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Bridging Gaps Between Constituents and Policymakers in Climate Policy in Washington State

Rebecca A. Dickson
Politics, Philosophy, and Economics (Economics Track)
May 2019

Faculty Adviser: Dr. Elizabeth Bruch

Essay completed in partial fulfillment of the requirements for graduation with Global Honors,
University of Washington, Tacoma

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Acknowledgements

I would like to thank several individuals for their dedicated assistance and support during the process of this project. First, I would like to thank my primary faculty advisor, Dr. Elizabeth Bruch, and my research partner, Grace McKenney for their dedicated support and assistance in this project process. Secondly, I would like to thank the Bamford Foundation for their financial support of this thesis and the Institute for Global Engagement for providing administrative support throughout this project. Thirdly, I would like to thank Dr. Will McGuire and Dr. Tom Koontz for their support and feedback throughout this process. Finally, I would like to thank Dr. Divya McMillin, Alexis Wheeler, Lynn Hermanson, Dr. Joanne Clarke Dillman, and Dr. Ben Meiches for their support of this project for the past year.

Table of Contents

Introduction.....	01
Background.....	02
Methodology.....	06
Results.....	08
Lack of Knowledge.....	08
Concerns About Equality and Representation.....	11
Impact of Income in Environmental Decision Making.....	14
Role of Corporations in Political and Personal Decision Making.....	16
Local Politics Grow to Larger Movements.....	18
Support of Environmentally Friendly Regulation.....	18
Support of Climate Pricing.....	20
Recommendations.....	22
Conclusion.....	24
Appendix A: Glossary of Terms.....	26
Appendix B: Verbal Consent Agreements.....	28
Appendix C: List of Policymakers.....	30
Appendix D: List of Interview Questions.....	31
Appendix E: Ages, Sex, Income, Educational Completion, and U.S. Congressional District Distribution of Survey Respondents.....	33
Appendix F: List of Survey Questions.....	36
Works Cited.....	44

Bridging Gaps Between Constituents and Policymakers in Climate Policy in Washington State

In a well-functioning democracy, the citizenry is well-represented by their representatives, who make political decisions based upon the wishes and needs of the voting public. For United States citizens at home and abroad, this representative system is one that is crucially important to protecting human rights. As cross-border interaction continues to grow through the evolution of the internet and the necessity to work cooperatively against common issues expands, nation-states are entering into a new time which requires international political cooperation. Climate change is one of these issues- as borders work as political and not ecological boundaries, environmental action must take place through cooperation. Still, political and environmental concerns by their nature have intersecting aspects; thus, a thorough understanding of the intersections of democratic action and of environmental action need to be analyzed in order to create suitable environmental policy.

This paper analyzes the intersection of political and environmental action, analyzing the ways policymakers interact with their constituencies in regards to environmental issues. Specifically, this paper focuses in Washington State as a government which is known for its environmental activism. Through a review of relevant literature, interviews with policymakers at different levels of representation in Washington State, and surveys of constituents across the state, this paper seeks to answer three primary research questions: one, what gaps are there in the Washington constituency's knowledge of environmentalism and environmental policy, two, what considerations should policymakers make when designing effective environmental policy, and three, what environmental policy should be enacted in order to address the environmental, social, and economic concerns of Washington constituents.

Background

Concerns about the United States' ability to work as a representative democracy have persisted over the last ten years. According to Freedom House, a nonprofit organization which monitors and reports information regarding the status of democracy across the world, the United States is "arguably the world's oldest existing democracy" whose citizens have a "vibrant political system, a strong rule-of-law tradition, robust freedoms of expression and religious belief, and a wide array of other civil liberties" (Freedom House). However, they also state that there are many issues facing the United States; "in recent years [the United States'] democratic institutions have suffered erosion" (Freedom House). This is concerning; in order to protect the rights of individuals in a representative democracy, democratic institutions must be resilient to erosion.

As the United States became leaders internationally after World War II through the International Monetary Fund, the World Bank, and the United Nations (Babones), it is oftentimes seen as a global leader which can make significant impacts around the world, specifically because global cooperation has occurred through "sustained U.S. engagement around the world" (Daalder & Kagan). Considering the history of global leadership of the United States, usually, the United States would be expected to take the lead in environmental policy in the international stage. The United States has expressed interest in cooperating with other entities in the past to combat climate change. According to testimony provided by the National Association of Manufacturers to the Committee of Environment and Public Works, the United States potentially has an interest in becoming a world leader on environmental issues; it was noted that "cooperation in gathering and disseminating environmental data and information should also be encouraged [to combat climate change] (Committee of Environment and Public Works- First

Session, 74). In recent years, however, this position has been negated, and this has been harmful to forming international bonds through climate policy. According to Brad Plumer, a climate reporter for *The New York Times*, “President Trump has already signaled that he doesn’t want the United States to be a leader on climate change, but pulling out of the Paris Climate Accord signals that he does not want the country addressing this issue at all” (Plumer). Because of this, it may be interpreted that the United States may lose strategic influence in climate change mitigation efforts, and reduce the United States’ reputation abroad.

If the United States does not choose to engage in its climate change mitigation efforts, it has also put itself in a position that decreases the economic power of the country (Francis), and its international political power (Shear). In order to reduce the impacts of climate change, international political cooperation is necessary. According to *The Climate Report*, “U.S. cooperation with international and other national scientific organizations improves access to global information and strategic partnerships, [which will allow the U.S. to address extremes] on national interests both within and outside of U.S. borders” (*The Climate Report*). However, even if the federal government is unable or unwilling to address these issues, individual states, such as Washington State, may have the ability to create intra-state and interstate collaborations in regard to climate change. For example, the United States’ Climate Alliance has worked to uphold agreements made in the Paris Climate Accord, despite a lack of federal support (“Alliance Principles, U.S. Climate Alliance”). As a member of the Climate Alliance, Washington State has committed to reduce greenhouse gas emissions by 24-26%, report their efforts internationally, and to advocate for climate-friendly policies state and nationwide (“Alliance Principles, U.S. Climate Alliance”). These types of interstate interactions are critical to address issues such as climate change.

Washington State is currently at the forefront of the nation's attention in regards to climate policy. Washington State's governor, Jay Inslee, is a politician who has recently announced his candidacy for President in 2020, in hopes of reducing the impacts of climate change (Brunner; Montoya-Galvez; Weigel et al.). In addition, climate policy initiatives such as the carbon tax have been voted on by the Washington State constituency with the stated goal of reducing carbon emissions (Broekhoff et al.). At the same time, Washington is a state that also has to deal with the environmental impacts of climate change such as sea level rise, heat waves, ocean acidification, and lower amounts of spring snowpack (Snover et al.). In addition, Washington is home to Joint Base Lewis-McChord, which is one of the country's largest and most notable military bases, and is expecting significant impacts due to climate change, primarily an increase in insect activity, reduced ability to conduct practice operations during the summer due to heat, and risk of fires due to pyrotechnic operations and heat levels within the region (Hayden et al.). In addition, Washington shares an international land border with Canada. As climate change is an issue that is generally believed to not be limited by political borders, (Singh-Peterson et al.), this issue may require international political cooperation; as Washington State is one of the bordering states, they may need to work in tandem with the Canadian and American governments in order to make progress on the issues of climate change.

Environmentally, the Pacific Northwest as a region will be affected by climate change. According to The Climate Report, created by the United States' Global Research Program, "climate change is already affecting the Northwest's diverse natural resources, which support sustainable livelihoods" and has affected many native communities already (*The Climate Report*). According to the report, existing infrastructure such as transportation, water, and energy lines will likely be significantly impacted by climate change (*The Climate Report*). Because of

these complications, Washington State is potentially a state which can serve as an example for other states who have significant risks to their natural resources, indigenous communities, and infrastructure moving forward.

