

COASTAL PROTECTION AND RESTORATION AUTHORITY



Union Freshwater Diversion Study *Sensitivity Analysis* PO-0192

Louisiana Wildlife Federation Diversion Meeting
March 9, 2022

committed to our coast

History

- Union Diversion - 2017 Master Plan
 - Operates at low river flow
 - 25,000 cfs max diversion flow capacity
 - Create/sustain wetlands
- EDF and Tulane - river water management study utilizing upper diversions
 - Union (25,000 cfs), Ama (50,000 cfs), and Maurepas (2,000 cfs)
 - Union reduced BCS discharge by 8%, but did not reduce duration

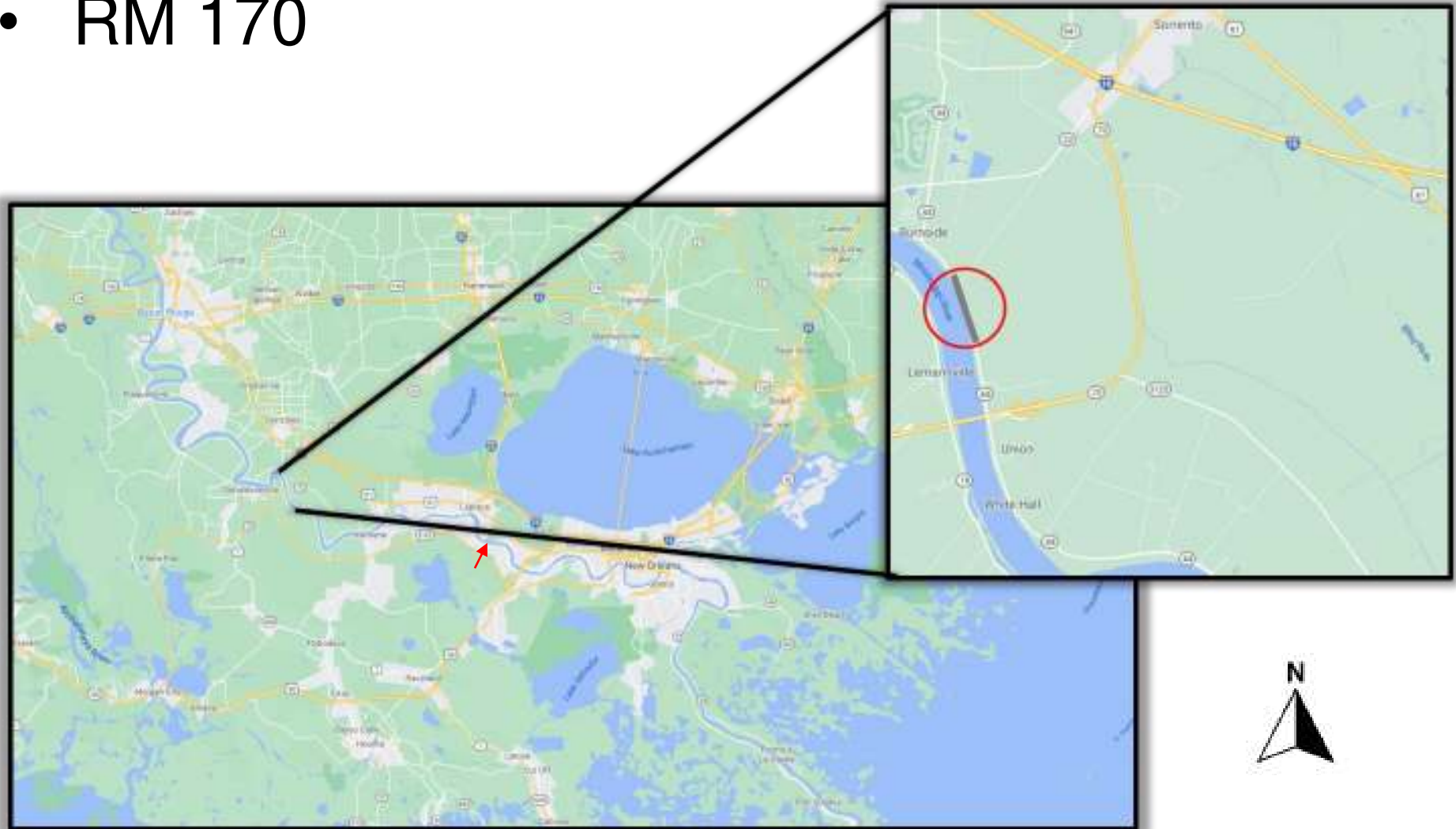
Union Diversion Sensitivity Analysis

- Objective:
 - **Evaluate reduction in magnitude/duration of flow through Bonnet Carré Spillway when assisted by Union Diversion operation at various flow capacities**
 - Evaluate flooding potential in zone of influence



