## After Massive Escape, Fish Farms Under Attack By Michael Hamilton

hould Washington state join its coastal neighbors—Alaska, California and Oregon—and prohibit the practice of farm-raising Atlantic salmon on the Pacific Coast? The August 19, 2017, escape of an estimated 305,000 farm-raised nonnative salmon in the San Juan Islands has reignited the aquaculture debate, with wild-fish advocates and tribal leaders calling for a permanent total ban while the industry downplays concerns.

In the aftermath of the escape, the Wild Fish Conservancy (WFC) has launched a lawsuit against Cooke Aquaculture, the international corporation responsible for the accident. Washington's 20 tribes, comanagers of the Puget Sound–Salish Sea fishery, are expected to follow suit. According to WFC executive director Kurt Beardslee, Cooke knew weeks before the failure of the net pens that the aging structures needed replacing: "Cooke had contacted state agencies that oversee the fish farm near Cyprus Island and told them that the net pens were near collapse but that they wanted to get one more harvest before they replaced them. The agencies allowed Cooke to risk the health of Puget Sound so the company could get one more year's worth of growth."

In a Seattle Times article, Cooke Company spokesman Chuck Brown was quoted as saying the company was aware that the net pens, which had been installed 17 years before, were close to failing. "We knew it was at the end of its life cycle and it needed upgrades right away, and we were in the process of doing that.... We ran into a

situation with very heavy currents and the farm did drift and move."

Of the 305,000 Atlantic salmon that escaped near Cyprus Island, tribal and sports fisherman caught approximately 145,000 by last fall. The others, notes Washington Department of Fish and Wildlife (WDFW) spokesperson Michelle Dunlop, went every which way: "Atlantic salmon have been found in the Snohomish, Skagit, Nooksack, Samish, and Puyallup rivers, and Hood Canal. The Nisqually and Squaxin Island tribes have also reported Atlantic salmon in their fisheries."

Beardslee says this widespread dispersement should raise red flags. "My main concern is that Atlantic salmon bring with them pollution, viruses, and parasites that threaten our native fish," he explains. He cites a 2012 outbreak of infectious hematopoietic necrosis (IHN) virus in three privately owned Atlantic salmon net-pen complexes in Rich Passage, near Bainbridge Island, Washington. "Researchers have found that Atlantic salmon are far more susceptible to the IHN virus than native Pacific salmon. Why continue to take the risk?" he argues.

However, WDFW's Dunlop cites a 1999 study that was published after previous Atlantic salmon escapes in 1996 (107,000), 1997 (369,000), and 1999 (115,000) in Washington waters. According to key points published by the WDFW in September 2017, the study concluded that "farmed Atlantic salmon are ill-suited for survival in the wild, and unlikely to compete with native fish.... The same study found that Atlantic salmon are unlikely to cross-breed with Pacific salmon,

and unlikely to spread any foreign infectious diseases to native stocks."

As a result of the breach, Washington's Department of Natural Resources (DNR), which holds all leases for Puget Sound fish farms, placed a moratorium on any new Atlantic salmon net-pen operations or expansions to existing ones on state-owned aquatic lands until it can be shown that this activity is in the best interest of the state. State Commissioner of Public Lands Hilary Franz explains, "DNR will ... be conducting inspections by a licensed structural engineer at all of Cooke's operations in Washington while the investigation into the Cypress Island incident is ongoing. The broad public outcry surrounding this net pen failure is understandable. So is the lack of confidence in how Cooke responded to the emergency, the recovery of fish and the management of future operations the company may pursue here in our waters."