Because these issues deeply affect individuals within the Washington State constituency, it is necessary to understand the way that individuals interact with the democracy and with the consumer environment. While individuals may vote for a politician within a democracy which create this policy, they also make votes when making consumer decisions. Studies have been completed across the world to analyze environmentally-friendly decision making in consumer purchases. For example, the National Geographic “Greendex” survey completed in 2014 allowed individuals from around the world to give their opinions regarding environmental decision making. Specifically, the Greendex presented four subgroups of consumer decision-making- transportation, housing, food, and other consumer goods- in its analysis of the attitudes and behavior of consumers. The Greendex presented research completed in 18 countries, looking at attitudes surrounding environmentally-friendly consumer decision making and self-reported individual conduct. According to the Greendex, overall concern for the economy has decreased within the United States over the years, however, still remains a prevalent concern (“Greendex”, 2014). After compiling their research, the Greendex determined the United States placed in last place among these 18 countries in environmental friendliness, as determined by behavioral and attitudinal analysis (“Greendex” 2014). Some parts of the Greendex have been carried out elsewhere. For instance, a study was done to determine how much more Swiss consumers were willing to pay for sustainable food (Tobler, Visschers, & Siegrist, 2011). Another example is of a study in Finnish grocery stores, which measured understanding of and interest in low carbon producing food (Hartikainen, Roininen, Katajajuuri, & Pulkkinen, 2014). However, no study on

Washington State specifically has analyzed responses to a wide range of consumer decisions, education, and attitudes to the extent of this research.

Because no study about environmentally-friendly consumer decisions within the Washington State has been completed, it is necessary to understand how consumers (and therefore, constituents) make decisions, their political beliefs regarding the environment, and what they wish for the future of the environment. Furthermore, as politicians may make different voting decisions for different reasons, it is necessary to get an unbiased, clear, and nuanced perspectives on why policymakers make their decisions. By combining these points of views, an unambiguous understanding of gaps in current climate policy may be found.

Methodology

This research is split into two parts: a qualitative and quantitative research survey, and a series of qualitative interviews. For the survey, results were deemed statistically significant with a 5% margin of error and a 95% confidence rating. The researchers randomly selected 755 survey participants through mobile applications via the Pollfish survey platform, which provides in-game rewards to survey participants. Each participant was 18 years or older, lived in Washington State a majority of the time, and opted-in to participate via mobile phone applications. Pollfish ensured survey participants did not repeat the survey twice on the same device and prevented speeding through surveys (“Methodology/Panel Freshness,” Pollfish.). Participants were mostly equal among age groups, and were recruited regardless of gender or income (See Appendix E). Survey participants completed the survey via mobile application on their personal mobile devices. Pollfish utilizes Random Device Engagement (RDE), which is similar in accuracy to many other standard survey methods, including the Random Digit Dialing (RDD) survey methodology used by Pew Research Center (Goel et al.). Survey participants were

contacted in a double-blind research setting. The researchers were given some non-identifying information about the survey participants (for instance, the zip code of survey participants, the device type participants completed the survey on, etc.). Survey participants were notified that the survey was developed by University of Washington students as part of research about environmental decision making in Washington State. All participants were asked the same 15 questions, in the same order (See Appendix F).

Upon consenting to completing a Pollfish survey, participants were presented with consent language, which identified the survey as having questions which concern a person's views and opinions regarding the natural world. Using the Pollfish interface, participants were presented with a main question; for example, "how much are you aware of the following topics?", and then were presented with a number of items to rank on a Likert Scale. Participants were also asked about environmentally friendly daily actions such as the use of reusable bags during shopping or using public transit on their daily commute. In addition, a narrative-style question was included to allow participants to provide additional information on their experiences in the natural world where they live, and give additional comments that were not specifically asked in the survey.

The researchers also identified 30 Washington State Policymakers demonstrated strong opinions in areas surrounding environmental policy (either strongly for or against environmental policy, as judged by their public statements and voting record). Researchers contacted these potential participants via email or online form, in accordance with requested contact methods on official government websites. Out of these 30 policymakers, six interviews were conducted in person (five interviews) or over Zoom video conferencing (one interview) (See Appendix C) Each participant represented an area of Washington State at a local, regional, state, or national

level, or were appointed to speak to the researchers by a policymaker. Each participant spoke English, was 18 years or older, and verbally consented to the research and its transcription (See Appendix B).

After participants consented to the research, the interviewer asked a series of questions surrounding the policymaker's knowledge, experience, and opinions regarding local, state, national, and international environmental decision making (See Appendix D). Interviewees were interviewed for as long as they were willing and able to do so, but generally participated in interviews under 30 minutes in length. Furthermore, interviewees were not limited in time for their responses - interviewees were asked to speak until they believed they had finished responding to the question. If policymakers requested that the question be repeated, or requested clarification, the researcher provided these upon request. Policymakers were also notified that they may deny answering any question; however, this only occurred twice over all of the interviews.

Results

Lack of Knowledge

Research results indicate a possible barrier to environmentally-friendly policy in Washington State may be a lack of knowledge. Survey results indicated there were significant knowledge gaps among Washington State's constituency, particularly in the areas of greenwashing, carbon neutral, environmental policy, and international political events. According to the survey, the term "greenwashing" is completely unfamiliar to 48.21% of participants (Dickson and McKenney, 2019b). As 92.84% of participants purchase products with labels that state the product is "Natural", "Sustainable", "Organic", "Eco" or "Green", (Dickson and McKenney, 2019b) there may be concern over consumers facing false advertising through

greenwashing. According to a study completed in 2009, which compared “green products” against updated Federal Trade Commission guidelines, up to 98% failed the guidelines (Quinn). As awareness increases about environmental issues in Washington State, corporations may choose to label their products with misleading packaging in order to sell additional products to consumers concerned about the environment.

The belief that additional information on environmentally-friendly decision making and environmentally friendly topics is reflected among policymakers as well. According to Ryan Dicks, sustainability manager and solid waste manager for Pierce County, “the educational piece is so far behind on a number of these things” specifically surrounding consumer decisions (Dickson, 2019e). In addition, Representative Denny Heck (WA-10) states that continued “conscious raising efforts” will cause individuals to make better environmentally friendly consumer decision making, even without “price signals” included in public policy initially (Dickson, 2019c). Overall, it seems as though education on identifying truly environmentally friendly products may serve the populous in selecting products that are environmentally friendly, thus creating greater demand from consumers for environmentally friendly products.

In addition, the term carbon neutral was unfamiliar to 25.03% of participants survey participants (Dickson and McKenney, 2019b). As environmentally friendly public policy such as Seattle’s Climate Action Plan (*Carbon Neutral*), and the federally-proposed “Green New Deal” (Ocasio-Cortez) reference the term “carbon neutral”, it is essential for the populous to understand this term in order to understand the greater policy debate, ensuring they can actively participate in the democratic process. There also seems to be a gap in the public’s knowledge of environmental policy as a whole. According to the survey, 66% of respondents are unaware the legislature in Washington State are considering a statewide ban on plastic bags (Dickson and

McKenney, 2019b). As 75.1% of consumers utilize plastic bags at least part of the time, this statewide ban would affect a majority of the constituency. As this is the case, it seems as if constituents are unaware of the current policy proposals within their state regarding environmental activism.

Constituents within Washington State also seem largely unknowledgeable of some international environmental policy. While Washingtonians stated they had some knowledge about the Paris Climate Accord (61.46%), they stated that they were less familiar with other international events, such as the Kyoto Protocol of 1992 (50.66% familiarity) or the World Climate Summit which will be occurring this year (59.07% familiarity) (Dickson and McKenney, 2019b). As both the Paris Climate Accords (*The Paris Climate Agreement*) and Kyoto Protocol (*Kyoto Protocol*) request state compliance with the standards set forth in the treaty. This is typically suggested to be done through domestic policy solutions. Knowledge of these types of international events may help create more informed constituents who can actively and knowledgably interact with their policymakers in this way.

