

Vibrios and Other Microbes in Louisiana's Oysters: Keeping Them Safe

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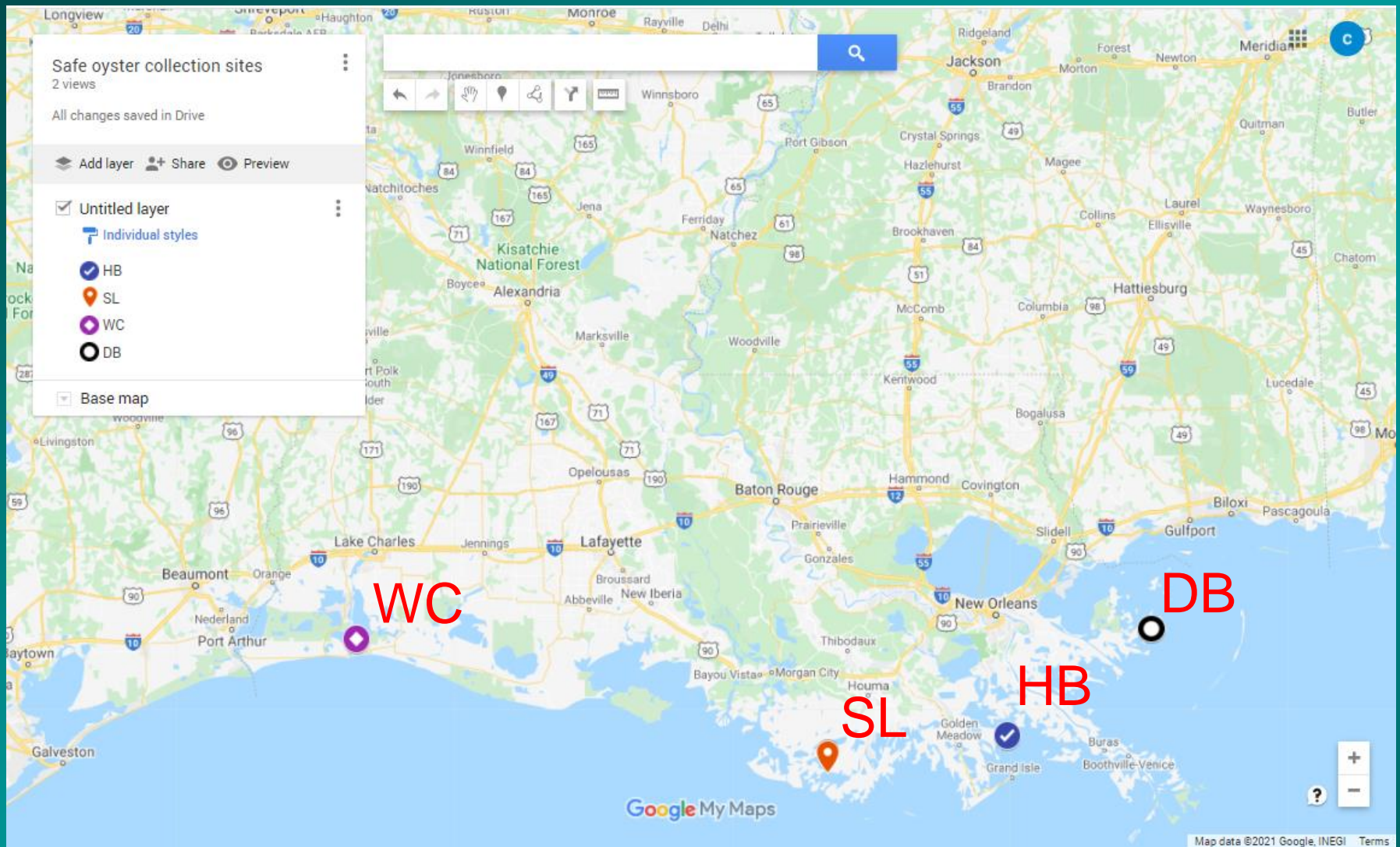
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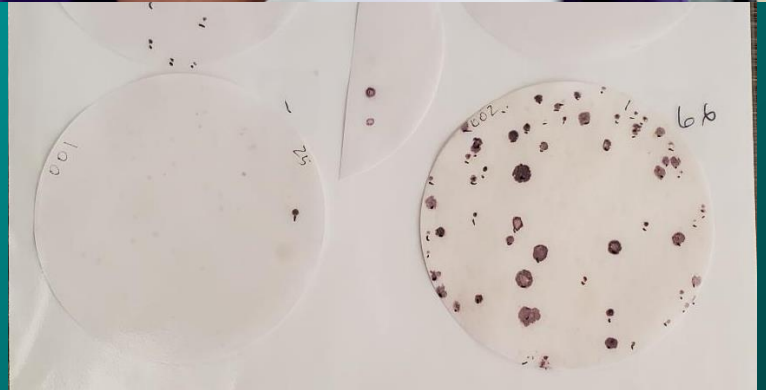
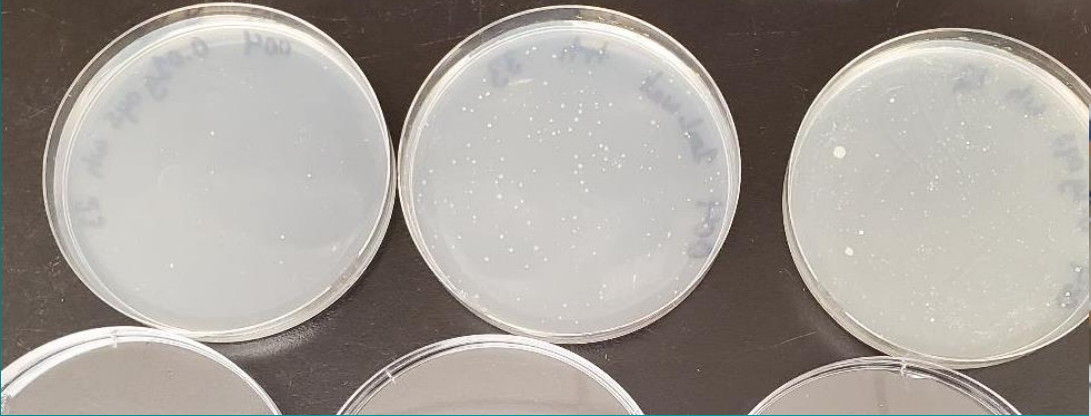
- | | | |
|---|---|---|
| <i>Vibrio cholerae</i>^H | <i>V. haliotocoli</i> | <i>V. parahaemolyticus</i>^H |
| <i>V. aerogenes</i> | <i>V. harveyi</i> (carchariae) ^{H,F} | <i>V. pectenicida</i> |
| <i>V. aestuarianus</i> | <i>V. hollisae</i> ^H | <i>V. pelagius</i> |
| <i>V. alginolyticus</i> ^{H, F} | <i>V. ichthyenteri</i> | <i>V. penaeicida</i> |
| <i>V. anguillarum</i> ^F | <i>V. logei</i> | <i>V. proteolyticus</i> |
| <i>V. campbellii</i> | <i>V. mediterranei</i> | <i>V. rumoiensis</i> |
| <i>V. cincinnatiensis</i> ^H | <i>V. metschnikovii</i> ^H | <i>V. salmonicida</i> |
| <i>V. cyclitrophicus</i> | <i>V. mimicus</i> ^H | <i>V. scophthalmi</i> |
| <i>V. damsela</i> ^{H, F} | <i>V. mytili</i> | <i>V. splendidus</i> |
| <i>V. diabolicus</i> | <i>V. natriegens</i> | <i>V. tapetis</i> |
| <i>V. diazotrophicus</i> | <i>V. navarrensis</i> | <i>V. trachuri</i> |
| <i>V. fischeri</i> | <i>V. nereis</i> | <i>V. tubiashii</i> |
| <i>V. fluviales</i> ^H | <i>V. nigrispulchritudo</i> | <i>V. vulnificus</i>^{H, F} |
| <i>V. furnissii</i> ^H | <i>V. ordalii</i> ^F | <i>V. wadonis</i> |
| <i>V. gazogenes</i> | <i>V. orientalis</i> | |

Table 13. Average annual oyster meat production (in pounds) on the gulf coast for various time periods (from Gunter 1971).

