



# MEMORANDUM

**TO:** Board of Directors *LNP*  
**FROM:** Larry N. Patterson, Executive Director  
**DATE:** April 27, 2018  
**SUBJECT:** Board of Directors Meeting - - May 3, 2018

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**Meeting Place:** Upper Trinity Regional Water District  
Board Meeting Room  
900 N. Kealy  
Lewisville, TX 75057

**Date:** Thursday, May 3, 2018

**Board Meeting:** 12:30 P.M.

**Notice:** For the required quorum, your presence is very important. However, if you cannot attend, please contact Nancy Tam by email: [ntam@utrwtd.com](mailto:ntam@utrwtd.com) or by telephone at 214-538-8602, as soon as possible.

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## A WORD FROM THE PRESIDENT.

You have heard me say it before, I have no private agenda; I just want what is best for Upper Trinity and for each of our Members. So, I really do enjoy seeing Board Members working together, trusting each other, taking bold steps, relying on staff, keeping the vision. It all came together at our meeting last month. One of our shortest meetings ever - - less than one hour. Yet, we took one of the boldest steps ever - - to authorize a contract for final design of the dam and spillway for Lake Ralph Hall. It doesn't get much more visionary or more trusting than that. Based on the unanimous vote, I think you may be taking special pride, like I am, in being part of the Upper Trinity team that acted on the vision to build Lake Ralph Hall for the future - - with water rights in perpetuity.

Yes, I am proud of our team. Looking around it just seems, to me, that Upper Trinity is special. Whether it is how we avoid large rate increases or how we keep winning the "Best Tasting Water" for all of Texas, I keep "busting buttons."

At the Board Meeting next Thursday, we will take another important step to help carry on the vision for Upper Trinity's future. We will elect Officers for next year to help lead the way - - to be our leaders through a big year of tough decisions. Your participation is important and vital.

See you at the Board Meeting next Thursday. IT IS IMPORTANT!

- - Kevin Mercer, President

## INFORMATIONAL ITEMS

**Expansion of Doe Branch Water Reclamation Plant.** For efficiency, and to make maximum use of available plant capacity, we try to coordinate (alternate) expansion projects between Riverbend and Doe Branch. With rapid growth continuing and with the Riverbend expansion scheduled for completion in about a year, it is timely to schedule the Doe Branch expansion to follow in a couple of years. In the meantime, excess flows from Doe Branch Customers (Prosper, Celina, Mustang, FWSD No. 10) will be transferred for treatment at Riverbend, taking advantage of the new capacity that will be coming on line. Then, before reaching the capacity of Riverbend, the Doe Branch expansion project has to be up and running, to relieve Riverbend from potential violation. It works! We save lots of money for Customers! We just have to keep an eye on the ball! In that spirit, all Doe Branch participants, District Staff and consultants met on April 17 to coordinate plans. It was agreed to move forward with the Doe Branch expansion - - tentatively, from the current 2 mgd capacity to 4 mgd, and to consider a design, contract as soon as the June Board meeting.

**Denton County Greenbelt Plan Reception.** In celebration of the Denton County Greenbelt Plan, the three sponsoring agencies (Denton County, Conservation Trust and the District) are hosting a special reception on May 10 from 5:00 – 6:30 PM at the Lantana Golf Club, 800 Golf Club Drive in Lantana. Please join us and encourage others who may be interested to attend as well to learn more about the Plan and meet with others who share an interest in protecting our natural assets. Heavy hors d'oeuvres are provided, and a self-guided tour of Lantana's greenbelt will be available. Please RSVP to Jason Pierce at [jpierce@utrwd.com](mailto:jpierce@utrwd.com) or 972-219-1228.

**District Education and Outreach.** Recently, the District hosted about 100 third grade students from Centennial Elementary School in Plano for an educational tour of District facilities. The students rotated between four stations to learn water conservation and watershed protection principles, and the water treatment process. The four stations included: Water-Wise Demonstration Garden, Taylor Water Treatment Plant, a stream erosion demonstration, and rainfall simulator. In addition, students from North Central Texas College toured the District's Water-Wise Garden and the Taylor Water Treatment Plant as part of their Environmental Biology class.

**Irrigation System Check-Ups.** As part of the Water Conservation Program, the District initiated an Irrigation System Check-Up program during the summer of 2017. To date, almost 150 check-ups have been completed. Homeowners from Argyle, Castle Hills, Celina, Copper Canyon, Corinth, Cross Roads, Flower Mound, Northlake, Paloma Creek, Providence Village and Shady Shores have taken advantage of this FREE service. Each homeowner receives a report of their irrigation system, which includes a list of recommended repairs to ensure the sprinklers are working efficiently and not wasting water. By completing the repairs, or simply adjusting the system settings, many homeowners can save hundreds of gallons of water per week. This program is available to all District Customers. To learn how to make this free service available to your retail customers, please contact Jason Pierce at 972-219-1228.