Location:

- RM 170



Project Timeline

- Kickoff Meeting - June 7, 2021
- Site Visit - June 21, 2021
- Riverside Analysis – Complete
- Basin-Side Analysis - Ongoing
- Project Completion and Final Report - May 2022

Modeling

- Union Diversion in Sensitivity Analysis differs from Union Diversion as described in 2017 Master Plan
- Flow Capacities:
 - 25,000 cfs
 - 50,000 cfs
 - 75,000 cfs
 - 100,000 cfs
- Utilize water year records in which BCS was operated
 - 2016, 2018, 2019, 2020

Riverside/Basin-Side Analysis

Riverside:

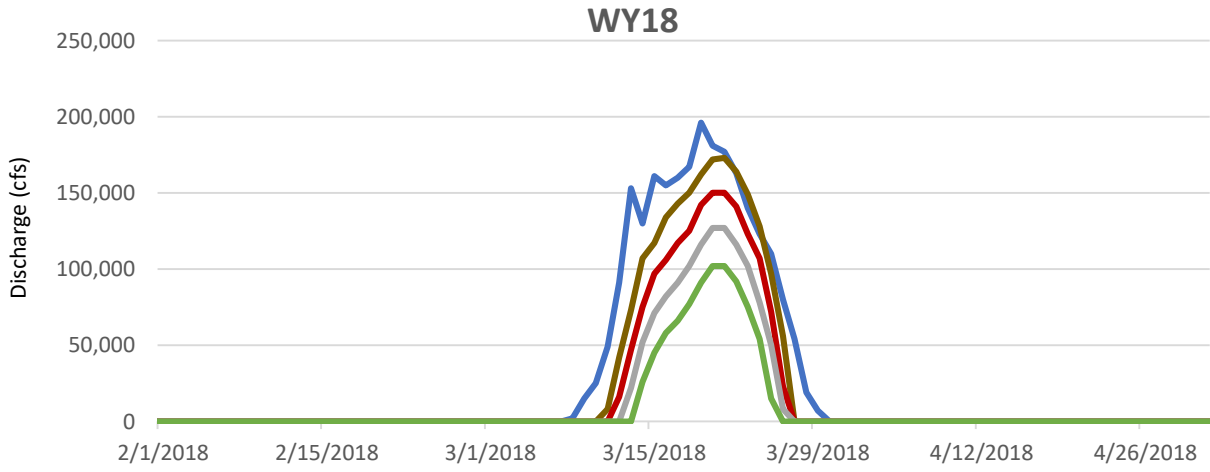
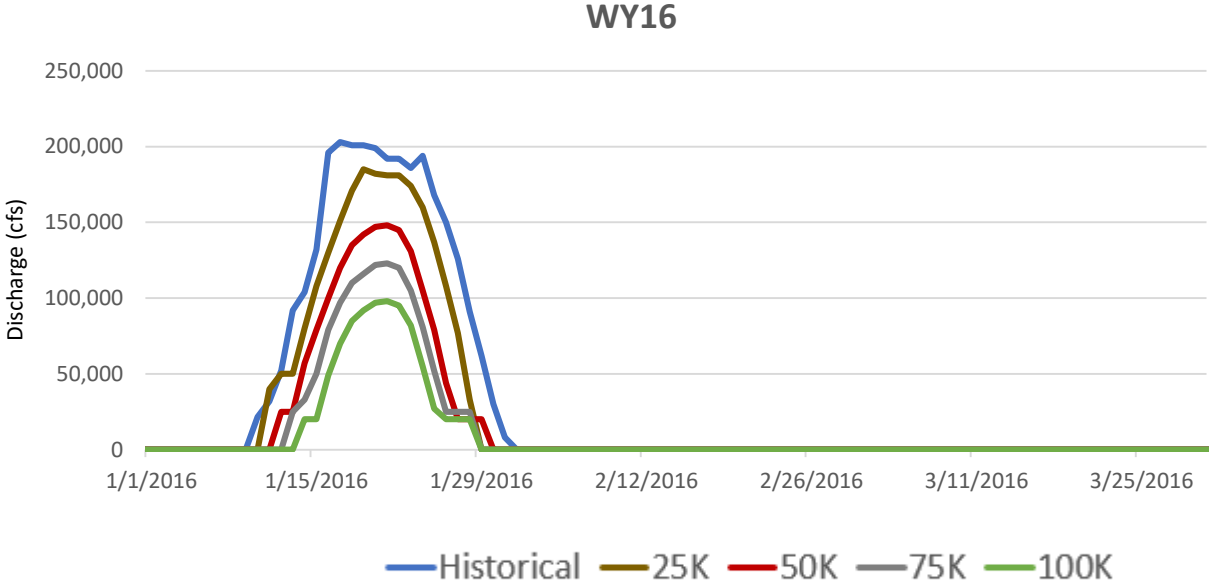
- **Quantify the reduction in magnitude/duration of flow through BCS**

