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# Victimizing Cap-and-trade: How Policy Narratives Influence Policy Realities

Alyssa Rehwald, Western Washington University

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## Abstract

When a cap-and-trade bill was introduced to the Washington legislature in 2009, it was met with staunch opposition from a coalition of businesses and industry leaders. In the end, the opposing side won when cap-and-trade legislation was removed from the bill. My goal was to better understand if there were differences in how the Pro and Con Coalitions presented policy narratives, and how they may have influenced the policy outcome. Using the Narrative Policy Framework, I analyzed public testimony produced by both coalitions and examined the use of narrative elements, narrative strategies, and policy beliefs between and within the coalitions. My results yielded statistically significant intercoalitional differences in narrative elements and policy beliefs, and revealed that the winning coalition's narratives were more cohesive. This work contributes further evidence that policy narratives created actors and stakeholders can indeed influence decision makers and thus, policy realities. In order to apply this work and previous NPF studies to influencing policy realities, future NPF work at the micro level should focus in on how effectively policy narratives shape elected officials' decisions.

## Introduction

The summer of 2017 had a dismal start for environmentally-conscious Americans. On June 1, 2017, President Trump announced that the United States would withdraw from the Paris Climate Accord, despite opposition from many Americans. Survey data published by the Yale Program on Climate Change Communication reveals that 69% of registered US voters in November of 2016 believed that the US should participate in the Paris Agreement (Marlon et al., 2017). It seems that the President's decision to withdraw from the Paris Accord was divergent from public opinion at the time. He justified his decision by stating that the Accord was an unfair burden on the American people that would cost our country money and jobs with little results (The White House, 2017). On the contrary, Gallup (n.d.) published data showing that in 2017, 56% of Americans prioritized protecting the environment over economic growth, with only 35% holding opposite priorities. This clash of beliefs between the President and the public supports Terry Moe's (2005) argument that the Presidency is an

institution of power, not cooperation. President Trump utilized his political power to follow his own agenda; he did not cooperate with the majority interests of American citizens.

The Paris Accord was the first agreement between all nations to collectively combat human-caused climate change. It established a goal of keeping future global temperature increases below 2°C, while also laying down a plan to help developing countries mitigate climate change impacts and invest in sustainable, low-carbon technology (UNFCCC, n.d.). By participating in the Paris Climate Accord, the US had a chance to help lead the transition to a low-carbon future. Instead of being a hero working to fix this global problem, President Trump spun a narrative depicting the US as a victim of the Accord. However, many American cities, states, and institutions decided to be heroes in their own story. A group of mayors, governors, university presidents, and over 100 businesses pledged to uphold the United States' Paris Accord greenhouse gas (GHG) reduction targets. As former New York City mayor Michael Bloomberg stated, “the bulk of the decisions which drive U.S. climate action in the aggregate are made by cities, states, businesses, and civil society” (Tabuchi & Fountain, 2017). This debate over the Paris Climate Accord was not the first instance of opposing groups creating their own narratives to win a climate policy outcome. When several western states formed a pact in 2007 to collectively reduce their emissions through a cap-and-trade program, they were faced with tough opposition and self-victimizing narratives.

### **The Western Climate Initiative**

Several western governors grew impatient after watching the George W. Bush administration fail to take action against the threat of global climate change. In February of 2007, the governors of Arizona, California, New Mexico, Oregon, and Washington took matters into their own hands by forming the Western Climate Initiative (WCI). By doing so, these leaders agreed to take collective action to address climate change by implementing market-based strategies and promoting the growth of green jobs. Their goal was to reduce GHG emissions in the region to 15% below 2005 levels by 2020 through the implementation of individual emissions cap-and-trade programs within a regional emissions market (Western Climate Initiative [A], n.d.). All emissions from major global warming pollutant sources, including those from electricity generated outside of the region and imported in, would be regulated. Support for the WCI grew through 2008, as the governors of Montana and Utah, as well as the Premiers of British Columbia, Manitoba, Ontario, and Quebec, had also joined the agreement. After collaborating with stakeholders and advisors for two years, the WCI partners released

their final design for establishing a regional cap-and-trade program in July of 2010. This provided a roadmap to assist each partner in designing their own programs, as well as guidelines for operating a regional carbon market (Western Climate Initiative [B], n.d.).

This opportunity for climate policy leadership was met with little success across the partner states and provinces. California and Quebec were the only partners who succeeded in establishing a cap-and-trade program by the end of 2011. Since the remaining states and provinces failed to pass cap-and-trade legislation for various reasons, they withdrew from the WCI in 2011, thus symbolizing the end of its era. In its place, a non-profit corporation named Western Climate Initiative, Inc. was formed to assist California and Quebec with implementing and operating their emissions trading market (Western Climate Initiative, Inc., n.d.).

My study focused on Washington State's unsuccessful attempt to establish a statewide cap-and-trade system during the early 2009 legislative session. I used the Narrative Policy Framework (NPF) to analyze arguments for and against the cap-and-trade bill, with the hopes of explaining why it failed. I analyzed public testimony produced by two coalitions and examined at their use of narrative elements, narrative strategies, and policy beliefs. My goal was to better understand if there were differences in how the Pro and Con Coalitions presented narratives, and how they may have influenced the fate of the bill. I addressed the following questions employed in previous NPF research (Shanahan et al., 2013): (1) Are there intercoalitional differences in the use of narrative elements, strategies, and policy beliefs between the Pro and Con Coalitions in this case study; and (2) are there varying levels of intracoalitional cohesion, as measured by differences in the use of narrative elements, strategies, and policy beliefs between the Pro and Con Coalitions?

Based on previous NPF research (McBeth et al., 2005, 2007; Shanahan et al., 2013), overall differences in narrative structure and beliefs are expected between the two opposing coalitions. I also expect to find higher levels of cohesion within the winning coalition, matching the results of the only other intracoalitional NPF study (Shanahan et al., 2013). These results will further shed light on the structure of opposing policy narratives, and how they possibly lead to winning or losing a policy issue.

### *House Bill 1819: Cap-and-trade*

Washington State's journey towards cap-and-trade began with the passing of a climate mitigation bill in early 2008, which created statewide goals for GHG emissions reductions and clean energy job growth, emissions reporting requirements, and called on the Governor and other state

agencies to design a market-based emissions reduction program (W.A. Legis. S., 2008). With avid support from legislators, regional businesses, and environmental leaders, this bill paved the way for future cap-and-trade legislation (Office of the Governor, 2008).

The cap-and-trade program proposed by House Bill (HB) 1819 in the 2009 legislative session targeted the state's largest carbon polluters. Cap-and-trade systems generally work by placing a limit, or "cap", on the state's total emissions, and then gradually decreasing that limit over time. A set number of allowances-essentially the right to pollute-would equal the current emissions limit and be distributed to polluters through an auction or other determined method. Polluters in need of more allowances to cover their projected annual emissions could buy them from a company holding excess, thus creating a "trading" system (Warren & Tomashefsky, 2009). There was also talk of investing capital generated from selling allowances back into the green energy sector, in addition to helping citizens afford their inevitably higher electricity costs (W.A. H.R., 2009). Together, these components would discourage stagnant approaches to GHG emissions, while incentivizing the rapid development of green jobs and technology.

