

Trash

This year up to 20 M T of plastic products will go into the sea. A new study in the strait of Georgia has found 3,000 plastic micro particles per cu. metre of water. We have to change our ways. It kills countless fish, millions of seabirds & 100,000 small mammals. Sea turtles eat them, thinking they're jelly fish, 6 pack rings strangle gulls & herons, the bags entangle and drown seals and dolphins. Whales become entangled in plastic nets or eat so much of this debris that their guts burst. Eventually plastic breaks down into micro particles that are everywhere. One study estimates that returning BC Salmon eat up to 90 plastic particles a day, these may contain endocrine inhibitors and carcinogens. The plastic production doubles every 20 years. Royal Society Research estimate that by 2050 the ocean will contain more plastic than fish. We are seeing stores now banning plastic bags but we should also ban individual size water bottles, plastic straws, non biodegradable disposal plastic cups & tableware and styrofoam ware. But storm sewers drain trash off urban landscape. Some cities require screens to catch plastic. Fishing line, nets & traps are deadly to wildlife.

The Puget Sound initiative has recently cleaned up 1000's of derelict fishing nets and crab pots gear that would have killed 300,000 animals.

We need better rules, a radical change in the way we use plastics. There are groups like the UN, The European Commission and the World Economic to recognize this and are asking for a new plastic economy and to replace petroleum inputs with benign material. Continually to ensure reuse and recycling with thought full cradle to grave product design, stop the irrational level of plastic waste - We all have a stake in this we need to urge our prov and federal govt to create a new plastic economy

Whales -

They are beginning to realize that vessel sounds can interfere with whale ability to hunt, navigate and socialize so they have asked ocean going vessels to go slow in critical habitat of endangered southern resident killer whales in the Salish Sea and have found that about 60% of the vessels are遵从ing this so far and are hoping for better results. They have asked them to go 11 knots a 40% reduction when going thru Haro Straight where it is a critical habitat for killer whales that are found typically summer feeding on seasonal salmon runs.

They want to measure whether the whales change their behavior when ships go slower. In some locals they're asking to reduce their speeds to reduce the chance of striking whales.

Typically container and cruise ships travel close to 18 knots. This is being tried until Oct 6 to see how they act with lower speeds. There are just 80 southern resident killer whales that exist in the shared water of the Salish Sea. Researchers think they're at risk from depleted runs of Chinook Salmon as well as pollutants such as banned but long lasting PCB's, and both the physical presence of vessels and their under water sounds. Slowing to 11 knots could result in delays of 30-60 min depending on vessel type and tidal currents.

Bees -

Bees are crucial to agriculture - about a $\frac{1}{3}$ of crops eaten by humans depend on insect pollination, with bees responsible for about 80% of that figure, but they are declining worldwide as scientists try to figure out why. Research has suggested ^{that} the use of neonicotinoids is among the factors contributing to the declines.

Thiamethoxam, a major neonicotinoid found in agricultural crops throughout the world reduced the chances of Bumblebee queens starting new colonies by more than a $\frac{1}{4}$.

Those that have been exposed to the pesticide were 26% less likely to lay eggs and start a colony. This could have major impact on pop. persistence and increases the chances of a pop going extinct.

Polly Mine

There will be no charges laid by BC Environmental law for Imperial Metals Mount Polly Tailings dam failure in 2014. Environmentalists are questioning whether BC's laws are strong enough. There could still be a Federal charge under the Fisheries Act as they have a 5 yr limit, but BC didn't make it under their 3 yr limit. This highlights a general trend of decreased successful convictions of environmental violations in BC. Calvin Sanborn, legal director of Victoria's Environmental Law Centre believes it underscores a benign neglect in regulation of mining highlighted in BC general auditors report last year that concluded compliance & reinforcement in the mining sector are not adequate to protect the environment.

The New BC Environmental Minister George Hyman said he will review how enforcement officers service undertake investigations & to get to the bottom of why not more resources weren't deployed for this. The time line for Fed charge is 5 yrs. Criminal charges also remain for BC & federally. However they have to be proven beyond a doubt while regulatory charges are tested under a balance of probabilities. Most charges for environmental incidents take place at the regulatory level. Under either situation charges would have to be approved by Crown Council in BC or a Public prosecution service of Canada.