From: Jim Verboon [mailto:vboonfrms@sti.net]
Sent: Saturday, April 09, 2011 9:21 AM
To: Macaulay, Terry@DeltaCouncil; Rogers, Pat@DeltaCouncil
Cc: vboonfrms@sti.net; russwaymire@sbcglobal.net
Subject: Fw: May 2007 Salmon Fish killed near Stockton's sewage outfall

Terry and Pat, please pass these comments to the independent science Board. As well as the stewardship Council. Appreciate all your work. Jim

Dear Delta science Board,

I received a copy of the following correspondence and would appreciate your investigating further at what happened, since my friend received no pictures or documentation. Thank you for your diligence. Jim

----- Original Message -----
From: Russ Waymire
To: Paul_Cadrett@fws.gov
Cc: it's Jim verboon
Sent: Monday, August 31, 2009 4:08 PM
Subject: May 2007 Salmon Fish killed near Stockton's sewage outfall

Mr. Paul Cadrett,

I have attached an article pertaining to the Salmon fish kill in the area of Stockton's sewage outfall in May of 2007.

#1. Is there a case number that the US Fish and Wildlife use to refer to in this instance as I'm sure they investigated the incident?

#2. I'm requesting information on the incident, any pictures, the location where the fish were discovered and any related reports.

#3. If you are unable to assist in this request who should I contact in relationship to this incident?

Thank you and I look forward to your response,

Best Regards, Russell Waymire

California

The Fresno Bee
Monday, June 2, 2008

Human waste may be killing delta fish

By Matt Weiser
The Sacramento Bee

SACRAMENTO — After years of searching high and low for a culprit in the collapse of delta fish populations, scientists are learning the problem may lie right under their noses.

The likely fish killer is ammonia, a common byproduct of human urine and feces.

Sacramento's regional sewage treatment plant is the largest single source of ammonia in the delta. It discharges treated waste water from nearly 1.4 million people into the Sacramento River near Freeport — without removing ammonia.

Two recent studies by Richard Dugdale, an oceanographer at San Francisco State University, show that ammonia disrupts the food chain in the Sacramento-San Joaquin Delta.

The discovery, if it holds up to further scientific review, reveals how just one factor can tilt the delta's complex ecological balance. It also illustrates how fixing the delta will be a costly task for many California residents who mistakenly assume their lives are not connected to the estuary.

The Sacramento Regional County Sanitation District estimates it needs as much as $1 billion to remove ammonia from the metro area's waste water. Monthly sewer bills would have to triple throughout the region.

"We're not going out on the edge to say this is the whole answer," said Dugdale, co-author of the studies along with others at the university's Romberg Tiburon marine lab. "But we think it's part of the reason for the decline in [ecological] productivity."

Ammonia in the river does not make fish unsafe to eat, nor does it pose a threat to recreation. It does, however, seem to interrupt a natural food production line that would otherwise yield abundant blooms of tiny aquatic animals to feed salmon, smelt and bass, Dugdale said.

Those species have been in steady decline.

The ammonia threat was dramatically illustrated last May when dozens of chinook salmon showed up dead in the San Joaquin River near Stockton's

See DELTA, Page B4

Delta: Ammonia-laced water harms food chain

Continued from Page B3

sewage outfall. Anke Mueller-Solger, an environmental scientist at the state Department of Water Resources, said the fish may have been killed by high levels of ammonia in the waste water.

Sacramento's effluent problem is slightly different. Rather than high concentrations of ammonia, the threat is the enormous volume of ammonia-laced waste water. The regional sewer agency treats human waste from Sacramento, West Sacramento, Folsom, Carmichael, Rancho Cordova, Elk Grove and other unincorporated communities.

The plant near Freeport each day releases about 146 million gallons of treated waste water into the Sacramento River. That's enough to fill about 225 Olympic-size swimming pools daily.

Despite this volume, Mueller-Solger said, the Sacramento River is traditionally considered the delta's lifeblood, because it provides the vast majority of fresh water entering the estuary.

"But there is this big urban area called Sacramento and it's been growing like gangbusters," she said. "Obviously, sewage is produced proportionally to the number of people, so the water's perhaps not quite as nice and clean as we thought."

The ammonia load in Sacramento's waste water has more than doubled since 1985 due to rapid urbanization, and is now more than 125,000 gallons per month. That's 10 times more than the Stockton sewage plant.

To handle more growth, the regional sewer agency plans a major expansion that would allow total discharge volume to grow by 30%. The plan includes no ammonia controls.

"This is a cost of growth that is too often externalized onto a degraded environment," said Bill Jennings, executive director of the California Sportfishing Protection Alliance and longtime delta water-quality watchdog.

Jennings called it "simply reprehensible" that the sewer agency hasn't already improved its systems to remove ammonia and other contaminants.

Sewage officials counter that they have a responsibility to ratepayers. They estimate upgrading the waste water treatment plant to filter out ammonia would cost $740 million. To remove excessive nitrates produced as a byproduct of that treatment would raise the cost to $1 billion.

District engineers estimate these steps together would boost sewage rates in the region from $19.75 per month to $62.17.

"If it's causing a problem, I think we have to recommend going to that," said Mary Snyder, district engineer. "But on the other hand, we don't want to leap into anything precipitously simply because of the effect on ratepayers. The average person is going to object to paying that much."

In May 2007 Stockton Cities DUMPING sewer Water into the River may have Killed Salmon!

Do you think Sacramento's dumping of over 146 million gallons of contaminated sewer water every day into the Sacramento River just might be a contributing factor to contaminating the Sacramento Bay Delta water? What about the combined effects of all the other Cities along the Sacramento River & Delta who are dumping their sewer water into the River and Delta?