year has been provided to the district with this application."

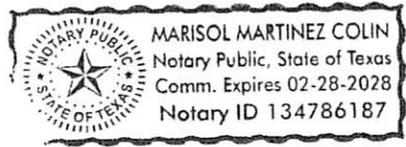
[Signature]
Signature of Affiant

Notary Public's Certificate

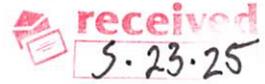
Subscribed and sworn to before me, by the said William Eckmann,
this 5 day of May, 2025, to certify which witness my hand
and seal of office.

[Signature]
Notary Public Signature

Marisol Martinez Colin
Notary Public Printed Name



Notary Public in and for Jackson County, Texas. My commission
expires 02 - 28, 2028.



Texana Groundwater Conservation District

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AFFIDAVIT REGARDING EVIDENCE OF HISTORIC USE OF A WELL FIELD

I, Albert Harrison Stafford II, who having been duly sworn state the following:

"I am 18 years of age or older and competent to submit this affidavit."

"The evidence of historic use submitted to support the validation of the historic use of the well field with wells located at:

Latitude: 28° 54' 18.5" N, Longitude: -96° 29' 56.3" W
28° 55' 05" -96° 29' 23"

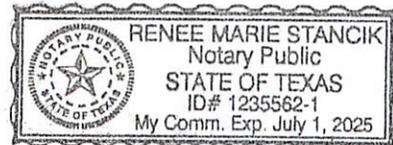
is to the best of my knowledge and belief true and correct and that all available information concerning groundwater production of the subject well during the historic use validation year has been provided to the district with this application."

Albert Harrison Stafford II
Signature of Affiant

Notary Public's Certificate

Subscribed and sworn to before me, by the said HARRISON STAFFORD
this 5th day of MAY, 2025, to certify which witness my hand
and seal of office.

Renée Stancik
Notary Public Signature



RENEE STANCIK
Notary Public Printed Name

Notary Public in and for JACKSON County, Texas. My commission
expires 7-1-25, 2025.

Confirmation of the Contiguous Tracts of Groundwater Control

The Texana Groundwater Conservation District requires certain information to be supplied with production permit requests including information regarding the boundary and size of the related tracts of groundwater resources controlled by the owners of groundwater resources associated with the production permit request. This form may be used to confirm details regarding the spatial aspects of a permitting request by the applicant.

The map below illustrates the boundary of the contiguous tracts of groundwater control (dashed line symbol) associated with Texana GCD - AVHUWF-20250424-01 as understood by the district. In addition, the map illustrates the location of any water wells registered with the district within the boundary (cross symbol).

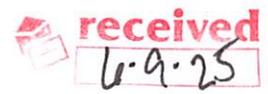
The calculated area of the contiguous tracts of groundwater control is 1525.09 acres.

By my signature, I confirm that the boundary of the subject tract of groundwater control, the calculated acreage for the boundary, and the location of existing wells within in the boundary are accurately represented on this form.

