

Test shows Laguna life endangered

BY FRANK ROBERTSON

Fast-blooming algae in the Laguna de Santa Rosa has reached a "critical level" that could suffocate fish and other stream life, according to results of water tests taken two weeks ago.

A lab analysis of Laguna water indicated a "serious problem" with algae levels nine times above the level considered acceptable, said state fish and game biologist Mike Rugg.

The tests, performed by Brelje and Race Laboratories, Inc. in Santa Rosa were paid for by several Russian River residents concerned about the translucent pea green hue and floating globs of algae collecting in the River downstream from Mark West Creek, where the Laguna water joins the River.

"It was obvious. You could see the difference in clarity" in the River above and below the Laguna, said Linda Lucey, one of the sponsors of the test.

The tests measure the presence of the green plant pigment Chlorophyll A, which is an indicator of whether algae is depleting the stream's dissolved oxygen.

Chlorophyll A levels higher than 50 micrograms per litre mean algae could "completely deplete the dissolved oxygen" in a stream, thereby suffocating other aquatic life, said Rugg. The Brelje and Race results showed a concentration of 140 micrograms of Chlorophyll A per litre of stream water in a sample taken from the Laguna de Santa Rosa at the Guerneville Road bridge. Five other samples taken downstream showed lower concentrations, ranging from 50 micrograms per litre in Mark West Creek at the Trenton-Healdsburg Road bridge, to less than 10 micrograms per litre in the Russian River at Steelhead Beach.

Rugg said high algae levels now apparent in the Laguna are most likely due to unseasonably warm spring weather combined with the Laguna's high concentration of wastewater.



TROUBLED WATERS?—Questions about effluent fed algae growth and mysterious spill surfaced this week.

When the Laguna is flowing at its present low summer levels and Santa Rosa is discharging treated sewage at five times in excess of normal levels, "I'd say 50 to 70 percent of the water in the Laguna is effluent," said Rugg.

North Coast Water Quality Control Board officials this week began conducting their

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own tests for "algal growth potential" in the Laguna and Russian River, but the results won't be ready for two weeks, said Ron Church, a WQCB zoologist.

Asked to comment on the Brelje & Race figures, Church said a single Chlorophyll A test is inconclusive because levels could vary. "There's a limited amount of confidence" in the accuracy of one Laguna sample, said Church. "It could be highly variable."

If tests show the Laguna's algal growth potential is abnormally high, it's probably because of treated sewage dumped by Santa Rosa's regional Llano Road Sewage Treatment plant, and not because of factors such as agricultural dairy runoff, said Church.

"We would assume cow manure is a constant," said Church. "If there's a dramatic increase [in algae] when effluent is in the stream, we'll associate it [algal growth] with effluent."

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