Basin-Side:

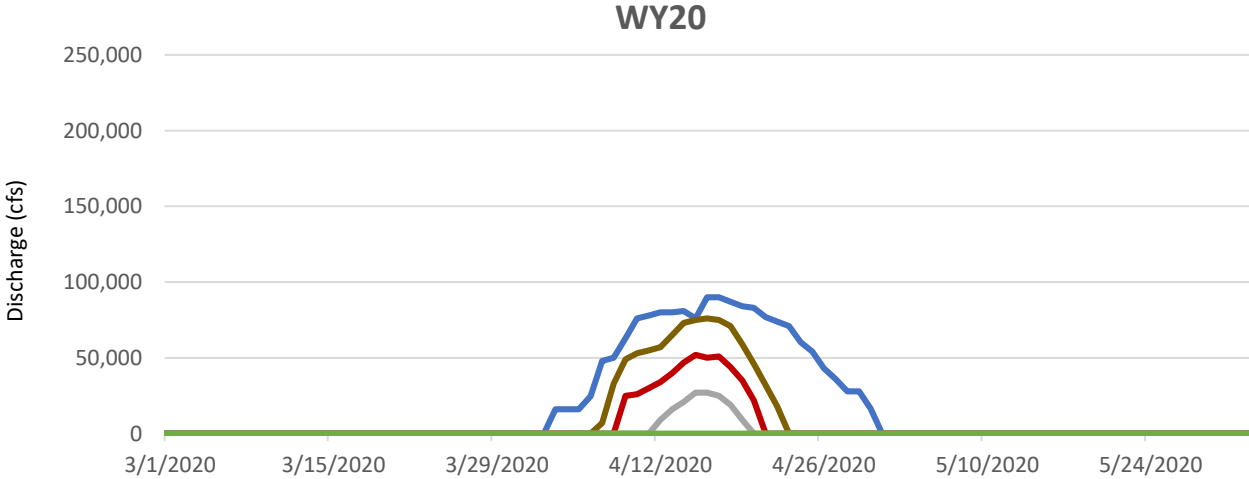
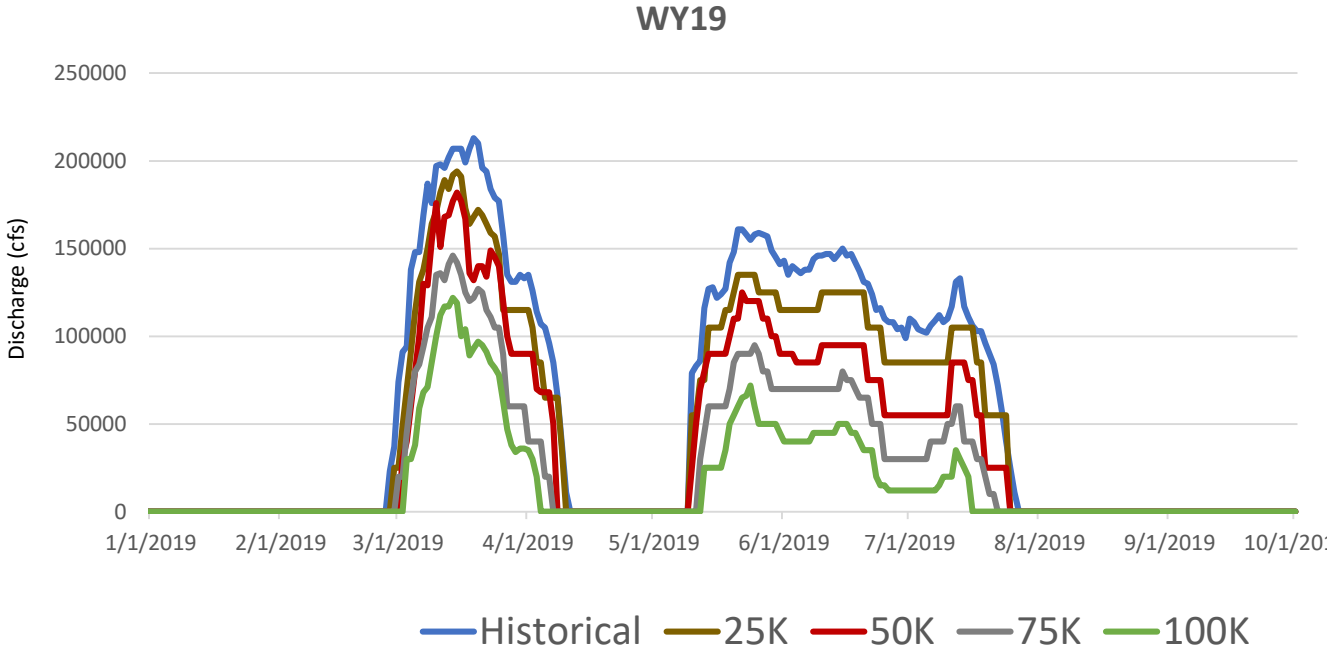
- **Investigate flooding potential**
 - Roads, railroads, levees, etc.



