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## the Astorian

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GUEST COLUMN

## The DDT of our generation

ow that we know a chemical in our car tires is killing salmon, we have to act urgently to keep it out of the water.

Research published last year confirmed that the preservative 6PPD interacts with ozone to kill coho salmon even in low concentrations in a short



WILLIE FRANK III



DAVID TROUTT

intersect.

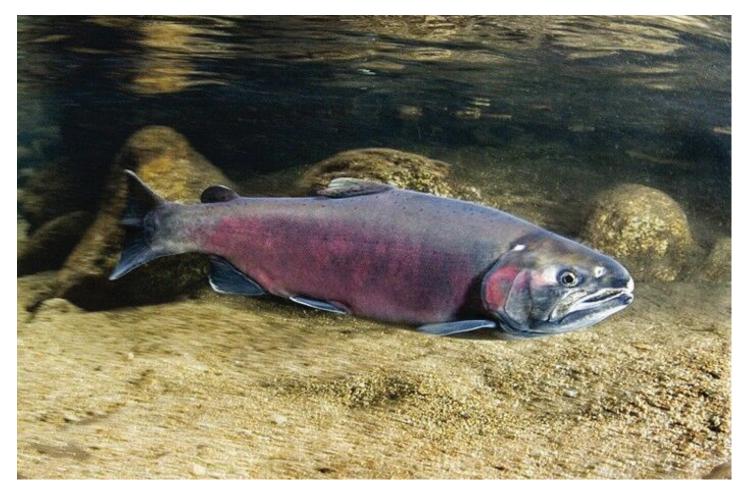
amount of time. The study, led by Jenifer McIntyre of Washington State University, was conducted over a decade in partnership with the University of Washington at the Suquamish Tribe's Grovers Creek Hatchery.

In the salmon recovery world, it's rare that we're able to pinpoint the exact chemical at fault. These findings are a smoking gun for the collapse of coho salmon throughout our region, especially in the urban and developing areas where roads and salmon

Coho populations are at an all-time low, having declined steadily since the 1980s. At the same time, we've seen the expansion of road systems into rural areas. While there are other factors that have led to declining salmon runs, science has shown that 6PPD is a piece of the puzzle.

Antiozonants like 6PPD make tires safer by preventing the rubber compounds from cracking and degrading. When 6PPD mixes with ozone, it becomes 6PPD-quinone, or 6PPD-Q. It is omnipresent on our roadways. With every rain event, the untreated chemical washes into our streams, rivers, bays and Puget Sound, killing juvenile coho as well as returning adults attempting to spawn.

Not only has this stormwater runoff been proven to kill coho salmon, it also has been shown to have sublethal effects on other fish — including reduced growth, heart defects and pulmonary edema — which affect their



National Oceanic and Atmospheric Administration

Coho salmon are at risk from a chemical tied to car tires.

ability to avoid predators and can lead to poor survival.

Solving this problem demands immediate action and a long-term commitment.

The first step is to remove 6PPD at the source by identifying a harmless replacement to make tires safe. This will take time, and unfortunately, it's not practical to replace every tire on the road. Even if we could, we would still have legacy impacts to deal with for at least 15 to 20 years. In addition to leaving residual tire dust on roads, used tires are commonly recycled into products like crumb rubber fields and playgrounds.

We need to deal with these impacts immediately by filtering 6PPD-Q from stormwater before it enters the water-

ways. The Nisqually Tribe is working with McIntyre, Long Live the Kings and the Washington State Department of Transportation to develop a compostable biofiltration system on State Route 7 where it crosses Ohop Creek. If we are successful, similar systems could be retrofitted along all roadways to remove this lethal, toxic chemical.

The tire industry understandably is going to be concerned about the economic impact of removing 6PPD from their product, but they understand the need to prevent it from killing salmon. In July, a representative from the U.S. Tire Manufacturers Association joined us in testifying before the U.S. House Natural Resources Committee's subcommittee on oversight and investigations, citing evidence that filtering

roadway runoff through a rain garden reduces fatalities in coho salmon.

