

## County Statistics

### Location

Approximately 30 miles northwest of San Antonio on IH-10 in the beautiful Texas Hill Country.

### Population

Approximately 30,000

\*2006 U.S. Census estimate



### Mean Elevation

Approximately 1500 ft.

### Average Rain Fall

Approximately 40 inches/year

### County Seat

Boerne, Texas 78006



[Careers](#) [Contact](#) [Local & State Links](#)

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Government Solutions

## Zoun, Reem

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**From:** John & Mary Evelyn Kight [jmkight@beecreek.net]  
**Sent:** Sunday, August 01, 2010 11:00 AM  
**To:** Michael Schultz (Director); Kathleen Ligon; marty.bryant@yahoo.com; sschmid@marlinatlantis.com; gjolley@texasrialaw.com; richard.tobolka@co.kendall.tx.us; David Welsch; kmkcwcid@hctc.net; manager@ccgcd.org; mbryant@sara-tx.org; remmons@fairoaksranchtx.org; mmann@ci.boerne.tx.us; Zoun, Reem  
**Cc:** Burke, Jaime; Bennett, Anthony (TCB); Parkhill, David; Debbie Magin  
**Subject:** Re: Summary from 07/22 Advisory Group Meeting - request for feedback on rainfall amount

Reem ,

In response to the rainfall question for Kendall County :

I will FAX you the 116 year rainfall records for Kendall County as recorded in Boerne , Texas .

The 116 year rainfall average for Kendall County is 33.97 inches per year . ( 1893-- 2009 )

From the above data the average rainfall for the past 10 years is 40.77 inches per year and 39.98 inches per year for the past 20 years . The 40 inches per year average looks good .

I hope this helps . Thanks , John Kight

----- Original Message -----

**From:** [Zoun, Reem](#)  
**To:** [mmann@ci.boerne.tx.us](mailto:mmann@ci.boerne.tx.us) ; [remmons@fairoaksranchtx.org](mailto:remmons@fairoaksranchtx.org) ; [mbryant@sara-tx.org](mailto:mbryant@sara-tx.org) ; [manager@ccgcd.org](mailto:manager@ccgcd.org) ; [kmkcwcid@hctc.net](mailto:kmkcwcid@hctc.net) ; [David Welsch](mailto:David Welsch) ; [jmkight@beecreek.net](mailto:jmkight@beecreek.net) ; [richard.tobolka@co.kendall.tx.us](mailto:richard.tobolka@co.kendall.tx.us) ; [gjolley@texasrialaw.com](mailto:gjolley@texasrialaw.com) ; [sschmid@marlinatlantis.com](mailto:sschmid@marlinatlantis.com) ; [marty.bryant@yahoo.com](mailto:marty.bryant@yahoo.com) ; [Kathleen Ligon](#) ; [Michael Schultz \(Director\)](#)  
**Cc:** [Debbie Magin](#) ; [Parkhill, David](#) ; [Bennett, Anthony \(TCB\)](#) ; [Burke, Jaime](#)  
**Sent:** Tuesday, July 27, 2010 10:33 AM  
**Subject:** Summary from 07/22 Advisory Group Meeting - request for feedback on rainfall amount

Dear advisory group members,

Since our meeting on 07/22 was our last advisory group meeting, I wanted to provide you with some key meeting outcomes. We also need input from you on the average Kendall county rainfall amount you would like us to use.

Please take a minute to read the following summary of key points from the meeting and provide any further feedback you may have.

Meeting notes/ highlights from the final advisory group meeting:

Wastewater Options:

1. Costing of pipeline will be added to Boerne/ Fair Oaks Ranch wastewater treatment plant option.
2. [Mike Mann will send AECOM engineers estimate for the Boerne 2<sup>nd</sup> water treatment plant.](#)

Water Quality:

3. Average annual rainfall in Kendall County: I believe 32 inches/yr and 35 inches/yr were mentioned at the meeting. [Please verify which number you would like for us to use](#) to compute non-point loadings. I have found 32in/yr at Texas Handbook and 40 in/yr on the Kendall County website. To use another number, please provide some supporting source.
4. Increase in point and non-point pollutant loadings will be presented as a percentage of total loadings.

