

Date: August 27, 2020
From: Paul Siebensohn, Director of Field Operations
Subject: Laguna Joaquin basin update

Laguna Joaquin Operations:

Water is continuing to be routed from the Cosumnes River into the CIA ditch and into Laguna Joaquin and towards the Anderson Ranch. It is fortunate that the Cosumnes River is maintaining a decent flow for this time of year of around 12 cubic feet per second.

Midge Fly Treatments:

Tom Hennig authorized additional midge fly treatments beyond our budgeted treatments in an effort to quell the midge fly hatches out of Laguna Joaquin. This season 5 treatments have taken place so far. The most recent treatment took place on August 20 with the next treatment scheduled to take place at the product's minimum reapplication time of two weeks.

With shorter days and cooler weather ahead, it will help the condition of the basin and the midge fly hatches will naturally subside.

History and Treatment Options (by Lee Lawrence)

See attached memo. Lee Lawrence was in charge of the District's utilities since the inception of the District until the time of his retirement in 2000.

August 27, 2020 Meeting with SacYolo Vector Control District

Tom and I met with Mary Scholl and Sarah Wheeler to discuss the midge fly issue, what we are doing, and suggestions. They recognized me from meeting with them previously years ago to discuss the same concerns in a previous AdHOC committee with RMA, area residents, John Sullivan, and RMCSD. Like in times past meeting with them, they reaffirmed they will not treat for the non-biting midge flies as they are not a disease carrying insect (aka Vector). They also confirmed that we are using the correct product, *Bti*, with the constraints that exist on the basin. Those constraints being; water in the basin is used for irrigation- by RMA and sometimes Anderson Ranch; we don't have permit for other products; and possible MS4 constraints with stormwater releases from the basin. It was brought up again that we again consider the possibility of building nutrient and sediment catch basins in the drainage system upstream from Laguna to help with water quality. They also noted that it is not good that the RMA fertilizes the grasses around Laguna which increases the phosphorus and nitrogen loading on the basin and facilitates algal blooms. Again they suggested that only mosquito fish be allowed to thrive in the basin, however the mosquito fish mainly only feed on the surface whereas midge larvae live in the mud. They did newly suggest that we look in to getting coverage under Sacramento County's MS4 permit. This would alleviate District from MS4 duties and allow us to focus on local concerns with drainage, like Laguna Joaquin. They also suggested that the District may be able to more appropriately collect funds as a pest abatement district vs drainage fund, which is a stretch to treat midge flies from.

Another new suggestion was to install bright lights in areas away from the residents to draw bugs towards them and to have the residents leave their lights off. Some of these lighted areas could also have trapping systems, such as over by the Gazebo or behind the RMA's pump station. Their major recommendation was to dredge the shallow areas around the inlets to Laguna to remove the organics that the midge fly larvae feed on and to possibly deepen the areas. Concerns they noted with dredging is that all drainage sludge is considered hazardous waste and must go to an approved landfill to handle it. Tom noted he was looking in to the local landfill accepting it for trash cover. It was also recommended that we hire an environmental consulting firm to evaluate the situation and to provide recommendations. They felt that treating midge flies is a "band-aid" to a natural problem and that there is no way to fully eliminate it.