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Should Water be Commodified? An Analysis of Government Regulation of Corporate Access to U.S. Water Supplies

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Should Water be Commodified? An Analysis of Government Regulation of Corporate Access to U.S. Water Supplies

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Abstract

My primary research questions are: first, what is the legal framework that allows corporations in the United States to source water for the sale of bottled water; and second, what are the environmental, economic, and political impacts of their actions in the affected communities? I answer these questions by exploring the variety of state laws that corporations are utilizing to access water sources, collecting data on all fifty states. I then focus on three communities in different U.S. states, focusing on regions with varying legal structures in place. The communities I focus on are Fryeburg, Maine; Osceola County and Mecosta County, Michigan; and Hood River County, Oregon. I examine the environmental, economic, and political impacts corporations are having on these communities, and offer a policy recommendation for further regulation of corporate access to water resources in the U.S.

Executive Summary

Water can be seen as both a public and a private good. Corporations through the large-scale water extraction of municipal water convert water from a public good to a private good to be sold for economic gain. It can be difficult to protect against corporations commodifying water because the impacts are felt at the community level. In most areas of the United States, tap water is available to residents, although corporations' market their bottled water as a better alternative as a means to sell water at a marked-up price. The bottled water industry is a multibillion-dollar industry that has been steadily growing over the last almost fifty years; in 2020, Americans spent 36 billion dollars on 15 billion gallons of bottled water, which in 2016 overtook soft drinks as the largest category of beverage consumed in the U.S. This shift from the consumption of tap water to bottled water has turned water into a commodity and provided an incentive for corporations to gain influence at the local, state, and federal level of government to protect their interests.

There is already extensive research on the environmental impacts of the packaging of bottled water, and on the draining of aquifers from large-scale water extraction. Although the groundwater that is used for bottling represents a small portion of the water extracted nationally, the lack of diversity in sources leads to larger environmental impacts that are localized at the source of extraction. In the communities where corporations extract water for bottling, as their municipal sources dry up, they come to rely more heavily on bottled water themselves continuing a cycle of higher profits for the companies and more extraction to accommodate the additional demand.

The federal government does not regulate large-scale corporate water extraction; regulation is left to the states and there are five primary legal frameworks in place to regulate such extraction: (1) the traditional common law doctrine; (2) the reasonable use doctrine; (3)

correlative rights doctrine; (4) the Restatement of Torts approach to reasonable use; and (5) the rule of prior appropriation. Many states use combinations of multiple legal frameworks and, although each state can generally be sorted into one of these five categories, each state has nuances specific to their groundwater extraction laws.

To examine the environmental, economic, and political impacts of corporations on communities from different regions in the U.S. I focus my analysis on three communities: Fryeburg, Maine; Osceola County and Mecosta County, Michigan; and Hood River County, Oregon, and their legal battles with Nestlé Waters the largest bottled water company in the United States. Maine operates under common law doctrine, which allows corporations to pump as much water as they would like regardless of use of the water. Michigan operates under the reasonable use doctrine, which means they can extract water as long as there is not an unreasonable effect on other wells and the water is put to reasonable use. Oregon operates under the rule of prior appropriation, which means a company must obtain a water right from the state government in order to pump from an aquifer and show beneficial use of the water they are extracting.

These legal frameworks are not enough to protect the environment and local public interest in regulating large-scale groundwater extraction. The common law doctrine provides no limits for corporations and incentivizes the development of close relationships with state and local government to promote their own interests above the public. The reasonable use doctrine, although providing slightly more legal recourse for communities, still allows corporations to extract large quantities of water if state and local government are amenable, leading to rare success for communities in their fight against corporate extraction. The rule of appropriation, although requiring corporations to obtain a permit, does not guarantee that public interest will be

held above corporate interest and, although leading to more frequent success, still does not go far enough to regulate large-scale water extraction.

More must be done to regulate the corporate commodification of water and to protect the environment from the negative effects of large-scale water extraction. I propose that states extend the public trust doctrine, which holds that the states' common resources be held in trust for the benefit of the public over private property owners, to include groundwater. There is some precedent of states applying the public trust doctrine to groundwater, including New Jersey, and New Hampshire, and in recent years other states have attempted to do so as well. The basic principle of the public trust doctrine is well suited for groundwater and many states already include provisions in their state constitutions rooted in similar principles. Applying the public trust doctrine to groundwater, although not perfect, would give communities additional legal recourse against corporate commodification of water.