As these larger international events can greatly influence policymaking within the United States, it is important for constituents to be knowledgeable about this information. Furthermore, it seems as lower-income individuals are less likely to be knowledgeable about these issues. While 38.54% of Washingtonians state they are unaware of the Paris Climate Accord, 48.33% of individuals who fall into the lowest income tier state they are unaware of it; these disparities are similar for some other questions asking about knowledge of international events (Dickson and McKenney, 2019b). Potentially, policymakers may wish to convey this information to their constituency, particularly their lower-income constituency, more effectively. However, it is also important to note that some individuals do not have access to the democratic process as much as

others, and the ability to actively participate in the democratic process is oftentimes dependent on class, race, ability, and a number of other factors.

Concerns about Equity and Representation

When considering an individual's ability to participate in the political process, it must be noted that demographic factors can lead to individuals to having a reduced ability to partake in traditional areas of political participation such as attending city council meetings. For instance, 60% of individuals who work nontraditional hours make less than the median household income (Enchautegui). If someone is working at that time, they will be unable to attend city council meetings, unless if they take leave off, which is often limited (Enchautegui). As such, low-income individuals may be less likely to speak at local council meetings, and therefore, risk not having their voices heard during meetings.

In addition, a person's other characteristics, such as race, oftentimes impact their ability to participate in the political process. According to the book *The Story of Stuff: The Impact of Overconsumption on the Planet, Our Communities, and Our Health- And How We Can Make It Better*, indigenous communities oftentimes live in areas with the most natural resources, which are then exploited, oftentimes without the community's consent or vote for the project (Leonard). This concern is portrayed by some policymakers who were interviewed. According to Representative Denny Heck (WA-10), rising pollution levels may affect salmon in the local area which affects his constituency. According to Heck, the loss of salmon is "not just a treaty obligation... (it's) a species which is spiritually iconic for the people who have lived here for thousands of years" (Dickson, 2019c). This is also reflected by Representative Sharon Shewmake (D-42), who has Lummi tribal lands within her district. According to Shewmake, flooding is occurring, which "blocks off the Lummi Indian Tribe" (Dickson, 2019d). These

examples some which demonstrate some communities are affected by climate change disproportionately, and thus, need to be taken into additional consideration in environmental policy. According to *The Climate Report*, “indigenous communities in the Northwest United States oftentimes face increasingly larger issues of climate change; tribes and Indigenous peoples [are] those most dependent on natural resources for their livelihoods, and the economically disadvantaged [face the need to] ... prioritize basic needs” making them less resilient to climate change (*The Climate Report*). In addition, issues of equity cross race, income, and ability lines. According to *The Climate Report*, climate change has already resulted in a number of potentially devastating effects, such as more exposure to heat waves, additional health impacts to “children, older adults, low-income communities, and some communities of color” and barriers to agricultural production due to a lack of potable water (*The Climate Report*). As individuals in low-income areas are more impacted by climate change (Balasubramanian), specifically in the areas of food insecurity (Dodge et al.), health issues such as asthma (Ashe and Salsburg), and negative effects from flooding events (Veenema et al.). These impacts were reflected within the survey results as well. According to the survey results, low-income individuals state that they are affected by flooding around the world at a higher rate (91%) than their middle-income peers (81.5%) (Dickson and McKenney, 2019b). Interview results state that individuals are more likely to be impacted by local flooding as well. According to Representative Denny Heck (WA-10), “lower income people are more impacted when there are flooding events” than higher income individuals (Dickson, 2019c). As individuals who experience a lack of political representation also may disproportionately face impacts related to climate change than their middle-income peers, policymakers may endeavor to understand the needs of lower income constituents, even if they are unable to attend city council meetings or hearings throughout the day.

Individuals who represent lower-income communities oftentimes see the effect climate policy has on their constituency. According to Port Angeles' Mayor, Dr. Sissi Bruch, the city would like to implement additional environmentally-friendly public policy, but "We know we can't do everything we would want to, because our citizens can't afford it". This concern is reflected among some other policymakers as well. According to Representative Denny Heck (WA-10), when considering a potential "gas tax" he was most concerned that "[the tax would] not disproportionately impact...people of less means" (Dickson, 2019c). This shows policymakers consider income in the implementation of climate policies, meaning potential policy proposals also should consider this factor.

Interviewed policymakers state consumer decisions made by lower income individuals are oftentimes influenced by their income. For example, Ryan Dicks explained that while some individuals may save money using a reusable water bottle, "some people don't have access to clean water, and so there's a lot of complexity" in individual consumer decisions (Dickson, 2019e). However, some policymakers state that an individual's income may decrease their carbon footprint as well. According to James Parvey the Chief Sustainability Officer at the Center for Urban Waters, "[if all of your income is going towards] shelter and food, there's not a lot of options, or different choices you could make, or reductions" (Dickson, 2019a). The idea that a person's income can reduce their carbon footprint is reflected by other policymakers as well. According to Representative Sharon Shewmake (D-42), "rich people also are more likely to take plane rides, and so they do tend to have a higher carbon footprint than people that are lower-income" (Dickson, 2019d). This shows policymakers may believe lower-income constituencies have less options in their day-to-day life, which potentially may reduce their carbon footprint.

Impact of Income in Environmental Decision Making

Survey indicate income may also impact an individual's ability to make environmentally friendly decision-making, and results suggest a person's income makes a larger impact in environmentally-friendly consumer decision making in relation to food purchases than their higher income peers. According to the survey results, 60% of low-income individuals state that the cost of food is very important in their purchasing decisions compared to 40.66% of their higher-income peers (Dickson and McKenney, 2019b). This may limit a person's ability to purchase less-packaged foods. In addition, food deserts tend to limit a person's ability to purchase food which is not heavily packaged.

Accessibility of food is also demonstrated across the United States. According to the U.S. Center for Disease Control, "Rural, minority, and low-income areas are often the sites of food deserts because they lack large, retail food markets and have a higher number of convenience stores, where healthy foods are less available" ("Food Desert"). Because lower income individuals are less likely to be able to have immediate access to fresh food (which tends to have lower amounts of plastic packaging than processed food), lower income individuals oftentimes have reduced access to fresh and ecofriendly food choices. However, access to fresh, organic food specifically seems to be something that individuals across the income spectrum wish they had access to- according to the survey, 73.77% of individuals believe organic foods should be available to everyone (Dickson and McKenney, 2019b). The availability of organic food may provide lower-income households access to healthier foods (including those which have less packaging than processed foods) as well as meet the wishes of the constituency. In addition, access to other environmentally friendly actions seems to be a need. According to the survey, 69.67% of individuals stated if they had greater access to environmentally friendly items for

consumer purchases, they would choose to purchase them (Dickson and McKenney, 2019b). Innovative technologies such as Loop, which will be offering the ability to have delivered shopping items in reusable packaging (Yang) may be an example of how reusable packaging can be available to some. However, the Loop program will require a down payment to start (Wiener-Bronner), and thus it may be inaccessible to some individuals.

Lower income individuals are also less likely to drive electric cars during their commutes. According to Michael Penuelas, legislative assistant for Representative Sharon Shewmake (D-42), he presently drives a gasoline powered truck he bought when his lifestyle required it; though he works on climate policy, he states replacing it with an electric version is too expensive at present despite stating his assertion that he has “enormous amounts of privilege, in all kinds of ways, including financial, over the average American” (Dickson, 2019b). Economic barriers such as these may be reasons why lower income individuals disproportionately do not drive electric cars as much as their upper income peers. However, this is not agreed upon by all policymakers. According to Ryan Dicks, “it's an uphill battle because people don't know that an electric car is cheaper” than a gasoline powered car overtime (Dickson, 2019e). However, he also acknowledges that this may not be possible for all individuals, stating “sometimes that isn't possible, either... but giving people choices... like walking, biking, transit, [which are] the more economically favorable choice[s]” are good solutions (Dickson, 2019e). This shows educational initiatives and creating ways for people to make economically affordable and environmentally friendly choices may be beneficial for the lowest income individuals, rather than providing subsidies for adoption of electric or hybrid vehicles.