5. Preventative measures to reduce non-point pollution will be mentioned in the report.

We appreciate your time and the useful information and comments you have provided on this project.

Thanks,  
Reem

**Reem J. Zoun, PE**  
Project Engineer, Water  
Southwest & Mountain Region  
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**AECOM**  
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**JOHN C. KIGHT**

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Phone: (830) 230-5373  
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FAX TRANSMITTAL

TO: Reem J. Zoun

FAX: 512-472-7519 DATE: 8-1-10

RE: Mendall County Rainfall records.

PAGES: 4  
Including This Cover Sheet

NOTES: see e-mail of 8-1-10

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BOERNE (410902)  
 Monthly Totals/Averages  
 Precipitation (inches)  
 Years: 1893-2009

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
1893	0.21	0.98	2.10	1.89	2.79	1.34	0.91	1.05	0.23	0.60	3.84	1.02	16.96
1894	1.68	1.16	1.10	7.78	6.05	2.17	0.13	6.87	1.97	2.72	0.07	0.24	31.94
1895	1.48	4.02	2.09	0.51	6.30	4.76	0.16	1.22	4.30	1.55	4.75	0.81	31.95
1896	4.41	2.82	0.83	2.95	0.98	0.37	6.71	0.62	5.59	4.86	0.31	2.41	32.86
1897	1.56	0.10	4.06	3.26	1.45	2.15	1.82	4.03	3.29	2.33	0.12	2.29	26.46
1898	1.25	1.26	1.92	3.88	2.71	6.71	1.66	1.70	2.10	3.32	2.16	2.77	31.44
1899	0.42	0.45	0.03	1.77	3.10	4.96	3.29	0.39	2.97	8.96	2.59	4.91	33.84
1900	5.31	0.25	3.36	12.36	7.71	1.08	8.40	2.46	1.99	4.62	1.35	1.30	50.19
1901	0.47	1.08	1.20	1.15	3.74	1.86	6.04	1.18	3.06	0.74	0.75	0.33	21.60
1902	0.97	1.02	1.97	2.32	5.94	0.39	2.77	0.06	2.84	2.78	9.00	3.65	33.71
1903	3.35	8.70	2.21	2.03	2.05	6.15	9.50	0.58	1.62	1.59	0.00	0.75	38.53
1904	0.12	1.33	0.88	4.26	8.28	1.84	1.99	4.16	8.83	2.50	0.55	1.67	36.41
1905	1.00	1.50	3.30	9.30	0.17	4.10	1.30	1.60	3.80	2.10	4.50	1.80	34.47
1906	0.40	0.90	0.45	2.40	1.20	1.05	7.00	1.95	5.60	1.00	1.20	1.20	24.35
1907	0.20	1.00	1.40	2.40	7.75	0.20	1.50	0.60	1.70	7.95	10.40	1.50	36.60
1908	0.40	2.10	2.00	2.40	7.60	0.00	5.50	5.90	1.00	0.45	0.80	0.83	28.98
1909	0.00	0.30	1.57	2.10	3.89	1.05	6.90	0.88	1.94	1.42	2.95	2.76	25.76