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I. Introduction

Two hours north of Los Angeles, California located in the San Bernardino national forest, Strawberry Creek is comprised of a network of clear streams running down the side of the steep Strawberry Creek Mountain. In 1984 Nestlé began pumping water from Strawberry Creek and has been bottling it under their Arrowhead brand for the last few decades. The brush covered area surrounding the location of Nestlé's wells is lush and green, there is abundant wildlife, from mosquitos to bears, utilizing the flowing stream of Strawberry Creek indicating a healthy ecosystem. Upstream from Nestlé's wells the environment stands in sharp contrast; the brush sparser and browner, there is little aquatic wildlife, and the stream has dried up. Despite the drought in California and the clear negative impact that the large-scale water extraction is having on the surrounding ecosystem, Nestlé continues to pump millions of gallons of water annually from Strawberry Creek (Perkins, 2019).

Literature Review

I begin by briefly examining the question, "To what extent is water a public good versus a private good?" From an economic lens, water can be considered both a public and a private good at times. Professor Karen Bakker at the University of British Columbia explains in her work *The "Commons" Versus the "Commodity,"* how corporations are able to take water as a public good and turn it into a private good:

> Private companies, who will be responsive both to customers and to shareholders, can efficiently run and profitably manage water supply systems. Commercialization rescripts water as an economic good rather than a public good,

> and redefines users as individual customers rather than a collective of citizens. (Bakker, 2007)

When corporations are extracting water from municipal water sources the question of whether water is a public or private good can become murky, and the ambiguity plays a role in how corporations are able to take advantage of legal frameworks to access public water supplies depending on different state laws (White, 2015). Based on work by scholar and activist Vandana Shiva, Bakker gives insight into why it is difficult to protect municipal water sources from corporations and prevent the environmental harm they are creating:

> [W]ater is a local flow resource whose use and health are most deeply impacted at a community level; protection of ecological and public health will only occur if communities are mobilized and enabled to govern their own resources. In particular, those who advance the "commons" view assert that conservation is more effectively incentivized through an environmental, collectivist ethic of solidarity, which will encourage users to refrain from wasteful behavior. The real "water crisis" arises from socially produced scarcity, in which a short-term logic of economic growth, twinned with the rise of corporate power (and in particular water multi-nationals) has "converted abundance into scarcity. (Bakker, 2007)

In most areas in the United States, where water is readily available in the form of tap water, bottled water companies, through packaging and marketing (to make bottled water seem healthier or safer), have created demand for bottled water as a means to increase profits. The bottled water industry in the United States is a multibillion-dollar industry that sources much of

its water from public water, from sources such as springs and aquifers, essentially for free (Perkins, 2019).

In 2020, Americans spent about 36 billion dollars on 15 billion gallons of bottled water, and the bottled water industry is projected to grow even larger (Rodwan, 2020). In 2020, bottled water, for the fifth year in a row, was ranked the largest category of beverage consumed in the United States, overtaking soft drinks in 2016. Every year from 1977 to 2020 (except during 2008 and 2009 during the Great Recession) the volume of bottled water sold in the U.S. has increased (Rodwan, 2020). In the U.S. companies overproduce goods such as beer and soda, creating "underconsumption" for these goods because consumer demand cannot keep up with their production. Water as an essential human need, makes bottled water perfect for companies like Nestlé, Coca Cola, and Pepsi, because they are able to create a high level of demand they cannot achieve with other beverages, to increase their profits (Robbins et al., 2010). This shift towards bottled water has turned water into a commodity, giving these companies power over an essential human resource and an incentive to gain influence at the local, state, and federal level of government to protect their interests regardless of the environmental impact of their actions.

There is already extensive research on the environmental impact of the packaging of bottled water, which is made from plastic. This plastic is polyethylene terephthalate, or PET, which is derived from petroleum, of which about two kilograms is required for every kilogram of bottles produced. The lifecycle of these bottles usually ends up in landfills despite being recyclable (Robbins et al., 2010). There is also significant research on the environmental impact of the draining of aquifers and the drying up of creeks and springs, which have long-lasting negative impacts locally and regionally and are further aggravated by climate change. Groundwater sources or aquifers are considered both a renewable and non-renewable resource.

While they can refill with rainfall and snow melt, some aquifers take thousands of years to replenish, and some do not refill at all. The emptying of aquifers can cause streams and rivers to decline and even dry up or reverse direction, which affects the local watershed and larger ecosystem (Ford-Stille, 2020). In "Regulated and Hydrated: A Case for Regulating Bottled Water," Hannah Ford-Stille, explains how the impact of extraction for bottled water differs from other municipal water sources:

> The [U.S. Government Accountability Office] determined that even though the amount of extracted groundwater that is used for bottling is small relative to other uses across the country, the extraction can have significant impacts on local groundwater availability, surface flows, and dependent resources. Municipal water sources, though at times guilty of the same sins as bottled water such as over-extraction, have greater diversity in their water sourcing, including pulling from surface water, rivers, lakes, reservoirs, or even from the ocean through desalination plants. This diversity can spread negative impacts across multiple areas, minimizing the effects and ensuring a more stable water management portfolio, rather than with bottled water where the impacts are larger and localized as the sources are less diverse. (p. 354)

On a national level this problem is also cyclical; when communities are left with little to no potable water because of corporate extraction, they must rely more heavily on bottled water as an alternative source of water, contributing to the corporations' success and ability to continue their actions in other communities. Today and for future generations, protecting the environment and municipal sources of potable water should be of the utmost importance.