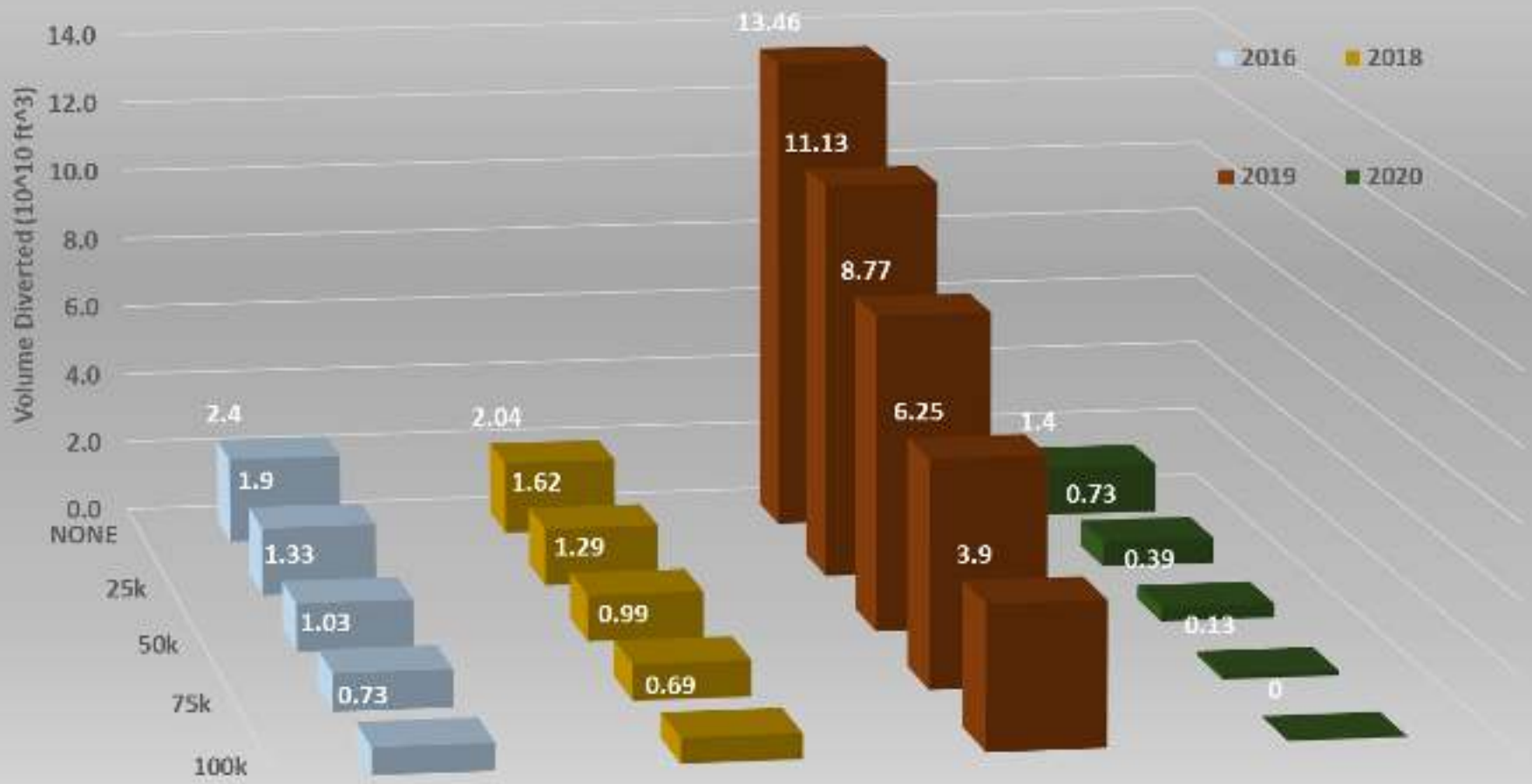
Preliminary Results: Magnitude/Duration



Preliminary Results: Magnitude/Duration



Volume Diverted by BCS when Assisted by Union Operation



Next Steps

- Final Report expected by May 2022
- CPRA has requested additional funding to allow for full feasibility level analysis

Acknowledgements





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