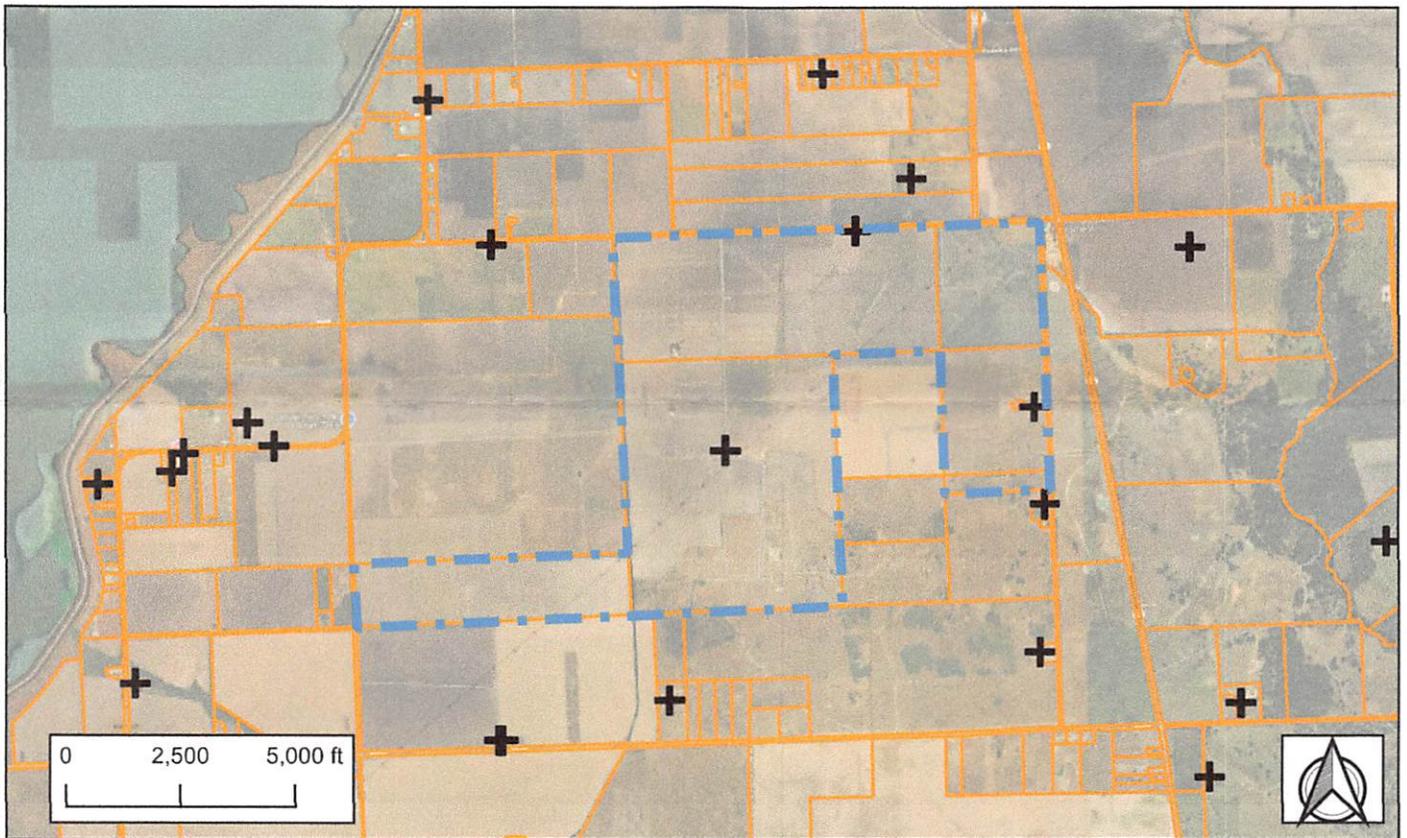
William Eckman
Signature of the Applicant

6/14/2025
Date

William Eckman
Printed Name



Printed Date: May 30, 2025



Disclaimer: The records, files, and documents maintained by the Texana Groundwater Conservation District (District) contain data and information from many sources. The District cannot guarantee the accuracy or validity of such data and information. The District specifically disclaims any warranty or guarantee relating to the accuracy or validity of any such data and information. All users of such data and information should conduct such investigation and review as necessary to independently determine the accuracy or validity of such data and information.

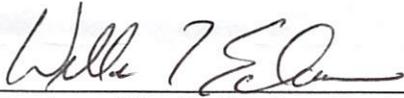
Confirmation of the Contiguous Tracts of Land Control

The Texana Groundwater Conservation District requires certain information to be supplied with production permit requests including information regarding the boundary and size of the related tracts of land controlled by the owner of the subject wells associated with the production permit request. This form may be used to confirm details regarding the spatial aspects of a permitting request by the applicant.

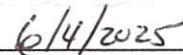
The map below illustrates the boundary of the contiguous tracts of land control (dashed line symbol) associated with Texana GCD - AVHUWF-20250424-01 as understood by the district. In addition, the map illustrates the location of any water wells registered with the district within the boundary (cross symbol).

The calculated area of the contiguous tracts of land control is 1525.09 acres.

By my signature, I confirm that the boundary of the subject tract of land control, the calculated acreage for the boundary, and the location of existing wells within in the boundary are accurately represented on this form.



