

Clearwater Underground Water Conservation District

Reagan Langemeier, Texas Tech University : Summer 2019 Intern
June 10-August 9, 2019

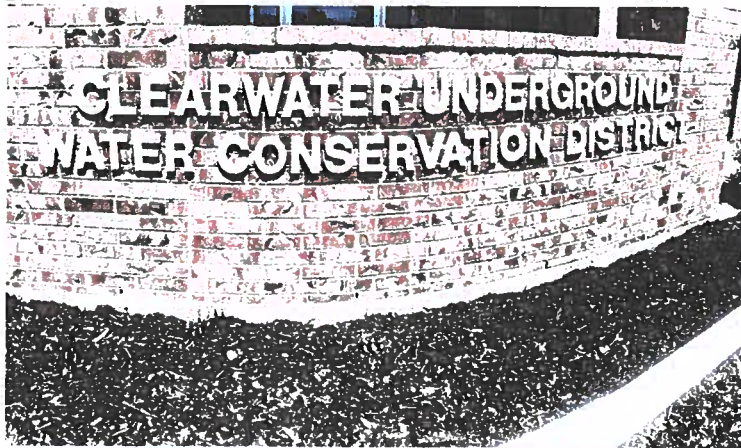
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Preface and Acknowledgement

For around 3 months from June 10 till August 9, I completed an internship at Clearwater Underground Water Conservation District, otherwise known as CUWCD, in Belton, Texas. CUWCD is responsible for the management of groundwater in Bell County. According to General Manager, Dirk Aaron, their mission is to, "develop and implement an efficient, economical and environmentally sound groundwater management program to protect and enhance the water resources of the district." This internship has been instrumental in my college career and has provided invaluable knowledge that will help me in my future pursuing my Law degree in the near future focusing on water law.



My three main goals working for Clearwater Underground Water Conservation District were:

1. Develop Communication platform such as Mail Chimp or alternative option based on the my current research and recommendation.
2. Assist in developing water conservation monthly conservation bullets with CUWCD logo in place. (sources TWDB, TWCA and Texas Water Foundation/ TAGD)
3. Research the Water Education and Outreach Communities in Texas and develop social media recommendation for ongoing GM plug and play efforts.

To accomplish these prompted goals at hand, I used numerous resources such as Mail Chimp Marketing Platform, TWDB, TWCA, social media outlets (Twitter and Instagram), US Drought Monitor, TCEQ, CUWCD and many other resources to gather as much pertinent information that could be included in our monthly newsletter that would be an outreach source to our general public and water conservation enthusiasts. I was able to travel with the Clearwater staff to educational learning events that focused on youth knowledge in water, environment and basic science to increase the awareness

of water conservation. I also was very active in meetings, seminars and conferences across the state to get a grasp on the water industry and network with business professionals that have the same goals at CUWCD that will directly correlate with my future pursuing a law degree in water law.

I am very appreciative for Dirk Aaron and taking a leap of faith and allowing me to come in and work on a daily basis learning the ins and outs of their business and what all groundwater and the water industry entails. Dirk has proven himself to be the hardest working person in the room and always has his plate full, yet will still drop anything to make sure I was suited in a comfortable learning environment. Dirk was continuously putting me in contact with experts in his field that will be invaluable in the future.

Thank you Shelly, Tristan and Corey for welcoming me to Clearwater as your own and making this journey one of the most enjoyable experiences I have had. I also want to say thank you to the Clearwater Underground Water Conservation District Board members who granted allowance for me to be here. Even though we did not work together on a daily basis, everyone was incredibly kind and welcoming from day one and always made sure I was well suited to succeed.

Throughout this internship, I have learnt a great deal about the Belton community and Bell County as a whole. In sum, I would like to thank Clearwater Underground Water Conservation District, Dirk and his staff and the Board Members that made it all happen and have allowed me to grow professionally, academically, and socially.

