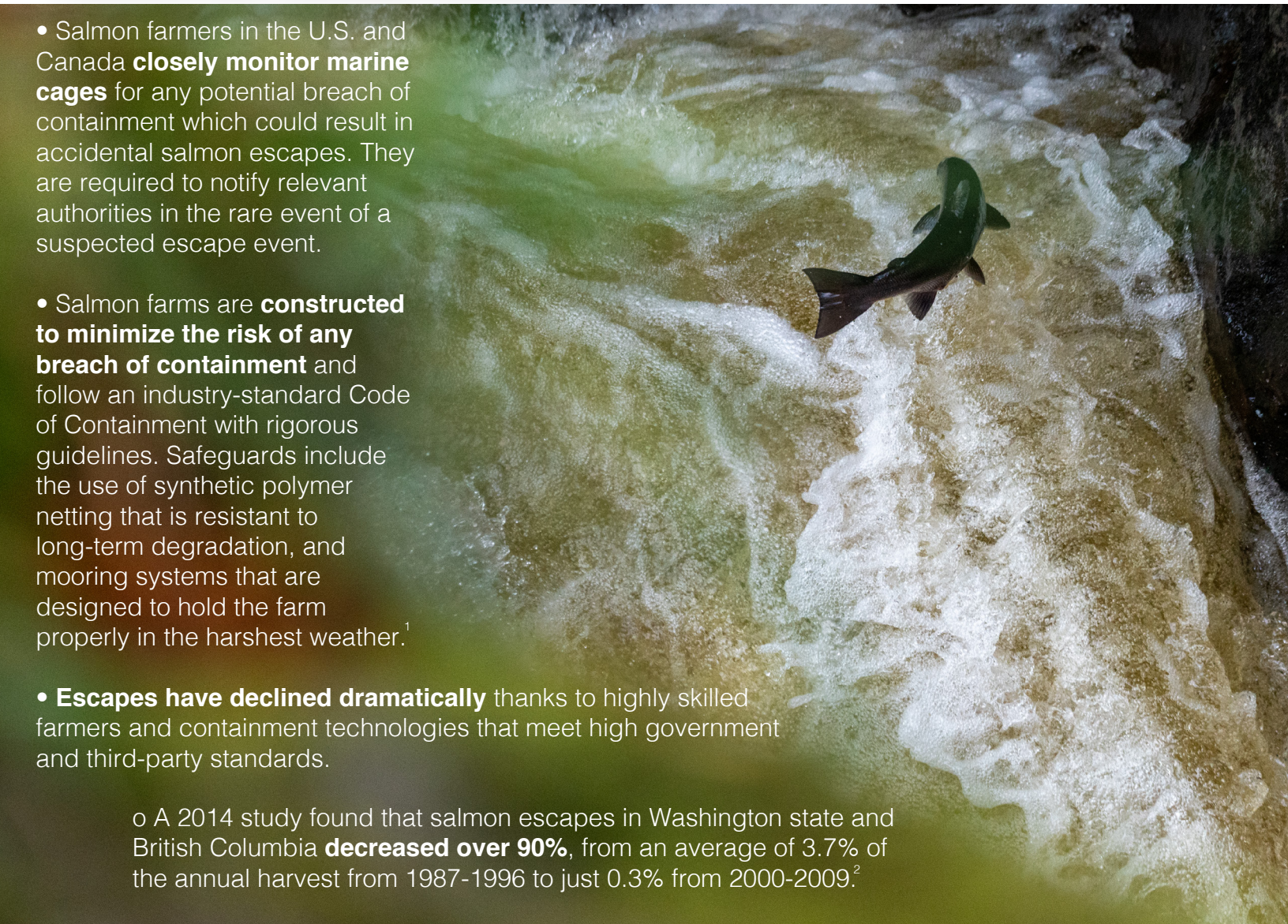
SAVING SEAFOOD

PROTECTING WILD SPECIES & MANAGING FISH ESCAPES

Best Practices in Atlantic Salmon Farming

American and Canadian salmon farmers are **committed to preventing their salmon from escaping containment.**

PREVENTING SALMON ESCAPES



• Salmon farmers in the U.S. and Canada **closely monitor marine cages** for any potential breach of containment which could result in accidental salmon escapes. They are required to notify relevant authorities in the rare event of a suspected escape event.

• Salmon farms are **constructed to minimize the risk of any breach of containment** and follow an industry-standard Code of Containment with rigorous guidelines. Safeguards include the use of synthetic polymer netting that is resistant to long-term degradation, and mooring systems that are designed to hold the farm properly in the harshest weather.[1]

• **Escapes have declined dramatically** thanks to highly skilled farmers and containment technologies that meet high government and third-party standards.

o A 2014 study found that salmon escapes in Washington state and British Columbia **decreased over 90%**, from an average of 3.7% of the annual harvest from 1987-1996 to just 0.3% from 2000-2009.[2]

UNLIKELY TO SPREAD DISEASES

• Farmers **vaccinate farm-raised salmon** against several diseases that commonly affect both farmed and wild salmon.

• British Columbia's salmon farms **pose "minimal" risk of spreading viruses and bacteria** to wild salmon, according to a risk assessment (2017-2020) by Canada's Department of Fisheries and Oceans.[3]

  o This includes minimal risk from naturally occurring viruses like Infectious Hematopoietic Necrosis and Piscine Orthoreovirus, and bacteria such as Aeromonas salmonicida and Piscirickettsia salmonis.

• A 2008 analysis found that escaped salmon had **not introduced new diseases or other pathogens** to wild fish species, concluding that diseases found in farm-raised salmon were already ubiquitous in wild populations.[4]

UNLIKELY TO COMPETE WITH WILD SPECIES

• Farm-raised salmon are **domestic animals** that are poorly suited to a wild environment. They show poor survival due to starvation and inability to evade predators.

• New research is modeling the dispersal of escaped salmon and genetic interactions between wild and farm-raised salmon to better inform management decisions and wild salmon conservation.[5]

• Escaped Atlantic salmon pose a low risk to wild species in Puget Sound, according to a 2002 NOAA study.[6]

  o Atlantic salmon are **not adept at surviving in the wild** outside their historic range and are **unlikely to prey on Pacific salmon** or colonize their habitats.

• Atlantic salmon are bred to reach harvest weight before reaching sexual maturity. They are **genetically distinct** from wild salmon like Pacific salmon and are **extremely unlikely to interbreed** with them even if they reach sexual maturity.

• In Maine, salmon farm escapes **had no impact on the genetic makeup** of wild populations.[7]

• An analysis of a 2017 salmon escape in Washington state estimated that within a year, most if not all fish had been recaptured or died. Escaped fish from the incident were found not to feed in the wild.[8]

1 https://bcsalmonfarmers.ca/wp-content/uploads/2019/12/BCSFA_Tech_Document_web.pdf
2 https://afspubs.onlinelibrary.wiley.com/doi/full/10.1080/03632415.2014.966818
3 https://www.dfo-mpo.gc.ca/cohen/iles-discovery-islands-eng.html
4 https://www.tandfonline.com/doi/full/10.1080/23308249.2021.1980767
5 https://www.researchgate.net/publication/337761759_Model-based_evaluation_of_the_genetic_impacts_of_farm-escaped_Atlantic_salmon_on_wild_populations
6 https://repository.library.noaa.gov/view/noaa/3331
7 https://www.tandfonline.com/doi/full/10.1080/23308249.2021.1980767
8 https://wdfw.wa.gov/sites/default/files/2020-01/marine_aquaculture_permit_justification-01-31-20.pdf