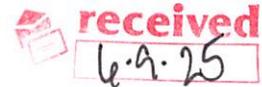
Signature of the Applicant



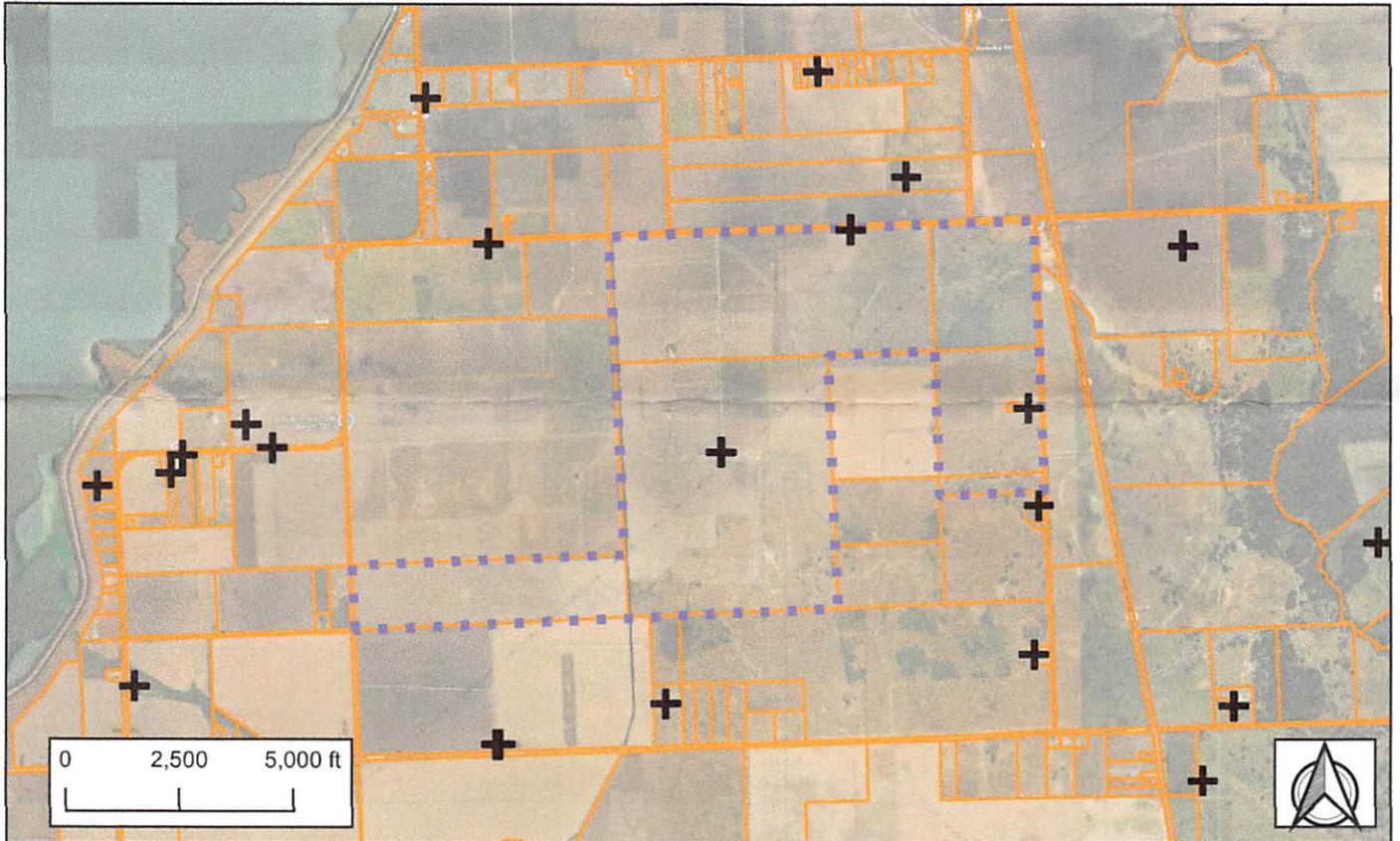
Date



Printed Name



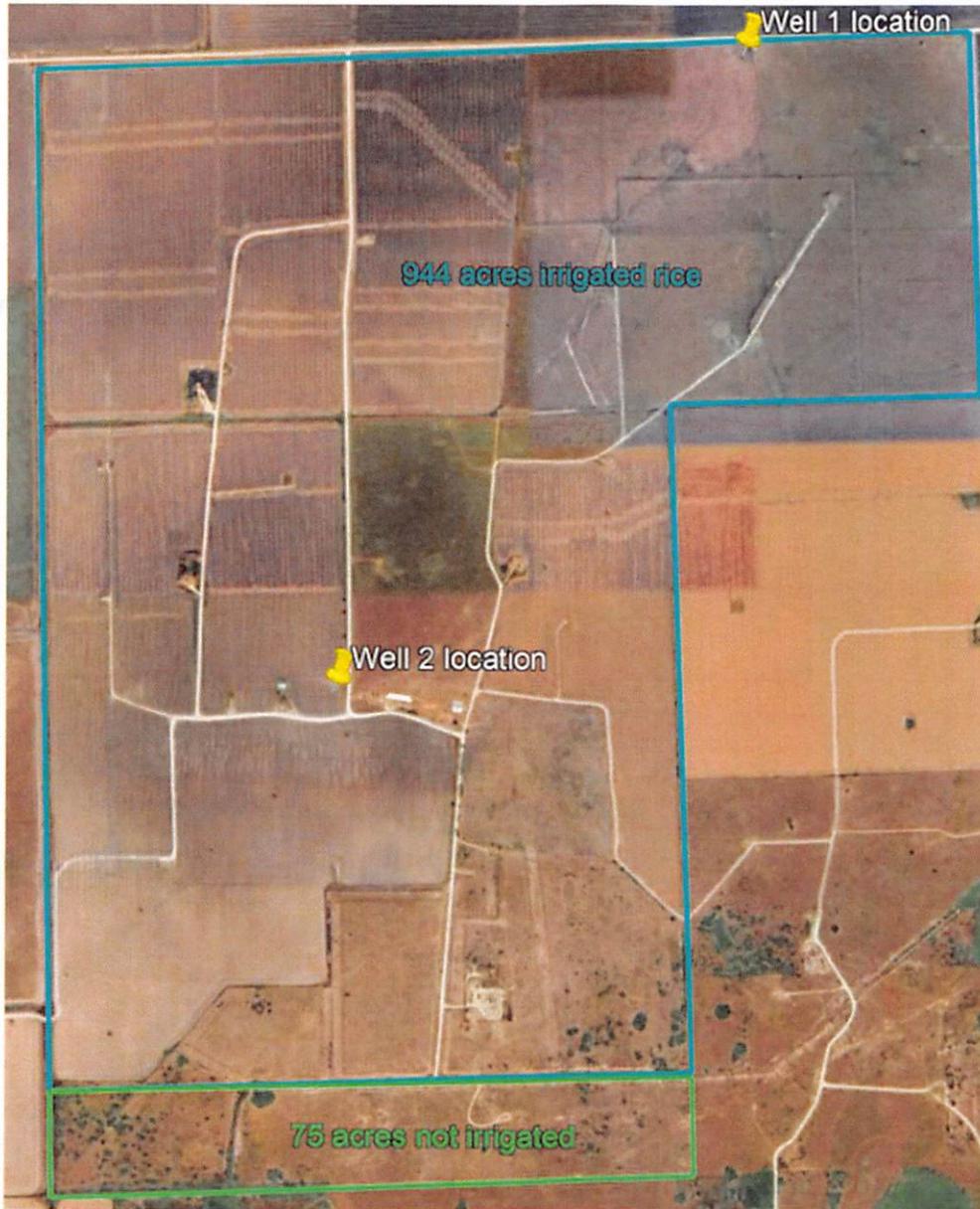
Printed Date: May 30, 2025



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Dixie II Investments
724 CR 423
Lolita, Texas 77971

Bill Eckmann
361-308-0833
b.t.eckmann@gmail.com



944 acres of land was utilized for rice production.
75 acres were not irrigated or in cultivation.
5,664 ac-ft of irrigation (944 acres X 6 ac-ft/ac)

Historic Irrigation Usage:

- International Rice Institute indicates that 6.23 ac-ft of water is typically utilized to produce the 1st crop of rice.
- International Rice Institute indicates that second crop rice requires approximately 60% of the water as 1st crop. Leading to an additional 3.74 ac-ft of water.
- Combining these two water usages indicates a total of 9.97 ac-ft of water is required to produce two rice harvests.
- Historic environmental data, while varying year to year, indicates that rainfall in our area during rice production is approximately 15" or 1.25 ac-ft.
- Removing rainfall from the total water required (according to the International Rice Institute indicates that for 2 crops of rice would require 8.72 ac-ft of irrigation (9.97-1.25).