The concept of cap-and-trade was not new when members of the WCI proposed it in 2007. The US has been using it to reduce acid rain emissions since the Clean Air Act of 1990, as well as in the Regional Greenhouse Gas Initiative (RGGI) between ten northeastern states (Warren & Tomashefsky, 2009). When HB 1819 was discussed in public hearings, it was clear that there were two opposing groups concerned with the issue. On one side, there was a Pro Coalition made up of business leaders, legislators, and environmentalists who saw this bill as an opportunity for Washington to lead the way in climate change legislation. They even called it the "cap-and-invest" bill due to the intention to invest allowance sales profits. On the other side, a Con Coalition of legislators and industry leaders were concerned about cap-and-trade incurring unnecessary financial burdens on their companies. The Pro Coalition created positive narratives where Washington State and Governor Gregoire were heroes for taking steps to reduce global climate change. Similar to President Trump's victimizing narrative surrounding the Paris Accord, the Con Coalition generated negative stories of failing companies and laid-off employees due to a cap-and-trade system. Despite initial optimism about HB 1819's potential, the Con Coalition won when cap-and-trade was removed from the bill less than two months into the legislative session.

While several external factors could have caused the cap-and-trade portion of this bill to fail, such as the recent economic recession, this work focuses on internal factors and explores how policy actors and stakeholders themselves influenced the outcome. Through newspaper editorials, website

posts, and testimonies at public hearings, members of both coalitions created policy narratives to persuade legislators towards their preferred policy outcome. Although people usually do not consider policy as a form of literature, most explanations of policy problems follow a narrative structure (Stone, 2012). Stone (2012) suggested that these policy narratives are so prevalent and influential because our imaginations are enticed by their promise to solve scary problems. Evidence for the influence of narratives in shaping beliefs and actions is presented in academic literature across multiple disciplines (Jones & McBeth, 2010). The authors also noted that a majority of literature studying policy narratives has followed qualitative and subjective methods, which has led to the idea that narrative research cannot be scientifically rigorous. On the contrary, they argued that this literature has just lacked the right approach. As a solution to this problem, Jones and McBeth (2010) introduced the Narrative Policy Framework as an empirical approach to studying how policy narratives influence policy outcomes. My work uses the NPF as a lens through which to analyze how coalition narratives influenced the failure of cap-and-trade in HB 1819.

### **The Narrative Policy Framework**

The NPF was introduced by Jones and McBeth (2010) as a “quantitative, structuralist, and positivist approach to the study of policy narratives”. Simply put, it recognizes the importance of policy narratives as an influential factor in the policy process, and offers empirical methods for better understanding that relationship (Shanahan et al., 2013). A structuralist approach asserts that each story contains a structure and components, such as plots and characters, which can be identified and quantified (Jones & McBeth, 2010). Additionally, positivism argues for the use of systematic methods and testable hypotheses (Jones & McBeth, 2010). Sabatier (2000) called for more scientifically rigorous methodologies in public policy research, and the NPF was developed as a response to that call (Shanahan et al., 2013). Due to its replicable methods and quantitative nature, Jones & McBeth (2010) concluded that the NPF has met Sabatier’s (2000) requirements, in that it is clear enough to be proven wrong.

There are three scales at which the NPF analyzes narratives: the micro, meso, and macro levels (Shanahan et al., 2013). At the micro level, analysis is focused on individual opinion and evaluating how that is persuaded by policy narratives (Jones & McBeth, 2010). Several causal mechanisms are considered at this level, including canonicity and breach, narrative transportation, and narrator trust

and credibility (Jones & McBeth, 2010). Narrative research at this level tends to rely on varying methods of survey analysis (Jones & McBeth, 2010).

The meso level of analysis studies the strategic use of policy narratives by coalitions, and how those relate to winning and losing policy outcomes (Shanahan et al., 2013). Quantitative content analysis of public consumption documents by human coders has been the primary methodology, which tends to be reliable and inexpensive (Shanahan et al., 2013). NPF research at this level has explored various roles of policy narratives, including the embedding of group policy beliefs (McBeth et al., 2005) and in creating distinct narrative strategies between coalitions (McBeth et al., 2007). Shanahan et al. (2013) further expanded NPF scholarship by examining intracoalitional cohesion in a wind farm case study. In other words, they analyzed how consistently the two coalitions used similar narrative elements, strategies, and policy beliefs.

The macro level of NPF analysis focuses on the role of institutional and cultural policy narratives over long periods of time (Shanahan et al., 2013). Given the required timeframe and scope of research, no NPF studies at this level have been published. I employed a meso level analysis.

### *Policy Narratives*

At the micro and meso levels of analysis, policy narratives are created by individuals and groups who use “words, images, and symbols to strategically craft policy narratives to resonate with the public, relevant stakeholders, and governmental decision makers” (Shanahan et al., 2011) in pursuit of a desired policy outcome. Since narratives are inherently difficult to measure (Jones & McBeth, 2010), NPF scholars have identified structures and narrative elements that can be generalized and quantified (Jones & McBeth, 2010; Shanahan et al., 2011, 2013). Although these same authors do define varying foundational components of a policy narrative, this work relies upon the requirements used by Shanahan et al. (2013). In order for a public consumption document to be considered a policy narrative, it must fulfill two conditions (Shanahan et al., 2013). First, it must contain either a stance on a policy issue or an opinion on a policy-related behavior (Shanahan et al., 2013). For example, one policy narrative might argue that the legislature should not pass the cap-and-trade bill, which expresses a stance on the specific policy issue. Another one might state that forcing businesses to pay for the right to pollute carbon emissions will cause employee layoffs. The latter example expresses an opinion on the result of a policy behavior, which was companies paying for the right to pollute. Second, a

policy narrative must identify at least one character as a hero, villain, or victim (Shanahan et al., 2013). In the previous example, laid-off employees are identified as victims.

Policy narratives can contain additional components, which the NPF divides into three categories: narrative elements, narrative strategies, and policy beliefs (Shanahan et al., 2013). Narrative elements are the traditional structures identified in literary analysis that support the policy preference (Shanahan et al., 2013). The strategic portrayal and use of these narrative elements by policy actors and stakeholders to persuade involvement in policy issues is a narrative strategy (Shanahan et al., 2013). Policy beliefs are the morals embedded within narratives that align groups and coalitions together (Shanahan et al., 2013). Definitions and examples of these terms can be found in Table 1.

Narrative elements operationalized in previous NPF research include characters, solutions, and plots (Shanahan et al., 2013). Each narrative must contain at least one character (hero, villain, and victim), and typically offer solutions (a.k.a. moral of the story) to a specified problem (Shanahan et al., 2013). For example, a narrative could praise the Governor's leadership in pushing for more emissions regulation, while stating that passing the cap-and-trade bill will allow Washington to reach its previously unattainable emissions reduction goals. The Governor was identified as a hero, while passing the bill was a solution to the state's problem of trying to reach its emissions goals. A plot is a story device linking characters to policy solutions and other narrative components (Jones & McBeth, 2010). Two common plots, which are described by Stone (2012), are the story of decline and story of control. The story of decline spins a tale of how conditions will get worse if a specific action is taken. They commonly begin with facts or figures showing a decline in conditions, and can even come in the form of a warning. In contrast, plots of control offer hope by implying that certain actions can allow one to reach previously unattainable goals.