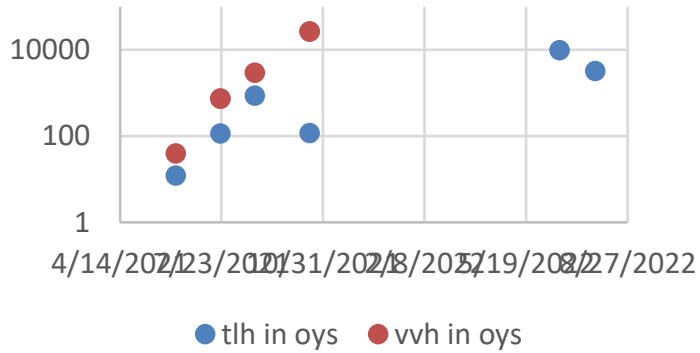
Time period	Florida	Alabama	Mississippi	Louisiana	Texas
1887 - 1940	1,394,000	939,000	4,108,000	6,252,000	1,514,000
1941 - 1959	859,000	1,385,000	698,300	9,426,000	691,000
1960 - 1965	3,334,000	769,000	2,887,378	9,917,000	2,569,000
1966 - 1970	4,507,000	1,072,000	2,356,000	8,689,200	4,003,800
1971 - 1975	2,791,200	463,600	880,000	10,389,000	2,805,600
1976 - 1980	5,087,000	812,000	775,400	9,344,400	2,203,000



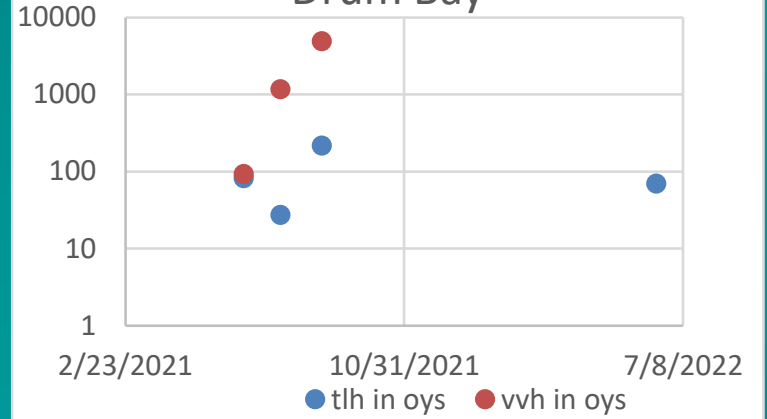
Map of sample sites. WC = West Cove, SL = Sister Lake, HB = Hackberry Bay, and DB = Drum Bay.



