

Release of Agricultural Water Conservation Funds – House Bill 1437

**Water Operations Committee Meeting
Oct. 18, 2022**



Project Funding

- Land leveling cost-share
- Lakeside gate automation
- HB 1437 administration



Land Leveling Cost-Share Recertification Program



Background

- **2006-2013 land leveling cost-share program:**
 - About 30,000 acres leveled
 - Estimated savings: about 5,000 acre-feet per year

Background

- 15-year practice life of HB 1437 leveled fields began expiring in 2021

Award year	Year expiring	Total acres funded	Cumulative percent expiring	Projected land leveling savings (a-f)*	Actual expired acres in production	Actual land leveling savings (a-f)
2006	2021	2,599	9%	4,600	1,424	5,015
2007	2022	3,533	21%	3,680	2,455**	3,977***
2008	2023	5,592	39%	2,760		
2009	2024	6,463	60%	1,840		
2010	2025	3,217	71%	1,380		
2011	2026	3,189	82%	920		
2012	2027	2,216	89%	460		
2013	2028	3,479	100%	0		

*Assumes 10,000 acres of previously leveled fields in production before expiration begins in a year without curtailment

**2022 data is provisional

***Assumes full first and second growing season savings

Program Goals

Maintain water savings to help meet HB 1437 no net loss requirements and water savings goals by:

- Recertifying or funding touch up of HB 1437 fields with permanent levees
- Redesigning HB 1437 cost-share program to fund upgraded field designs



Water Savings Goals

- **HB 1437 program:**
 - Meet Brazos River Authority projected demand of 13,300 a-f by 2030
 - Current three-year average savings: 16,278 a-f (no curtailment)
 - Projected savings for 2022: 16,590 a-f (second growing season savings only Garwood)
 - Projected savings decrease to 10,000 a-f in 2023 if full curtailment

Updates to Land Leveling Program

- **Provide funding to survey existing HB 1437 fields**
- **Fund fields and structures qualifying for upgraded design up to 50% of the cost**
 - Eligible funding amount tied to cost per yard of dirt moved and cost per structure rate caps set annually
 - Provide funding for field perimeter structures and structures within permanent levees and in-field laterals
- **Add permanent levee, levee density, minimum levee structure size, minimum surface water use and survey requirements**
- **Include only previously leveled fields irrigated with LCRA water at least twice in the past 10 years**

Timeline

- **August/September 2022:** Develop online cost-share grant application, contractor and producer agreements with LCRA Legal and Supply Chain departments, and program flyer and website content
- **October 2022:** LCRA Board action
- **November-December 2022:** Obtain signed quality assurance and quality control inspection contracts, reach out to producers about field surveys
- **January 2023:** Offer cost-share program, hold field day
- **April 2023:** Spring cost-share program application deadline
- **June 2023:** Cost-share program grants awarded

Lakeside Main Canal Gate Automation Pilot Project



Program Goals

Automate sites at 10 key junctions near the head of each canal subsection (Main, Prairie and South), but first we must:

- Explore alternative gate designs
- Construct a prototype site
- Fresh look at the Supervisory Control and Data Acquisition and control system

