2021 District Report to the Board of Directors
Wintergarden Groundwater Conservation District

Overview: Year 2021 was the 22nd year of operation for the Wintergarden Groundwater Conservation District (the District). All existing projects have continued in force. This was the second full year for Debbie Farmer to be employed as the General Manager. Louie Longoria terminated his employment on March 19, 2021, and Paula VanCleve began employment as the Field Technician on May 6, 2021.

Groundwater Management Committee 13: GMA 13 held five (5) joint planning meetings which consisted of the development of the proposed Desired Future Conditions (DFCs) which must be adopted every five (5) years. This development included Aquifer Uses/Conditions; Water Needs and Strategies; Hydrological and Environmental Conditions; Subsidence; Socioeconomic Impacts; and Private Property. GMA 13 proposed their DFCs and Relevant Aquifer Designations on April 23, 2021. The District held a public hearing for public comment on the proposed DFCs and Relevant Aquifer Designations on July 14th. A letter of written comment was received from David Earl representing Webb County landowners dated May 11th, with a revision of the letter dated June 15th, requesting a change of the secondary DFC for the Carrizo-Wilcox, Queen City, and Sparta aquifers. There was no verbal public comment at the July 14th hearing. The District Board of Directors did not support any changes to the proposed DFCs and Relevant Aquifer Designations. On November 10, 2021, GMA 13 received a letter dated November 5, 2021, from Legacy Water Supply Corporation requesting 50,000 acre/feet of pumping be included in the DFCs for Webb Count included in the DFCs for Webb County, including the City of Laredo. On November 19, 2021, the GMA 13 Committee adopted by resolution the DFCs and Relevant Aquifer Designations as proposed on April 13, 2021. The District's General Manager participated in each of these meetings.

Most Efficient Use of Groundwater: Throughout the District, water levels were recorded in eight (8) water wells using continuous recording devices, and one (1) well readings were recorded using a sonar device. These water levels were reported to the public via newspapers within the District each quarter of the calendar year. Water levels were reported to the Board at each monthly meeting.

Controlling and Preventing Waste of Groundwater: Quarterly news releases on water levels obtained from well monitoring were published in newspapers within the District. News releases were published in the newspapers on "Groundwater Wells and Reporting Requirements"; "Water Conservation Tips on Landscape Watering" published by the Texas Commission on Environmental Quality "Take Care of Texas" program; and "Know Your Responsibilities – Cap It or Plug It (Sealing, Capping, and Plugging of Water Wells."

The District continued to promote and provide cost-share funding for the plugging of water wells that were deteriorated and posed threats to the groundwater; however, no requests were received for providing cost-share funds. One (1) water well in Dimmit County was reported to be open, with no cap. The District Field Technician capped the well with a 5" PVC cap.

Conjunctive Surface Water Management Issues: The District continued its conjunctive management efforts with the Nueces River Authority to promote education through a Rainwater Catchment Program and Water Stewardship Education. The last quarter of 2020, due to COVID-19, the Rainwater Catchment Program was put on hold as requested by the Nueces River Authority. For FY2019-2020, the

Water Stewardship Education Program reached a total of 516 students with 29 education sessions in the District. Due to the COVID-19 pandemic, visitations were limited.

Natural Resource Issues That Impact the Use and Availability of Groundwater: Water well registrations and production permits were issued according to the rules and regulations of the District. Seventy-nine (79) Exempt Wells were registered, and twenty-eight (28) production permits were issued. State well reports were received from the drillers, or if the well was a conversion well (oil/gas to water), Form P13 was received on each conversion.

To prevent waste (contamination/pollution) of groundwater, the District continued the review of all oil and gas waste disposal facility (SWD) and surface facility applications issued within the year. In 2020, the District filed protest of the applications on two (2) SWD facilities and one (1) surface facility, and participated in a hearing with the RRC on one (1) application. The District continued its efforts to work with applicants to ensure protection of the groundwater by engaging in settlement agreements and by making site visits to locations to evaluate compliance with those settlement agreements.