Actors and stakeholders use narrative strategies to either contain or expand their coalition support. Empirical studies by NPF scholars (McBeth et al., 2007; Shanahan et al., 2011; Shanahan et al., 2013) have strove to understand how interest groups and coalitions try to expand or contain a policy issue. They found that groups constructed different narratives based on whether they perceived themselves as winning or losing. When a group thought it was winning, it used strategies that contained its audience, while a group who thought it was losing used strategies to expand participation in the policy issue. Coalitions can do so through the distribution of costs and benefits among characters in the narrative. A group expands their support by diffusing costs and concentrating benefits on a small group, and contains the issue by diffusing benefits and concentrating costs on a small group (McBeth et al., 2007; Shanahan et al., 2011).



Table 1. Definitions and examples of policy narrative components.

		Definition	Cap-and-trade Example
Narrative Elements	Characters	Participants assigned a role in a policy narrative.	
	Hero	An entity claimed as the problem-solver or leader in fixing the specified problem.	The Governor, whose bill could help reduce the state's GHG emissions.
	Villain	An entity claimed as the cause of the victim's harm.	Cap-and-trade itself, which imposes additional financial burdens on Washington businesses.
	Victim	An entity claimed to take harm from specified conditions.	Washington businesses, who will be burdened by the additional costs of purchasing emissions allowances.
	Solution	A policy solution offered that is meant to solve the solve a specified problem.	Passing the bill and thus establishing a cap-and-trade program.
	Plot	A narrative device linking the character(s) and moral of the story to a specified outcome. The plots considered were decline and control.	Passing the bill will allow Washington State to lead the way in establishing major GHG emissions policy.
Narrative Strategies	Expansion	A policy story intended to display conflict and bring in more support by concentrating the benefits and diffusing the costs.	Establishing a cap-and-trade program will help the growth of green jobs, while doing nothing to address climate change will result in increased costs for many industries and ultimately hurt the state's economy.
	Containment	A policy story intended to maintain the status quo of support by diffusing benefits and concentrating costs.	Establishing a cap-and-trade program may affect Washington businesses, however it will also benefit everyone in the state by reducing our carbon emissions.
Policy Beliefs		A set of values and beliefs that influence a group and/or coalition's policy opinions and decisions.	Environmentalism, conservatism, etc.

A narrative strategy that is newer to the NPF is the devil shift-angel shift from ACF scholarship. The devil shift occurs when opposing sides have divergent policy beliefs, and thus overstate the power, or “evilness”, of their opponent (Shanahan et al., 2013). In policy narratives, this occurs when a group often identifies their opponent as villains. The opposite situation, the angel shift, occurs when a group often identifies themselves as the hero. For example, one narrative author identified their own company as a hero for already trying to help global climate change by reducing their carbon footprint. Shanahan et al. (2013) found that both coalitions embedded the devil shift-angel shift frequently, and that the losing coalition relied heavily on the devil shift.

The NPF has roots in the Advocacy Coalition Framework (ACF), which looks at beliefs as the glue that brings coalitions together and informs their political behaviors (Shanahan et al., 2011). Stakeholders form advocacy coalitions based on common policy beliefs and a desired policy outcome (Shanahan et al., 2011). NPF scholars have broken down these concepts into finer elements and applied them to policy narratives generated by coalitions. By analyzing the use of characters in narratives, differences in policy beliefs have been found both within (Shanahan et al., 2013) and between winning and losing coalitions (McBeth et al., 2005), suggesting that they influence policy outcomes. The NPF has typically used a -1.00 to +1.00 scale to measure use and intensity of policy beliefs through narrative characters (McBeth et al., 2005, Shanahan et al., 2011, 2013). The policy beliefs I measured were the human-nature, polis-market, and conservation-business relationships. The first two rely on who the victims are, while the third one is based on who the heroes are. For example, when a narrative argues that the environment will be a victim of not reducing carbon emissions, it aligns with on the nature side of the human-nature policy belief. Similarly, a narrative that identifies an industrial company as a hero for already reducing their emissions without incentives aligns with the business side of the conservation-business policy belief.

So far, NPF scholarship has tested for intercoalitional differences in narrative elements, strategies, and policy beliefs between opposing coalitions (e.g. Shanahan et al., 2011), as well as intracoalitional cohesion on those aspects (e.g. Shanahan et al., 2013). Recently, research has explored connections between winning in a policy issue to coalitional use of narrative elements, strategies, and policy beliefs (Shanahan et al., 2013). My paper contributes to that work by analyzing policy narratives at the meso level for differences in use of narrative elements, strategies, and policy beliefs between winning and losing coalitions.

## Methodology

To explore this research question, I conducted a qualitative content analysis of policy narratives surrounding the cap-and-trade bill using quantitative methods. The timeframe ranged from January 1, 2009 up until March 17, 2009 when cap-and-trade was removed from the bill and the Con Coalition won. Public consumption documents were found on the Internet, kept if they met the conditions for a policy narrative, and assigned to the Pro or Con Coalition based on their stance on the bill. A total of 76 documents were found, with 31 generated by the Pro side and 45 by the Con side. The policy narratives identified include interest group website posts, editorials, press releases, and videos of public testimony at legislative hearings (Figure 1). A codebook was created based on the one used by Shanahan et al. (2013), and tested on policy narratives to determine coding rules.

The variables explored were select narrative elements, narrative strategies, and policy beliefs. Definitions of the narrative elements and strategies were informed by previous work (Stone, 2012; Shanahan et al., 2013). The narrative elements studied in this work were characters, plot, and solution. The narrative strategies were the distribution of costs and benefits for the proposed and opposing policy solution, and use of the devil and angel shifts. The devil and angel shifts were operationalized by identifying the opposite coalition as the villain or themselves as the hero, and averaged onto a -1.00 to +1.00 scale using the equation shown in Table 2. Narratives that identified the author as a hero were given a +1.00 score for each self-hero, while those that identified an opponent as a villain were

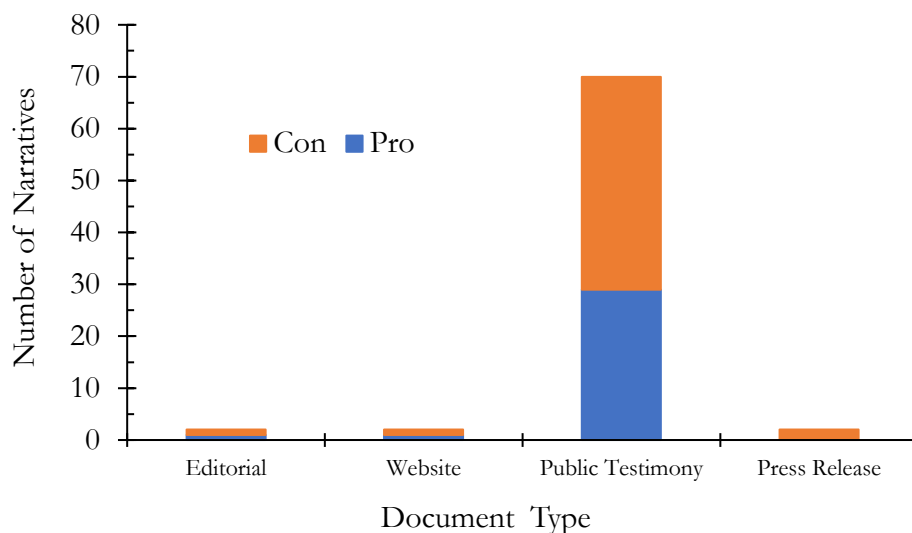


Figure 1. Breakdown of public consumption document type by coalition.

