## **BOARD OF SUPERVISORS PRESENTATION**

## WRTH UPPER LAKE LEVEE SUBCOMMITTEE

Julia Carrea: Chair/Lead Walt Christianson: Member John LaBoyteaux: Member

Efforts to manage high stream flows and relocate annual watercourses began with early agriculture in the Upper Lake Valley. In approximately 1958, the Army Corp of Engineers and Bureau of Reclamation built the Middle Creek and Clover Creek levees, including a large flood control

Channel (aka the Middle Creek Diversion Project), to prevent frequent flood of the town. They also relocated the lower portion of Clover Creek south of Hwy 20.

It is an imperfect system. We are glad Lake County Water Resources continues to look at the issues, and, the discussion needs to be expanded. Sediment and gravel washed down from the mountains is trapped between the levees which is a forever maintenance problem. In some areas, like Alley Creek near Pitney Lane and at the diversion structure, the initial engineering was poor.

From 1960 to 1996, State Department of Water Resources provided maintenance but in 1996 discontinued the 1960 agreement and left maintenance to Lake County. Maintenance activities include:

- Levee patrolling especially during and after high water events.
- Emergency flood fights as needed.
- Mowing of grasses.
- Control of weeds with herbicides.
- Removal of excess woody growth (trees and bushes) within the levee easements.
- Maintenance of levee roads.
- Removal and trimming of trees and brush within the creek's active channel area.
- Periodic removal of sediment deposits.

Some of these items have not been done in recent years or have been done in a poor and incomplete manner as compared to earlier County efforts. Thank you to the Water Resources Department for their extraction efforts and for contracting with a local firm, Coleman Construction, for the recent sediment removal that took place at the Clover/ Ally confluence, and at the diversion structure. There is no removal of the overgrown vegetation/vegetation dams in the channel as of yet.

To the best of our knowledge, based on research and prior county employee interviews, in 60 plus years there has never been any attempt to return the system to its original design capacity through major removal of accumulate sediment.

Of immediate urgency is the very large growth of vegetation, including some trees over 40 feet tall, growing directly in the flood control channel. **PHOTO OF DIVERSION CHANNEL** 

Over the last 10-12 years, there have been at least 5 different directors of the Water Resources Department and Watershed Protection District and many new employees. In our view this has resulted in serious loss of institutional memory as well as shifting priorities. There also seems to have been a loss of practical know how in carrying out the maintenance functions.

We, the people of Upper Lake, as Stake Holders and Citizen Scientists, would like to have an ongoing dialog with the County Watershed Protection District and its staff about permits; funding and performance of maintenance activities; and the possibility the existing scour continuing to advance into the Levee itself. We support a vigorous gravel extraction and vegetative dam removal effort to champion the Clearlake Hitch habitat restoration and reduce flooding in the Upper Lake community. **PHOTO OF SCOUR** Please take advantage of knowledge and skill of persons in the Upper Lake community who have observed the levee system for many years.