Water Conservation: The District continued its education program with the Nueces River Authority promoting water stewardship education and personal responsibility water conservation. Due to COVID-19, there was limited access to schools and in-person demonstrations. Report from Nueces River Authority indicated 516 students were reached with 29 education sessions.

Aquifer Recharge: The Risinger Recharge project was not monitored for its intended purpose due to the landowner using the pit to pump water into for livestock and wildlife use.

The Westwind Ranch Recharge project did not receive an amount of rainwater to gravity flow water into the injection well for the purpose of monitoring the amount of water recharged, and for the purpose of testing the quality of water monitored downstream in nearby monitor wells.

Six (6) site visits were made to the Westwind site to maintain grass and weeds as well as to check water level in the pit following rain events. Telephone calls were made to Westwind representative following rain events to verify rainfall amounts.

Brush Control: FY2020-2021 was the District's seventh year to sponsor a cost-share program for landowners to control brush and enhance recharge. Eight (8) applications were received, with only five (5) completing the work. One (1) application was denied by the Board. See the following table for details:

County	Control Method	Acres	Cost per Control Method	Total Cost Per County
Dimmit	Root Plow/Rake	50	$5,000.00	
Total		**50**		**$5,000.00**
La Salle	Aerial Spray	177	$4,973.70	
	Root Plow/Rake	63	$9,945.00	
Total		240		**$14,918.70**
Zavala	Aerial Spray	137	$3,048.73	

Total		**137**		**$3,048.73**
GRAND TOTAL		**427**		**$22,967.43**

Rainwater Harvesting: In conjunction with the Nueces River Authority, a Rainwater Catchment Project continued in force through the end of the 3rd calendar-year quarter with 18 visits made to 16 campuses resulting in 211 individuals reached. Five (5) campuses had 5,000 gallon tanks on site, and four (4) campuses had 3,000 gallon tanks on site. Seven (7) campuses housed a total of 31 metal, self-decorated rain barrels. Total gallons of rainwater harvested was not reported. Due to COVID-19, visits to campuses were very limited, and no visits were made during the 4th quarter of the calendar year.

The Natural Resource Conservation Service in Cotulla, Texas, had two (2) 2,500 gallon tanks on site. Due COVID-19, on-site staff was limited to one (1) person; therefore, the tanks were not utilized or maintained.

Drought Conditions: The District reported to the Board the Palmer Drought Severity Index map to the Board at each monthly meeting. The District is engaged in developing a drought contingency plan.

Desired Future Conditions: In the following table, the District compiled well monitoring data from seven (7) water wells within the District to determine a seven (7) year water well average for the Carrizo/Wilcox Aquifer based on the data.

	Dixondale-Dimmit Co.	**Shape-Dimmit Co.**	**Echols-La Salle Co.**	**Hinojosa-La Salle Co.**	**Cargil-Zavala Co.**	**Hargrove-Zavala Co.**	**Rutledge-Zavala Co.**
2014	417.147	177.512	319.577	487.410	392.500	370.157	45.464
2015	437.226	178.519	373.985	510.500	388.530	377.587	46.851
2016	402.409	179.518	366.548	470.960	387.330	358.674	43.101
2017	390.696	180.926	311.710	456.110	387.330	369.483	30.232
2018	395.109	182.557	331.604	484.560	401.230	359.417	35.630
2019	410.497	183.930	351.031	509.320	396.180	376.917	34.006
2020	434.922	185.382	356.634	533.950	380.280	403.429	37.622
7-Year Average	**412.572**	**181.192**	**344.441**	**493.258**	**390.482**	**373.666**	**38.986**

The well monitoring data was reported to the Texas Water Development Board for use in the Groundwater Availability Model for the purpose of establishing the 50-Year Desired Future Conditions.

Of the 28 new production permits issued in 2020, seven (7) were issued in Dimmit County; six (6) in La Salle County; and fourteen (14) in Zavala County.