United States Legal Framework

The federal government does not regulate where and how much water corporations can extract from groundwater sources. The federal regulation of bottled water exists only under the purview of the U.S. Food and Drug Administration (FDA) which focuses on the quality of the groundwater extracted for product safety. Although there is a short provision on bottled water in the Safe Drinking Water Act (SDWA) that gives the Environmental Protection Agency (EPA) regulatory power, they deferred jurisdiction to the FDA in 1979 in the Federal Food Drug, and Cosmetic Act (FFDCA) (Ford-Stille, 2020). The lack of federal regulation means that states dictate whether and how corporations may extract water for bottling. With regulation left to the states, laws vary across the country and most states allow corporations to pump as much water as they would like without regard for the environmental impact or the use of the water (Ford-Stille, 2020; Perkins, 2019). Corporations often drain surface and groundwater resources, leaving little to no potable water left for the people living in the affected communities, and face few consequences for their actions.

States typically combine multiple different legal frameworks to regulate water extraction for bottling. Some states apply traditional common law, some combine traditional common law with other legal frameworks, and some apply combinations of multiple legal frameworks. There are five general categories that states draw from in their regulations: (1) the traditional common law doctrine; (2) the reasonable use doctrine; (3) correlative rights doctrine; (4) the Restatement of Torts approach to reasonable use; and (5) the rule of prior appropriation (Ford-Stille, 2020).

The traditional common law doctrine also known as “absolute dominion” rule, allows for landowners (in this case corporations) to draw an unlimited amount of groundwater, regardless

of the use of the water (Besinger, 2020; Ford-Stille, 2020). Among the different legal frameworks, this gives corporations the most freedom; they can pump as much water as they desire with little regard for the environmental or community impact of their actions. In states that apply only the traditional common law doctrine to their regulatory structures, communities have little room to take legal action against corporations for depleting their groundwater resources, regardless of the severity of the impact (Ford-Stille, 2020).

The reasonable use doctrine builds on the common law doctrine but traditionally requires that the extracted groundwater be put to reasonable use and be used on the land from which the water was extracted. However, this law is often interpreted broadly, and if there is no injury to other landowners and use of the water is on any land above the aquifer, then the landowner can extract an unlimited quantity (Ford-Stille, 2020). Although the reasonable use doctrine protects water resources and communities slightly more than the common law doctrine by itself, the broad interpretation of the regulation often gives corporations a lot of leeway on what is considered reasonable use of the water they are extracting. Despite this, there is greater potential for the protection of water resources under the reasonable use doctrine than under common law doctrine, which allows for occasional legal success in communities taking action against corporations.

The correlative rights doctrine is similar to the reasonable use doctrine; however, it focuses on shared community access. It requires an equitable share of the water extracted by landowners using the same aquifer and more strictly specifies that water must be used on the land overlying the aquifer. Similar to the reasonable use doctrine, landowners are not necessarily prevented from using the water they extract off their land, but in times of low water, corporation's usage is considered of lesser importance than the other landowner's use due to the

large quantity of water being extracted and because the water is being used off the land (Besinger, 2020; Ford-Stille, 2020). The equitable share requirement restricts the amount of water corporations can extract, and may mitigate some of the company's negative impacts, particularly in times of drought. However, the correlative rights doctrine does not interfere with the corporations' actions in all situations as it depends on the number of landowners extracting water from the same aquifer and the quantity of water they are extracting. In short, the correlative rights doctrine, like the reasonable use doctrine, gives room for corporations to use the water extracted, outside of the explicit use laid out in the regulations, allowing them legal flexibility if communities take legal action.

The Restatement of Torts approach to reasonable use combines aspects of the common law doctrine and the reasonable use doctrine by placing liability on the groundwater extractors for any injuries or any unreasonable harm they cause due to the quantity of groundwater they extract. These injuries include harm associated with lowering the water table, exceeding a reasonable share of the total quantity of water available either completely or annually, or causing a significant effect on waterways or lakes. Under the Restatement of Torts approach, the extractor can be held liable for injuries regardless of the location of usage of the water on the land overlying the aquifer (Ford-Stille, 2020). In states that apply the Restatement of Torts approach, communities have more power to hold corporations accountable in situations where there is a negative environmental impact due to the large quantity of water being extracted. Notably, only two states apply the Restatement of Torts approach in their regulatory structures (see Table 1).

