Blame game in the mystery of the fish kill

Was it the vineyard's compost or the government's gravel-soil mound. Government is keeping mum on test results

By Larry Pynn, Vancouver Sun June 10, 2014

David Avery, owner of Lotusland Vineyards in south Abbotsford, sells 'biodynamic organic' compost to the public. Avery says the B.C. government is fingering him for the nearby fish kill because he refuses to put concrete under his compost mounds. He blames a government fill pile nearby. Photo by Larry Pynn/Vancouver Sun

ABBOTSFORD — It's a classic environmental murder mystery: endangered fish dying by the bucket load on Fraser Valley farmland, the B.C. government pointing the finger at compost from an organic winery owner loosely tied to a former Canadian prime minister, and the winery blaming a massive provincial soil dump site next door. The only thing lacking is a satisfying ending — the true perpetrator brought to justice.

The saga begins with University of B.C. students conducting research in a series of ponds in a private field at King Road and Lefeuvre Road in south Abbotsford and sounding the alarm after finding dead: 18 endangered Salish suckers, five bullfrog tadpoles, and more than 50 three-spine sticklebacks.

The federal Fisheries Department takes the initial complaint on June 17, 2013, then refers the matter to the Environment Department, which, in turn, hands it off to the B.C. Environment Ministry to investigate under the Waste Management Act.

When provincial staff visit the site three days later, on June 20 — the 4 Seasons King Mushroom Farm on the north side of King Road naturally draws suspicion. But it turns out the farm drains into Howes Creek, not Salish Creek, where the dead fish were found; besides, it's a mushroom-growing farm, not a compost operation.

The investigation turns to a less-obvious suspect: compost windrows placed in the field by David Avery, owner of Lotusland Vineyards. That's the organic wine label featuring images of prominent British Columbians such as former Prime Minister Kim Campbell and disk jockey Red Robinson.

"The production of compost on the property was a potential source that could have caused the fish kill," the ministry said in a release from communications officer David Karn. "Surface water sampling ... determined that leachate from the compost windrows was capable of causing pollution."

The investigation also found that the composting should have been registered under the Organic Matter Recycling Regulation and that "none of the regulation's requirements had been followed."

So far, no charges have been laid. And Avery insists the mountain of provincial "toxic waste" next door is to blame. "This whole thing is friggin' ridiculous," he says of the province fingering him. "It's just to hide the elephant."

• Over the past four years, the Transportation Ministry has dumped 1.3 million cubic metres of soil — more than at any other government site in the province — at the 92-hectare provincially owned former gravel site known as the Strong Pit.

"There didn't used to be a creek here, not the ponds, none of that," remarks Mike Pearson, a consulting biologist and Salish sucker expert who accompanies The Sun on a tour of Strong Pit.

When humans alter landscapes, nature tends to suffer. But when the deep gravels deposited by the last ice age were extracted by man, it created fish habitat. "Once the fish move in, it's habitat — and it's turned into one of the main spawning areas in this watershed. It's one of the hot spots for this species."

So important, in fact, that Pearson has identified these ponds as critical habitat in a recovery plan that is still awaiting federal approval under the Species At Risk Act.

"When lay people think of endangered species, they often think of the tiger in the rainforest in Sumatra," he explains while watching an American bittern, another species at risk, land in the field's tall grasses. "In fact, most endangered species are in places like the Fraser Valley, southern Vancouver Island, and the south Okanagan, due to habitat loss."

The land uses in this case include not just Avery's three-hectare winery and the compost windrows he deposited, with permission, on his neighbour's property, but the small mountain of provincial soils from the Port Mann/Highway 1 Improvement Project.

Brian French, the "monitor" in charge of Strong Pit for project contractor Kiewit-Flatiron, insists that the soils do not exceed the standards set by the province's Contaminated Site Regulation. "It was a very well controlled project," he says.

Soils were tested along the highway/bridge project and areas deemed not to be contaminated were excavated and trucked to Strong Pit. Each truck was checked for the proper documentation before being allowed into the pit; those with contaminated soils mistakenly delivered to Strong were turned back.