Table 2. Coding methods for each variable.

Variable		Coding Method
Narrative	Hero	Total number, and coded into the following categories: Washington/The Governor Business/Industry Environmentalists Themselves
	Villain	Total number, and coded into the following categories: Washington/The Governor Business/Industry Environmentalists Cap-and-trade Opponent
	Victim	Total number, and coded into the following categories: The Public/Employees Business/Industry/The Economy Nature/Environment Themselves
	Solution	Yes or no, and coded into the following categories: Cap-and-trade Amend the bill Do not pass the bill National cap-and-trade system
	Plot	Yes or no, and coded into the following categories: Story of decline Story of control
Narrative Strategies	Devil shift-angel shift	$\frac{(total\ self\ heroes \times +1.00) + (total\ opponent\ villains \times -1.00)}{total}$
	Distribution of costs and benefits	Theirs or opposed solution, and concentrated or diffused
	Nature-human	$\frac{(total\ human\ victims \times +1.00) + (total\ nature\ victims \times -1.00)}{total}$
	Polis-market	$\frac{(total\ polis\ victims \times +1.00) + (total\ market\ victims \times -1.00)}{total}$
Policy Beliefs	Conservation-business	$\frac{(total\ conservation\ heroes \times +1.00) + (total\ business\ heroes \times -1.00)}{total}$

given a score of -1.00 for each one. Each coalition or author group's devil-angel shift value was calculated by totaling the individual narrative scores, and then averaging over the number of narratives in that used the devil-angel shift.

Policy beliefs were also operationalized using characters and then averaged onto a -1.00 to +1.00 scale as shown in Table 2. The calculation method for policy beliefs was similar to the one used for the devil-angel shift. The human-nature policy was measured by identifying human or nature/environment victims. The polis-market policy belief is based on the concept of self-interests vs. common interests discussed by Stone (2012). It was measured by identifying victims cast as either individuals (e.g. my own business, my employees) or groups and cultural icons (e.g. the environment, the economy). The business-conservation policy belief is similar to the human-nature belief, except that it was measured by identifying heroes associated with either conservationist or business interests. Coding methods for each variable (Table 2) were based on those used in previous NPF studies (Shanahan et al., 2011, 2013).

## **Results and Discussion**

### *Intercoalitional Differences*

Analyzing intercoalitional differences in narratives reveals the policy realities of opposing coalitions, and sheds light on their impact on policy outcomes. Prior NPF research has revealed that policy narratives created by opposing advocacy coalitions contain statistically significant and different uses of narrative elements, strategies, and policy beliefs (e.g. Shanahan et al., 2013). Results from my work are consistent with previous findings, except in narrative strategies which had no statistically significant intercoalitional differences.

### *Narrative Elements*

Characters are a necessary component of policy narratives. They add drama and bring narratives to life (Stone, 2012). There was a statistically significant difference in the use of each character type between the opposing coalitions (Table 3). On average, the Pro Coalition identified more heroes, while the Con Coalition identified more villains and victims. The winning coalition almost exclusively identified victims, which differs from character use in previous NPF research

Table 3. Intercoalitional differences in narrative elements ( $\alpha=0.05$ ).

Narrative Element	Pro Coalition n (%)	Con Coalition n (%)
<b>Solution</b>		
Yes	31 (100%)	42 (93%)
No	0 (0%)	3 (7%)
Total	31 (100%)	45 (100%)
$\chi^2$ (d.f. = 1) = 2.152, NS		
<b>Plot</b>		
Decline	10 (32%)	34 (76%)
Control	9 (29%)	0 (0%)
Neither	12 (39%)	11 (24%)
Total	31 (100%)	45 (100%)
$\chi^2$ (d.f. = 2) = 20.242, $p < 0.001$ , Cramer's V = 0.516, $p < 0.001$		
<b>Characters</b>		
Mean character use per narrative (total number of narratives)		
Hero	0.97 (31)	0.02 (45)
t-statistic = 6.907, $p < 0.001$ , equal variances not assumed		
Villain	0.00 (31)	0.13 (45)
t-statistic = 2.602, $p < 0.05$ , equal variances not assumed		
Victim	0.39 (31)	1.58 (45)
t-statistic = 9.572, $p < 0.001$ , equal variances not assumed		

(Shanahan et al., 2013). This clear difference in character use between winning and losing groups suggests that it influenced the policy outcome.

Narratives typically contain a policy solution to the specified problem (Shanahan et al., 2013). Both coalitions embedded their solutions frequently, resulting in non-significant differences (Table 3). Contrary to previous findings (Shanahan et al., 2013), the winning coalition switched between three different solutions: not passing the bill at all (mentioned in 69% of narratives), amending the bill to

remove cap-and-trade (16%), and waiting for a national cap-and-trade system (31%). Some Con narrative mentioned multiple solutions. For example, suggesting not passing the bill so we can wait for a national program to be created. On the other hand, the Pro Coalition matched previous winning coalitions by embedding the same solution—establishing a cap-and-trade program—almost exclusively (in 90% of narratives).

Plots provide a backbone to policy narratives by linking characters with solutions and outcomes. Statistically significant differences were found between the coalitions in their use of plots (Table 3). The Pro coalition embedded stories of decline and stories of control evenly throughout their narratives, while the winning coalition only embedded the story of decline. Exclusively embedding stories of decline matches the winning coalition’s consistent identification of victims suffering from the opposing solution. These differences add to previous evidence (Shanahan et al., 2013) that opposing advocacy coalitions use different narrative elements. These results also suggest that constantly presenting negative impacts of the opposing solution (i.e. through identifying victims in stories of decline) may have convinced legislators to remove cap-and-trade, thus making a winning coalition.

### *Narrative Strategies*

Narrative strategies describe how policy actors and stakeholders wield narrative elements to either expand or contain coalition support. I analyzed two narrative strategies; the devil shift-angel shift and distribution of costs and benefits. My results for both of these strategies were inconclusive. Use of the devil shift-angel shift was virtually non-existent, as it was only identified in 5% of all narratives (Table 4). The Pro Coalition identified themselves as a hero in four narratives, which would align them with the angel shift. However, since the Con Coalition never identified themselves as heroes or the opponent as villains, I decided that these findings were non-significant.