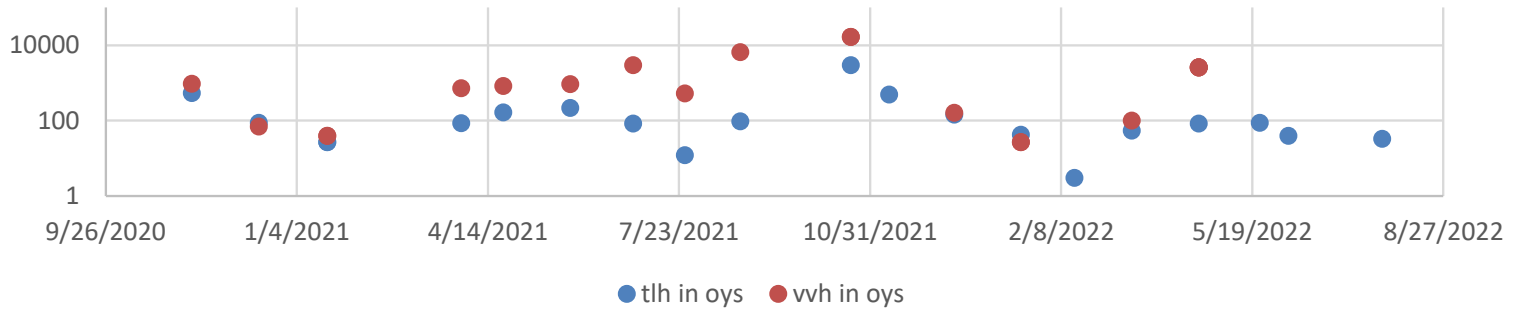
West Cove



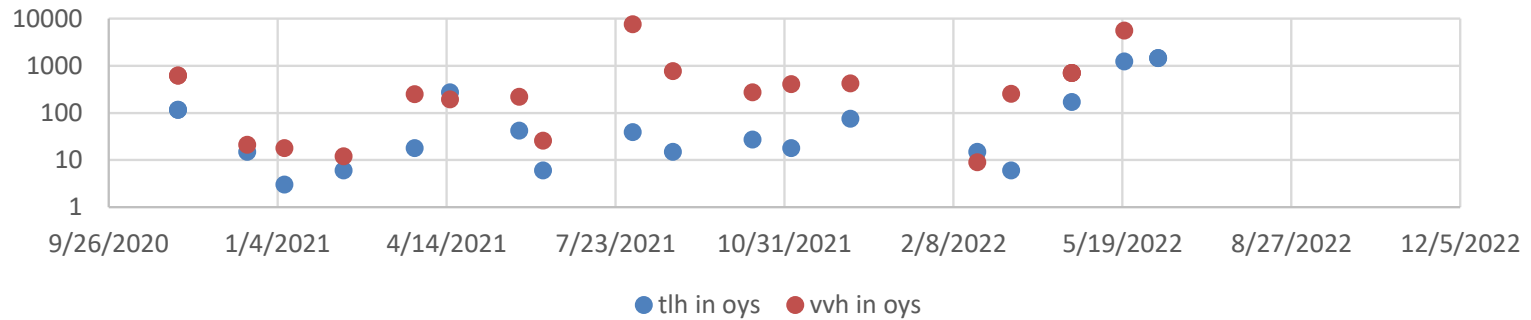
Drum Bay



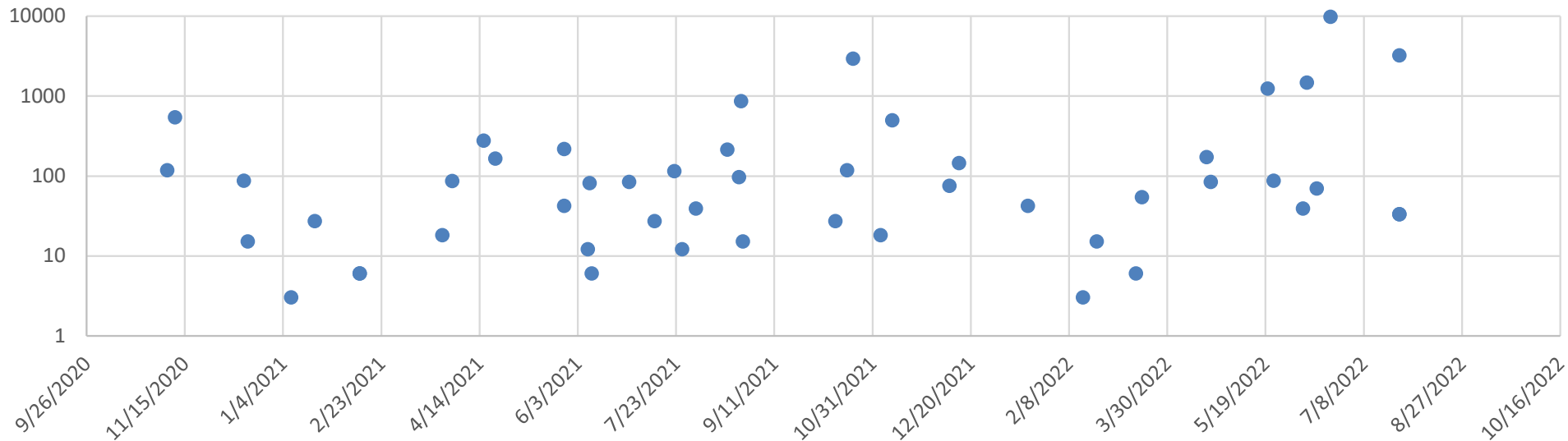
Sister Lake



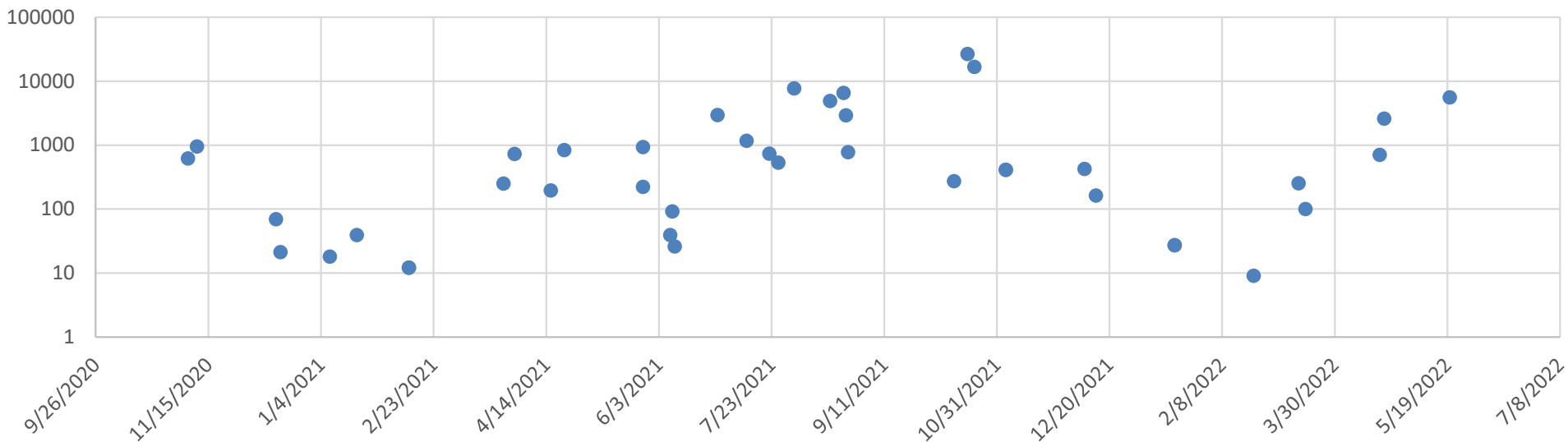