"Every single load that arrived at Strong Pit has to have the proper paper work. I can categorically say that any contamination that managed to get into the stream certainly wasn't coming from Strong Pit."

Settlement ponds were built at the south end of Strong Pit to control sediments in the water before being released into the environment — partly to Pepin Creek and partly to the underlying aquifer.

• French insisted that water from the pit does not flow into the ponds where the suckers died.

Avery, wearing a "Salmon Safe" T-shirt, walks an access road running between his vineyard property and the Strong Pit mound and explains that, in addition to his own vineyard, he creates vineyards on other peoples' property in the Fraser Valley — designing, building, maintaining the vineyard, and purchasing the harvested grapes.

He also sells "biodynamic organic" compost to the public on King Road — mushrooms and combinations of 10 types of manure, including

horse, cow, turkey, sheep, duck and goose and three types of bedding material. A machine turns the compost on a regular basis to create prime conditions for the micro-organisims, fungi and worms to render the concoction into compost for gardens or other vineyard.

Avery said the Environment Ministry "came down" on him for not putting concrete or asphalt beneath this compost but he argues: "You cannot make proper compost on concrete or asphalt. It's not possible — period."

• He argued there is little leaching because a sheen develops on the windrows, "which is why I don't have to cover finished compost in the winter."

Avery estimates he placed 500 tonnes of compost in windrows in his neighbour's 40-hectare field before the sucker deaths. He's removed more than half of that amount and has agreed not to put any new compost out there. "I'm not looking to piss anybody off. I don't do any operations down here."

Meanwhile, he says he no longer uses grapes from this vineyard from his Lotusland label due to the presence of the soil mound and has voluntarily removed his organic certification. "Over some period of time, that's going to leach into our property. I've taken the precautionary road and I don't blend any of the wine off the property with the rest ... No one is consuming this."

The Environment Ministry does not consider the dump site a potential cause of the fish kill. "Leachate from mushroom compost would likely produce increased levels of nutrients, biochemical oxygen demand, some metals and E. coli, as well as organic material suspended in the water. Gravel and fill brought to the fill site was likely from a roadway (and) would likely produce hydrocarbons, oils, and inorganic sediment."

So exactly what is in the water here?

The Transportation Ministry has drilled seven monitoring wells, starting in 2009, to test for water quality twice-annually, but refused to release any results to The Sun, saying that a final report is expected in July.

The Environment ministry says it can't release its test results because the case "continues to be under review by the ministry for possible enforcement action."

That's a shift from when the The Sun started its investigation of farming's impact on fish streams. At that time, the ministry said it preferred helping land users achieve compliance rather than enforcement action

It is an offence under the federal Species At Risk Act, in part, to kill an endangered species, as well as to damage or destroy its residence — but only if someone's watching, and a government agency is determined to see a violation through the courts.

Anna Johnston, a staff lawyer with West Coast Environmental Law, said she's concerned with a new federal Fisheries Department policy of not reviewing certain activities or projects in certain waters, instead requiring proponents to "self-assess" whether they'll cause serious harm to fish and, if so, suggest mitigation measures to prevent the harm.

The list of water bodies that do not require a federal Fisheries review, but are still required not to cause serious harm to fish include irrigation ponds and channels, agricultural drains and drainage ditches and roadside drainage ditches, private and commercial ponds, quarries and aggregate pits.

Johnston said protections under the Act still apply, but she questions who will be out there checking to see if the rules are followed. "If DFO (Fisheries) is not monitoring ... who knows whether they species at risk are suffering any harm or their critical habitat is being damaged," she said.

Pearson's often asked why all the fuss about endangered fish such as the Salish sucker and Nooksack dace. "What are they good for? Can you eat them?"

He explains they are a unique part of the biological makeup of B.C., and the stream equivalent of the canary in the coal mine serving as an early warning for trouble in our environment. "They've been living in these streams since the ice retreated. If species that have survived here for thousands of years and suddenly now decline to point of extinction then there's something seriously wrong with the habitat and water they depend upon."

Whether the case of the dead Salish suckers yet serves as a deterrent to pollution of critical fish habitat remains to be seen.

lpynn@vancouversun.com