Lavaca River – Hydrologic Condition

Choosing a hydrologic condition allows a new water right permit to allow different levels of base flow to remain in the stream when stream conditions are wetter than normal, about normal, and dryer than normal. The hydrologic condition is chosen using the long-term engagement frequencies in the BBEST's environmental flow regime tables.

Sample Hydrologic Conditions

Long-term Engagement Frequency	Lake Texana Reservoir Volume	Lavaca River 12-month Preceding Total Flow	Lavaca River 3-month Preceding Total Flow
Base high, 25% of time, when -	170,300 acre-feet (100% full over 25% of time)	Above 361,608 acre-feet	Above 81,936 acre-feet
Base medium, 50% of time	Between 132,460 (77.8% full) and 170,300 acre-feet	Between 99,829 and 361,608 acre-feet	Between 10,189 and 81,935 acre-feet
Base low, 25% of time	Between 93,298 (54.8% full) and 132,460 acre-feet	Between 26,232 and 99,829 acre-feet	Between 1,883 and 10,189 acre-feet
Subsistence, 100% of time	Below	Below 26,232 acre-feet	Below 1,883 acre-feet

Pros and Cons of Different Hydrologic Conditions

Pros and Cons	Lake Texana Reservoir Volume	Lavaca River Preceding 12-month Total Flow	Lavaca River Preceding Season Total Flow
Provides flow variability	Hydrologic condition changes **86** times from 1950 - 1990	Hydrologic condition changes **50** times from 1950 - 1990	Hydrologic condition changes **54** times from 1950 - 1990
Availability of information to calculate hydrologic condition	Available every day	Must be calculated at end of each season	Must be calculated at end of each season
Current use	Used in a number of river basins	Not currently used	Not currently used