- As documented by the Texas Water Development Board, 1st crop rice production in our area in 1950 (attached) required approximately 52.5" of water. (4.375 ac-ft).
- Second crop rice would require 60% (International Rice Institute) of the water used for 1st crop. 60% of 4.375 ac-ft = 2.625 ac-ft)
- Combining these indicate rice production would require approximately 7 ac-ft of water. Removing the average rainfall of 1.25 ac-ft during the growing season would leave 5.75 ac-ft of irrigation required.

- Based on these two calculations we are requesting 6 ac-ft/acre of historical irrigation capacity.

- The land plate included shows the acreage which was irrigated by this irrigation field. Of the total 1,019 acres – 944 acres were in irrigated rice production.
- 944 acres @ 6 ac-ft/ac irrigation = 5,664 ac-ft of irrigation.

TEXAS STATE BOARD OF WATER ENGINEERS
Hal A. Beckwith, Chairman
Andrew P. Rollins, Member
James S. Guleke, Member

M 061

WATER REQUIREMENTS FOR CERTAIN
IRRIGATED CROPS IN TEXAS

Roy C. Garrett, Hydraulic Engineer

August, 1951

WATER REQUIREMENTS FOR CERTAIN
IRRIGATED CROPS IN TEXAS

Roy C. Garrett, Hydraulic Engineer
State Board of Water Engineers
Austin, Texas

August, 1951

WATER REQUIREMENTS FOR CERTAIN IRRIGATED CROPS IN TEXAS

There is a lack of data from controlled experiments concerning the duty of irrigation water in Texas. Certain investigators in the past have attempted to collect such data from individual farmers. Adequate methods of water measurement were not available in all cases, and quite often the yields were estimated by the farmers. In the few cases where experiments were controlled the period was of short duration such that it is hard to draw acceptable conclusions from the results. Information will be presented herein concerning the water requirements of certain crops being irrigated in Texas with the realization that in most cases the data available are inadequate.

RICE IRRIGATION

A considerable portion of the water supplied to rice fields is lost by evaporation which cannot be materially reduced or controlled. Total evaporation largely depends on the local temperatures, percent relative humidity and wind movement, and the amount of water required in rice irrigation may be controlled to a great extent by these factors. Another factor to be considered is the type of soil; however, the tight soils on which rice does best do not lose an appreciable amount of water by percolation and deep seepage. Hence, the total requirement is chiefly composed of the amount consumed by transpiration and evaporation.

The amount of water used on certain Texas rice farms is given in Table I. It is not known how accurately the water was measured during 1909 and 1926; however, the measurements are thought to be good for the years 1947-50 inclusive. It is to be noted that in later years the length of the irrigation season has increased and the amount of water applied to the rice likewise shows an increase. Also, it seems that where water is taken from streams the tendency is to use more water than when wells are the source. Information is not available as to the yields on the various farms shown in Table I.