1910	0.05	0.68	3.70	3.38	1.91	0.61	0.84	0.00	1.43	3.11	1.34	4.41	21.46
1911	0.58	2.17	5.45	4.72	1.36	0.13	1.70	1.05	0.40	1.97	2.95	2.95	25.43
1912	0.34	3.55	3.53	2.73	1.15	3.41	0.92	0.86	1.73	3.47	3.84	2.18	27.71
1913	1.21	1.80	0.90	1.94	3.85	6.05	0.33	0.53	5.64	16.37	8.03	5.82	52.47
1914	0.05	1.73	1.32	6.57	15.65	0.50	0.84	10.00	1.56	2.52	3.80	2.24	46.78
1915	1.68	2.90	1.69	9.94	1.30	0.16	1.61	5.20	5.34	1.18	0.67	2.04	33.71
1916	4.35	0.04	0.23	6.76	7.54	0.54	3.62	2.63	5.44	4.39	0.87	0.25	36.66
1917	1.05	1.30	0.28	1.14	6.85	3.65	0.58	0.13	3.05	0.95	0.79	0.05	19.82
1918	0.28	1.65	0.93	3.72	1.28	2.56	0.12	1.27	4.01	3.47	4.72	6.57	30.58
1919	4.14	2.85	1.73	3.84	4.16	5.74	6.27	7.06	13.90	10.49	1.08	1.21	62.47
1920	2.72	0.74	0.94	1.31	2.44	3.89	1.53	2.99	2.63	3.54	5.04	0.22	27.99
1921	2.16	0.87	3.35	4.81	2.35	3.87	1.02	0.90	9.69	1.02	1.39	1.38	32.81
1922	1.42	1.54	3.18	7.59	3.22	3.15	0.28	0.41	1.66	2.24	1.41	0.13	26.23
1923	0.56	5.35	3.28	4.89	1.61	1.48	3.23	1.92	9.97	7.18	4.02	4.74	48.23
1924	1.64	3.61	2.91	3.86	9.82	4.10	0.00	0.10	4.06	0.79	0.24	1.66	32.79
1925	0.42	0.12	0.00	1.51	2.35	1.02	0.59	2.10	3.17	6.00	2.66	1.07	21.01
1926	2.85	0.11	6.04	8.11	4.17	2.96	2.85	0.89	0.27	4.13	3.10	3.08	38.56
1927	1.54	4.60	2.72	3.48	2.72	5.58	3.17	0.15	0.86	1.75	0.10	3.23	29.90
1928	0.64	3.90	0.68	1.70	1.01	2.64	4.07	1.64	5.73	1.07	2.06	2.61	27.75
1929	1.58	0.62	1.34	2.42	8.04	1.28	6.83	0.64	2.02	2.86	3.17	3.26	34.06
1930	1.54	1.22	2.51	1.95	5.20	4.27	1.22	0.94	2.01	-	-	1.40	22.26
1931	6.44	5.53	2.69	7.09	1.62	1.79	3.81	1.60	0.17	-	-	3.78	34.52
1932	4.38	3.84	3.14	3.01	1.94	1.22	5.62	4.49	5.19	0.00	0.47	3.35	36.65
1933	4.13	2.51	0.85	1.32	3.75	1.20	2.37	0.83	2.52	0.13	0.48	0.49	20.58
1934	6.01	2.33	2.54	2.73	1.74	0.55	5.17	0.38	0.91	0.14	0.99	3.29	26.78
1935	0.42	3.04	0.77	2.45	12.59	8.59	6.80	0.57	10.40	2.14	1.35	3.81	52.93
1936	0.70	0.65	1.74	0.97	11.17	9.27	2.80	2.44	11.43	2.97	1.77	1.68	47.59
1937	1.98	0.15	2.92	1.60	5.94	5.50	3.24	1.49	0.10	2.89	1.54	5.46	32.81
1938	4.06	1.61	2.07	4.52	2.59	1.33	1.84	0.22	3.97	0.16	0.48	1.29	24.14
1939	3.54	0.86	0.65	1.46	2.58	0.58	6.55	3.05	0.48	3.16	2.33	0.96	26.20
1940	0.68	3.69	1.59	2.24	3.45	3.90	0.79	1.19	1.17	4.71	3.67	5.21	32.29