**Drinking Water Week will be celebrated May 6 – May 12, 2017.** For more than 40 years, the American Water Works Association and its members have celebrated Drinking Water Week – a unique opportunity for both water professionals and the communities they serve to join together in recognizing the vital role water plays in our daily lives. Upper Trinity encourages our member and customer cities to participate in Drinking Water Week. This year's theme is "Protect the Source." Free information and materials are available for download, including logos, official proclamations, and social media posts at <https://www.awwa.org/resources-tools/public-affairs/public-affairs-events/drinking-water-week/dww-materials.aspx>.

**Drinking Water Week | May 6-12, 2018**



**Protect the  
SOURCE**



**Lake Lewisville Dam Safety Modification Project Update.** The U.S. Army Corps of Engineers (USACE) is expected to award the first contract for Dam Safety Improvements in 2019. Phase one improvements are estimated at \$150 million and will include utility relocations, a new berm, seepage collection drains and anchors for the concrete spillway. See enclosed article for more information. While reviewing preliminary plans, District Staff discovered potential construction conflicts with UTRWD facilities. Specifically, the 60-inch raw water supply line to the Taylor Water Treatment Plant and both the treated and non-potable pipelines serving Castle Hills (DCFWS #1A). Our staff is working directly with USACE, Lewisville Lake staff and the USACE design team in Tulsa, Oklahoma to resolve these potential conflicts, prior to advertisement for bids.

**Upper Trinity had a strong showing at the 2018 Texas Water Conference.** Texas Water is the largest regional water-related conference in North America and is jointly sponsored by the Texas Section American Water Works Association (TAWWA) and the Water Environmental Association of Texas (WEAT). This is where Texas Water Professionals go to share experiences, learn and to recognize industry leaders. District staff presented three technical papers at the conference. These presentations were on the following topics:

1. Technology and Aging Infrastructure: Using New Tools to Optimize Rehab Dollars – Kurt Staller and Adam McKnight – Engineering
2. County-Wide Plan Preserves Greenbelts, Protects Quality of North Texas Water Sources – Blake Alldredge and Jason Pierce – Watershed Protection
3. Field Experience for Beginners: Navigating Your First Jobsite – Elizabeth Boddicker – Engineering

**Greenbelt Plan Selected for Communication Award.** The Denton County Greenbelt Plan received a Watermark Award from the Texas AWWA during the Texas Water Conference held in San Antonio from April 23 – 26. The Watermark Awards recognize excellence in communications among utilities statewide, and the Award was received specifically for the poster that was developed to effectively communicate the benefits of the Plan. This is the third award that the Greenbelt Plan has received, in addition to the National Environmental Achievement Award from NACWA and the Director's Award from the American Planning Association – Texas Midwest Section.

### **BOARD MEETING**

Enclosed is the agenda for the May 3, 2018 Board Meeting, and the Data Sheets for action items and other related information. Please contact me or the appropriate staff person if you have any questions.



# DENTON RECORD-CHRONICLE

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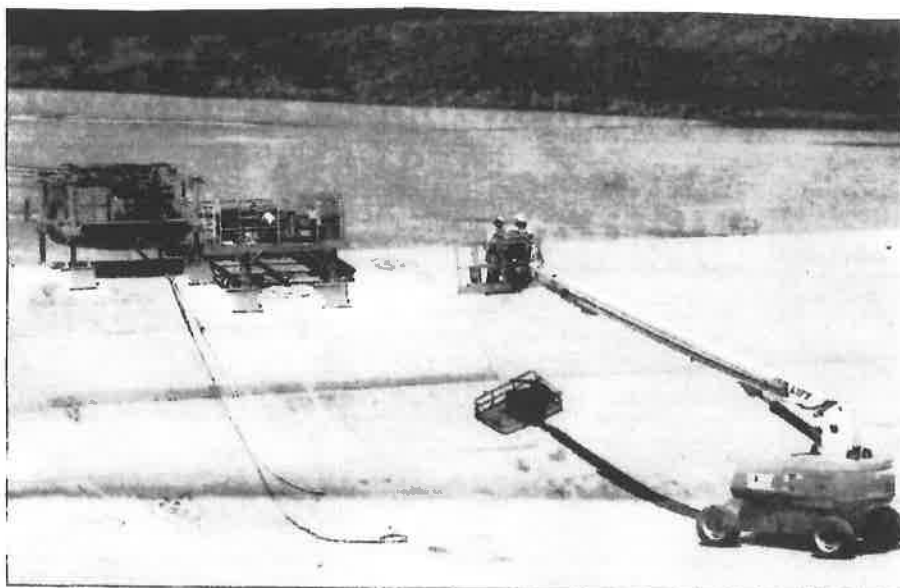
VOL. 114, No. 261/18 PAGES, 3 SECTIONS

FRIDAY, APRIL 20, 2018

DENTON, TEXAS

## Project preparations

Lewisville Lake dam work to start in 2019, four years after scare



Photos by Ron Baseline, Dallas Morning News

Independent contractors drill and test Thursday to see how many new anchors are needed and how strong they need to be for the stability of the spillway at the Lewisville Lake dam. Preparations are accelerating for the \$150 million Army Corps of Engineers project to secure the dam.

