

Twin Lakes Annual Lake Levels/Watershed & Management Story

Triggers 2021	Date 2021	UTL stor Ft/m	TP stor Ft/m	LTL vertical Ft/m	Date	UTL stor Ft/m	TP stor Ft/m	LTL Ft/m
Snow pack/precip.	Mar 118%N	Apr.>N						
Lake Ice off	Apr 4	1.2/.38	.39/.12	16.8/5.12				
DL 1469s culverts ice out	Apr 8							
Water into UTL	Apr 23	1.4/.43	.95/.29	16.5/5.0				
Water to edge UTL spillway	May 27	3.28/1		16.2/4.9				
Water into LTL	Jun19	3.24/.99	1.14/.35	16.11/4.91				
Horn Creek stops	May15	2.88/.88	.59/.18	16.4/4.99				
Spillway stops	No H2O over							
Water to LTL stops in 33 days	Jul 22	2.3/.69	1.8/.55	15.55/4.7 ER culvert Blocked				
Dam culvert open/shut	Jun 18 Shut Oct 27	Oct27 .95/.29	.0/.0	Oct27 15.53/4.73				
LTL Peak	Jun 28	2.88/.88	2.6/.8 ER blocked	16.22/4.9				
Ice -on	Dec 12	1.3/.4	-4/-1.2	15.3/4.6				
Pump on	Mar 31	1.2/.38	.39/.12	16.8/5.12				
Pump off	May 6	2.6/.8	.59/.18	16.37/4.98				
Total Freshet	.9'+.48'+assume 4'EUS =5.38'/1.6m							
EUS assum.	4'/1.2m							
Total pumped	.4'LNID +.08'fire							
Projected NextCapacity Add. Info.	6.6 ft. (UTL 2.3 ft. + LTL 4.3 ft. to built infrastructure). FSS down .9' c/o 2020. 2021 very hot dry spring/summer. July5 - Aug 15 most day highs 30 to 40C. Golf Irrigation was 24/7 until Jul20. Peak data shows water ++ moved to ground from UTL –did not reach LTL.							

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Legend: **UTL** is Upper Twin Lake, **TP** is Turtle Pond, **LTL** is Lower Twin Lake, **DL 1469s** culverts are at South White Lake Rd. ~ 1km above or south of UTL. Snow pack is predicted mid Mar. & mid Apr. at Mt. Kobau snow pillow. LTL has **Full Lake Supply** (FLS) at 19.6 ft when water spills beyond tree line to built infrastructure. **Full System Supply** (FSS) = UTL storage (licensed for 3 ft. but measures 3.5 ft on WCG before spill) + LTL 19.6 ft. One vertical inch. of LTL water (when LTL is at ~ 80 acres) is 2.173M USg. LTL vertical water level was set by the 1968 hydrometric station (Botham 1973 recommended normal should be 12.6 ft to 17.6 ft). **Stor** is live storage and **MHC** is Middle Horn Creek – from UTL outlet to TP. **ER** is Eastview Rd. culvert. **EUS** is evaporation/use & seepage which in 1973 average was 3 ft. but 2019 proved to be 4 ft. (2 ft. from each UTL & LTL). Botham 1973 stated the **average spring freshet** to be **4 to 7 ft.**