

# REVIVE EXPRESS CAR WASH

---

## Car Washing and the Environment

When you're washing your vehicle in your driveway, the last thing you're thinking about is how you washing your vehicle effects the environment. Despite this, the Environmental Protection Agency (EPA) currently states that non-point wastewater runoff (like what happens when you wash your vehicle at home) is the leading cause of freshwater pollution in the country! It might surprise you to know that in most municipalities including Toronto, which had a bylaw pasted in 2000 making washing your vehicle in your driveway illegal!

Most people agree that maintaining a clean vehicle is not only important for the life of that vehicle, but it might also reflect on your personal image. So, in this day-in-age of environmental consciousness, using a commercial car wash is, in fact, a far better choice than doing it yourself at home.

Let's break down what happens to freshwater usage, wastewater disposal, and the chemicals and detergents being used to clean your vehicle at home compared to what happens when you choose to wash your vehicle at a commercial car wash.

## Washing your car at Home

**Freshwater Usage:** When it comes to water usage, home car washing is very taxing on your municipal freshwater supply. Engineering studies in both the US and in Canada have shown that a 5/8" garden hose running at only 50 PSI uses 10 gallons of fresh water per minute. That means if you wash your car at home, you're using about 100 gallons or more of fresh water each time you wash your car. If you wash your car once a week, you'll use 52,000 gallons of municipal fresh drinkable water in a single year.

**Wastewater:** Many soaps that people use when washing their cars at home contain chemicals which represent another large contributing factor to environmental damage. In addition, most people who wash their car at home on their driveway overlook where the wastewater goes. It runs down the driveway and into nearby street catch basin / storm drain which then flow directly into our streams, rivers, lakes and eventually into our oceans. Many soaps we use also contain chemicals that are harmful to fish and degrade the water quality. Some soaps may also contain phosphates, which can cause excess algae to grow in local waterways. Algae looks bad, smells bad, and harms water quality. As the algae decay, the process uses up oxygen in the water that fish need to survive.



### Using a commercial car wash

**Fresh Water Usage:** Being a very cost-conscious industry, combined with the regulations imposed by the EPA, and other government agencies in both the US and in Canada, commercial car wash operators use as little fresh water as possible to clean their customer's cars effectively and safely. The car washing industry has made great advancements in the types of equipment we use, which has greatly reduced water consumption. Comparatively, a commercial car wash will use less than half (about 30 – 50 gallons) of fresh water to successfully clean a vehicle.

### How much water do commercial car wash use vs. home washing

TYPE OF WASH	WATER USAGE
Touchless Tunnel Car Wash	80 gallons per car
<b>Soft Touch Express Tunnel Car Wash**</b>	<b>40 gallons per car</b>
Self Service Hi-Pressure Wand	15 gallons per 3-minute cycle
Self Serve Foaming Brush	1-2 gallons per minute
Washing Your Car at Home	100+ gallons per car

#### \*\*Revive Express Car Wash:

**40 gallons per car represent 26 gallons reclaim water and 14 gallons fresh water. This equates to substantial water saving for a municipality.**

**Wastewater:** Wastewater is also a large concern for commercial car washes. Responsible operators not only want to do what is right for their community but also want what is the most cost-effective means of conducting business. Under the Clean Water Act, EPA, and other government agencies in both the US and Canada have very strict guidelines for commercial car washes requiring all commercial car wash facilities to drain their wastewater into on site underground oil/grit interceptor to capture all sediments and oils and then the remaining wastewater is drained to municipal sanitary sewer systems and sent to a municipal treatment facility where it gets treated before it is discharged back into the environment. Approved chemicals that are either treatable at these facilities or completely bio-degradable are only used in commercial car washes.

In addition to the above required oil/grit interceptor, some commercial car wash facilities, such as **Revive Express Car Wash**, go a step further to help the environment by further reducing freshwater consumption. This is done by installing on site a high tech wastewater reclaim system coupled with additional large underground reclaim holding tanks that allow even the fine sediment to settle to the bottom as it travels through the multiply chamber where at the end the wastewater is free of sediments, is then pumped back into the wash facility where it undergoes a multi stage high tech

filtering system which purifies the wastewater to the original clear state which can now be reused by the wash process.

Now to be clear, since **65%** of the wastewater is reclaimed and recycled, the remaining **35%** is in fact freshwater and that fresh water is what is used in the final wash and rinse cycles so at the end of the wash process each vehicle always gets 100% fresh water making cars spotless.

The remaining sediment that has settled at the bottom of the reclaim tanks is periodically pumped out by a hazardous material handling company and is properly disposed of at a ministry approved waste disposal site.

At **Revive Express Car Wash**, we recognize the need to minimize environmental pollution. With our state-of-the-art wash equipment, we treat all of our wastewater and recycle it. We only use EPA approved chemicals to ensure a greener environment. In addition, our facility is designed using high-efficiency mechanical & electrical equipment including energy saving LED lighting inside the building and outdoor lighting which consist of dark-sky fixtures to reduce light pollution to preserve a view of the stars in the night sky.

Regarding facility noise, we use one of the quietest in bay vehicle drying systems in the industry and the exterior free vacuum stations are connected to a central vacuum system that is located inside a separate soundproof building providing a noise free vacuuming environment for our customers and surrounding neighbouring properties.

Our computer regulated equipment measures water, sewer, and chemical usage down to one-hundredth of an ounce. We regularly monitor our equipment as well as water usage to ensure we're using the least amount of water possible while providing our customers with high-quality car washing. We also only use soft touch equipment in our car wash tunnel, which not only do a better & safer job at cleaning your car but are also the most environmentally friendly. These factors ensure our businesses proudly support a healthy environment for not only our customers & staff, but our communities at large.