An individual's limited income also impacts policymaker's ability to make environmentally friendly policy decisions. Within some regions which rely on industries which are considered "dirtier", crafting environmental policy in consideration of local industry is incredibly difficult. According to an interview with Representative Shoemake, her district has two oil refineries; thus, environmental policies must ensure they do not damage the economy (Dickson, 2019). According to Representative Sharon Shewmake (D-42), industries that are traditionally perceived as "dirtier" are not necessarily as dirty as some may think. According to Shewmake, "oil should be refined in [her] district, and in the refineries in Washington State, because they are the cleanest and the safest in the world" (Dickson, 2019d). At the same time, Representative Sharon Shewmake (D-42) stated that she considers the impacts climate change has on the local economy; she states that it is a balance between working to support current economic workers and protecting future workers from externalities from climate change. According to Representative Sharon Shewmake (D-42), "frankly, I think our biggest environmental problems- climate change- are things that need to be done on the governmental level- that there's a massive coordination problem, and, as an individual, I can't necessarily put pressure on my... the people who generate my power" (Dickson, 2019d). Policymakers are aware of the individuals who are able to keep them elected- their constituency- and wish to ensure constituents present and future will have access to economic opportunity.

Role of Corporations in Political and Personal Decision Making

Many individuals state political decision making in Washington State is impacted by the influence of corporations on initiatives, policymakers, and campaigns. For instance, in the last attempt at passing a carbon tax in 2018, "companies like Chevron and BP donated \$31 million to oppose the measure—the most a ballot measure opposition campaign has ever spent in the state"

(Anzilotti 2018). The influence of corporations in public policy are not new. In apparent reference to the Citizens' United Decision, which established corporations could donate to political campaigns it is free speech, Representative Denny Heck (WA-10) stated:

“Corporations aren't people, but people run corporations and they tend to be almost exclusively motivated on their bottom line considerations. I don't think it's a reasonable expectation in a market-based economy for us to...endlessly hope that they set aside their objective. On the other hand, I for one would sure as 'heck', pun intended, like for them to stop being so resistant... to the changes [in climate] policy”.

With the legal ruling of Citizen's United in place, it seems as if any proposed policy must take into considerations the interests of corporate entities. However, there are also some who say they would like to make it in a corporation's best interest to be environmentally friendly. According to Ryan Dicks, “(corporations) will do things when it is in their best interest, and we need to make it so it is in their best interest to do good things” (Dickson, 2019e). This was echoed by James Parvey. Within his interview, he stated individuals do not necessarily know all they are purchasing when they make consumer decisions- they do not know the cost of the packaging. According to Parvey, consumers face asymmetric information when making purchasing decisions; he states corporations “don't necessarily look for options that are less environmentally impactable, or least expensive for the consumer... people aren't able to evaluate [the costs of the packaging]” in their purchasing decisions (Dickson, 2019a). Increased awareness of this may eventually encourage consumers to advocate for more environmentally-friendly and cost-effective packaging, thus, reducing the environmental impacts of packaging. However, policymakers also state that their constituents have a relatively large amount of power *en mass* to make changes, if they have the ability to do so. According to Parvey, if constituents

show a want that can be granted by the market, that want “starts driving companies and policymakers to figure out how to accommodate (it)” (Dickson, 2019a). Overall, it seems as policymakers believe they may be able to rely on market pressures to a certain extent, however, additional regulation is necessary in order to direct their actions towards change.

Local Politics Grow to Larger Movements

Policymakers seemed to believe smaller policies can provide a basis for larger policies over time. According to Michael Penuelas, Legislative Assistant for Washington State Representative Sharon Shewmake (D-42), “you have to get local buy-in, you have to have local communities be involved in the creation of the solution before you can move it at a higher level... at the core of our politics, I think solutions have to start locally” (Dickson, 2019d). If this is the case, it may be that constituencies should be better aware of environmental policies outside of their own district in order to better advocate for good environmental policies in other districts. Policymakers tend to believe seeing the changes which have occurred internationally, and their effectiveness is beneficial to more local governments. According to Ryan Dicks, “we can sort of learn from mistakes made on the bleeding edge of policy [as we are 2-3 years behind international policy in Pierce County]” (Dickson, 2019e). As this allows policymakers to be better informed decisions, it may be beneficial to look at ways in adapting environmental regulations from other states or countries as a frame for more localized policy.

Support of Environmentally Friendly Regulation

When considering policy implementation, policymakers should be responsive to the wishes of their constituencies, as well as aware of the needs their constituencies in the present and future. Rousseauian political theory states “The government must always be responsive and responsible to the sovereign, the people”, and thus they must serve the public’s interests (Faber). Because of this, Washington State’s representatives must be responsible to ensure the climate,

something which affects all of their citizens, is protected, so long as the citizens wish for the environment to be protected. According to the survey, Washingtonians feel as if policymakers on the national level should be involved in the creation of policy to regulate the use of single use plastics. 82.13% of respondents of the survey believe the national government should be involved in regulating single-use plastics (Dickson and McKenney, 2019b). This shows that some level of environmental regulation may be popular on a national level. In addition, there seems to be an approval for being willing to sacrifice in consumer-decision making, be it through reduced consumption or increased regulation within Washington State. According to the survey, 71.66% of Washingtonians are supportive of the statement “we should make sacrifices in consumer decisions for the long-term health of the global environment” (Dickson and McKenney, 2019b). Policymakers seem to agree with this. According to an interview with the Mayor of Port Angeles, Dr. Sissi Bruch, constituents and policymakers should “absolutely” make sacrifices for long-term environmental sustainability. According to Bruch, she believes thinking about the effect of policy decisions seven generations in the future is critically important and may provide a guide to thinking about the environment (Dickson and McKenney, 2019a). Other policymakers state they do not believe it to be a sacrifice. According to Representative Denny Heck (WA-10), specific policy proposals which to some may be considered a sacrifice may not in fact actually be a sacrifice. He stated “should [constituents] have to pay more for their gasoline in order to discourage it’s use and encourage the use of increased fuel efficiency in electric cars? Uh, probably yes, but, is... is that a sacrifice when if they don’t, we’re all going to pay the cost?” (Dickson, 2019c). This awareness of the sacrifices individuals have to make—either now in decision-making and regulation, or in the future in increased wildfires, decreased

crop yield, and decreased amounts of potable water—is consistent amongst policymakers and constituents.

Support of Carbon Pricing

Increased regulation, particularly in the form of carbon pricing (or a carbon tax) were constantly popular amongst most policymakers interviewed. Policymakers described this in a variety of different ways. According to Representative Denny Heck (WA-10), there are three different ways to start to fix the issue of climate change: a command and control policy, where “[businesses] simply cannot emit more than x, period”, a Cap and Trade, where society makes a free market for carbon production, and where businesses can sell or trade their ability to produce carbon to other corporations, or “carbon pricing”, in which there is a tax on the production of carbon (Dickson, 2019c). Policymakers were overwhelmingly in favor of carbon pricing. According to Representative Denny Heck (WA-10), “carbon pricing is probably the most efficient way to deal with it, because what it does is build [environmental costs] into the [economic] system...so that... neither the producers nor the users of products that result in carbon [change]... are held harmless for... the cost associated with carbon emission” (Dickson, 2019c). According to the majority of policymakers, a carbon tax will likely be the least restrictive on businesses. However, its effectiveness on controlling carbon emission is disputed.

