The purpose of the report is to examine ways that Nova Scotia can reach the goal of reducing solid waste disposal from 400kg/person to 300kg/person by 2030. Although we see the Nova Scotia government moving in the right direction by eliminating single use plastic bags province wide, there is a lot more that needs to be done in the same format. Just as people have adapted to reloading their reusable bags into vehicles after a grocery trip, by creating new rules, we will continue to build new habits into Nova Scotian's everyday lives.

Single use plastic is surging with the pandemic and we need to change our overall thinking around it. There are biodegradable options that can be used when packaging is necessary and many products really do not need wrapping at all.

Wrapping corn on the cob, tomatoes, etc. in plastic is not necessary and should be against the law.

As an eighteen year old, I have always been exposed to green bins, recycling containers and composting. It is a regular practice in my daily life. I cannot imagine throwing everything into one bag like it was done in my parent's childhood.

Like my own environmental project that created a huge change in my community, I have learned that there are a few components to making change happen.

Education with facts is key. Getting those facts out into the broad community is the next step. You have to rally the community together and push for change to happen. Once you have a support group and facts, leaders are willing to pursue action. Overall, get the message out far and wide that we need to reduce our landfill waste. A massive educational campaign is needed. The newer message of refuse, reduce, reuse

needs to be seen far and wide as much as we traditionally know reduce, reuse and recycle.

Stella Bowles

Reducing Solid Waste Disposal in Nova Scotia

Stella Bowles

Grade 12 Student

Park View Education Centre

I often go on walks at my favourite beach near my home. It is a peaceful place that I have enjoyed since I was born. It has become habit now to take a backpack with a garbage bag and also a jar for my sea glass collection. The amount of waste I pick up is always disturbing, mostly being some kind of plastic. As a young person growing up along the Atlantic Ocean, I see a huge need for humans to change habits around waste. Too much is being put in our garbage. With a few changes to our everyday habits, I know we can significantly reduce waste in our landfills and oceans.

I was shocked to learn that Nova Scotian's currently send approximately 400 kg of waste/person to our landfills, however, the Nova Scotia Department of Environmental and Climate Change is working with municipalities and other stakeholders to lower the solid waste disposal target of 300 kg/person by 2030. This is a great goal and reachable if we change some of our everyday routines. The mantra I grew up with, "reduce, reuse and recycle" is now updated to "refuse, reduce, reuse" and this is what we all need to do. It is a simple and powerful message. "Waste reduction helps to preserve valuable resources, like energy and time. This contributes to the circular economy — a positive system that phases out waste and pollution by using what we already have." (Divert 2021).

One of the biggest problems is single use plastics. "Since the 1950, it is estimated that more than 8.3 billion metric tons of plastic has been produced, and 60% of that waste has ended up in landfills or the environment." (Global Citizen, 2021) When I walk into a grocery store I am appalled by the amount of plastic that is being used when it really doesn't need to be used, and it

appears to be more now than ever before. Almost all produce is wrapped in plastic. I will always choose products with less plastic, often leaving what I wanted behind. With the COVID-19 pandemic and fear of spreading the virus, I see the amount of single use plastics has grown a lot. "Government restrictions and public health guidelines have triggered a backslide in societal consumption of SUPs." (Molloy, Varkey & Walker, 2021). The testing kits that were given to us in school have so much added plastic waste. I have no idea why the amount of plastic was added for no apparent reason. Packaging of products should have environmental rules. From the fruits and vegetables wrapped in plastic to kids toys that are often in elaborate and excessive packaging, there should be strict government regulations limiting the waste. Biodegradable materials can be used for a lot of the product packaging and should be the only option.

As a society, we need to force people to change their habits by putting laws in place. The 100% removal of plastic grocery bags in Nova Scotia is a great example of how we can do this. After putting away groceries, the task of returning the reusable bags to vehicles become part of people's routines. The next move should be more laws introduced to eliminate unnecessary plastic packaging.

My family takes jars to the bulk barn and we get a lot of dry products with limited waste this way, however, it is an added step in the daily process to get the jars prepped. Often the convenience of 'grab and go' does outweigh the pre-thinking and planning needed for a reduced waste trip to the grocery store. The key to making people reuse items is to make it easy, but that is not an easy task in the world of convenience. I like seeing refillable stations popping up in our community. For instance, Gow's Home Hardware in Bridgewater now has a refillable station for Natura cleaning vinegar, laundry detergent or laminate floor cleaner. This is great! These stations should be in the front and centre of every store for many different products.