In previous NPF research (e.g. Shanahan et al., 2013), how each coalition distributed costs and benefits depended on whether they were discussing their own policy preference, or that of their opponent. When referencing their own policy preference, a coalition is expected to try expanding their support by concentrating the benefits and diffusing the costs (Shanahan et al., 2013). When referencing their opponent’s policy preference, a coalition is expected to contain support by diffusing benefits and concentrating costs (Shanahan et al., 2013). My results did not follow these predicted strategies at all (Table 4). Neither group concentrated benefits and diffused costs. Each coalition did

Table 4. Intercoalitional differences among narrative strategies ( $\alpha=0.05$ ).

Narrative Strategy	Pro Coalition n (%)	Con Coalition n (%)
Distribution of costs/benefits		
Their policy		
Concentrates benefits, diffuses costs	0 (0%)	0 (0%)
Diffuses benefits, concentrates costs	1 (3%)	0 (0%)
Neither	30 (97%)	45 (100%)
Opposed policy		
Concentrates benefits, diffuses costs	0 (0%)	0 (0%)
Diffuses benefits, concentrates costs	0 (0%)	1 (2%)
Neither	31 (100%)	44 (98%)
	Mean value per narrative (n)	
Devil shift-angel shift	1.00 (4)	0.00 (0)

diffuse benefits and concentrate costs only once. The winning coalition discussed the costs of the opposing policy preference almost exclusively (present in 96% of narratives), while the Pro Coalition focused on the benefits of their own preference and the costs of the opposed preference. Despite statistically non-significant differences between the coalitions, the Con Coalition's consistent reference to the costs of a cap-and-trade system further reveal the group's fixation on negative impacts, and are likely informed by their policy beliefs as well.

#### *Policy Beliefs*

Advocacy coalitions are held together by common policy beliefs, which also direct their political decisions and use of narrative elements and strategies. I looked at three policy beliefs averaged onto a -1.00 to +1.00 scale: the human-nature relationship, polis-market relationship, and conservation-business relationship. A score of -1.00 means each narrative aligned with the human, polis, or conservation side of each relationship, while a score of +1.00 means each narrative aligned with the nature, market, or business side of each relationship. Scores between -1.00 and +1.00 show which side of each relationship narratives leaned towards.

The human-nature and polis-market relationships were determined by the victims identified in each narrative, while the conservation-business relationship was determined by the identified



heroes. I found only found statistical differences between the two coalitions on the polis-market relationship (see Appendix), while Shanahan et al. (2013) found statistical differences in all three of these policy beliefs. The winning coalition focused on how cap-and-trade would harm individual businesses (market), while the Pro Coalition was evenly split between the effects of further climate change on local agriculture and industries (market) and the global environment (polis), which can be seen in Figure 2. While the human-nature and polis-market beliefs were embedded in 100% of Con narratives, they were only present in 52% and 58% of Pro narratives, respectively. This makes sense given that the Con Coalition also identified victims at a significantly higher rate than the Pro Coalition. As for the conservation-business relationship, the difference in how often it was embedded in narratives matches the relative frequency that each coalition identified heroes. In McBeth et al.’s (2005) Yellowstone study, they found that neither advocacy group’s narratives perfectly followed the expected ideological alignment. In my study, the Con Coalition did follow the expected ideological alignments nearly perfectly, while the Pro Coalition did not. As McBeth et al. (2005) suggest, lack of perfect ideological alignment suggests that advocacy groups’ policy beliefs are somewhat molded to fit their political realities and draw in more support. From this perspective, the losing coalition perhaps expressed more variety in their policy beliefs in the hopes of reaching a wider audience, while the winning coalition stuck to their audience. The intracoalitional results will reveal whether each coalition was consistent in their use of these narrative elements, strategies, and policy beliefs.

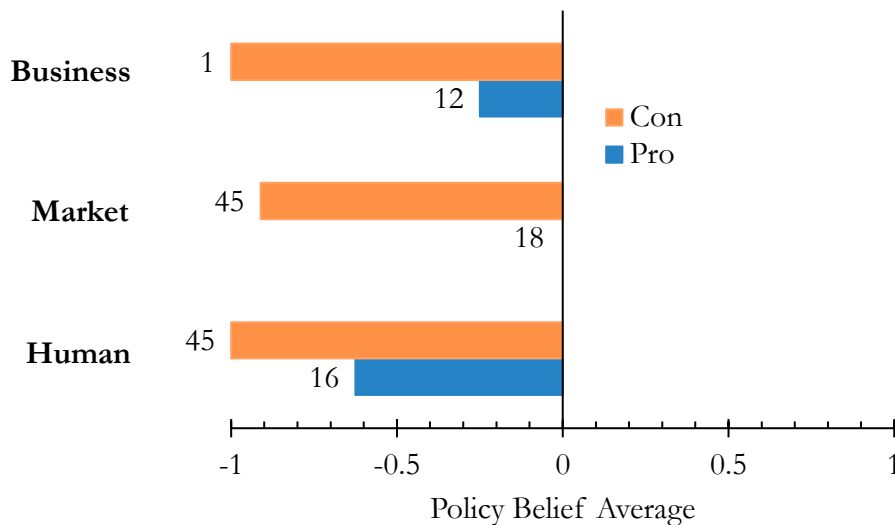


Figure 2. Intercoalitional differences in policy beliefs. Numbers at the end of each bar represent the number of narratives each relationship was present in.

### *Intracoalitional Differences*

To analyze intracoalitional cohesion, the authors of each coalition were assigned to either the dominant or Other group. Author groups were considered dominant if they produced more narratives than the other groups. As shown in Table 5, the Pro Coalition's dominant author type was environmental with 48% of Pro narratives, while the Con Coalition's dominant authors were businesses and industries with 78% of Con narratives. Intracoalitional cohesion was evaluated by comparing narrative structure from each coalition's dominant author type (e.g. Business/Industry and Environmental) to those of the remaining non-dominant author types, which were combined into their own group titled Other. Within the Con Coalition, business and industry authors were combined into one group titled Business, while the remaining authors were placed into the Other group. The Pro Coalition was divided into an Environmental group and an Other group. Comparing the intracoalitional differences in use of narrative elements, narrative strategies, and policy beliefs reveal how consistent each coalition's overall narrative was, and how that may have influenced the policy outcome. While both coalitions were statistically cohesive, the Con coalition showed greater levels of consistency narrative elements, narrative strategies, and policy beliefs.

Table 5. Composition of each advocacy coalition by author type.

Author Type	Pro Coalition n (%)	Con Coalition n (%)
Business/Industry	8 (26%)	35 (78%)
Government	8 (26%)	5 (11%)
Environmental	15 (48%)	0 (0%)
Other	0 (0%)	5 (11%)
Total	31 (100%)	45 (100%)

Grand total of narratives = 76

*Narrative Elements*

I found no statistical differences in use of narrative elements between the main author groups in either coalition (Table 6), which shows fairly high levels of cohesion among each coalition. Both coalitions consistently embedded solutions in nearly all of their narratives, showing high levels of cohesion. They also used characters with similar frequencies. The Environmental and Other authors in the Pro Coalition both used heroes as a primary character and villains as a secondary character, and the Business and Other authors of the Con Coalition primarily used victims.