Finally, the rule of prior appropriation requires landowners to obtain a water right from the state government to extract groundwater from an aquifer. Landowners can secure this right

by essentially being the first user to extract water from a water source and put it to beneficial use. In times of drought, these landowners have seniority, and they may continue to extract water regardless of the use of the water. Under this rule, state governments tend to interpret the beneficial use component generously, deeming use for bottled water to be beneficial use (Besinger, 2020; Ford-Stille, 2020). This regulatory structure technically gives the state more power to ensure corporations are not over extracting water and causing environmental damage because they can refuse to grant water rights, although in practice many bottled water companies use their political power at the state level to gain access to water sources. In 2020, the state of Washington successfully pushed back against these political pressures when it passed a bill prohibiting new permits for water bottling operations, but few states have confronted the bottled water industry in this way (Wallace, 2020).

Table 1 indicates what legal frameworks are in place in each of the fifty U.S. states. Although each state can be categorized into one of these legal frameworks, as seen below a portion use a combination of multiple legal frameworks. Despite the simplicity of the categorization, each state has nuances specific to their groundwater extraction laws. I sourced the information included in Table 1 predominantly from Hannah Ford-Stille's work "Regulated and Hydrated: A Case for Regulating Bottled Water," and supplemented with information from two state reports and the National Agricultural Law Center (Ford-Stille, 2020; Legal & Institutional Framework Working Group, 2018; Pilson, 2017; *Water Law: An Overview*, n.d.).

Table 1: United States Legal Frameworks

Legal framework	**States**
Traditional Common Law Doctrine	Connecticut, Georgia, Indiana, Louisiana, Maine, Massachusetts, Mississippi, Rhode Island, Texas
Reasonable Use Doctrine	Alabama, Arizona, Delaware, Florida, Illinois, Kentucky, Maryland, Michigan, Missouri, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, South Carolina Virginia, West Virginia,
Correlative Rights Doctrine	Arkansas, California, Iowa
The Restatement of Torts	Ohio, Wisconsin
Prior Appropriation	Alaska, Colorado, Idaho, Kansas, Montana, New Mexico, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington
Combination Common Law and Correlative Rights Doctrine	Minnesota, Vermont
Combination Reasonable Use and Correlative Rights Doctrine	Hawaii, Nebraska, Oklahoma, Tennessee
Combination Reasonable Use Doctrine and Prior Appropriation	Wyoming

Research Design

Throughout this thesis I focus primarily on the actions of Nestlé Waters, which is the largest corporation in the bottled water industry in the United States, although it should be noted that Coca Cola and Pepsi also hold a substantial portion of the U.S. bottled water market. I also examine the actions of Food & Water Watch, a prominent non-profit organization that challenges

the bottled water industry in the U.S. In looking at Nestlé, which holds most of the U.S. market for bottled water, and Food & Water Watch, I focus on how both corporations and non-profits shape the prospects for regulation at the federal and state level. As a part of my research, I conducted an interview with a senior organizer at Food & Water Watch to get inside information on the goals and priorities of Food & Water Watch in lobbying for increased regulation of bottled water.

I focus my analysis by looking at three cases in communities across different regions in the U.S. to examine the environmental, economic, and political impacts of these corporations' actions. In addition, I ask whether, to what extent, and why communities might resist the efforts of large, bottled water corporations. I conclude my thesis by answering the question "Should there be more regulation of corporate commodification of water?" and offering a policy recommendation to further regulate corporate water extraction. In conducting my research, I utilized a large variety of different sources and databases; a majority of the information available came from media searches and were supplemented with material from state supreme court cases, academic journals, law review articles, and local documents and reports found on town and city websites. It was particularly difficult to find information regarding the legal battles between Fryeburg, Maine, and Nestlé, partially because Fryeburg has a significantly smaller population that the communities I focused on in Michigan and Oregon and received less media attention.

Case selection

I look at three different cases to answer my research questions, focusing on communities in Fryeburg, Maine; Osceola County and Mecosta County, Michigan; and Hood River County, Oregon. I chose these case studies because the legal frameworks regulating corporate large-scale

groundwater extraction vary among them. These communities also have unique legal battles and community advocacy campaigns that have arisen that shed light on the impacts that corporations are having in communities where they are pumping water. These three cases are in states that utilize the three most common regulatory structures in place. Maine, for example, operates under common law doctrine or "absolute dominion" law, which means corporations can pump as much water as they would like regardless of use of the water and without regard to the environmental impact (Ford-Stille, 2020; Perkins, 2019). Michigan operates under reasonable use doctrine, which means they can extract water as long as there is not an unreasonable effect on other wells or the aquifer they are pumping from and the water is put to reasonable use, which in Michigan the use for bottled water is considered reasonable use (Ford-Stille, 2020; Winter, 2017). In Oregon, the laws are stricter; they operate under the rule of prior appropriation which in Oregon means a company must obtain a water right from the state government in order to pump from an aquifer, and they must show beneficial use of the water they are extracting. Although the laws are stricter in Oregon than in Maine or Michigan, this stricter requirement does not always protect communities and water sources, although it does open up opportunities for some legal success for communities who go against corporations (Ford-Stille, 2020; *Oregon Water Law Basics*, 2007). All three of these communities, Fryeburg, Maine; Osceola County and Mecosta County, Michigan; and Hood River County, Oregon, have faced long standing legal battles specifically with Nestlé Waters. I compare how the differences in the regulatory structures each state has in place have impacted the communities' legal success against Nestlé in protecting local water resources.