The effectiveness of carbon pricing is debatable. According to an article by economist William A. Pizer, policies which require only price controls may lead to producers to simply paying a fee to avoid reducing their carbon production (Pizer, 2002). Implementing a carbon tax may be beneficial in affording other portions of solutions focused on climate resiliency (such as educational tools to educate individuals about climate positive actions, or providing subsidies for local vegetables for individuals in need), while also reducing the amount of carbon emitted in the

atmosphere. While some may argue carbon pricing may hurt the economy if the funds produced by it are not allocated correctly, the Congressional Budget Office stated that a nationwide carbon tax may provide up to \$1.2 Trillion of federal government revenue (Congressional Budget Office, 2013). Allocated well, these funds could potentially offset any lessened economic productivity, and help those who are identified by Representative Denny Heck (WA-10) as most impacted by the carbon tax and climate change- low income individuals- adjust to the changes they may face in their household budgets.

Carbon pricing has been shown to be effective while not hurting the greater economy in other countries. Carbon pricing was shown to neither help, nor hurt, the British Columbia economy after implementation, and reduced environmental impacts at the same time (Lindsay). In addition, it has been noted that B.C.'s carbon tax has "shelter[ed] the BC economy from future petroleum price increases and volatility" (Elgle & McClay, 2013). Because experiments such as these have proven success, a revenue neutral carbon tax combined with some regulatory actions on the consumption of carbon may provide a step forward towards reducing carbon consumption, while providing additional funds for climate resiliency measures.

However, there is some concern of the economic impact of these regulations. According to the survey, 42.62% of Washingtonians agree or strongly agree that increased environmental regulation will have a negative impact on the economy, with 31.52% of individuals stating neutrality on the issue (Dickson and McKenney, 2019b). Because of this, policymakers need to ensure their policies do not negatively impact the environment and that this is communicated effectively to their constituency. However, some policymakers counter beliefs of Washingtonians, stating that these policies, once implemented, will not necessarily be worse for the economy than taking no action. According to Representative Shewmake (D-42), "we need to

be considering the economic impacts of climate change, for example” as well as weighing the effects of climate change in the short term and the long-term impacts of all actions (Dickson, 2019d). While the economic implications of climate change and environmental policy are disputed, most believe there is some impact that climate change and environmental policy will have on the economy.

Recommendations

In order to pave a better environmental and political future for Washington State constituencies, it is important to consider the barriers and effects of climate change, and the impacts specific policy may have on the constituency. Particularly, increased focus on climate resiliency measures through education and access may be beneficial. Using funds gained through a revenue neutral carbon tax, providing the public information about common consumer tactics of trickery such as greenwashing may assist in having consumers make eco-friendly decision making. Consumers state they are open to receiving more information on these topics. In addition, 64.77% of constituents state that if they had more knowledge about environmentalism, that they believe they would make more eco-friendly consumer decisions. As this is the case, making the public aware of tactics such as greenwashing may make them more aware, and put pressure on corporations to provide truly green products to those who are requesting them.

Additionally, there seems to be a lack of knowledge of environmental policy which is occurring both across the state and the world. Providing addition information on environmental policies (both local and international) within an accessible format is likely to allow individuals who are less likely to be able to engage traditionally in the political system to still participate and make their voices better heard. If the public is more knowledgeable about environmentally-friendly public policies, they may be more likely to support them. As Washington State is

currently working to pass and implement a state-wide plastic ban (The Associated Press, March 2019.), but over 40% of Washingtonians are unaware of this fact, it may prove beneficial to provide this information in an accessible format to all constituents.

It is also important for Washington State to provide access to environmentally friendly decisions, and assist those individuals and communities who suffer disproportionately from climate change impacts. One way of doing this in a cost-effective way is to provide double the food stamps at certain local farmer's markets for fresh produce (Charles, 2014). By implementing this policy in extreme food deserts, lower-income individuals will have more access to local fruits and vegetables, increasing access to healthy and affordable foods, while reducing the amount of packaging and gasoline used to produce processed food products. Bills like these have passed in states, such as Michigan, where an additional \$100 million was allocated towards doubling the amount of money which could be spent for food stamps at farmer's markets (Charles, 2014). By utilizing the funds generated by the carbon tax, some of the impacts of climate change as well as the tax would be offset, while also providing additional access to farmers markets and to healthy food.

Primarily, a revenue neutral carbon tax may be beneficial in Washington State. Common critiques of the carbon tax include that it sets price controls rather than quantity controls, and thus, would not guarantee a reduction in carbon. According to Pizer, a carbon tax would allow for corporations to pay for the right to produce additional carbon (Pizer). Through this, occasionally, nation-states will increase their net carbon emissions. For instance, Norway "GHG emissions increased by 15% from 1991, when it implemented a carbon tax, to 2008" (Sumner et al. 2011). However, the authors also state that the country experienced a large amount of GDP growth (70%) in the same timeframe (Sumner et al. 2011). If properly taxed, the negative

externalities of this increased production could potentially reduce demand for carbon in other areas (for instance, reducing the need to power homes on natural gas through the use of solar power), which may offset at least some of the impacts of increased carbon usage. In addition, this appears to be political feasible as well. As previously stated, policymakers state increased regulation, particularly a carbon tax is possible.

This also appears to potentially meet requirements from other entities such as corporations as well. According to Representative Shewmake (D-42) her office has “been having conversations in this office about corporations wanting to see a price on carbon, even the ones that are emitting a ton of CO₂ and that are creating a lot of fossil fuels. One of the reasons why, is because the other regulations are more onerous and less effective”. This is true- in comparison to two other dominant ways of controlling carbon output, through quantity control (Pizer), a carbon tax would give corporations more flexibility in the amount of carbon they can legally emit. However, it is important for policymakers to actively engage corporations on this topic; otherwise, they may lose popular support through corporations lobbying to constituents about the negativities of the carbon tax. As shown in the case of the carbon tax initiative in 2018, corporations such as BP and Chevron are willing to put large sums of money towards convincing the public that carbon pricing is a bad idea for the economy (Anzilotti 2018). Thus, if the policy passes in the state legislature, additional information of the expected impacts on local economies are necessary to reassure individuals the economic future of the state is protected.

Conclusion

Ultimately, in order to impact the issue of climate change substantially, it is necessary to attempt changes at local levels first. While climate change is an issue which crosses borders, policymakers have stated that local and state policies are oftentimes trial spaces for national

policy creation. As such, Washington State may do best by focusing its attention and funding in the implementation of a revenue neutral carbon tax, with additional funds put towards educational initiatives, greater access to healthy and environmentally-friendly foods, and additional climate resiliency measures, as necessary. In order to address a problem as interconnected and large as climate change, changes on local levels (such as access to contributing to political debate with non-traditional work schedules), as well as more systematic changes (such as a carbon tax) are necessary in order to address consistent concerns pointed out by the constituency.

Climate change is a global issue, but interviewees and survey respondents consistently showed growing concern for the environment and its impact on the economy, social welfare, and future generations. As policy is created, current gaps in environmental policy need to be filled in ways that address concerns of all involved actors—constituents, policymakers, and businesses—while also acting quickly in order to meet the goals set out by individual states—such as the climate alliance—as well as to save the environment and national interests.

While climate change is a large-scale issue, it also can be used as a topic to analyze the ability of democracy to act in the interests of the citizenry. As constituents and policymakers agree change needs to be done, a well-functioning democracy should adequately address these issues—it is up to the constituents and policymakers to work towards solutions for the environment and the citizenry—present or future.

Appendix A- Glossary of Terms

Asymmetric information: One entity has more advantageous information than another entity. In a consumer-producer relationship, a producer may know how much it costs to produce an object, whereas a consumer does not.

Attitudinal analysis: Study of people's beliefs and opinions

Cap and trade: A policy which sets a limit on carbon production and either gives away or auctions off vouchers to produce carbon. Vouchers then can be traded by entities that have them and do not need them to other entities that wish to have the right to produce carbon.