Stories of decline were used nearly equally among all author types in the Con Coalition. On the other hand, the Pro Coalition’s author groups seemed a little more scattered in their plot choices.

Table 5. Composition of each advocacy coalition by author type.

Narrative Element	Pro Coalition		Con Coalition	
	n (%)		n (%)	
	Environmental	Other	Business	Other
<b>Solution</b>				
Yes	15 (100%)	16 (100%)	33 (97%)	9 (82%)
No	0 (0%)	0 (0%)	1 (3%)	2 (18%)
Total	15 (100%)	16 (100%)	34 (100%)	11 (100%)
	$\chi^2$ (d.f. = 1) = 1.639, NS			
<b>Plot</b>				
Decline	7 (47%)	3 (19%)	27 (77%)	7 (70%)
Control	5 (33%)	4 (25%)	0 (0%)	0 (0%)
Neither	3 (20%)	9 (56%)	8 (23%)	3 (30%)
Total	15 (100%)	16 (100%)	35 (100%)	10 (100%)
	$\chi^2$ (d.f. = 2) = 4.684, NS			
<b>Characters</b>				
	Mean character use per narrative (total number of narratives)			
Hero	0.73 (15)	1.19 (16)	0.00 (0)	0.10 (10)
	t-statistic = 1.739, NS			
Villain	0.00 (0)	0.00 (0)	0.03 (35)	0.20 (10)
	t-statistic = 1.257, NS			
Victim	0.26 (15)	0.25 (16)	1.51 (35)	1.70 (10)
	t-statistic = 2.033, NS		t-statistic = 0.795, NS	

For example, the Environmental group included stories of decline the most, while the Other group used neither plot primarily. Although these differences weren't significant, a lack of consistent plot types reveals some level of disorganization within the losing coalition. The winning Coalition was a little more cohesive in their use of narrative elements, which shows that their narratives tended to have a more consistent structure than the Pro Coalition.

### *Narrative Strategies*

My narrative strategy results were fairly inconclusive due to their low sample sizes (Table 7). The distribution of costs and benefits strategies I tested for appeared in only two out of all narratives, showing that both coalitions were cohesive in not using the expansion or containment strategies. This lack of results is the opposite of what Shanahan et al. (2013) found. In their case study, authors from both coalitions used the containment and expansion strategies, and also displayed high levels of intracoalitional cohesion in their use. Perhaps my results just reflect a difference in priority between the coalitions in my case study and those studied by Shanahan et al. (2013). As for the devil-angel shift, the Pro Coalition lacked cohesiveness while the Con Coalition authors collectively did not use this strategy. A few authors in the Other group identified themselves as heroes, which further demonstrates that the two author groups were not creating uniform narratives. Shanahan et al. (2013) found that both coalitions frequently utilized the devil shift-angel shift and had high levels of intracoalitional cohesion in their usage. Once again, the contrast between my narrative strategy results and those of Shanahan et al. (2013) could be reflective of differences in narrative priority between each case study's coalitions. More intracoalitional NPF research could provide further insight into how coalitions choose what narrative strategies to use, and whether my results are simply an outlier. Either way, these inconclusive results are not explained by my findings for policy beliefs within each coalition.

### *Policy Beliefs*

I found no statistical differences in use of policy beliefs for either coalition, suggesting strong intracoalitional cohesion (see Appendix, Table A.2). Both author groups in the Con Coalition focused

Table 7. Intracoalitional differences among narrative strategies ( $\alpha=0.05$ ).

Narrative Strategy	Pro Coalition		Con Coalition	
	n (%)		n (%)	
	Environmental	Other	Business	Other
Distribution of costs/benefits				
Their policy				
Concentrates benefits, diffuses costs	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Diffuses benefits, concentrates costs	1 (7%)	0 (0%)	0 (0%)	0 (0%)
Neither	14 (93%)	16 (100%)	45 (100%)	45 (100%)
Opposed policy				
Concentrates benefits, diffuses costs	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Diffuses benefits, concentrates costs	0 (0%)	0 (0%)	1 (2%)	0 (0%)
Neither	15 (100%)	16 (100%)	44 (98%)	45 (100%)
	Mean value per narrative (n)			
Devil shift-angel shift	0.00 (0)	1.00 (4)	0.00 (0)	0.00 (0)

almost exclusively on individual and human concerns, while the conservation-business belief was barely present (Figure 3). However, the Pro Coalition showed a little less uniformity (Figure 4). Instead of polarizing towards one end of the spectrum like in the Human-nature and Conservation-business relationships, the two groups' values for the Polis-market relationship were fairly neutral. Since each policy belief score is an average of that group's values, neutral scores indicate that authors expressed interests from each side of the belief relationship somewhat evenly. Therefore, nearly neutral Polis-market scores reflect a lack of uniformity between Pro authors in this policy belief. Going back to McBeth et al.'s (2005) finding that advocacy groups tempered their policy beliefs to draw in more support, I saw evidence of that from both author types within the Pro Coalition. Shanahan et al. (2013) found high levels of cohesion on policy beliefs within both coalitions, which matches my findings. The only difference is that in my case study, the winning coalition was slightly more cohesive on policy beliefs than the losing coalition. Although this was a small difference, it could have influenced the policy outcome.

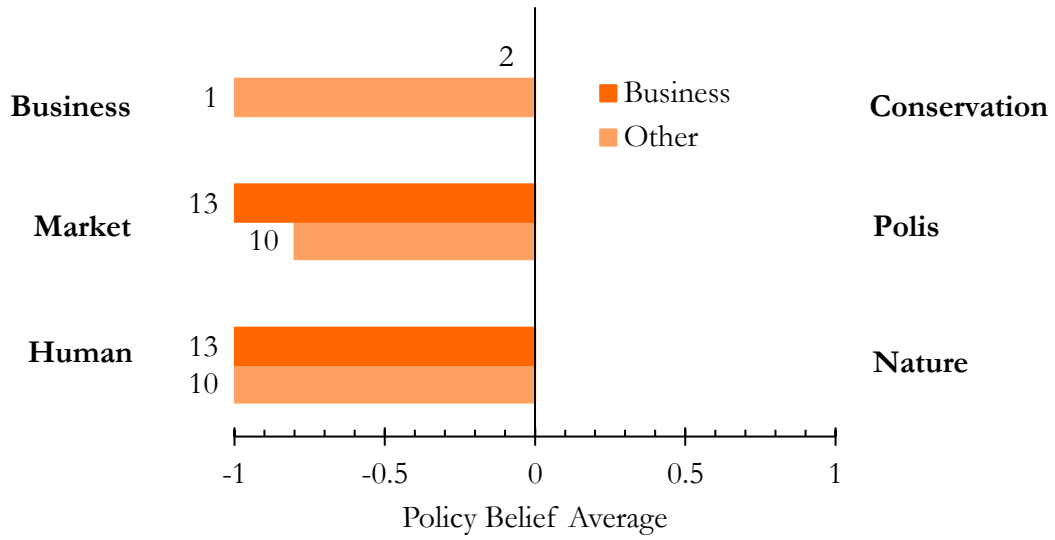


Figure 3. Intracoalitional differences among policy beliefs within the Con Coalition.