II. Fryeburg, Maine Case

Introduction

In Maine the legal framework in place is the common law doctrine or "absolute dominion" rule, which allows for landowners to draw an unlimited amount of groundwater, regardless of the use of the water. This case is unique in that Nestlé is purchasing water from a public utility and gaining access to an existing well in Fryeburg. Unlike in other cases, Nestlé did not directly purchase land and build their own well; rather, they are partnering with the Fryeburg Water Company (FWC) and leasing land from the town of Fryeburg. In executing this deal Nestlé needed approval from the Maine Public Utilities Commission (PUC); this case highlights the dangers of having Nestlé deeply entwined in the state government and the impact this has on the ability of communities to protect their own interests which are in conflict with Nestlé and departments like the PUC. Local communities typically struggle to prevent the corporate commodification of water, and with the state of Maine approving decades-long contracts, they have almost no recourse in protecting the environment. See Table 2 for overview of the events I discuss in this section.

Table 2: Timeline of Events

Year	Event(s)
1997	The Fryeburg Water Company (FWC) drills a second well in Fryeburg.
2005	Nestlé applied for a permit from the Town of Fryeburg to build a loadout facility for water transport to nearby bottling plants.
2006	The FWC was pumping 800,000 gallons of water a day and selling it to Pure Mountain Springs, who then sold the water at a markup to Nestlé.
2008	Nestlé purchased Pure Mountain Springs, in order to begin paying the public rate which was about a tenth of a cent per gallon of water rather than the marked-up price they were previously paying.
2009	The Maine Supreme Court sides with Nestlé, allowing them to begin construction on their loadout facility in Fryeburg after public opposition from Western Maine Residents for Rural Living (WMRRL).
2012	The FWC sought approval from the Maine Public Utilities Commission (PUC) for a twenty-five-year contract with Nestlé, for the lease of a two-acre piece of land and pumping station, and for the purchase of water from FWC by Nestlé.
2016	The Maine Supreme Court rules in favor of Nestlé against Bruce Taylor and Food & Water Watch affirming the decision of the PUC to approve the contract with Nestlé.
2021	Nestlé sold its Poland Spring brand, which its Maine sourced water is bottled under, to a private equity firm.

Background

Fryeburg, Maine is a small town with a population of 3,400 people, it is located near the eastern edge of the White Mountains in southwest Maine alongside the Saco River, which originates in the White Mountains and runs through New Hampshire into Maine where it empties into the Atlantic Ocean (See Appendix A). In Fryeburg, the Fryeburg Water Company (FWC), a private company, is the exclusive water utility provider. The FWC was created in 1882, the same year that Fryeburg's water system was built, which initially drew water from springs originating in the White Mountains. Most residences in Fryeburg had wells built on their properties to provide water for their everyday needs, but by 1950 all the homes in Fryeburg had private plumbing systems and later pipes and mains were laid to provide water to businesses in town.

FWC provided the water from two sites in the White Hills, which were originally selected because there was no property claim to them. The two sources were White Lot and White Lot Brooke, tributaries which both fed into the Saco River. The FWC also began managing and distributing water from the Wards Brook Aquifer, which in 1955 had a storage capacity of about eight billion gallons of water; they began providing water from the aquifer to the residents of Fryeburg as well as some customers in East Conway, New Hampshire (Marcus, 2012).

Fryeburg Water Company Business Expansion

In 1997, with the intention of expanding its customer base, the FWC decided to drill a second well in Fryeburg. They subsequently sold a significant portion of the water pumped from the second well to Nestlé instead of its public water customers. In 2006, FWC was pumping about 800,000 gallons of water per day and selling it to Pure Mountain Springs, who then sold the water to Nestlé (Marcus, 2012). Because FWC is a public utility, they cannot sell water to Nestlé at a higher price than any other customer. As a work around, FWC sold the water to Pure Mountain Springs, a company controlled by the Hastings family who also control FWC, at the same rate as ordinary customers. Pure Mountain Springs then sold it to Nestlé at a markup. No longer wanting to pay a marked-up price, in 2008 Nestlé purchased Pure Mountain Springs, in order to begin paying the public rate which was about a tenth of a cent per gallon of water rather than the marked-up price they were previously paying. Nestlé and members of the Hasting's family continue to refuse to make the previous price public information (Woodard, 2014).