1993	2.66	2.58	2.29	2.94	3.37	3.28	0.00	0.00	2.88	2.29	0.92	0.81	24.02
1994	2.81	2.98	5.01	2.95	6.34	2.49	0.00	0.75	3.25	8.33	2.23	3.84	40.98
1995	0.34	1.06	2.06	2.64	7.89	4.10	1.08	2.14	4.14	0.49	3.63	0.72	30.29
1996	0.03	0.29	1.37	1.62	4.11	2.55	0.31	3.23	3.58	1.42	3.46	2.60	24.57
1997	1.79	5.87	3.53	6.69	5.99	16.56	0.32	2.53	0.63	3.90	1.03	3.88	52.72
1998	2.38	6.91	6.95	0.57	0.76	3.23	1.13	7.03	2.48	8.54	4.71	1.05	45.74
1999	0.06	0.03	3.33	1.51	2.37	4.82	3.35	0.69	0.22	1.87	0.42	0.00	18.67
2000	1.10	1.65	1.02	1.22	6.03	5.53	0.55	1.94	1.94	15.16	8.14	2.02	46.30
2001	4.74	2.13	3.39	1.53	4.56	0.31	0.00	14.65	4.75	4.71	9.70	3.44	53.91
2002	0.61	0.75	2.22	2.06	3.64	2.23	28.43	1.24	7.48	8.28	1.62	3.85	62.41
2003	1.31	4.09	1.58	0.24	0.15	6.58	5.78	1.32	3.66	2.89	0.81	0.14	28.55
2004	3.23	3.23	2.48	9.50	2.08	8.65	1.56	7.53	2.81	6.71	12.52	0.20	60.50
2005	2.78	3.75	2.46	1.09	4.79	1.68	1.99	3.69	0.52	1.42	1.12	0.07	25.36
2006	0.77	0.87	2.40	2.85	3.59	2.69	1.29	0.73	2.50	2.52	2.32	1.71	24.24
2007	6.76	0.06	10.40	1.64	10.31	7.39	9.64	7.77	2.88	0.83	0.74	0.58	59.00
2008	0.54	0.28	1.81	0.69	1.62	0.49	2.21	5.04	0.11	1.55	0.06	0.34	14.74
2009	0.69	0.27	2.66	2.30	3.30	0.88	1.34	0.58	5.29	10.31	2.85	2.18	32.65