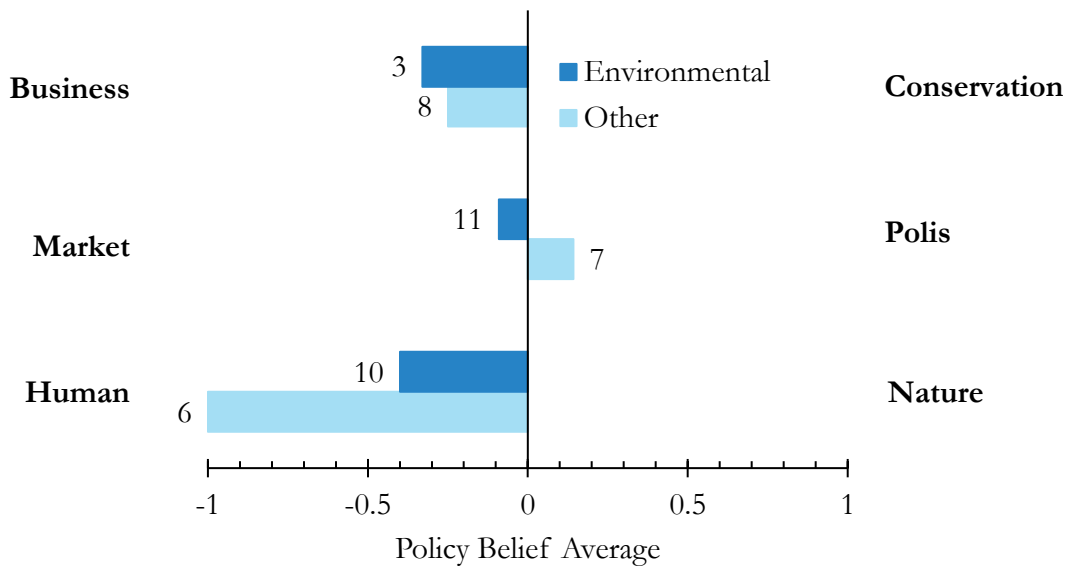


Figure 4. Intracoalitional differences among policy beliefs within the Pro Coalition.

### *Limitations of the NPF and Future Work*

I found the NPF to be an intriguing and revealing analytical lens. However, mixing quantitative methods with qualitative content can create difficulties and limitations. As Gray and Jones (2016) mention, some policy areas are difficult to research with quantitative methods due to small sample sizes, access issues, and other factors. I came across this issue with some of my narrative strategy data when I could not run statistical tests because some datasets contained only one sample. By using the NPF with qualitative methods, some of these issues can be resolved, and qualitative and quantitative NPF studies can merge and inform each other (Gray & Jones, 2016). This is a new area of NPF research that requires future exploration. Quantitative methods also have another limitation. As Shanahan et al. (2013) state, statistical results cannot solve causal questions. While NPF research is intriguing and informative, it is also somewhat limited by this aspect. It can help scholars infer possible causes of policy outcomes, but it cannot provide causal links for those outcomes. Policy narrative research has potential, however a lot more work needs to be done before scholars can point out causal links between policy narratives and climate policy realities.

My study had its own limitations and caveats as well. First, the debate over HB 1819 occurred almost 9 years before this study was conducted. Given that all of my samples were found on the internet, it is entirely possible that I was missing some narratives that were removed from public access. Second, the public testimonies that made up 92% (Figure 1) of the total narrative pool were limited to one to two-minute speeches. Some speakers were cut off in the middle of their narrative for going over the time limit. Many advocates submitted written testimonies to the legislature, which I could not gain access to. Thus, I missed some parts of these advocates' policy narratives. These two aspects show that my results may not be a complete representation of the opposing coalitions' policy narratives. Third, this study had only one coder, which can lead to bias and reliability issues. Fourth, this is one case study among a small collection of inter and intracoalitional NPF studies. More micro and meso level NPF studies need to be published in order to better assess the influence that policy narratives have on policy outcomes.

### *Making Climate Policy Winners and Losers*

Removing cap-and-trade from HB 1819 resulted in a clear winner and loser. While I cannot definitively say what killed this cap-and-trade bill, it is clear that policy narratives were a key factor. As

Shanahan et al. (2013) state, statistical results alone cannot answer the causal question in this policy issue. However, my statistical results do allow me to speculate and infer possible influences. My results showed clear differences in which characters each coalition identified, and how they were used to create plots. The winning coalition consistently portrayed negative stories of Washington employees and businesses being harmed by a statewide cap-and-trade system, while the Pro Coalition emphasized the positive effects of controlling carbon emissions, as well as the inevitable consequences to the state's environment and industries from doing nothing. While both coalitions showed high levels of cohesion, the losing coalition's authors were slightly less consistent in their choice of plots, angel-devil shift, and the polis-market policy belief. Perhaps consistent negative information was just more persuasive to legislators, regardless of the Democratic majority in both the House and Senate at the time. It is also important to remember that when policy narrative influence policy outcomes, they also influence real-world consequences.

Failing to establish cap-and-trade in 2009 left Washington State without an effective way to cut GHG emissions. As a result, the state will likely fail to meet the WCI's emissions reduction goal of 15% below 2005 levels by 2020. Data reported by the US Energy Information Administration (2017) shows that the state's total annual emissions in 2015 were only 3.6% below 2005 levels, leaving the remaining 11.4% in reductions to be achieved in five years. Reducing carbon emissions at this level is unheard of, especially without a major reductions program. This real-world consequence serves as a reminder that negative policy narratives can win even in progressive states with Democratic majorities.

Much of Washington and the Pacific Northwest are known for their environmental progressivism. Governor Inslee was among those who voiced continuing support for the Paris Agreement after President Trump's announcement (Tabuchi & Fountain, 2017). Yet, Washington has continually failed to pass influential carbon emissions reduction policies. For example, the 2016 carbon tax initiative failed in Washington State by a margin of 18.6% (The New York Times, 2017). According to the Yale Climate Opinion Map (Marlon et al., 2016), in 2016 an estimated 73% of adults in Washington state believed that global warming is happening, and an estimated 77% supported regulating CO<sub>2</sub> as a pollutant. If the public are in support of regulating carbon emissions, then why is there a disconnect between policy preferences and policy reality? Achen and Bartels (2017) posited that voters don't actually control policy realities because elected officials often don't share the policy views of the people who elected them. Instead of voting with specific issues in mind, voters side with



the party they personally identify with, resulting in elected officials who represent the party and not necessarily the voters (Achen & Bartels, 2017).