Early Opposition

In June 2005, Nestlé applied for a permit from the Town of Fryeburg to build a loadout facility close to Route 302 as a part of a project to extract water from the nearby town of

Denmark and pipe it to Fryeburg. Nestlé planned to store water in a silo and build a structure with a concrete loading pad where water transport trucks could be filled. This loadout facility would allow Nestlé to fill up to fifty water transport trucks a day for the transport from Fryeburg to a nearby bottling plant. After multiple public meetings the Fryeburg Planning Board determined that Nestlé's proposal qualified under the town's land use ordinance and approved the permit by a 4-1 vote. There was immediate backlash from the community, and the Western Maine Residents for Rural Living (WMRRL) appealed the decision to the Fryeburg Board of Appeals (BOA). The BOA held two public hearings, after which they granted WMRRL's appeal, denying Nestlé the permit to build the loadout facility. Nestlé appealed this decision, and the issue went back and forth in court until it eventually made its way to the Supreme Judicial Court of Maine (*Nestle Waters North America Inc v. Town of Fryeburg*, 2009). The Maine Supreme Court ultimately sided with Nestlé, and after four years of delay they began construction on the loadout facility in Fryeburg. Construction on the facility began in May 2009 and took about six months to complete, at a cost of $2.1 million. The main concern of critics such as the WMRRL was about the cumulative impact on the roads of the daily heavy truck traffic coming to and from the facility and increasing the town's road maintenance costs (The Associated Press, 2009).

Expansion of Operations

This section describes the conflict over Nestlé's purchase and extraction of water in Fryeburg. The community was strongly opposed, but with interest from local officials and strong state support, they were not successful in halting the deal with Nestlé. This conflict illustrates a key weakness with the common law doctrine: having almost no regulation of large-scale water extraction, corporate lobbying power allows almost unlimited access for corporations to execute plans as they see fit despite local opposition.

In 2012, the Fryeburg Water Company (FWC) sought approval from the Maine Public Utilities Commission (PUC) to execute an agreement with Nestlé for the lease of a two-acre piece of land and pumping station, and to purchase water from FWC. This deal involved Nestlé paying FWC a fixed monthly rent for the land use and purchasing a minimum quantity of water per year at the public rate (less than a cent per gallon of water) approved by the PUC. Included in this deal, FWC agreed to allow the exclusive use of one of their wells by Nestlé, although they retained the right to suspend Nestlé's use in circumstances where the water supply for FWC's customers is in jeopardy or to comply with environmental regulations. This proposed agreement between FWC and Nestlé was for a twenty-five-year contract with the option for four additional extensions of five years each, totaling forty-five years (*Taylor et al. v. Public Utilities Commission et al.,* 2016). The proposed length of this contract is particularly concerning since the magnitude of the impact on the watershed of such groundwater extraction is hard to anticipate with the ongoing effects of climate change.

In October 2012, the PUC began an investigation and opened an adjudicatory proceeding regarding the proposed agreement. In response, Bruce Taylor, a Maine resident, intervened with the help of Food & Water Watch, engaging in discovery and settlement efforts in an attempt to thwart the deal. By November 2014 though, the PUC had approved the agreement. Taylor, with Food & Water Watch appealed the decision to the Supreme Judicial Court of Maine, where they argued that the PUC mistakenly concluded that the agreement satisfied the necessary statutory criteria. Taylor's main argument was that the agreement exceeded the scope of FWC's authority under its legislative charter, designating its role in providing a utility service to public customers, which Nestlé is not. The Court, however, was not convinced by Taylor's argument, citing that the language of the charter is vague and makes no mention of public customers or bottled water.

The Court deemed that the PUC did not violate any statutory or constitutional provisions in approving the agreement, affirming the decision of the PUC (*Taylor et al. v. Public Utilities Commission et al.*, 2016).

In deciding whether to approve the deal with Nestlé, all three original PUC commissioners had to recuse themselves from ruling on the case because they all had past associations with Nestlé. Initially this delayed the decision on the contract until the Maine legislature passed a new law allowing for the appointment of alternative commissioners by the governor. Governor Paul Lepage then appointed three retired Maine judges to take over (Woodard, 2014). Thomas Welch, the first of the three commissioners to recuse himself did so because he was an attorney for Nestlé prior to being appointed to the PUC in March 2011. Welch worked at Pierce Atwood law firm and advised Nestlé in 2008 on the purchase of Pure Mountain Springs, which significantly cut down their costs on water that they were purchasing from FWC (Woodard, 2014). Commissioner Mark Vannoy worked for Nestlé as well, as an executive and project manager at Wright-Pierce, an engineering firm, that worked on twenty different projects, including fifteen projects in Maine, for Nestlé (Woodard, 2013b). David Little, although never having worked directly for Nestlé, was also a partner at Pierce Atwood and recused himself as well. Along with the three commissioners, Timothy Schneider, a Public Advocate representing ratepayers in PUC proceedings also recused himself because he had worked at Pierce Atwood specifically representing Nestlé on the deal that the PUC was deciding upon (Woodard, 2013a). None of the commissioners wanted to recuse themselves, they all claimed there was no conflict of interest due to their work with Nestlé, but they eventually did after pressure from the community, Food & Water Watch, and the advocacy group Community Water Justice, led by Nickie Sekera (Woodard, 2013a, 2013b).

