

EAHCP STEWARD

News from the Edwards Aquifer Habitat Conservation Plan - November 2019

Partnering to Prevent Pollution

EAA and SA Fire Department collaborate to protect the Edwards Aquifer



Chuck Ahrens and Michael Wagner (right) at a San Antonio Fire Department hazmat vehicle.

“Mulchie” started it all. Part of the Edwards Aquifer Region’s water lore is the massive mulch fire that ignited Christmas night in 2006 near Helotes. The mulch pile had been continually added to over a period of four years and had grown to an estimated 80 feet high and 800 feet long. From the distance, it looked like it could be another hillside in the Texas Hill Country. In the end, it cost about \$5.8 million and took three months to extinguish. Throughout the ordeal, the fire gained worldwide media coverage, was the subject of various poems and songs and earned that “Mulchie” nickname.

Aquifer Storage and Recover - Continued

The biggest issue with the process of snuffing out the fire was that the mammoth mountain of mulch sat on the Edwards Aquifer Recharge Zone. Consequently, the enormous volume of water being poured on the fire created a toxic stream of runoff. Due to the environmental issues at hand, the San Antonio Water System shut off the water to stop the potential for contaminating the aquifer.

“Needless to say, the whole mulch fire episode initiated new environmental concerns,” said Chuck Ahrens, the Edwards Aquifer Authority’s water resources director. “There was all kinds of smoke and ash in the air and we were all concerned with the contaminated runoff getting into the aquifer. And while there were a few wells in the area that showed some contamination from the mulch fire runoff, we were fortunate that the problem was not widespread and did not impact any public supply water wells. But, what we all learned



The Emergency First Responders Project is a collaborative effort of staff from various departments at the Edwards Aquifer Authority.

was that there needed to be some changes with how such fires are managed on the Edwards Aquifer Recharge Zone and how we monitor and address firefighting there. Mulchie was truly the impetus for the program we are implementing now with cooperation from the San Antonio Fire Department (SAFD) and other agencies.”

Ahrens explained that after the mulch fire incident, the State Legislature gave the responsibility for monitoring and mitigating potential impacts from firefighting water runoff to the Edwards Aquifer Authority. Initial efforts to create a program stalled a bit, but over the last several months, a new plan to track and develop programs to mitigate impacts from firefighting on the recharge zone has taken hold. The City of San Antonio provided a \$218,900 grant for analysis and training, the San Antonio River Authority stepped up to manage the funds and the Edwards Aquifer Authority (EAA), San Antonio Fire Department and Texas A&M University - San Antonio collaborated to put the program components together.

“Since the San Antonio Fire Department has a state-of-the-art hazmat program, we were already active in pollution prevention efforts that can be a part of fighting fires,” said SAFD Captain Michael Wagner. “However, when the EAA approached us about taking our efforts to the next level in protecting the Edwards Aquifer Recharge Zone, our leadership team welcomed the opportunity.”

Pollution Prevention - Continued

Texas A&M University - San Antonio staff then reached out to the Texas A&M Engineering Extension Service (TEEX) training school to enlist their knowledge in developing some best management practices (BMP) for the program. TEEX is home to some of the world's top training facilities for emergency preparedness and trains nearly 200,000 firefighters, Homeland Security officials, law enforcement and other emergency responders from around the world each year.

“The TEEX faculty is world class and we were thankful for their participation in helping us formulate a direction for the program,” Ahrens noted. “The EAA has also had regular meetings with the SAFD leadership group, and Captain Wagner in particular, as we try and understand how we can incorporate recharge zone protection BMPs for firefighters working in Northern Bexar County.”

The early research and series of meetings have produced significant goals for the program. The EAA will be visiting all regulated facilities located within the city limits of San Antonio and on the Edwards Aquifer Recharge Zone. The EAA’s Small Container Rules require facilities that store more than 1,000 gallons of regulated substance in containers smaller than 500 gallons to submit facility maps and an inventory of regulated substances that are housed onsite. Using the facility maps and the regulated substance inventory, EAA staff plans to create a database that firefighters will have access to in case they have to fight a fire in the Recharge Zone. Additionally, the EAA will be creating an innovative site-specific GIS maps that will show firefighters the most environmentally sensitive areas of a given piece of property. The site-specific maps will also show firefighters which direction the water will run given the slope near facilities storing large quantities of possibly harmful materials.