Introduction

Goal 1: Develop Communication platform such as Mail Chimp or alternative option based on the my current research and recommendation

While developing communication platforms I wanted to keep three goals or guidelines in mind that would be the most effective for CUWCD. Those three things included: being informative, unique and out of the box, yet still reaching the audience in a well formatted, professional manner. My idea of our templates derived from those simple guidelines and has allowed me to create a standard that can be used for months or maybe even years to come. First off, the newsletter platform is a plug and play model that allows easy access inputting new information each month and still has a clean and bold look. I took the colors from our logo to create the basis of our model that made a contrasting look that is easy to read, yet catchy to look at. In my example below, you can see that each of the columns are put into blocks that create a simplistic maneuver to edit in the future because there will be little to no formatting to be done, unless there is a drastic difference in the amount of content. What I mean by that, is that I have created blocks for each topic that CUWCD staff and I found pertinent and useful to the interacting audience, however if that content amount shifts drastically either less or greater there will need to be small formatting changes that I have written and recorded in detail on how to do. Those details are in the 'Handbook of Mail Chimp'.



Clearwater CUWCD EMAILS...

<p>MARK YOUR CALENDAR</p> <p>CUWCD Monthly Board Meeting August 14. View here</p> <p>Texas Groundwater Summit August 20-22. View here</p> <p>Texas Dossal 2019. September 4-8 View here</p> <p>TWCA Fall Meeting. October 16-18. View here</p> <p>Bell County Water Symposium. November 8. View here</p>	<p>NEWS + SESSION UPDATES</p> <p>Wakeboarding activities can cause damage to shore, docks and other vessels, leaving operators responsible Read the full article from Brazos River Authority here</p> <p>Legislative Session The 86th Legislative Session Updates relevant to the water world and what to expect. Click here to view TCEQ's update. Click here to view Capitol Texas Legislative update. Click here to review the new flood legislation.</p>
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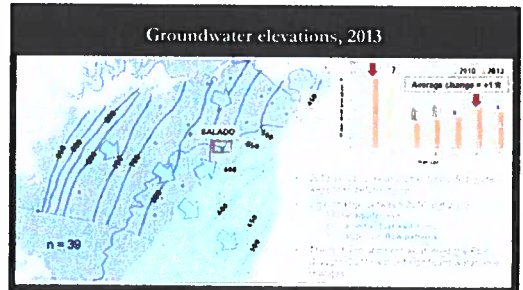
CHECK OUT CUWCD

TWDB PRESS RELEASES
AUSTIN – (July 1, 2019) – The Texas Water Development Board (TWDB) is partnering with the Texas Historical Commission (THC) and the Texas Parks and Wildlife Department (TPWD) to host the fourth annual #TXwindmills and #TXwaternowers Virtual Road Trip in July. [View here](#)

TIPS + TRICKS TO BE MORE CONSERVATIVE

- Fix your leaks
- Shorten your showers
- Water the yard when it's cool outside
- Cover the pool

[View here](#) to read more conservation tips and tricks that can save you \$\$.



CURRENT COOPERATIVE STUDIES

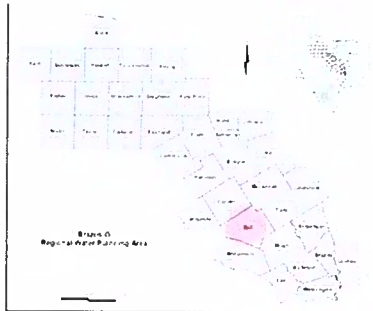
We have continued to affirm that the 2013 Synoptic Water Level Study, and corresponding map that shows the groundwater in the Edwards moves West to East and is not influenced by the groundwater production south of Bell County. We hope to show with a repeat of the 2013 study, and the attached map illustrates that the flow paths are the same and water quantity is higher than we have seen in more than 50 years. [Click here](#) to view the Synoptic Water Level Study by Professor Dr. Theodor von Stackelberg, University of Texas at Austin.

CURRENT COOPERATIVE STUDIES

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The following picture illustrates the results of our previous work in 2010 & 2013. Repeating the study under such high flow conditions validates our belief that the aquifer is healthy and needs no Federal Oversight.