Average 1.83 2.15 2.19 3.17 4.24 3.27 2.66 2.57 3.82 3.47 2.51 2.13 33.97

1941	1.81	5.88	4.71	5.76	4.51	3.03	1.61	0.55	5.00	7.02	0.85	0.87	41.60
1942	0.41	1.17	0.66	3.53	3.79	1.27	2.62	3.91	4.78	5.65	1.58	1.75	31.12
1943	0.86	0.07	1.71	1.27	4.26	3.57	5.16	0.05	4.76	0.39	1.59	2.64	26.33
1944	3.67	3.75	3.70	1.08	8.56	1.88	0.87	7.56	2.25	1.37	3.91	4.38	42.98
1945	3.55	2.94	1.98	1.10	1.00	2.65	4.22	2.85	5.01	3.94	1.30	2.96	33.50
1946	3.02	2.35	1.93	3.94	3.65	3.14	2.40	6.62	9.45	4.22	2.29	2.61	45.62
1947	4.09	0.37	1.91	1.51	5.92	0.31	0.48	-	-	-	-	-	14.59
1948	0.44	3.08	1.49	1.98	1.29	5.47	1.81	0.87	3.56	2.43	0.57	0.78	23.77
1949	3.68	3.72	1.73	7.28	3.18	3.95	3.77	5.54	2.08	3.33	0.00	2.89	41.15
1950	0.70	2.49	0.34	3.73	3.08	2.02	4.14	3.88	3.29	0.55	0.72	0.00	24.94
1951	0.24	1.71	2.69	2.48	4.10	1.60	0.60	0.31	1.44	2.08	1.26	0.25	18.76
1952	0.53	1.59	2.98	3.64	7.14	0.96	0.62	0.00	13.63	0.00	3.40	3.05	37.54
1953	0.73	0.89	1.18	1.47	1.60	0.72	0.77	4.52	3.97	3.95	0.39	1.23	21.42
1954	0.87	0.00	0.08	1.07	0.91	1.47	0.25	0.06	0.57	2.72	1.94	0.35	10.29
1955	1.72	2.71	0.45	0.14	4.68	1.37	0.37	4.09	0.70	0.19	1.56	1.29	19.27
1956	1.07	1.33	0.13	0.23	0.67	0.59	0.14	1.98	2.04	1.11	1.68	1.08	12.05
1957	0.51	3.46	4.06	9.33	9.22	3.12	0.00	0.68	8.90	7.22	4.61	1.44	52.55
1958	4.68	2.92	2.89	1.17	7.34	3.20	0.12	0.79	10.37	6.63	0.33	0.50	40.94
1959	0.75	4.44	0.30	2.76	2.02	9.44	1.39	1.76	2.27	4.93	2.06	3.52	35.64
1960	1.01	1.47	2.63	0.84	1.45	3.24	3.80	4.57	0.74	6.70	1.16	4.94	32.55
1961	1.26	4.00	0.39	0.06	0.12	6.82	3.92	1.06	1.42	2.06	2.82	1.52	25.45
1962	0.61	0.63	1.47	4.41	1.42	1.92	0.76	0.69	5.11	4.51	2.40	1.33	25.26
1963	0.22	2.23	0.13	3.80	1.19	2.24	0.33	2.70	1.29	1.67	3.88	0.98	20.66
1964	4.19	2.34	3.12	1.71	0.97	2.38	0.37	1.40	6.61	1.35	1.77	1.15	27.36
1965	1.07	6.47	2.04	5.54	10.26	2.24	0.04	1.02	3.68	4.68	1.03	4.34	42.41
1966	1.82	2.12	0.83	4.56	5.17	1.02	1.16	5.94	5.99	0.21	0.00	0.23	29.05
1967	0.15	0.99	0.94	1.54	3.24	0.04	0.58	3.43	8.00	2.68	3.38	1.78	26.75
1968	6.50	1.89	2.64	4.59	3.59	3.57	2.02	0.45	4.08	0.94	2.78	2.09	35.14
1969	0.78	3.92	2.24	4.45	2.82	2.73	1.28	4.14	2.97	7.17	2.18	3.39	38.07
1970	1.82	3.78	2.66	1.33	8.04	1.14	0.44	0.11	6.53	1.74	0.02	0.18	27.79
1971	0.05	1.24	0.11	2.93	1.98	3.26	0.35	15.25	8.91	6.25	2.85	2.06	45.24
1972	1.31	0.28	2.03	1.73	7.86	4.10	2.18	6.37	2.92	2.58	3.19	0.54	35.09
1973	3.67	2.70	2.74	4.49	0.89	10.02	9.83	1.29	6.86	7.67	0.61	0.16	50.93
1974	1.95	0.05	0.99	1.40	7.27	1.82	0.18	15.46	2.00	3.46	3.86	3.36	41.80
1975	1.09	5.04	1.03	6.76	5.89	3.57	2.60	0.52	1.99	3.25	0.18	1.57	33.49
1976	0.33	0.24	1.39	11.11	6.13	1.53	4.66	2.58	4.35	7.57	2.14	3.21	45.24
1977	3.11	1.16	1.37	5.90	2.63	5.17	0.29	0.57	1.06	3.84	6.91	0.42	32.43
1978	0.95	2.09	0.81	1.56	1.05	2.05	0.31	6.38	9.38	0.29	6.09	4.21	35.17
1979	3.75	3.01	6.97	4.64	1.06	5.51	8.17	1.58	0.71	0.66	2.11	1.80	39.97
1980	1.20	0.52	2.40	2.69	5.58	0.17	0.16	2.17	7.94	1.87	3.68	0.64	29.02
1981	1.43	1.44	3.88	2.33	6.04	11.16	2.43	2.71	2.26	4.65	2.07	0.65	41.05
1982	1.18	1.97	0.74	2.04	6.47	2.84	1.18	1.01	2.14	2.77	3.80	1.50	27.64
1983	1.73	1.81	3.96	0.00	5.59	3.98	2.77	3.53	2.28	5.70	2.58	0.67	34.60
1984	1.87	0.63	0.50	0.26	2.41	3.68	1.89	0.33	1.74	7.02	2.48	4.16	26.97
1985	1.82	3.19	-	3.19	2.81	6.83	3.70	0.05	7.11	3.76	4.14	1.17	37.77
1986	0.88	1.86	0.58	1.24	7.46	4.48	0.11	0.98	6.61	-	1.90	6.84	32.94
1987	0.81	4.25	0.92	0.88	8.55	11.22	0.96	0.85	3.15	0.18	5.68	2.41	39.86
1988	0.56	1.05	2.39	1.09	1.35	5.07	0.58	1.64	3.04	1.94	0.21	0.62	19.54
1989	4.71	0.92	2.06	1.56	2.19	2.85	0.46	1.02	1.99	5.35	1.60	0.43	25.14
1990	1.35	2.30	6.59	4.74	2.63	0.10	11.59	2.39	3.94	3.17	3.40	0.31	42.51
1991	4.22	2.36	1.47	3.51	4.49	4.03	0.85	1.86	5.18	1.27	2.02	16.96	48.22
1992	4.67	7.81	5.93	1.77	12.61	7.20	4.88	4.54	3.69	1.40	7.13	2.54	64.17