

Santa Cruz Irrigation Ditch System Flush Procedure

This procedure must be used a minimum of once a week, prior to use, after storms or as needed to keep sand and debris from entering the ditch.

Warning: Never leave flush gate #1 or #2 open unattended! Never!

Warning: Do not operate the ditch after the last release of water from Santa Cruz dam for the irrigation season. Unless there is an adequate amount of water to flush and the river is clear of mud and no storms are expected.

Warning: Do not operate the ditch in freezing temperatures.

Step #1 Drive to the river through the gate at the La Puebla Arroyo (Maggoo Arroyo). Check if the water is clean enough to use for flushing and there is not the reasonable possibility of debris coming downstream. Also make sure there is enough water to operate the ditch at max capacity in order to flush correctly. Otherwise discontinue the flushing process. If there is minimal water flow in the river the flush gates will not flush properly or close properly. Repeat do not operate flush gates #1 or #2 if there is low flow in the river because they will not close. Only if the flow in the river is adequate to flush open Flush Gate #1 completely allow the river to flush for a least 15 minutes or as needed to ensure maximum cleanliness or until the Flush Gate #1 closes down completely after flushing. While flush gate #1 is completely open you can open flush gate #2 completely as long as there is enough water. If water level is kind of low you can close Flush gate #1 half way and proceed to open flush gate#2 completely. Take a brief break allow the head-gates to flush. Now close Flush gate #1 completely. Allow flush gate #2 to continue flushing. Walk to Flush gate #3 and the Gage Gate.

Step #2 Walk to Flush gate #3 and the Gage Gate at the adjacent sediment pond. Close The Gage gate completely, next open flush gate #3 completely. Now return to head-gate #2 open it a minimum of 50 threads up from the top of the nut (chuck). Allow Head-gate #2 to flush and the water to return to the river thru the sediment pond and flush gate#3 for 15 minutes minimum. While head-gate #2 is flushing close down Flush gate #2 completely. If flush gate #2 does not close reopen flush gate #2 and repeat flushing until it closes completely. When flush gate #2 is completely closed begin opening Head-gate #1 open it half way about 20 threads above the nut (chuck). Next begin closing Head-gate #2 close it half way or leave 20 threads showing above the nut(chuck). Now with Head-gate #2 still open half way proceed to open Head-gate #1 50 threads above the nut (chuck). When head-gate #1 is open 50 threads above the nut (chuck) go back to head-gate #2 and close it completely. The head-gate is considered closed when the operating Rod (threaded bolt on head-gate) is flush with the top of the nut (chuck). Next verify that flush gate #1 and #2 and head-gate #2 are completely closed. If any of these gates did not close completely repeated the flush procedure. Minor leakage is acceptable as long as large debris cannot get lodged in the gates. Allow water to flow through Head-gate #1 to flush the sediment a debris pond until satisfactorily clean. Make sure flush gate #4 is completely open before proceeding to the next step.

Step #3 When the sediment and debris pond are thoroughly clean. Begin closing Flush gate #3 close it half way and proceed to the gauge gate. Open the Gage gate to the flush level indicated by red paint on the head-gate Next finish closing flush gate #3 completely, allowing the water to run through the river ditch to the sand Trap. Follow the water to the sand trap. Quickly Drive to flush gate #4 and the sand trap make sure flush gate #4 is fully open to allow any sand debris and sediment to return to the river. Inspect the sand trap and allow it to flush as needed to maintain maximum capacity. It may be necessary to allow the sand trap to flush overnight depending on the cleanliness of the sand trap.

Step #4 When the Sand trap is satisfactorily clean, return back to the Gage gate and adjust it back to the safe operating level indicated in green. Next close head-gate #1 completely. Make any necessary adjustments, lock the head-gates and lock the gate at state road 76 upon departure