CHECK OUT USGS DATA FOR BELL COUNTY



Region G Water Planning Group

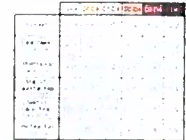
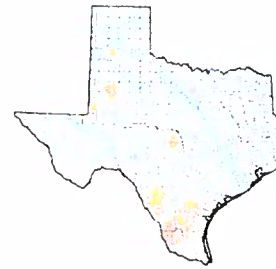
Stretching from the rocky woods of Grimes County in the southeast to the rolling plains of Kent County in the northwest, the Brazos G Regional Water Planning Area includes all or parts of 37 counties. Over 90 percent of the region lies within the Brazos River Basin, with the Brazos River being the region's primary source of water. The largest economic sectors in the region are service, manufacturing, and retail trade. Major cities in the region include Abilene, Bryan, College Station, Klein, Round Rock, Temple, and Waco. Texas Water Development Board.

<http://www.brazosgw.org/Default.aspx>

CLICK HERE TO OVERVIEW THE 2018 ANNUAL REPORT

U.S. Drought Monitor Texas

July 16, 2019
 Revised Thursday, July 18, 2019
 10:48 a.m. EDT

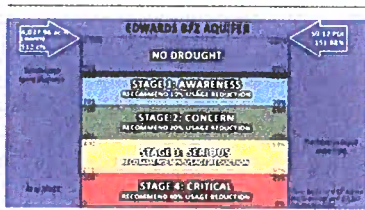


USDA
 NOAA
 droughtmonitor.unl.edu

Texas Drought Monitor

This is the official drought monitor for Texas. It is a key tool for drought assessment and response. The Texas Drought Monitor is a key tool for drought assessment and response. The Texas Drought Monitor is a key tool for drought assessment and response.

CHECK OUT THE CLEARWATER UWCD WELLS



Local Water Supply

Clearwater UWCD is a public utility providing water service to the Clearwater area. The Clearwater UWCD is a public utility providing water service to the Clearwater area.



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Our mailing address is:
 P.O. Box 1989
 Belton, Texas 76513

Telephone Number:
 254-933-0120

Fax Number:
 254-933-8398

Hours:

Monday – Friday 8:00 am to 5:00 pm
 Closed from 12:00 to 1:00 pm for lunch

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I looked into switching to an alternative route instead of Mail Chimp Marketing Platform, however every other option I looked into either costed money vs. Mail Chimp being free or it didn't have the ability to create the look that I was after. This marketing strategy allows flexibility in the budget because it is not costing us anything currently and it creates desirable templates. The other options I looked into were ActiveCampaign, GetResponse, MailerLite, and Benchmark. Each platform has their positives and negatives, however MailChimp is everything we need and I always think...if it's not broke, then don't fix it.

Goal 2: Assist in developing water conservation monthly conservation bullets with CUWCD logo in place. (sources TWDB, TWCA and Texas Water Foundation)

This has been an ongoing process this summer developing relationships with people across the state in the water industry. While developing these relationships, I have been able to brainstorm and create ideas that will be beneficial for CUWCD and incorporate the information learned into our monthly newsletter that we push out to the public. Also, having the ability to go to various seminars, conferences and meetings has given me the opportunity to see the hot button issues that groundwater districts and water conservationist are having to face. After analyzing these issues, I then incorporated them in our newsletter to publish each month to the general public. Areas I tried focusing on were legislative session issues, related water news, press releases, conservation efforts, cooperative studies, drought monitors and water supply related topics such as groundwater and aquifer levels. Some of the outlets I was able to get a vast amount of valuable information were from: Texas Aquifer Water Conference, SAWS/H2Oaks Water Facility, Brazos G. Water Planning Meeting, Texas Ground Water Association Continuing Education class, Killeen Rotary Presentation, and the GMA 8 Water Planning Meeting. On the newsletter each bullet of information has one or more links that will directly take you to more details about that certain issue or the source of where that information derived from. For example:

TXWATER.COM/NEWS/09 - DRAFT Newsletter, 2019

MARK YOUR CALENDAR
 CUWCD Monthly Board Meeting - August 14 - View [HERE](#)
 Texas Groundwater Summit - August 20-22 - View [HERE](#)
 Texas Deal 2018 - September 4-6 - View [HERE](#)
 TWCA Fall Meeting - October 16-18 - View [HERE](#)
 Bell County Water Symposium - November 6 - View [HERE](#)

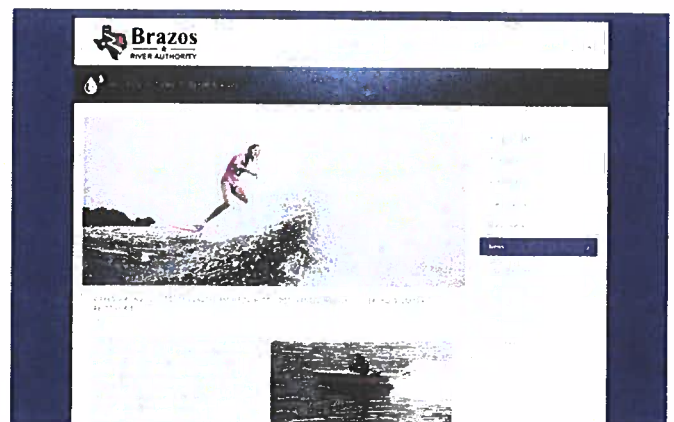
NEWS & SESSION UPDATES
 Westboarding activities can cause damage to shores, docks and other nearby boating equipment's responsible. Read the full article from Brazos River Authority [HERE](#)
 Legislative Session - The 86th Legislative Session. Updates relevant to the water world and what to expect. Click [HERE](#) to view Capri's Texas Legislative Update. Click [HERE](#) to review the new food legislation.

CHECK OUT CUWCD

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TIPS + TRICKS TO BE MORE CONSERVATIVE
 - Fix your leaks
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 - Water the yard when it's cool in the day
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 View [HERE](#) to read more conservation tips and tricks that can

You can see this directly takes you to BRA website.




Goal 3: Research the Water Education and Outreach Communities in Texas and develop social media recommendation for ongoing GM plug and play efforts.

This goal was something I thought was challenging, yet very interesting because I feel like communication efforts are constantly evolving and as time proceeds I feel that CUWCD will have to adapt to those changes as needed. However, I have gone in and created a complete facelift to CUWCD main social media platform, Twitter. Doing this will potentially bring growth on this social media platform and enhance the communication between other Groundwater Conservation Districts and other water enthusiasts that interact on this site. Two main plug and play effort templates I have created that are simple, yet useful are the Board Meeting and Public Hearing Notice that are sent out each month to remind the community that these actions are taking place. Below is one example of the templates I created that model the newsletter in terms of contrasting colors and formatting. They have become extremely useful and easy to edit.

In terms of the social media aspect, I think as a whole there needs to be discussion of whether or not Facebook is beneficial to Clearwater. I believe that Facebook is a useful tool to connect with friends and family, share photos, videos and general updates about daily life activities. Whereas, Twitter is a platform that shares ideas, has real-time information and allows people to read and engage in trending news. According to HubSpot, Twitter is appealing to a younger demographic, in fact 81% of millennials check Twitter once a day and 74% of them use Twitter as their source of news. Politicians, celebrities, and journalists turn to Twitter for trending news that is quick to read, engage in, and follow along with. Currently, I think focusing our content to millennials and the political world should be the number one priority because that is who needs to be educated or can appear to be the most misinformed. I think Clearwater's next step would be to have discussions with the board on what avenue everyone thinks is best or what platform best suits you and the future of the company.

<http://www.cuwcd.org/>



Clearwater
Underground Water Conservation District

Every drop counts!

CUWCD to hold a Board meeting on August 14, 2019



The Clearwater Underground Water Conservation District (CUWCD) will hold a board workshop to review and discuss draft budget for FY20 in addition to regular board meeting activities. The board will also conduct a previously posted public hearing to deliberate on a request to make an exception to the district's setback rules related to location of groundwater wells relative to existing property lines and other groundwater wells.

The Board Meeting will be held on August 14, 2019 in Belton, TX at the Clearwater Underground Water Conservation District office, 700 Kennedy Court, at 1:30PM (CST).