Economic Concerns

Under the twenty-five-year contract, approved by the PUC, Nestlé has the right to withdraw up to 603,000 gallons of water per day at the same cost that Fryeburg residents pay (Miller, 2016). The minimum annual payment Nestlé is required to pay FWC for this water is $144,000, which would account for forty percent of FWC's revenue (Woodard, 2013b). In addition to paying FWC, Nestlé will provide the town of Fryeburg with $12,000 a month to lease one well, the land and some equipment (Miller, 2016). This money is significant for Fryeburg and shows why local governments often support or encourage Nestlé's presence in their communities, although the cost to Nestlé is negligible compared to the profits, they make from the water they are extracting. The cost of bottled water to consumers is heavily marked up compared to the public rate residents pay (which is less than a cent per gallon) for tap water from the same aquifers. The economic benefits do not outweigh the potential environmental costs of Nestlé business. Over the twenty-five plus years Nestlé is able to extract water under their contract, the aquifer will inevitably dry up; this will not only have a detrimental affect the surrounding ecosystem, but residents will be required to find additional water sources, turning to bottled water to supplement their needs. This will end up being more costly to residents, increasing Nestlé's profits and offsetting the economic benefits brought in by Nestlé's business.

Opposition to Nestlé

Nestlé learned how to finesse the state government in Maine to work to their advantage from the logging industry which, like Nestlé, had strong lobbying power at the state level in Maine. Many Maine residents were familiar with how the logging industry mistreated their communities, which raised red flags when Nestlé entered their communities to set up operations

(*Food & Water Watch Interview*, personal communication, March 23, 2023). There was already strong opposition to Nestlé in Fryeburg early on, which Food & Water Watch joined and supported.

A senior organizer at Food & Water Watch, who worked in Maine during the height of the Fryeburg community's recent fight with Nestlé, claimed that "Maine is a Nestlé state," referring to a revolving door of former Nestlé employees becoming government officials, and officials leaving office going to work for Nestlé, has enmeshed Nestlé into the state government (*Food & Water Watch Interview*, personal communication, March 23, 2023). They shared that Nestlé also donates extensively to Political Action Committees (PACs) to support political campaigns, including former Republican Governor Paul LePage who vocally supported Nestlé's business in Maine, and who still has influence in Maine politics. These ties between Nestlé and Maine's state government in conjunction with Maine having the most relaxed laws regulating groundwater have made it virtually impossible for the public interest to be considered. Once Nestlé is established, the way they are in Maine, it makes it increasingly difficult for communities to have their voices heard (*Food & Water Watch Interview*, personal communication, March 23, 2023).

Most recently, in 2021, Nestlé sold its Poland Spring brand, which its Maine sourced water is bottled under, to a private equity firm. Nickie Sekera, co-founder of Community Water Justice, expressed concern that the private equity firm might be less responsive to the community than Nestlé, saying "that at least a corporation like Nestlé to a degree will be sensitive to bad public image". This desire to protect their self-image and garner favor with local government motivates a small sense of accountability and holds Nestlé responsible for keeping the promises they make to communities like Fryeburg, and critics are concerned that the sale will lead to the

disappearance of any accountability (*Water Rights Activists Worry about Sale of Poland Spring*, 2021).

Key Takeaways

Maine's state government is heavily tied to Nestlé, and this in conjunction with having the most relaxed laws dealing with groundwater extraction, leaves local communities with little recourse against Nestlé. If Maine had stricter laws, it would leave less room for government officials with ties to Nestlé to have such immense power, although with the ties already in place, it is unlikely at this point that a slightly stricter legal framework (such as the reasonable use doctrine) would make a difference in giving communities more power against Nestlé's large-scale water extraction. Additionally, the financial compensation Nestlé provides under their twenty-five-year contract is significant for the small town of Fryeburg, which motivates the local government's support of Nestlé. However, the economic benefits do not outweigh the potential environmental and economic costs of large-scale water extraction on the community, especially when the cost to Nestlé are negligible compared to their profits. This commodification of water at the expense of the community and the environment motivates ongoing public opposition to Nestlé.