This is the DDT of our generation. In the 1960s, we learned that the insecticide was harming bald eagles and other raptors. It was removed from the ecosystem — not without struggle and industry resistance — and bald eagles made a comeback.

We are in a similar struggle. We've been putting 6PPD-Q into Washington waters and it's killing the salmon that are the lifeblood of tribal cultures here. We must do everything we can as fast as we can to keep it off our roads and out of our waterways.

Willie Frank III is the chairman of the Nisqually Tribal Council. David Troutt is the natural resources director of the Nisqually Indian Tribe.

## GUEST COLUMN

## The heart and soul of our cities

he COVID-19 pandemic confirmed the critical role that small businesses play in our daily lives.

Neighborhood restaurants, entertainment venues, service companies and any business where in-person contact was the norm endured periodic closure and suffered financial hardship. It sounds cliché, but our locally-owned small businesses truly are the heart and soul of our cities and towns.

d towns.
Small Business Saturday is our chance



MARTIN GOLDEN

to thank these local heroes that struggled to survive over the last 18 months. People in Astoria can also participate in Shop Local, Shop Plaid, an event promoted by the Astoria Downtown Historic District Association that runs from Friday to Dec. 3.

Small Business Saturday has slowly become an American tradition following the Thanksgiving holiday. Brick-and-mortar businesses across the country promote their best deals of the year in hopes of luring shoppers from online purchases. It was not that long ago when Americans would visit their locally-owned downtown retailers to purchase all their holiday gifts for family and friends. Shop owners would decorate their stores with ornate lights and ornaments, or create elaborate window displays, to grab the imagination of a passerby to lure them inside their business. The holiday shopping season was a magical time of year, and many of us still hold on to those fond

memories today.

Given the dramatic shifts in the retail environment over the last 20 years, those holiday scenes and traditions are in danger of passing into the realm of nostalgic folklore. Recent surveys show that over 80% of Americans make regular online purchases throughout the year. Online shop-



Small businesses help downtowns thrive.

ping skyrocketed during the pandemic as more people stayed home to slow the spread of COVID-19. Many locally-owned businesses struggled to find new ways to compete with mega online shopping sites and large retailers that remained

To better compete, small-business owners have become very innovative in the way they sell and promote their products and services. Some are bringing back the retail traditions of the past by providing personalized one-on-one assistance to customers and the selling of locally produced niche items found nowhere else in town.

Although online merchants have driven many retailers into closing their doors, small business remains the one stable job creator in most communities across Oregon. Here at home, Oregon's 396,925 small businesses continue to generate 2 of every 3 net new jobs and deliver essential

goods and services in both rural and urban communities. They employ more than 893,758 Oregonians, and make this state a better place to live in.

As the voice of America's entrepreneurs, the U.S. Small Business Administration celebrates this nation's 36 million small businesses that still ignite our local economies and enrich our communities

throughout the year.

Each year, Small Business Saturday provides a huge boost to the U.S. economy when over 100 million consumers spend more than \$20 billion at small shops and local restaurants. With increased consumer confidence in the economy, and a waning pandemic, this year's Small Business Saturday looks to be even bigger and brighter.

Economic prosperity is very good news not only for America's small businesses but for society. In so many ways, small businesses act as the bond that holds our communities together. They fund the local tax base, finance local nonprofits and charitable organizations and create good-paying jobs that boost the overall

marketplace.

By backing our locally owned small businesses, you support the thousands of jobs they create and the families they sustain. Small businesses are the backbone of our democracy, and the solution to our most challenging economic problems.

On Small Business Saturday, please join me in making at least one purchase from a locally-owned small business in your city or town. These business owners are the true superstars of our community, and they deserve our support, thanks and appreciation.

Martin Golden is the Portland district director of the U.S. Small Business Administration.