We highly encourage the public and interested shareholders to attend the Board meeting. Citizens who desire to address the Board on any matter may sign up to do so prior to this meeting.

For more information as well as formal postings of the meetings, we encourage you to visit our website. Click here to [view](#)

CHECK OUT CUWCD WEBSITE HERE

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Hours:
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Conclusion and Future Work

Clearwater Underground Water Conservation District internship has been an instrumental role in my understanding in media and communications and how it plays such a large part of any ones business platform.

I have learned a great deal of knowledge while I have been here but there are three main things I have taken away from this experience that I was not aware of when I started and were standout points that are always a work in progress in the groundwater world.

1. **The disconnect of information between the legislators, water experts, and the general public.** In any facet of business I feel like there will always be a disconnect or a misinformed community, however while I have been working here I have seen

first hand just how large some of the gaps are. General knowledge about groundwater, water supply and the future of water are very important issues and yet, so many people don't have a real grasp of what is going on. For example: I attended some educational trailer events and even though we were there trying to teach the kids, more times than not we were informing the parents about things that what we seem to think is common knowledge. I think we can all agree that we need to merge the gap from water experts to community citizens to better inform our public about general water supply and the needs of their day to day life. That is why I think it is so valuable that CUWCD has the educational trailer to teach local kids to better inform the community.

2. **The political divide.** No matter what field you are in that is associated with the government, in my opinion, there will always be a political division. We would be a socialist country if we didn't have opposing opinions. As an outsider looking in with the session just ending, it was interesting to see what bills were signed and vetoed either due to politics, poorly written bills or they just weren't beneficial for all involved. The biggest topic of discussion were the politics in each matter and why some important and beneficial bills weren't pushed thru all due to a political stance or their presumed thoughts on a certain topic. Furthermore, it was eye-opening to see politicians be combative towards issues when they refuse to learn all the angles of the concept or understand the real facts of the situation instead they tended to lean towards an emotional view or stance on the matter. This issue was relevant in multiple cases this summer and I am not saying this to target anyone but what I am saying is that as a whole we need to stay measured, open-minded and trust one another because in the end we are trying to serve the greater good to our public. I believe that no matter what side of the fence you are on there has to be a decision made that is for the good of the people and not for the good of your party or alliance.
3. **The push and desire to store and conserve is a battle when times are plentiful.** As many have realized, the last few months we have received more moisture than we have received in a very long time. Mother Nature and God have really blessed us, however we need to be conserving and storing in these times, so when we are not as fortunate we are prepared for what is to come. Practices like Aquifer Storage and Recovery otherwise known as ASR are unique and innovative ways to store water that we can be using when we are in severe drought. I think the push to conserve in times like these are vital and would put to use the excess water that we have from floods and runoff. This point tends to bring home and sum up the two points previously discussed. Water conservation is a hard topic to talk about in any setting when the general public, legislators, and the misinformed think we have plentiful of

that resource. Then you are in a political setting and bills involving water typically involve high dollar figures and controversial changes which aren't always easy either. No matter how hard the conversations may be or where you stand on the issue, there has to be an awareness or future planning to stay on top of our current water supply and the supply for future generations.

In the future, I believe that CUWCD will need to stay engaged on social media, especially Twitter, as well as keep the newsletter updated as much as possible. Twitter serves as a platform that we can push our real-time news to the general public. Staying engaged with help merge the gap between our experts and our citizens. I encourage the staff as a whole to reach a consensus on the amount of times you would like to push out a newsletter. I believe creating a campaign and sending out newsletter is beneficial and an efficient way to spread the word about Clearwater and the water industry on a professional level. I have noticed, just in the short three months that I have been here, that engagement activity is low on the monthly newsletter. So maybe, decreasing the amount of campaigns and how many times you send out a newsletter will allow CUWCD staff to gather enough pertinent information to have a larger and more engaging piece of communication material. Or send out newsletter more frequently since we have not done that in the past to keep our audience engaged constantly with new information. This decision will have to be made on behalf of the staff.