

THREATS TO GIBSONS AQUIFER AND THE ENVIRONMENT FROM THE GEORGE CONTAMINATED SITE

Since 2013, Gibsons Alliance of Business and Community Society (GABC), has communicated information and concerns to the BC Ministry of Environment (MoE) and the Town of Gibsons (Town) about the proposed hotel, condo, and marina project on the waterfront in Gibsons Landing, known as “The George.” A controversial spot-zoning of waterfront lands in 2015 resulted in a **precedent setting zoning uplift and transfer of public assets**, including the crown owned foreshore water lease, to the George developer.

The George properties include a **high-risk contaminated site** that hosts a marine fueling station as well as former boat repair facility (Hyak Marine) that operated on the site for over 50 years. The pressurized artesian aquifer that provides drinking water for the Town of Gibsons, “**Gibsons Aquifer,**” sits as close as **1metre from the surface** on the George development lands.

Excavations and dredging for site clean-up and activities required to build the project, pose the risk of perforating Gibsons Aquifer and could result in a **massive uncontrolled breach or “blow-out” of the aquifer.**

Potential impacts also include loss and/or contamination of the drinking water supply, and distribution of toxic contamination, including Tributyltin (TBT), into the marine environment.

Consultants working for the Town and the George developer identified maximum excavation depth for the project from .05 - 1.5m, to protect the aquifer. Yet, over the summer at a last minute special meeting, Gibsons council approved a remediation plan that includes excavating below 2m and sets **no limit on maximum excavation depths.** The Town has not published a peer review of the developer’s consultants reports since 2015 when its own consultant Waterline Resources gave their opinion “that there is **insufficient data to characterize the Gibsons Aquifer-Aquitard system within the proposed dredging area** or to fully understand the impact of the proposed marine development on the Gibsons Aquifer-Aquitard system.

The Town is aware of the risks to the aquifer, yet it issued development permits, with no security bond from the developer and only an emergency contingency plan, if something goes wrong.

GABC has been closely monitoring the remediation plans for this contaminated site and risks posed by excavations and dredging for the project since the development application was first submitted in 2013. In 2014, we reviewed the developer’s preliminary environmental investigation for the site and discovered it omitted to characterize a highly toxic substance called **Tributyltin (TBT)**. TBT is an anti-fouling agent formerly used in marine paint. Paint scraping and spills from cleaning and painting boat hulls at Hyak Marine over 50+ years resulted in the **deposit of high-risk levels of TBT on the site.**

TBT is 16x more toxic than mercury and lethal in one part per trillion in water. It is highly toxic to a wide range of organisms. By poisoning organisms at the bottom of the food chain, **TBT is biomagnified up the marine predators' food web** where it can lead to the collapse of whole populations of organisms. TBT disrupts **invertebrate’s** endocrine systems; leads to immunosuppression in **fish and marine mammals** and causes hearing loss in top mammalian predators, like **Orcas**. **Humans**, are exposed to TBT through our diet.

After pressuring MoE about the TBT on the George site for two years, the developer’s consultant finally submitted site samples in 2016 that show TBT in sediments at 120x higher than safe levels.

TBT **bio-accumulates** in sediments where it can remain (for up to 30 years) and be released by disturbing soils and sediments, just as is planned at the George site. To properly remediate TBT, site specific remediation must be undertaken. But the developer’s remediation plan does not account for TBT. Instead, **the developer is exploiting a loophole in the provincial Contaminated Site Regulation to avoid cleaning up the TBT.**