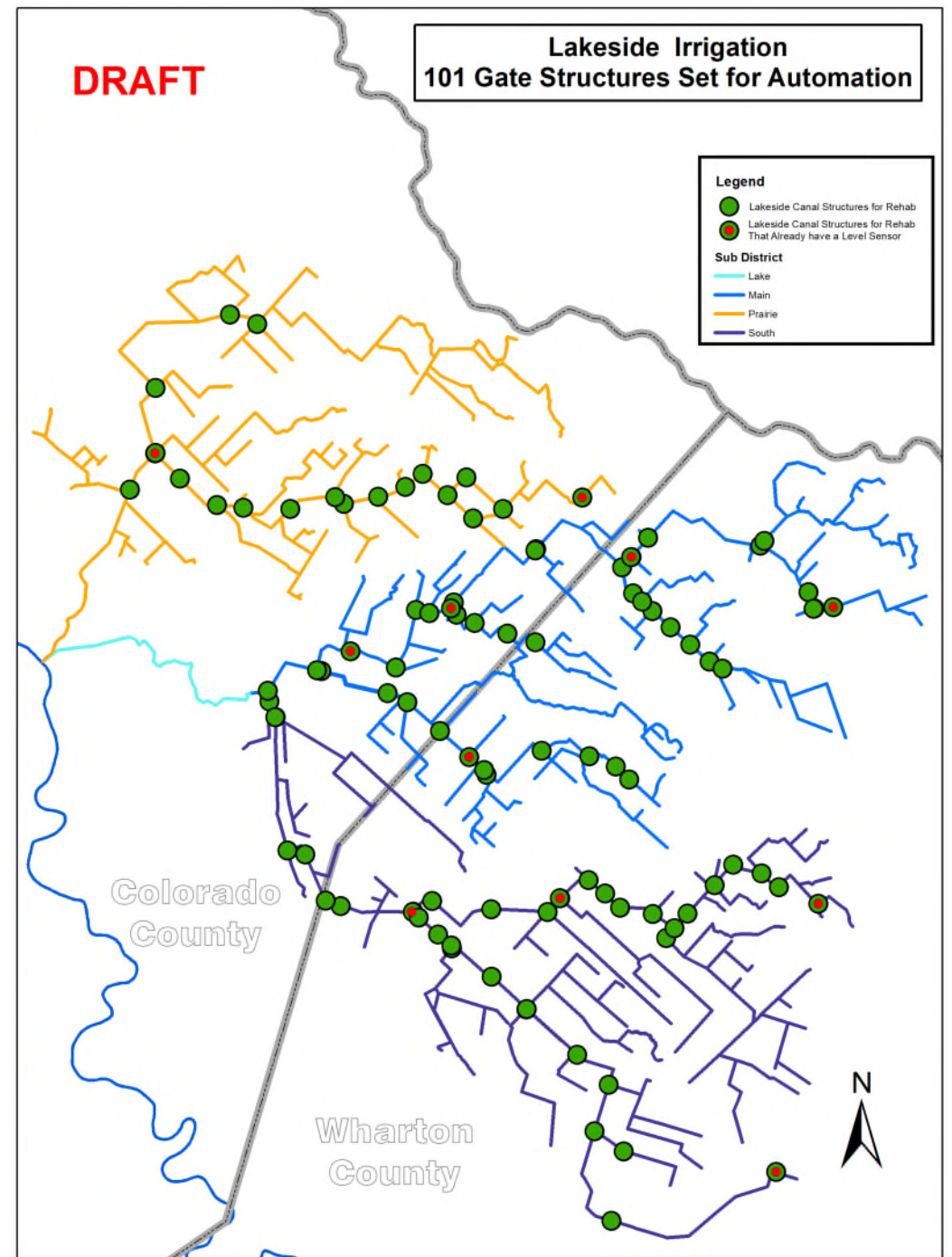


Lakeside Gate Automation

- **Initial estimates show 100-plus gates/gate structures are required to provide meaningful control and water savings**
- **Applying the Gulf Coast unit cost of \$25,000 per site to Lakeside translates to a \$2.5 million project; the Gulf Coast model may not be viable or appropriate for Lakeside**
- **This FY 2023 pilot project is to explore alternative designs and to construct a prototype site**
 - This work will include a fresh look at the SCADA and control system potentially using a cloud-based control system