“Having this type of information available as our units approach the scene of a fire will be invaluable to us,” Wagner said. “While our first priority is saving lives, we are also extremely conscious of protecting the environment. We can pour tens of thousands of gallons of water on a burning structure and we all know that the water has to go somewhere. If we can see that the runoff could enter a sinkhole or other recharge feature from that data the EAA provides, we can immediately set up berms and other containment materials to mitigate contamination of the aquifer.”

Through collaboration with the SAFD, EAA is already getting email notices about any fires occurring on the recharge zone. Ahrens said those notifications are not meant to trigger a water quality team from the EAA heading out to the fire, but more about having the opportunity to do some post-event water quality sampling.

“San Antonio firefighters are well trained and we are not going to get in the way of them doing their jobs. However, the open line of communications and data sharing will help both of us,” Ahrens concluded. “Our long-term goal is for comprehensive training on this issue to become a standard component for every new firefighter joining the SAFD. The Edwards Aquifer will always be an essential water supply for San Antonio and other communities around the region, so we need to ensure that we’re taking every step we can to protect it from potentially contaminated runoff that can occur as firefighters do their jobs on the Edwards Aquifer Recharge Zone.”



EAHCP STEWARD SHORT TAKES

EAA Partners with Morgan's Wonderland to Build Education Center



Gordon Hartman, left, and Roland Ruiz show off a rendering of the new education center planned for the Morgan's Wonderland Camp.

The Edwards Aquifer Authority (EAA) announced a partnership with ultra-accessible™ Morgan's Wonderland Camp (MWC), a 102-acre recreational oasis on the northern outskirts of San Antonio that will year-round offer a summer camp-type experience to those with and without special needs. It has been of longstanding importance to the EAA to impart water wisdom by cultivating a curiosity for the life-sustaining groundwater system below our feet – The Edwards Aquifer.

“Our partnership with Morgan's Wonderland Camp will be manifested in the creation of the EAA Education Outreach Center,” said Roland Ruiz, EAA

General Manager. “It reflects the way we must approach our work moving forward – through inclusion, imagination, and innovation – if our legacy is to be a sustainable Edwards Aquifer for generations to come.”

The \$2.5 million EAA Education Outreach Center will encompass 3,500 square feet and feature unique learning experiences that will broaden imaginations through participation in innovative STEM opportunities with an inclusive mindset. The \$28 million, ultra-accessible Morgan's Wonderland Camp, which is slated for completion in the latter half of 2020, will be able to accommodate, at one time, up to 525 campers of all ages and abilities along with staff for day, weekend or week-long camp sessions.

Joint Committee Meeting Scheduled for Dec. 19

A joint meeting of the Stakeholders, Science and Implementing Committees is scheduled for Thursday, Dec. 19, 10 a.m., at the Edwards Aquifer Authority offices in San Antonio.

Sessom Creek Cleanup Day Happening Saturday, Nov. 23

The next Sessom Creek workday is scheduled for Saturday, Nov. 23, from 9 a.m.-11 a.m. Tasks for the day include removing invasive ligustrum constructing contour terracing, dragging small brush to be chipped, pulling invasive seedlings, broadcasting native seed and removing trash. Volunteers will meet at the Vie Lofts parking lot at 817 Chestnut St. Tools will be provided, and be sure to wear closed toed shoes for the day. Pizza will be provided at the end of the cleanup event. RSVP to eweeks@sanmarcostx.gov.

Trinity University Student Sarah Mock Interns with EAHCP

Trinity University student Sarah Mock earned one of the Edwards Aquifer Authority's sought after intern positions and will be working with the Edwards Aquifer Habitat Conservation Plan (EAHCP) team through the end of this semester. She is pursuing an economics and environmental double major and is scheduled to graduate next May.

Her work with the EAHCP includes managing administrative records, working on website updates, conducting a literature review on zebra mussels and learning some GIS applications. Additionally, she has had the opportunity to accompany some of the field teams to observe their work.

"I really enjoyed the outdoor work and learning about the various types of water quality testing and endangered species studies the contractors and staff are working together on," Mock said. "This opportunity has really given me, in just the past few weeks, a good idea of how I can use my degrees in the future. There is an impressive group of programs in just the EAHCP alone and I feel very fortunate to have the opportunity to get a first-hand look how they're being implemented to protect the endangered species."

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