TABLE I

DUTY OF WATER IN RICE IRRIGATION IN TEXAS

<u>Year</u>	<u>Farm and/or Location</u>	<u>Irrigation Period Days</u>	<u>Total Water Received Inches</u>	<u>Rainfall During Season Inches</u>	<u>Irrigation Water Inches</u>	<u>Water Source</u>
1909 ³	Tex., Ark., La.	86	31.82	15.16	16.66	Wells & Streams
1926 ⁶	French Farm Rosedale	79	35.27	17.49	17.78	Stream
1926	Walker Farm Rosedale	100	31.61	13.83	17.78	Stream
1926	Gregg Farm Amerila	-	36.30	16.02	20.28	Stream
1926	Carrol Farm Nome	-	34.09	15.49	18.60	Stream
1926	Obrecht Farm Nome	-	29.05	15.49	13.56	Stream
1926	Carpenter Farm-Nome	64	31.62	15.42	16.20	Stream
1926	Neches Canal Co. Farm Nome	90	29.21	13.73	15.48	Stream
1947 ¹	J.D. Wood Farm Brookshire	101	33.00	9.91	23.09	Well
1948	J.D. Wood Farm Brookshire	128	36.72	0.96	35.76	Well
1948	Ray Wood Farm Hockley	147	37.92	2.04	35.88	Well
1949	J.D. Wood Farm Brookshire	121	27.36	6.96	20.40	Well
1949	Stafford Farm-Edna	-	42.72	14.52	28.20	Stream
1950	J.D. Wood Farm Brookshire	103	41.76	17.28	24.48	Well
1950	Ray Wood Farm-Hockley	140	46.20	18.12	28.08	Well
1950	Stafford Farm-Edna	110	46.56	10.80	35.76	Well & Stream
1950	Babb Farm-Edna	145	59.28	15.00	44.28	Well & Stream
<u>AVERAGES</u>						
1909 & 1926		84	32.37	15.33	19.04	
1947-50		124	41.28	10.62	30.66	
Wells - 1947-50		123	37.16	9.21	27.95	
Wells & Streams 1947-50		127	49.52	13.44	36.08	

Plans were completed in 1951 to begin some controlled experiments concerning the duty of water in rice irrigation at the Texas Agricultural Experiment Sub-Station at Beaumont, Texas. In a few years more adequate information in this regard should be available.

Time of Water Application

The general practice in the Texas rice belt is to irrigate the land thoroughly prior to planting. In some areas, where airplane seeding is being practiced, the fields are seeded while the water is on them. From the time of seeding until the rice is 6-8 inches high the fields are left dry, after which they are again flooded. In the Katy, Brookshire and Hockley Areas the water is retained on the field until the rice is mature. Occasionally a field may be drained in this area to attempt to control root grubs but this is not the general practice. In the Beaumont area the practice of draining the fields during the growing period to allow rainfall to wash some of the salts off the land is followed by some growers.

One of the big factors in flooding rice lands is the control of weeds and noxious plants; however, indications are that rice will produce heaviest under deeper flooding if allowed to stool properly prior to flooding.

Conclusions

1. It appears that the length of the irrigation period for rice has increased since 1909 and 1926.
2. If the data presented in Table I is reliable more water is being used in rice irrigation than in past years.
3. Between two and three acre-feet per acre seems to be the usual amount of irrigation water applied in the Texas rice belt, with the larger quantity being applied where surface water is used.