Hackberry Bay

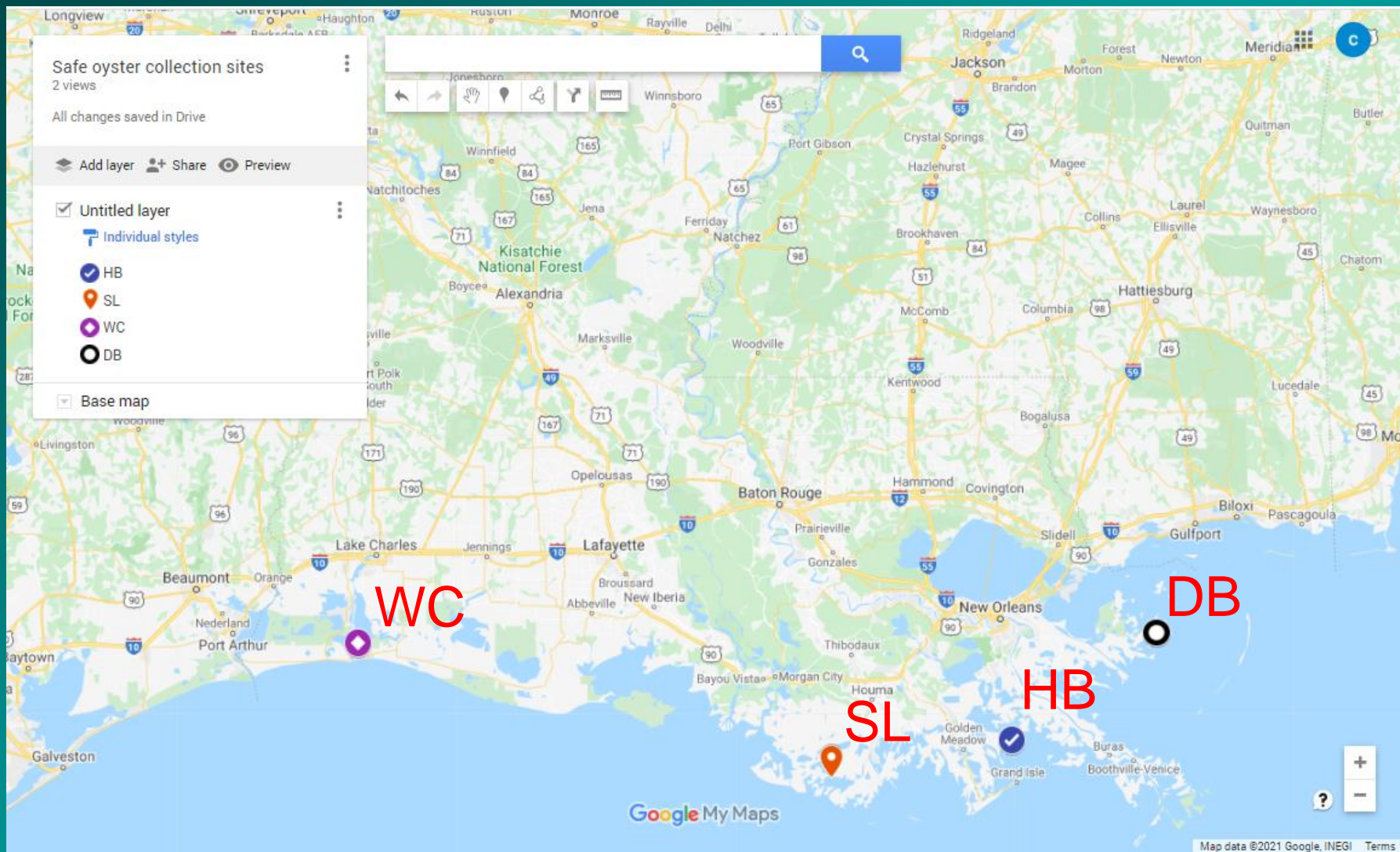


tlh in oys



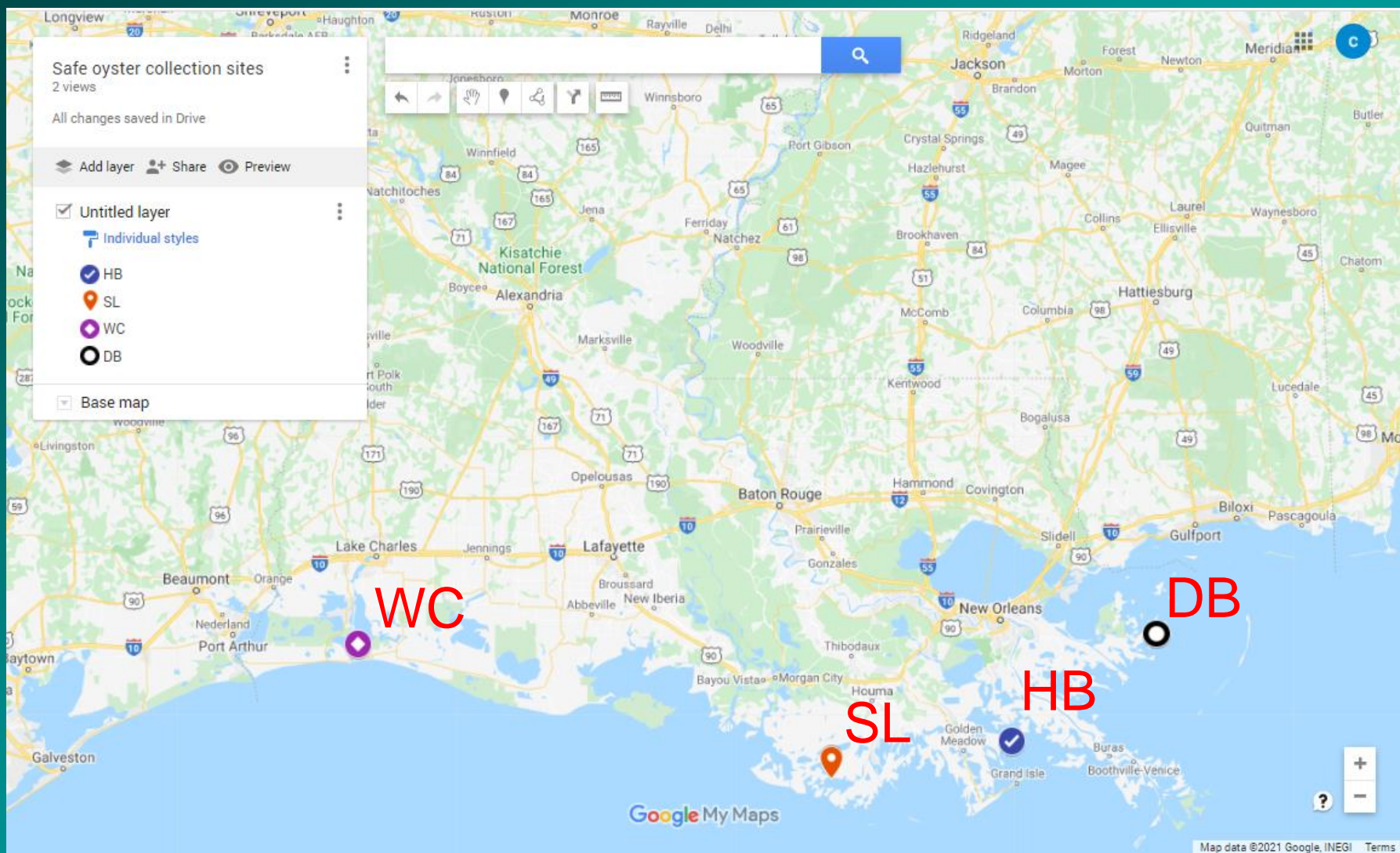
vvh in oys





Map of sample sites. WC = West Cove, SL = Sister Lake, HB = Hackberry Bay, and DB = Drum Bay.

Vibrio gene	West Cove (n=6)	Sister Lake (n=20)	Hackberry Bay (n=19)	Drum Bay (n=4)
Seasons	Summers only	Year-round	Year-round	Summers only
tlh in water	5.38	2.91	3.10	6.27
wh in wat	5.34	6.12	4.28	4.94
tlh in oys	3132.53	1256.94	1204.57	2909.49
wh in oys	11678.26	5496.71	4627.23	9639.86



Map of sample sites. WC = West Cove, SL = Sister Lake, HB = Hackberry Bay, and DB = Drum Bay.