Carbon footprint: the amount of carbon above net-zero emissions an entity produces.

Carbon neutral: Creating a system where the carbon which is produced is offset through carbon reduction efforts, such as through planting trees.

Carbon pricing: A policy which sets a cost on production of carbon, and charges entities for producing that carbon.

Climate resiliency: the ability to withstand the effects of climate change

Command and control: A policy which sets a limit on carbon production, and requires entities to comply with that level of production.

Constituencies: Groups of individuals formally represented or served by public officials.

Consumer environment: the area of life in which individuals make consumer decisions, such as in the grocery store, mall, or online retail stores.

Familiarity: A score of at least "a little familiar" on the Likert scale.

Gas tax: See Carbon Pricing

Greenwashing: Exaggerating the environmental benefits of a product, oftentimes in order to attract environmentally-friendly products.

Interstate: Between states bodies (such as between Washington State and Oregon) or between countries (such as between the United States and Canada).

Likert scale: A commonly utilized scale which measures people's level of agreement from 1-5, from strongly disagree to strongly agree.

Low-Income: A family income of under \$50,000 per year.

Middle-Income: A family income between \$50,000 per year and \$100,000 per year.

Nation-state: A political body, traditionally recognized by international organizations such as the United Nations (UN) as a legitimate government.

High-Income: Above \$100,000 per year

Non-traditional hours: Work hours that are outside of the typical daytime work hours (8-5)

Paris Climate Accord: Commonly known as the "Paris Agreement", the Paris Climate Accord is a part of the United Nations Framework Convention on Climate Change (UNFCCC), and serves as an international agreement between nation-states in order to reduce the amounts of greenhouse gas emissions overtime.

Price controls: limiting the amount of carbon production through price-based measures

Quantity controls: limiting the amount of carbon production through a strict regulatory limit.

Appendix B: Verbal Consent Agreement

**Verbal Script for Obtaining Informed Consent
(adapted from: Graduate Student Co-Investigator – Consent Documentation Waived from
Ohio State University)**

Hello, my name is Rebecca Dickson. I am a current student at the University of Washington Tacoma in the Global Honors Program. As part of my thesis for the program, I am completing academic research about environmentally conscious decision making and policy making within Washington State.

Today, I am interviewing you regarding your views on environmental policy and your experiences in your (district/region/state/city). This will be extraordinarily valuable in understanding the views of policymakers in environmental policy.

This interview will take about 30-45 minutes of your time.

The information you provide may be used or shared with other researchers or published without your additional informed consent.

There are minimal risks to your participation, primarily due to the political nature of some questions we will ask.

Participation is voluntary. If you decide not to participate, there will be no penalty, and we will stop the interview. You can, of course, decline to answer any questions at any time, as well as to stop participating at any time, also without any penalty.

If you have any additional questions concerning this research or your participation in it, please feel free to contact me, my thesis supervisor or our university research office at any time. I would like to make a tape recording of our discussion, so that I can have an accurate record of the information that you provide to me. I will transcribe that recording by hand. This will be recorded in audio form

Do you have any questions about this research? Do you agree to participate? Do you also agree that I may record our discussion?

Thank you.

Appendix C: List of Policymakers

Name	Area of Representation	Title	Date of Interview	Method of Interview
Mayor Sissi Bruch	Port Angeles, WA	Mayor	March 8, 2019	Zoom Video Conferencing
Representative Denny Heck	10 th District	National Representative	March 20, 2019	In Person
Michael Penuelas	42 nd Legislative District	Legislative Assistant	March 21, 2019	In Person
Representative Sharon Shewmake	42 nd Legislative District	State Representative	March 21, 2019	In Person
Ryan Dicks	Pierce County, WA	Sustainability Manager and Solid Waste Management	March 20, 2019	In Person
Jim Parvey	Tacoma, WA	Chief Sustainability Officer, City of Tacoma	April 4, 2019	In Person

Appendix D: List of Interview Questions

Scientific Knowledge/Opinions related questions

1. **In your point of view, what is the primary cause of climate change? What is the effect of climate change, if any, on the prevalence and severity of natural disasters, such as droughts, flooding, etc.?**
2. **What is the relationship, if any, between climate change and environmental concerns within your district/region/state?**
3. **What are the primary environmental concerns you see within your district/region/state?**
 - a. *How does this affect people within your district/region/state?*
4. **What is the connection between global and local environmental issues in your district/region/state?**

Policy Related Questions

5. **In your point of view, what areas of public policy are related to climate change and/or environmental issues?**
 - a. *In your point of view, what public policy, if any, should be changed/added in order to change consumer behavior, as it relates to environmental issues?*
 - b. *In your point of view, what is the relationship between environmental issues and the economy within your region/district/state?*
 - c. *In your point of view, what public policy on a state level, if any, should be changed in order to reduce the effects of climate change and/or environmental harm?*
 - d. *In your point of view, what public policy on a national level, if any, should be changed in order to reduce the effects of climate change and/or environmental harm?*
 - e. *What public policy, if any, should be changed in order to reduce the use of single-use*

plastics?

f. Recently, there have been initiatives, started by citizens, with the stated goal to reduce the amount of carbon found within the atmosphere (colloquially named the “Carbon Tax”). In your point of view, are these initiatives beneficial to preventing climate change?

Consumer Decision Making

6. In your point of view, what is the role of consumers and their individual consumer decisions, such as using plastic bags, purchasing a car, etc., in local environmental issues?

a. Should consumers make sacrifices in consumer decisions for long-term health of the environment?

7. What is the role of corporations and large-scale producers in environmental issues?

8. In your point of view, what is the relationship between a consumer’s socio-economic status and their potential for making environmentally friendly purchasing decisions?

