*On Sept. 28, LRWA Board Members **Linda Fawcett** and **Melissa Burnard** -attended the **Hill Country Alliance's Annual Summit** in Dripping Springs as a Sponsoring -organization. Needless to say, all of the presentations were amazing, highlighting common problems and solutions. Here is just one example:*

When Life Gives You Drought: Innovations for a Better Water Future

Droughts bring a myriad of extreme challenges to our region—from declining spring flows and low lake levels, to reports of dry wells and stressed community water supplies—but they can also be the catalyst for innovations that move us towards a more sustainable water future.

Panel moderated by **Marisa Bruno**, HCA Water Specialist

Representative **Tracy O. King**, District 80

Lon Shell, Hays County Commissioner

Dave Mauk, Bandera County River Authority and Groundwater District

Sharlene Leurig – Texas Water Trade

Question: How have you addressed the water crisis?

Representative **Tracy King** (District 80) said he looked around the Texas Legislature and noted that former water advocates were gone or getting older, so he began working to build a younger group resulting in the **Water Caucus**, which then led to **Senate Bill 28** (to be voted on in the November 7 election as **Proposition 6**. Their budget began as $3 billion, and was subsequently whittled down to $1 billion, but nonetheless a good start.

Dave Mauk (Bandera County River Authority & Groundwater District) followed up and told a familiar story of phenomenal growth (new landowners) in the district coupled with too many exempt private wells. To combat this, he started with a study of the decreasing rainfall to the point that Bandera County's Middle Trinity Aquifer currently has only 3-4% recharge from vertical sources (rain). Even though the county also has the Lower Trinity Aquifer, the two aquifers don't connect and the latter contained "very old water." All the science and record trends pointed in the same direction. The county needed to do something so it changed the subdivision minimum lot size for a well to be increased from 5 acres to 10 acres. This also would help protect current landowners from running out of water.

Lon Shell, Hays County Commissioner, reported that historic Jacob's Well was going dry. (Jacob's Well gets its water from the Trinity Aquifer that makes its way through an extensive underground cave system. The spring is the headwaters of Cypress Creek that feeds into the Blanco River.) Shell said his county's minimum lot size for exempt wells was currently 6 acres. He reported that even the "rednecks" could see how this drought was causing the water to go away. Cypress Creek was in bad shape, and Aqua Utility has severely been over pumping its permits, now subject to large fines from the county. The next step was to develop new

Subdivision guidelines to monetarily incentivize developers to include open spaces and other conservation practices into their plans. New development areas would have to devote more than 50% of their acreage to habitat for wildlife, including endangered species, and promote flood control. The goal is to create a MARKET THAT WANTS GREEN DEVELOPMENT.

Sharlene Leurig (Texas Water Trade) emphasized that our current water shortages are NOT just temporary and we need to plan for the next 50-100 years, not just the next ten. The problem is structural – most of our water comes from underground. The current setup of centralized water and wastewater plants combined with individual wells is "so last century." New planning is essential. Developments need to look to a future not as "sources of demand," but as "sources of water capture and storage." Increasing rainwater collection is a great example in the Hill Country. One small but significant example: air conditioners pull moisture from the AIR and this can be captured as condensation (don't just let it drain into the leaky sewers!) Same for stormwater runoff – capture and store. Also, in the near future sinks and toilets could have immediate wastewater conversion *inside each building*: NET ZERO WATER. This idea has been presented to the Texas Builders Association, who are listening because they are well aware of increasingly exorbitant fees for connection to centralized water and wastewater treatment, and that the cost of buying water and pipelines is also skyrocketing. All this is pointing in the same direction – from now on, any public building should be built with the Net Zero Water concept. For more information on Net Zero, please go to https://www.energy.gov/femp/net-zero-water-building-strategies.

But centralized water/wastewater treatment will still be needed and continue alongside building-size treatment. However, this will exacerbate a looming water workforce crisis – we don't have enough water operators as it is, and many are about to retire. With demand increasing for smaller (and therefore more numerous) water treatment facilities, a major need is to recruit many more now.

Representative King: Yes, our water infrastructure is old and leaky, therefore the need for Senate Bill 28 to pass in November. But individual and local water conservation practices are also absolutely necessary (King mentioned visiting Israel last year and learning that 98% of their water is re-used, for example.)

But **King** also voiced the elephant in the room – that we will be witnessing conflicting factors – for example, cities needing to collect large water fees to pave streets, etc, whereas developers are searching for the cheapest water source as possible to make their lots sell cheaper. Human nature at its finest – many people won't go for Net Zero Water or Rainwater Collection until they turn on their faucets and nothing happens. **Shell** was more optimistic, saying that science will be the key to awakening folks.

QUESTION: How can we address the discrepancy between the wealthy who can afford exported water (usually via pipelines) that at the same time deprive poorer communities who live near that source?

Representative King: We did a study and then legislatively created a statute that charges export fees for the purpose of reimbursing poorer people having to dig new wells, or at least to slow down the exported water business.

We also need to change the water-related laws in Texas, especially the right of capture.

QUESTION: How do we keep drought-conscious attitudes going during the interim wet periods?

Leurig – We simply have to create habits (remember recycling?) of not wasting water and also tailor current solutions to individual towns. We need sustainable projects that INCREASE water. This calls for Chambers of Commerce leadership.