Vibrio gene	West Cove (n=5)	Sister Lake (n=5)	Hackberry Bay (n=6)	Drum Bay (n=4)
Summers only				
tlh in water	4.60	3.27	7.07	1.50
wh in wat	5.54	8.63	1.38	4.63
tlh in oys	2811.52	53.33	556.97	98.48
wh in oys	1235.27	3350.00	3525.00	2052.99

Acknowledgments

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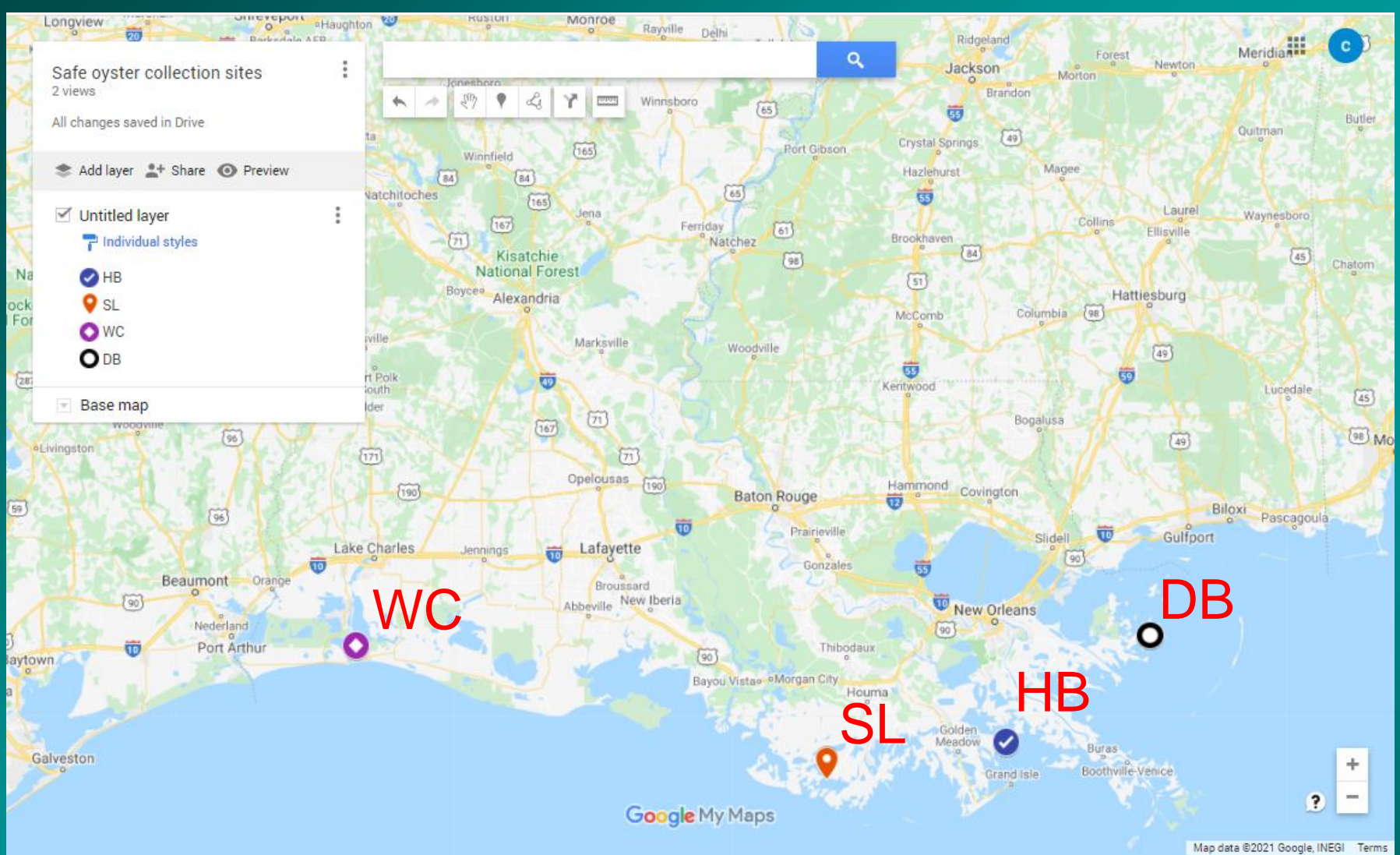
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DB: Carl Britt, Thomas Rowley, and crew