Removing cap-and-trade entirely from HB 1819 can be viewed as a form of agenda-setting by conservative legislators because they removed an undesired policy option. Thus, it could also be seen as an exercise of political power (Moe, 2005) in which legislators represented a party instead of their voters. However, with a senate majority of 31-18 Democrats-Republicans and a house majority of 64-34 Democrats-Republicans (NCSL, 2009), legislators did not follow party lines. A Gallup poll (n.d.) reveals that just after the US economic recession started in late 2007, the percentage of people prioritizing environmental protection dropped from 55% to 38% by late 2010, while the percentage prioritizing economic growth rose from 37% to 53% in the same time span. Public concern for the two issues crossed at approximately 45% in late 2008 to early 2009 (Gallup, n.d.), right around the time that legislators were discussing HB 1819. Perhaps this change in public opinion gave more weight and validity to the Con Coalition's consistent victimizing narrative, while the Pro Coalition was viewed as the minority opinion. If so, then removing cap-and-trade—which was portrayed as a costly economic risk by the Con Coalition—meant that legislators represented the majority public opinion more so than their own party.

Going back to Moe's (2005) discussion of institutions of political power, the decision by legislators to remove cap-and-trade may have been fueled by party interests after all. At the time of HB 1819, these representatives were likely thinking about the upcoming midterm elections in 2010, and how many seats they might lose. The Con Coalition's stories of decline featuring Washington businesses as the victims, combined with increasing public concern for economic growth (Gallup, n.d.), may have persuaded Democrats that cap-and-trade would be too risky in light of the upcoming elections. In that case, Moe (2005) and Achen and Bartels (2017) would be correct; legislators were choosing to represent their party's interests to hold on to their political power.

After seeing multiple failed climate policy attempts, how can Washington end this trend and start passing legislation? In his 2016 book titled, *Reclaiming the Atmospheric Commons*, Leigh Raymond offers some answers to this important question. Raymond (2016) looks at the ten RGGI states who successfully passed bipartisan cap-and-trade legislation, analyzing what historical events paved the way for them, and how framing allowed for an almost complete auction of allowances. He argues that one of the most influential strategies used by RGGI advocates was the combination of a public benefit frame and policy design focused on economic benefits, coined as the public benefit model. Instead of just making polluters pay, “this new frame connected public ownership of the resource [air quality] to

the idea of auction revenue providing specific public benefits, including ratepayer relief” (Raymond, 2016, p. 96). RGGI advocates were organized and able to garner support from groups and politicians on both sides of the political spectrum (Raymond, 2016).

When comparing the RGGI advocates to the advocacy coalitions in my case study, it is clear that there were some strategic differences. The RGGI advocates were consistent in their focus on the economic benefits of auctioning allowances (Raymond, 2016), while the Pro Coalition’s narratives instead talked about the environmental benefits of cap-and-trade, and occasionally brought up the economic consequences of continued global warming. Although the Con Coalition emphasized negative impacts of cap-and-trade, the consistent economic focus of their narratives was more similar to the RGGI advocates’ strategies than the Pro Coalition. Another difference lies in policy design. The stakeholder working groups who designed RGGI’s guiding plans were explicit about wanting to auction allowances, and even devoted an entire meeting to the topic (Raymond, 2016). HB 1819 just called for the establishment of a cap-and-trade system (W.A. H.R., 2009), leaving the implementation details to be decided after the bill was passed. Several testimonies from the Con Coalition expressed concerns about the lack of details in the bill, stating that they could not support a program if they didn’t know what the financial costs would be to their own businesses. The debate between the Pro and Con Coalitions centered around whether a cap-and-trade system should exist at all; the Pro Coalition didn’t make it far enough to fully advocate for specific allocation methods. Perhaps if the Pro Coalition had followed the public benefit model, HB 1819 could have been more persuasive and overcome the victimizing narratives and lack of public support for climate policy at the time.

### **Conclusions and Moving Forward**

With the NPF as a lens for analyzing the 2009 cap-and-trade policy issue, I found some intercoalitional differences in the use of narrative elements and policy beliefs in policy narratives, which follows previous NPF studies (Shanahan et al., 2013; McBeth et al., 2005). The Con coalition focused on individual, anthropocentric interests by repeatedly presenting stories of decline featuring victims who would be harmed by a cap-and-trade system. On the other hand, the Pro Coalition did not construct the same narrative each time. They embedded heroes and victims in both story types, and displayed both sides of each policy belief. I also found slight differences in intracoalitional cohesion. While both coalitions showed high levels of cohesion in general, I found that the Pro Coalition was not quite as consistent as the Con Coalition in their use of plot types and the polis-

market policy belief. These results were consistent with one of the seminal NPF studies whose evidence also revealed stronger intracoalitional narrative cohesion within the winning coalition (Shanahan et al., 2013). The Con Coalition won in the end when cap-and-trade was removed from the bill, perhaps due to their consistent victimization narratives.

There are additional possible explanations for the removal of cap-and-trade. One is the disconnect between public opinion on regulating carbon emissions and the actions of elected officials who often represent party interests. A second explanation is that rising public concern for economic growth combined with the Con Coalition's narratives persuaded legislators to represent the majority opinion on this matter. Another alternative is that Democratic legislators were actually focused on maintaining their political power through the upcoming 2010 midterm elections, and were persuaded by public opinion and narratives that a risky cap-and-trade program could cost them seats. The cause of this policy outcome was likely a combination of the Con Coalition's negative policy narratives and external factors, such as changing public opinion and the pressure of upcoming mid-term elections.

An important question still remains to be answered: how can Washington end the trend of climate policy failures and start passing legislation? Raymond (2016) suggests that the RGGI's public benefit model could help other states pass cap-and-trade legislation, as well. However, the Pro Coalition's attempt at public benefit framing did not work out for them. They were not as focused on the economic benefits, and their narratives were slightly less cohesive than the Con Coalition. Regardless of whether the public benefits model is the key to future success for climate policy, climate policy advocates need to start with getting support from elected officials. President Trump's decision to withdraw from the Paris Accord, despite public opinion, reemphasized the disconnect between public opinion and policy outcome. In order to apply this work and previous NPF studies to influencing policy realities, future NPF work at the micro level should focus in on how effectively policy narratives shape elected officials' decisions.

## Disclaimer

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## Appendix

Table A.1. Intercoalitional differences among policy beliefs ( $\alpha=0.05$ )

Policy Beliefs	Pro Coalition		Con Coalition	
	Mean (n)		Mean (n)	
Human-nature	-0.625 (16)		-1.00 (45)	
	t-statistic = 1.861, NS			
Polis-market	0.00 (18)		-0.911 (45)	
	t-statistic = 3.639, $p < 0.05$ , equal variances not assumed			
Conservation-business	-0.250 (12)		-1.00 (1)	
	t-statistic = 0.959, NS			

Table A.2. Intracoalitional differences among policy beliefs ( $\alpha=0.05$ )

Policy Beliefs	Pro Coalition		Con Coalition	
	Mean (n)		Mean (n)	
	Environmental	Other	Business	Other
Human-nature	-0.40 (10)	-1.00 (6)	-1.00 (13)	-1.00 (10)
	t-statistic = 1.964, NS			
Polis-market	-0.09 (11)	0.143 (7)	-1.00 (13)	-0.80 (10)
	t-statistic = 0.456, NS		t-statistic = 1.000, NS	
Conservation-business	-0.33 (3)	-0.25 (8)	0.00 (2)	-1.00 (1)
	t-statistic = 0.110, NS			