International Relations Related Questions

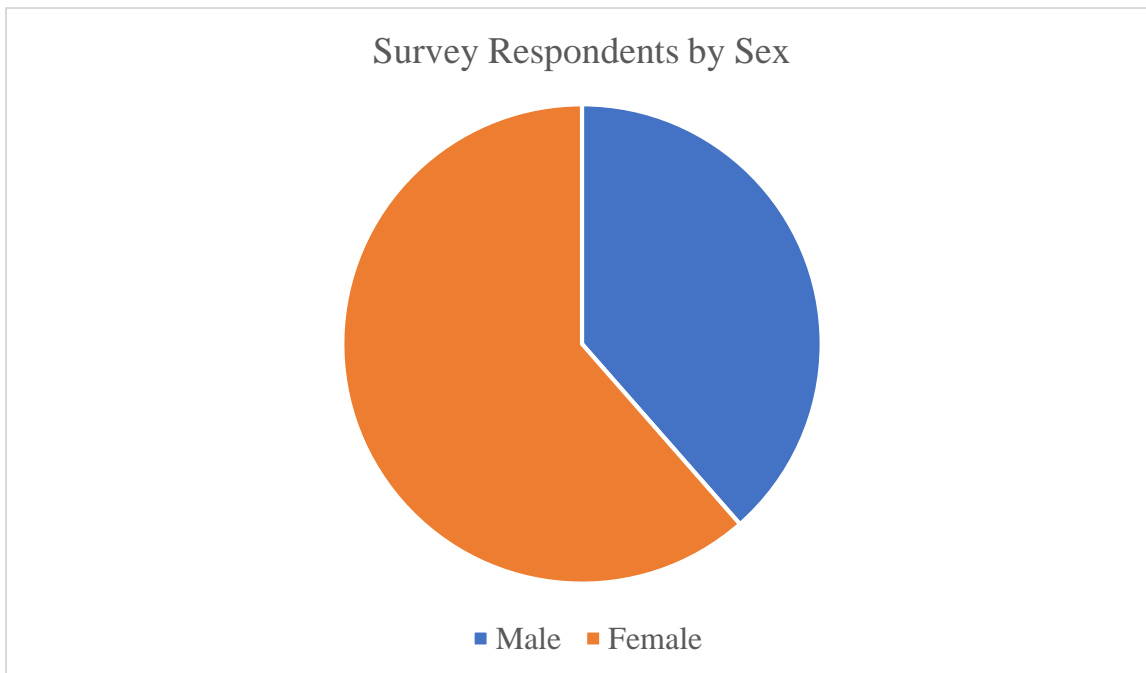
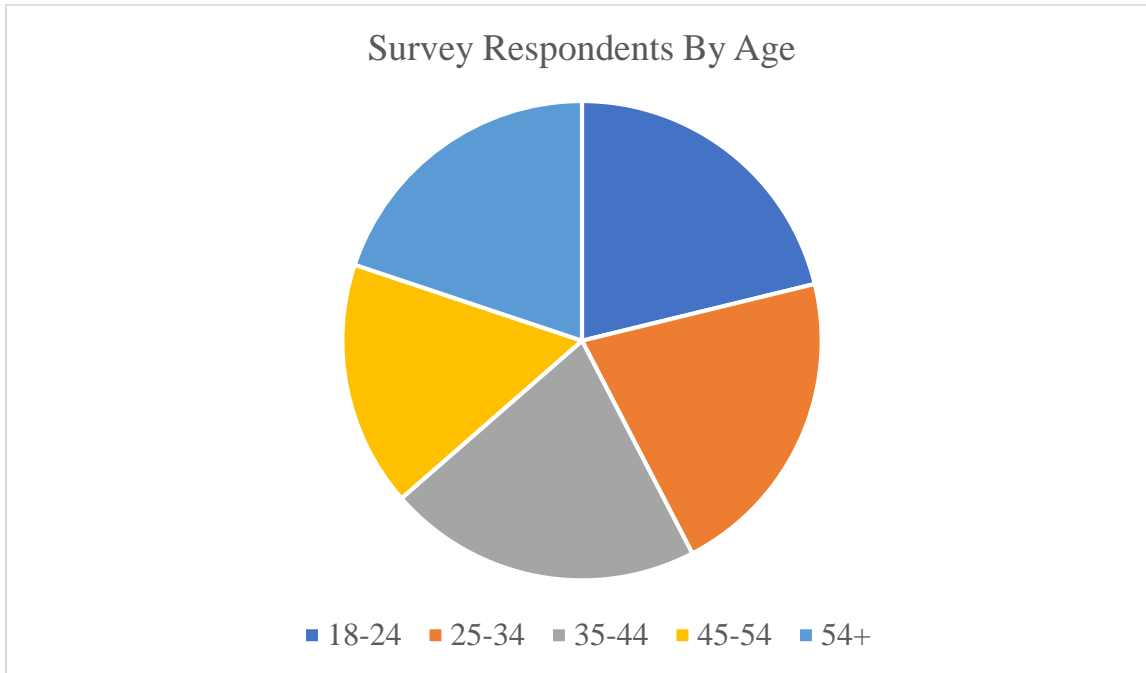
9. In your point of view, what is the role of the international political cooperation (such as the Paris Climate Accords, Kyoto Protocol, etc.) in reducing the effects of climate change and/or environmental harm?

a. In your point of view, what is the relationship between the forming of relationships among sovereign nations and climate change and/or environmental harm?

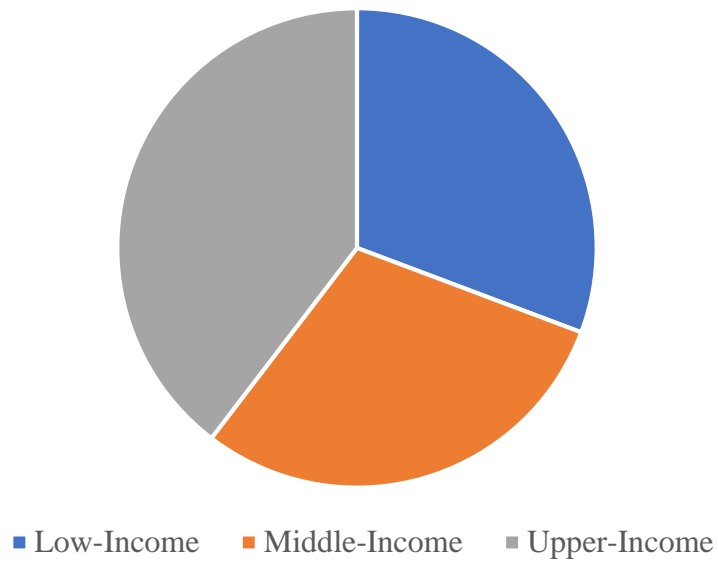
10. In your point of view, what is the relationship between national security and climate change?

a. In your point of view, what is the relationship between climate instability and the military?

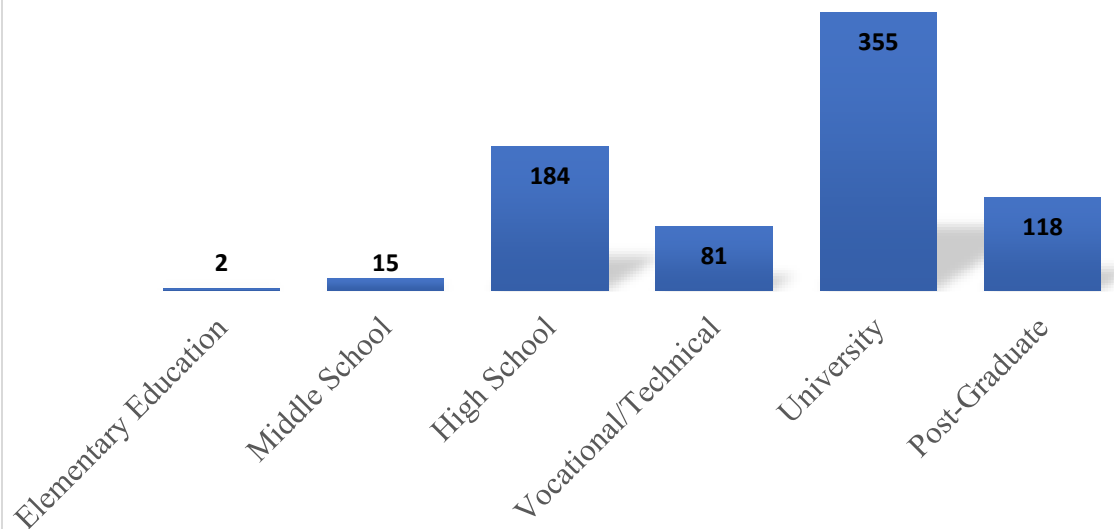
Appendix E: Age, Sex, Income, Educational Completion, and U.S. Congressional District Distribution of Survey Respondents



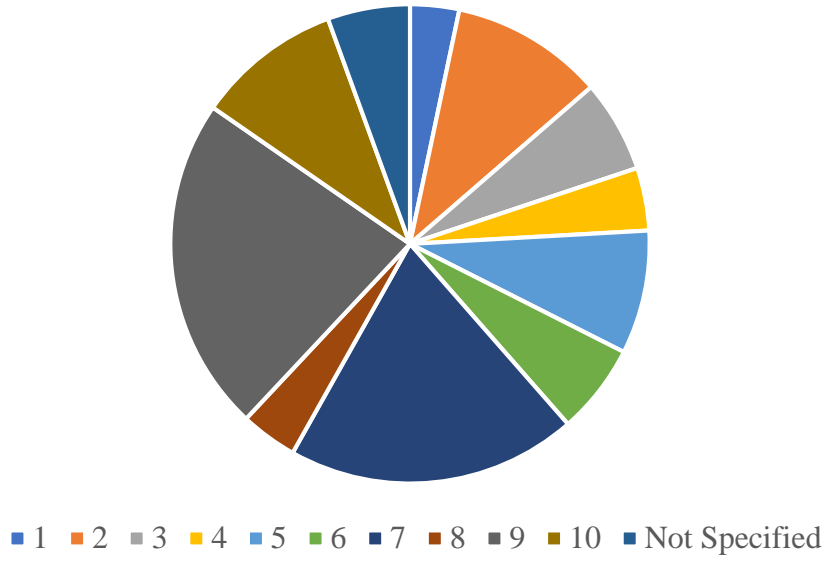
Survey Respondents by Income



Survey Respondents by Educational Completion



Survey Respondents by U.S. Congressional District



Appendix F: List of Survey Questions

Consent Agreement: This survey has questions about your views and actions concerning the natural environment. Participation is voluntary. Your answers to this survey will be used in a project about environmental decision making. It may be used by University of Washington undergraduate students for research and presentation, and has received exempt status by the UW Institutional Review Board.