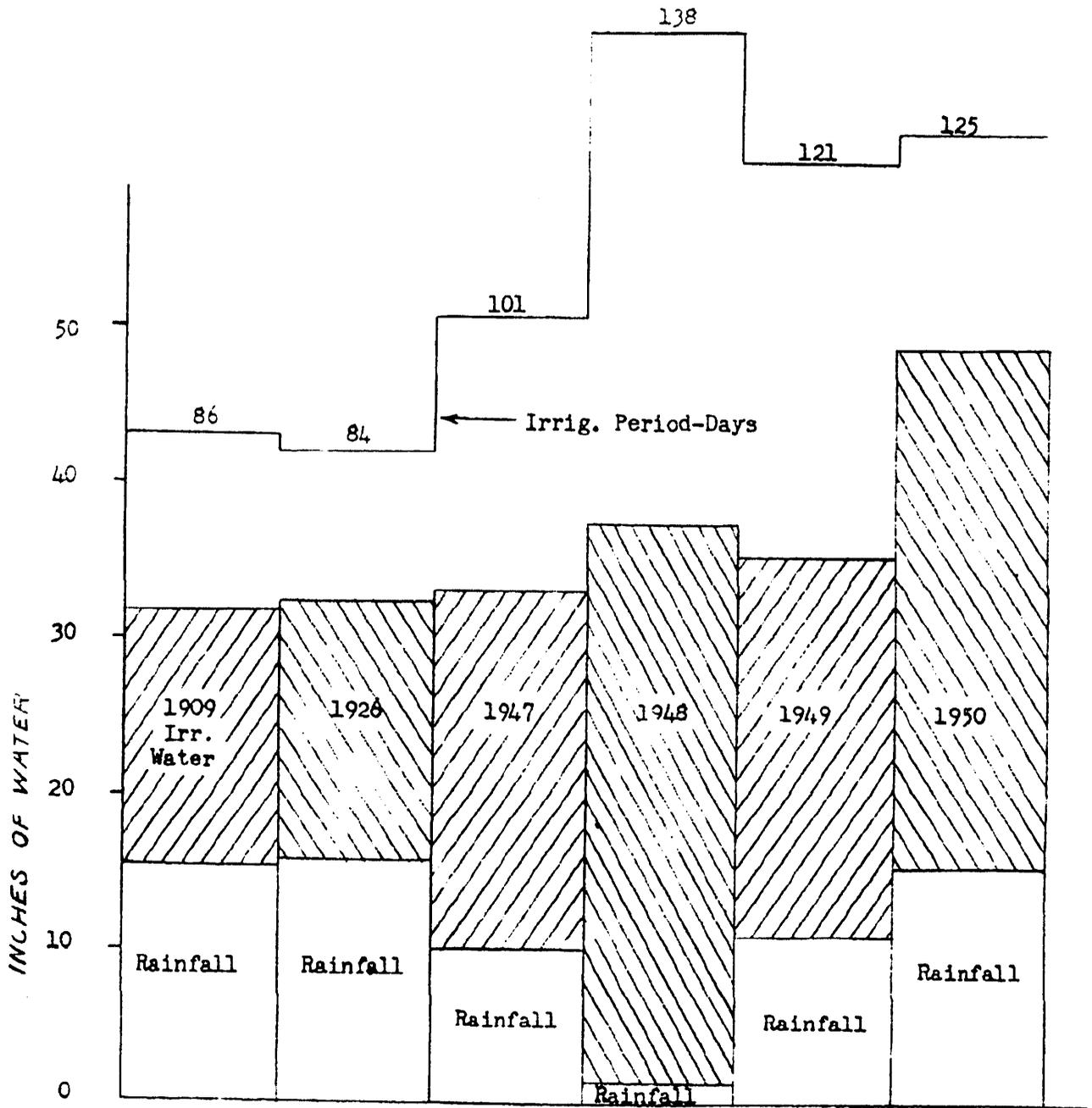


Figure 1. Total Water used for Rice and Length of Irrigating Season - Selected Farms in Texas Rice Belt.

9-185-July 1935
Revised

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

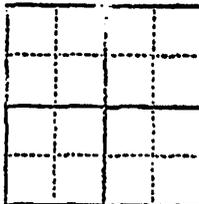
PP8005701

WELL SCHEDULE

Date January 25, 1960 Field No. KL5A
Record by R. Marvin Office No. _____
Source of data Obs., Mr. Stafford (part owner) & driller

1. Location: State Texas County Jackson
Map 5 miles NW of La Ward
1/4 sec. T N R E
2. Owner Harrison Stafford Address all of Edna, Texas
Doc Lee, & Pets Lyden
Tenant Address _____
Driller Leonard Mickelson Address El Campo, Texas

3. Topography flat
4. Elevation 7.0 ft. above _____
below _____
5. Type: Dug (drilled) driven, bored, jetted _____
April 1951
6. Depth: Rept. 429 ft. Meas. _____ ft.
20" to 150", 12" to 429"
7. Casing: Diam. _____ in., to _____ in., Type iron
Depth 429 ft., Finish slotted for 309'



8. Chief Aquifer sands From 120' ft. to 429 ft.
Others _____
9. Water level 47.91 ft. rept. March 23, 1960 above top of
casings, north side which is 7.6 ft. below surface
10. Pump: Type turbine Capacity _____ G. M.
Power: Kind nat gas Horsepower 100
11. Yield: Flow _____ G. M., Pump 2000 G. M., Meas. (Rept Est. 4-1.3)
Drawdown _____ ft. after _____ hours pumping _____ G. M.
12. Use: Dom., Stock, PS., RR., Ind. (Irr.) Obs. Rice
Adequacy, permanence _____
13. Quality good water Temp 73.5 °F.
Taste, odor, color _____ Sample No
Unfit for _____

14. Remarks: (Log, Analyses, etc.) Did not obtain driller's log
Pump set at 130' in 1951
Measured pump in level 124.0' in 50 hrs pumping
100 gpm, 1-6-53, returned 44.72' in 1-hr steady flow

Obs Well

Tracy Lee & Pons