In Nova Scotia we have a great recycling program. Since I was born, I have known about composing and blue bags. It is part of my everyday practice and I view it as normal. We wash out containers and jars for recycling, put all paper in a bin and food waste goes in our green bin. I have travelled extensively with my LaHave River project for speaking engagements, and have really noticed other places not sorting as well as we do. For instance, when I was in Toronto there was usually only one garbage bin instead of sorting stations. I see sorting stations all over our Nova Scotia communities, as well as in schools and public buildings. When we see these options and understand how to sort, it forms habit and becomes an everyday task we just do as good citizens. Exposure and education are key components in reducing waste.

I see a shift in thinking to thrifting for clothing and household items. Often, my friends and I will go to the local Frenchy's or Value Village to look for clothing. As a minimalist myself who dislikes clutter, I work hard on buying only the products I need as opposed to items I want. Teaching youth about the importance of finding out where products come from and buying ethically sourced items is another important component. So many youth are being sucked into marketing schemes and trying to buy the latest 'cool' products. Although I do see schools working hard to encourage reduction of waste among the youth, I do not feel it works well as a curriculum outcome. Waste reduction needs continual discussion and visuals to prompt us to form better habits.

The article, 10 Simple Ways to Cut Back on Single-Use Plastic in Your Life recommends simple ideas that could make a huge impact on our reduction of waste in landfills. They are: carry reusable shopping bags, drink your coffee from a reusable cup, avoid bottled water, steer clear of plastic straws, switch to plastic-free chewing gum, shop at a farmers market, swap out bottles for bars and avoid buying clothes made with plastic and compost food waste. Education

around this should be everywhere. We need posters in all public spaces, ads on our computers and televisions, etc. These ideas need to be built into people's everyday habits to make them stick. Also, in combination with education, our government must implement strict guidelines around single use plastics. Most single use plastic is unnecessary and doing more harm than good to our overall environment and health.

Personally, I have a very interesting perspective on waste reduction. I started a project to rid the LaHave River of illegal straight pipes dumping raw sewage into our waterways. There were an estimated 600 of these pipes along the LaHave River and many more all over our province and beyond. My project prompted a \$15.7 million dollar cleanup of our river, involving three levels of government. With a positive social media platform I educated my community on the scientific facts that our river was extremely unhealthy. The community then backed my agenda and wanted the change too. Governments had no choice but to respond. Although initially I did not think my project would create such a huge positive environmental change in my community, it did work, and now I am proof that one person can make significant environmental change happen.

Educate with the facts of solid waste in Nova Scotia, create a large campaign to push the agenda, communicate effectively to the broad population and get into the schools. Then law and policy makers need to act (like they did with plastic grocery bags) so we change our everyday habits. By doing this we will become better patrons of the environment and free of so much unnecessary waste. Maybe someday I will just need the jar for my sea glass when I walk along the beach, and I can leave the garbage bag at home because it won't be necessary anymore.

References

- Divert NS (2021). Refuse, Reduce, Reuse. https://divertns.ca/refuse-reduce-reuse
- Global Citizen. (2021). 7 Groundbreaking Government Initiatives to Reduce Plastic Waste. https://www.globalcitizen.org/en/content/plastic-waste-government-initiatives/
- Global Citizen. (2018). 10 Simple Ways to Cut Back on Single-Use Plastic in Your Life. https://www.globalcitizen.org/en/content/tips-reduce-plastic/ https://www.onegreenplanet.org/lifestyle/home-items-you-can-reuse-over-and-over-again/
- Molloy, S., Varkey, P, Walker, T. (2021). *Investigating Opportunities for Single-Use**Plastic Reduction in Nova Scotia Food Services During COVID-19 (p. 27) https://divertns.ca/sites/default/files/researchreportsfiles/2021-12/

 SUP%20Reduction%20in%20Food%20Services_1.pdf
- Nova Scotia Government Environment and Climate Change. (2021). *Nova Scotia Taking Action to Reduce Waste*. https://novascotia.ca/news/release/?id=20211210007
- Waste Wise Products Inc. (2019). 3 *Countries With the Best Waste Recycling Strategies*. https://www.wastewiseproductsinc.com/blog/programs-initatives/3-countries-with-the-best-waste-recycling-strategies/