Lakeside Irrigation

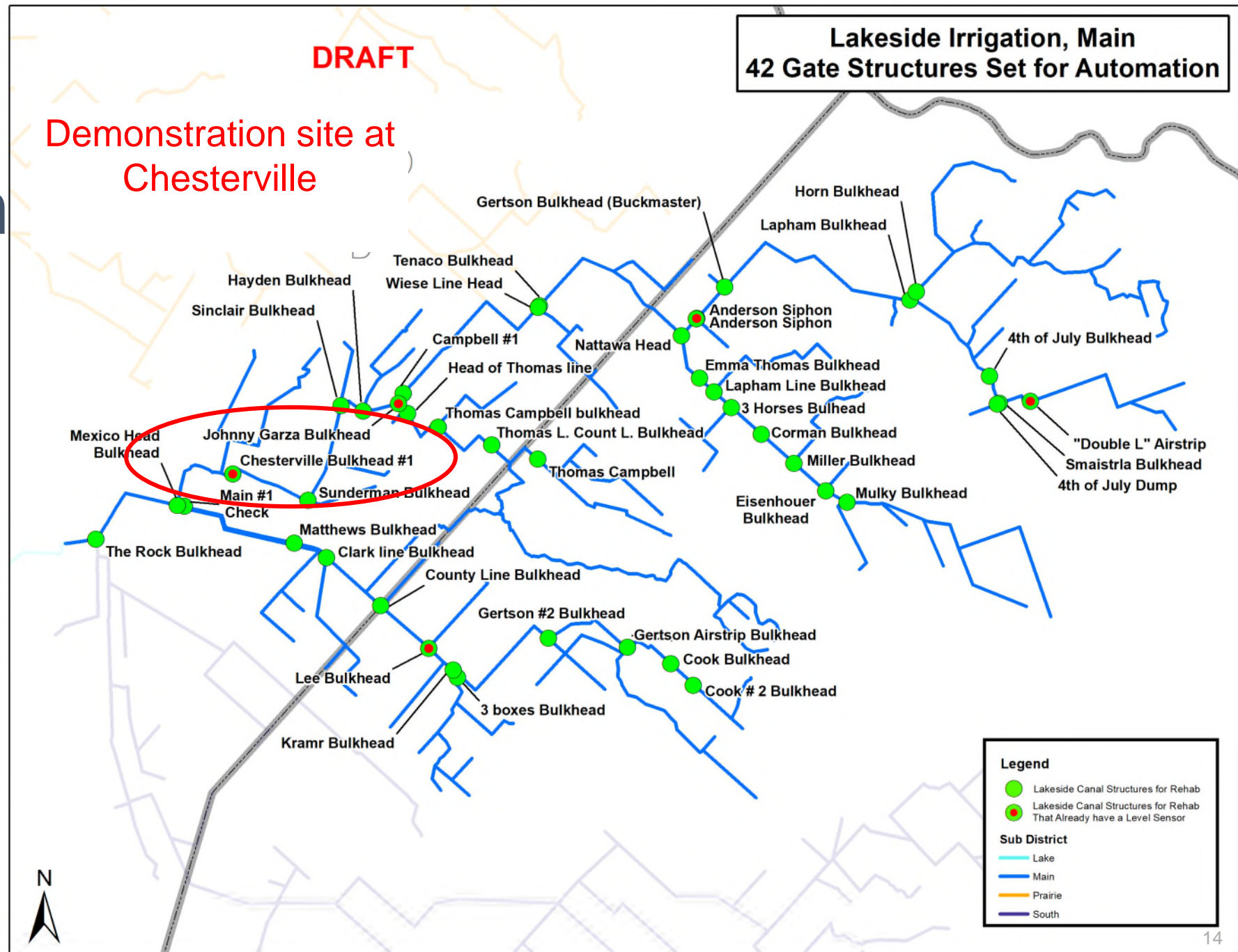
101 Gate Structures



Lakeside Gate Automation Pilot Project



Lakeside Gate Automation Pilot Project (Continued)



Timeline

- **To date:**
 - Engineering team has been looking at new gate design options
 - Working with Smithville Rail Fleet Maintenance Facility on their availability to build the gate structures
 - Cost estimate to build the first gate
- **October 2022:** LCRA Board action
- **Next steps:**
 - The project team will begin construction of the first gate
 - Plan for installation
 - Begin developing the SCADA and control system

HB 1437 Program Administration



Program Needs

Annually, about \$25,000 is spent on administration of the program, including:

- Savings verification studies
- Generation of the annual report
- Hosting advisory committee meetings



HB 1437 Financial Status

- **Agricultural Water Conservation Fund balance: \$3.3 million (as of August 2022)**
 - Revenues in 2021: \$485,629
 - Funds available: \$2.911 million
- **Proposed expenditure request: \$600,000**
 - \$450,000 for land leveling program over three years (FY 2023-FY 2025)
 - \$100,000 for gate pilot project in Lakeside Agricultural Division (FY 2024)
 - \$50,000 for HB 1437 program administration (FY 2024-FY 2025)

Agricultural Advisory Committee Support

- **Staff met with the Agricultural Advisory Committee on Sept. 16**
- **Staff answered several questions from committee members**
- **The committee unanimously recommended the expenditure of up to \$600,000 from the Agricultural Water Conservation Fund for:**
 - The land leveling recertification cost-share program
 - The Lakeside Agricultural Division gate automation pilot project
 - Administration of the HB 1437 program
 - Water savings verification studies
- **Staff on Oct. 19 will seek Board approval of the proposed release of funds**