Question 1: How familiar are you with the following concepts?

- A. Answers
- B. Single use plastic
- C. Carbon footprint
- D. Climate change
- E. Environmental degradation
- F. Environmentally sustainable
- G. Renewable
- H. Greenwashing
- I. Biodegradable
- J. Carbon neutral
- K. Green energy

Question 2: How familiar are you with the following concepts?

- A. Ocean acidification
- B. Ecosystem restoration
- C. Community food gardens
- D. Eco-Art

- E. Locavore (only eating locally grown foods)
- F. Environmental remediation
- G. Permaculture
- H. Ecological activism
- I. Global sea level rise
- J. Compost

Question 3: Imagine you are deciding to buy a car. How important would the following factors be in your decision about which car to buy?

- A. Safety
- B. Popularity – What other people are buying
- C. Environmental Friendliness
- D. Family traditions / Culture
- E. Fuel efficiency
- F. Purchase price
- G. Maintenance costs
- H. Ethical sourcing
- I. Brand/Model loyalty
- J. Reliability

Question 4: Imagine you are deciding to travel for leisure. How important would the following factors be in your decision about where to travel?

- A. Safety
- B. Popularity – Where other people are traveling
- C. Environmental Friendliness

- D. Family traditions / Culture
- E. Activities / Attractions at the destination
- F. Convenience
- G. Location
- H. Ethics
- I. Cost

Question 5: Think about your grocery shopping. How important are the following factors in your choices about which food to buy?

- A. Health of food
- B. Popularity – What other people are buying around you
- C. Environmental Friendliness
- D. Family traditions / Culture
- E. Religion
- F. Convenience
- G. Brand loyalty
- H. Ethical sourcing
- I. Cost
- J. Taste

Question 6: How much do the following GLOBAL environmental issues impact your daily life?

- A. Deforestation around the world
- B. Water pollution around the world
- C. Air pollution around the world
- D. Rising sea level around the world

- E. Wildlife population decline around the world
- F. Increasing daily temperatures around the world
- G. Drought around the world
- H. Flooding around the world
- I. Natural resource depletion around the world
- J. Ocean acidification

Question 7: How much do the following LOCAL environmental issues impact your daily life?

- A. Water pollution from oil in your local area
- B. Water pollution from plastic in your local area
- C. Air pollution from wildfire smoke in your local area
- D. Air pollution from smog in your local area
- E. Rising sea level in your local area
- F. Increasing daily temperatures in your local area
- G. Drought in your local area
- H. Flooding in your local area
- I. Wildlife population decline in your local area
- J. Natural resource depletion in your local area

Question 8: How frequently do you do the following actions?

- A. Recycle
- B. Reduce consumption of all products
- C. Use reusable shopping bags
- D. Compost food scraps or use compost collection bins
- E. Bicycle to work or school

- F. Carpool to work or school
- G. Drive an electric or hybrid car to work or school
- H. Use/take public transit (e.g. bus, train, etc.) to work or school
- I. Walk to work or school
- J. Grow a food garden or use a community food garden

Question 9: How frequently do you do the following actions?

- A. Buy products that have a label saying, "Natural" or "Sustainable" or "Organic" or "Eco" or "Green"
- B. Buy organic food
- C. Buy the cheapest products
- D. Buy the best quality products
- E. Buy the healthiest products
- F. Buy products from second-hand or thrift stores
- G. Buy brand name products
- H. Repurpose items or products OR use reusable products
- I. Avoid purchases with too much packaging/single use plastics
- J. Use "buy, sell, trade" websites or social media pages

Question 10: How much do you agree or disagree with the following statements?

- A. The U.S. national government should be involved in the regulation of single-use plastics.
- B. Major companies and corporations should do more to be environmentally friendly.
- C. The United States should be the front runner when it comes to being environmentally friendly.
- D. Other countries should do more to be environmentally friendly.

- E. Environmental regulation can have a negative impact on the economy.
- F. Environmental issues (e.g. pollution, etc.) can have a negative impact on the economy.
- G. Environmental issues (e.g. pollution, etc.) are a national security issue in the United States.
- H. Climate change is a national security issue in the United States.
- I. Humans play a role in the changes happening in the world's climate and environment.
- J. We should make sacrifices in consumer decisions for the long-term health of the global environment.

Question 11: How much do you agree or disagree with the following statements?

- A. Having a cheaper or less expensive products is more important than being environmentally friendly.
- B. Organic food should be available for everyone.
- C. Your income plays a role in what, if any, environmentally friendly products you buy.
- D. The condition (good or bad) of the global environment directly impacts the health of every person.
- E. The condition (good or bad) of your local environment directly impacts the health of local people.
- F. The Earth needs large actions by a few people to improve the condition of our natural environment.
- G. The Earth needs small actions by many people to improve the condition of our natural environment.
- H. If you had a higher income, you would make more environmentally friendly choices.

- I. If you had a more knowledge on these issues, you would make more environmentally friendly choices.
- J. If you had more access to environmentally friendly items, you would choose more of them.

Question 12: How familiar are you with the following occurrences in Washington State?

- A. The city of Tacoma enacted a plastic bag ban in July 2017.
- B. The city of Seattle enacted a plastic straw ban in July 2018.
- C. Washington state legislature is proposing a ban on plastic bags for the whole state.
- D. The city of Tacoma has an Electric Vehicle Discount Program.
- E. The city of Spokane is proposing to use 100% renewable electricity by 2030.
- F. The Washington State Carbon Tax Initiative of 2015 and 2018 failed to pass both times.
- G. Oil company Tesoro wanted to build the largest oil shipping terminal in the U.S. in Vancouver, WA.
- H. WA state Environmental Priorities Coalition wants Washington to reach 100% clean energy in 8 years.
- I. The Southern resident orca population are considered critically endangered.

Question 13: How familiar are you with the following occurrences in the U.S. and around the world?

- A. The United Nations Framework Convention on Climate Change aka Kyoto Protocol that happened in 1992.
- B. The United Nations Framework Convention on Climate Change aka Paris Agreement that happened in 2015

- C. The U.S. government just released a report saying climate change will negatively impact the economy
- D. The World Climate Summit happening in 2019.
- E. Pieces of plastic and microplastics are being found in the fish people eat.
- F. Honey bees are now considered endangered.
- G. The state of California is proposing to use 100% renewable electricity by 2045.
- H. European Parliament approved a ban on single-use plastics (e.g. plastic bags, plastic cutlery, etc)
- I. President Trump decided to remove the U.S. from the Paris Agreement.
- J. A company called Loop is getting big brand name companies to try exchangeable reusable containers.

Question 14: Which of these categories best describes you?

- A. Taking/took an environmentally related course in high school
- B. Taking/took an environmentally related course in college
- C. In/was in an environmentally related major in college
- D. In/was in an environmentally related minor in college
- E. In/was in an environmentally related career
- F. None of the above

Question 15: Please add any story that you would like to tell us about your interactions with the changing natural environment around you (e.g. observations, concerns, suggestions, etc.). If not, then put NA.

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