By Jeff Mosler

The Dallas Morning News

[jmosier@dallasnews.com](mailto:jmosier@dallasnews.com)

Since a spring 2015 scare at the Lewisville Lake dam, repairs have been on a fast track. But that means years when it comes to federal funding.

Now, preparations are accelerating for the \$150 million Army Corps of Engineers project to secure one of the region's most critical pieces of infrastructure, which the corps once rated as the eighth-riskiest in the nation.

The first contract is expected to be awarded next year with construction also starting in 2019.

Even without the first large chunk of funding — about \$55 million already in President Donald Trump's budget —



U.S. Army Corps of Engineers were addressing slope stability, which is part of normal maintenance to prevent slides at a spillway, Thursday at the Lewisville Lake dam.

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workers are already drilling deep under the concrete spillway to better understand what's needed to ensure the dam's integrity.

"Dams are designed and built to reduce flood risks, but they cannot eliminate all risks," said Col. Calvin C. Hudson II, commander of the corps' Fort Worth district. But he emphasized that the dam is safe and effective. Hudson also used the often-repeated phrase that the dam is "functioning as designed."

Concerns about the Lewisville Lake dam came to the public's attention following a late 2015 *Dallas Morning News* story called "The Dam Called Trouble." That recounted the discovery of a sand boil — or whirlpool — that officials briefly worried could have led to dam failure.

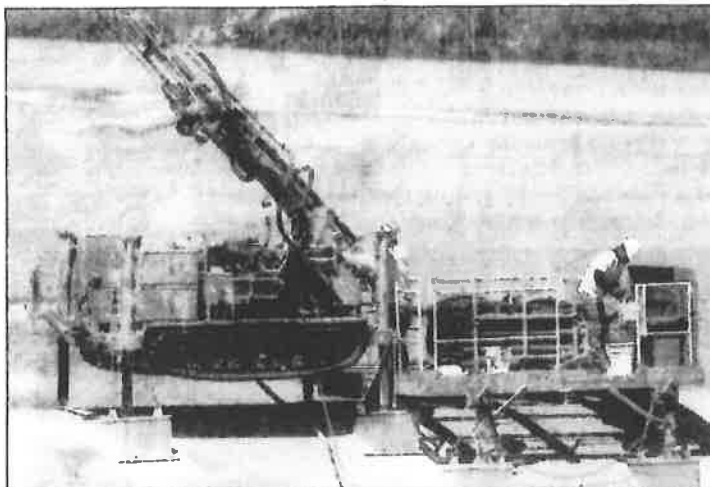
Quick action stopped the sand boil, and staff has continued monitoring that area closely. A decade ago, corps engineers found seepage under the dam's foundation and some embankment instability.

The 63-year-old earthen dam is considered high-risk in part because of the consequences of failure. Federal estimates are that complete failure would threaten 431,000 people and could potentially flood downtown Dallas with 50 feet of water.

The upcoming repairs include new anchors for the concrete spillway and additional concrete covering it. A new berm, collection and filtering system will keep tabs on and manage seepage underneath the dam. The repair plans are reviewed by experts inside and outside of the corps.

The contract planned for next year will address seepage, which caused the sand boil that concerned corps officials in 2015.

## Dam



Ron Basellce/Dallas Morning News

The upcoming repairs to the Lewisville Lake dam include new anchors for the concrete spillway and additional concrete covering it.

"We want to make sure that the seepage doesn't get out of control," Sarwenaj Ashraf, dam safety program manager for the corps' Fort Worth district. She said that some seepage is expected though.

The next contract, expected in 2021, would be for spillway improvements. Drilling equipment is already boring six holes as deep as 130 feet to test the soil. That work will help the corps decide how many new anchors are needed and how strong they must be to reinforce the spillway.

Lewisville Lake dam improvements are expected to be completed by 2026 to 2028, a couple of years later than expected. Corps officials said the need to break the \$150 million project into small pieces is expected to delay completion.

Project funding will also include money to strengthen parts of the dam against slides.

Earlier, minor repairs have already been made to the dam, including fixes to a dramatic 160-foot slide that happened after a particularly rainy season. The corps had described that as mostly cosmetic and not a threat to the dam's structural integrity. Those repairs cost about \$8.8 million.

While these are large projects, Hudson said there are annual and every five-year assessments of the dam. Those and daily checks also lead to small repairs and routine maintenance that Hudson likened to keeping a car running.

"If we see something," he said, "we fix something."