



## CITY OF HORSESHOE BAY

### **Lower Colorado River Authority/LCRA Questions (during July 2022 workshop):**

1. Big picture concern: The Upper Colorado River (Lake Powell/Lake Mead, etc) is not connected to our Lower Colorado River. But they give us fair warning. Is it true that part of their problem (beyond drought) is that the UCRA oversold its capacity? How can the LCRA ensure they avoid this and stay within anticipated capacity in coming years and/or have a plan to adjust if use begins to outpace availability.

LCRA will not sell above capacity. It has put several management strategies in place to increase capacity, but individual customers (such as cities) will need to put conservation practices in place to stay within their 'firm water guarantee' levels. Horseshoe Bay is a prime example since it maintains a Stage 2 water level, has Water Smart and other technology to monitor leaks which is why it was the first recognized River Hero Award recipient. Strategies by LCRA such as creating off site reservoirs, limiting agricultural water downstream will help manage the quantity of available water for consumers.

2. LCRA is allowing the installation of a silt/sand removal plant in the Kingsland area (correct?). What impact does this have on taking away water? Is there also a potential impact on future flooding in later years if water is retained upstream in this area? Also, what safeguards are in place to monitor the water quality impact of this plant's work disturbing the ground silt and stirring up buried chemicals/toxins/debris?

The removal of silt will have negligible impact on the lake capacity, but also will have limited negative impact on water quality. Both the removal and water is monitored. The biggest alert for all is recreational as water shifts can result in cliff exposures/drops for swimmers and debris for boaters.

3. The cycle in Texas has been for a significant drought (which is happening more frequently) to be followed the next year or so with a major flooding. What strategies are in place to be prepared for future flooding so we don't experience what we saw in 2019 (following the 2016-18 drought)?

The river is doing what it is supposed to do: Store water in the basins in wet season to have it available in dry seasons. The cycle of floods will always impact those on the river banks and all should be prepared by not building directly at the edge, having off site drainage plans, and securing property. The dam system works to move water downstream, but once it is past the Lake Travis area, the water has no capture point. To assist in avoiding full flooding in Austin, the upstream basins must be released at a pace that preserves lives and moves the water in the safest manner.

4. Cities all along the river (including HSBay) are renegotiating new contracts for expanded 'firm' water commitments for 20 years out. The City of Horseshoe Bay request will be for a doubled increase which will include a 'reserve' for those anticipated growth areas on Hwy 71. We know we will have to pay for the 'reserve' portion of this even though we won't be accessing this water for several years for those new developments (and they will pay/reimburse for the reserve costs paid). Are plans in place to ensure that when we do need this 'reserved' water in 4-8 years, it will be available?

Firm water guarantees for HSBay will be honored up to its full cap. Internal city practices to ensure you do not go above that cap for the 20 years ahead will be the most essential factor. Current practice (and history of HSBay) indicates it will be prepared for managing its firm water limits for secure water access for the expanded growth over the coming 2 decades and likely more.

5. Is it true that downstream consumers (agriculture and cities in east/south Texas portions of the river which receive more rainfall) will have either 'interruptible water' or reduced capacity to balance the need for upstream communities (west of us) with limited rainfall?

Agricultural customers (mostly rice farmers) are aware their water access will fluctuate. It is sold to them at a lower rate than 'firm' guarantee customers since they must expect that their water guarantee is 'interruptible' to ensure 'firm' customers have their water caps met. This year the water access has already been interrupted for their second phase of planting. It is their responsibility to manage and anticipate this. Due to outsourced planting, the amount of farming served by the LCRA has reduced by 1/3 over time, reducing amount of water requested. This has allowed the river to serve 'firm' guarantee populations confidently.

6. All 'firm' water costs are the same by volume - the cost variance is in the quantity contracted for -- correct? So when we increase our contract quantity, it is not costing the individual homeowner/business more money - rather the additional homeowners/developers pay for the additional water needed for their purposes. Right?

Yes. All firm water contracts have the same cost per acreage use of water. New contracts will be based on a community's ability to demonstrate its request reflects current and future development needs. No customer will be able to guarantee an extreme excess amount (hoard) to the detriment of others. Some such as HSBay have a 'defined boundary' of potential development and can better project maximum water needs through full development (assuming good conservation practice is in place).

7. New properties on Hwy 71 (that sit within our ETJ/Extra territorial jurisdiction) can be annexed by HSBay and water service would flow through our 'firm' contract without negative impact on current citizens. Our new firm water contract will take into account the quantity needed for these additional properties so our cap would be sufficient for current and future needs. If we choose not to annex these properties, this does not remove their access to water (whether through contracting with Marble Falls, LCRA, etc.) In other words - property owners will have right to get water access, right?

Yes. Properties in your ETJ may access water through your city (if annexed or through contract) at the same rate as any other user. If HSBay annexes, they control the density of housing, the zoning/quality, and type of development that will border the city. The City will also be able to impose conservation standards and impact drainage activity. If you do not annex (or instead allow Marble Falls to annex), you will forfeit control. These properties can be encouraged to first seek other water options such as drilling on site, but could ultimately contract with neighboring communities for LCRiver water especially since Marble Falls has water access along Hwy 71 at Hwy 281.

8. HSBay has voluntarily stayed at Stage 2 since 2015 (unlike surrounding areas at less restrictive Stage 1). What other conservation practices can we consider to maximize our water access? (Example: future development required to use more native landscaping/lower water absorption lawn grasses, strengthened drainage efforts). Will HSBay be 'rewarded' for higher standards by having priority standing for 'firm' water access?

There is no 'reward' system in place. However, when negotiating the next 'firm water guarantee' contract, HSBay will be able to demonstrate their ability to stay within their cap and verify future needs for expanded growth with its trusted history of water management. This makes their request for quantity and time period more credible.

9. Currently lakeside residents all along the river pay a flat fee based on property size to draw irrigation from the lake regardless of amount of water used. This could mean they may water daily. Is there a way to require these properties to adhere to the same water schedule as their area communities? Can they be metered to show quantity of use so that they do not take an unfair amount which could reduce availability down the road?

Open water access to lakefront properties is expected to irrigate at the same level (Stage 2 for HSBay lakefront) as the adjacent communities. LCRA is putting in place a better monitoring system to ensure this is enforced.

10. In time, is it likely that communities will need to consider a way to process gray water for broader use. We currently use golf courses to keep our TCEQ requirement and would not anticipate having excess water. But other communities could conceivably process their gray water at a higher level so that it could serve for community lawn irrigation (correct?) which could reduce overall drain on the river for all. Is this a discussion factor for larger cities?

Many cities (such as HSBay) already have 'purple pipe' systems available to parts of the community where public areas and/or home lawns are watered with treated waste water. This is a strategy that can have significant impact on water availability since over 60% of all water use is due to irrigation (the biggest water drain on the river is actually surface evaporation). Using purple pipe and other conservation practices (native planting, xeriscaping, low water grasses, leak monitoring technology, and Stage 2 levels of irrigation) will all assist in keeping the river quantity high – and will allow for specific city's ability to stay within their contracted cap.