III. Osceola and Mecosta County, Michigan Case

Introduction

In Michigan the legal framework in place is the reasonable use doctrine which holds that a property owner may extract the groundwater beneath their property as long as it constitutes reasonable use, and the property owner obtains a permit from the state to ensure their use will be reasonable (Westmaas, 2021). This case highlights that although the reasonable use doctrine is stricter than the common law doctrine, it does not necessarily extend greater autonomy over water rights to local communities or ensure success against Nestlé. Success in Osceola County only came about because the local government was protecting its own interests against Nestlé in upholding zoning ordinances, rather than protecting the interests of the public against the commodification of water or protecting the environment. See Table 3 for overview of the events I discuss in this section.

Table 3: Timeline of Events

Year	Event(s)
2000	Nestlé purchased land, with access to groundwater, called Sanctuary Springs in Mecosta County.
2001	Nestlé gained the right to extract water at Sanctuary Springs, installed four wells and began the construction on a bottling plant in the nearby town of Stanwood. The Michigan Citizens for Water Conservation (MCWC) is formed, and they file a suit against Nestlé, claiming unreasonable use of water in Mecosta County. Nestlé installed a water extraction site from White Pine Springs in Osceola County.
2005	The Michigan Court of Appeals ruled in favor of MCWC, finding that Nestlé's water extraction in Mecosta County constituted unreasonable use.
2011	Nestlé uses their White Pine Springs well in Osceola County for the first time.
2017	Nestlé sought approval from the Osceola Township Planning Commission to build a booster station to pump more water from their White Pine Springs well.
2019	The Michigan Court of Appeals sided with Osceola Township against Nestlé reversing the lower court decision that approved Nestlé's plan to pump additional water from the White Pine Springs well.

Background

Osceola County and Mecosta County have a combined population of about 63,000 people and are located in west central Michigan (*Michigan Counties by Population*, 2021). Nestlé's presence in Mecosta County, Michigan began in December of 2000 when Nestlé obtained the groundwater rights to install four wells at Sanctuary Springs, a private hunting preserve on a 600-acre parcel of land. In the winter of 2001, Nestlé installed two wells on the Sanctuary Springs site, and during the summer months they installed two more wells. Nestlé also started construction on a bottling plant with the intention of pumping water from Sanctuary Springs through a pipeline directly to the bottling plant which was about twelve miles away in Stanwood (See Appendix B). Nestlé bottles water under their Ice Mountain brand at this plant, which is sold predominantly in the Midwest, within 250 miles of Stanwood (Ellison, 2016a, 2016b; *Michigan Citizens for Water Conservation v. Nestle Waters NA*, 2005).

In 2001, former Republican Governor John Engler was an early supporter of Nestlé's plans for a bottling plant in Mecosta County and helped award Nestlé with a $9.5 million tax break . Michigan does not charge fees on groundwater extraction, which served as an additional incentive for Nestlé to set up operations in Michigan. To gain local goodwill Nestlé worked with the local government in Mecosta County to purchase new emergency first-responder vehicles, new township wells, and make bottled water donations to the local schools. This helped Nestlé develop a friendly relationship with the local government in both Mecosta and Osceola County (Ellison, 2016b).

Michigan follows the reasonable use doctrine, which holds that a property owner may use groundwater beneath their property as long as the use is reasonable, and it does not interfere with water use by neighboring properties. Additionally in the Great Lakes states, including Michigan,

property owners generally must obtain a permit from the state to ensure the water use will be reasonable (Westmaas, 2021).

Early Opposition in Mecosta County

When Nestlé initially obtained the permits to extract water in Mecosta County from the Michigan Department of Environmental Quality (later renamed the Department of Environment, Great Lakes, and Energy in 2019) it was for a rate of 400 gallons per minute. Some local citizens were worried about the environmental impact of this rate of extraction and formed the Michigan Citizens for Water Conservation (MCWC). In 2001 they sued Nestlé on the grounds that 400 gallons per minute was an unreasonable use of groundwater. The Michigan Court of Appeals ruled in favor of MCWC, finding that Nestlé's extraction at that high level was an unreasonable use (Westmaas, 2021). The decision in *Michigan Citizens for Water Conservation v. Nestlé Waters NA* (2005) limited Nestlé to an average of 218 gallons per minute, with additional restrictions for extraction during the spring and summer months. MCWC also opposed the construction of the bottling plant, and circulated petitions to organize a local vote on the issue. However, they failed to get enough signatures and were unsuccessful in their efforts to halt construction of the plant (Ellison, 2016b).

Expansion of Operations in Osceola County

Nestlé began operations in Osceola County in 2001when they built the White Pine Springs well and were permitted to extract 250 gallons per minute or 360,000 gallons per day **(**Westmaas, 2021). Despite gaining quick approval, Nestlé did not begin extracting water from the White Pine Springs well until 10 years later when they significantly expanded their operations in the area. From 2011 to 2015 Nestlé pumped upward of forty-five million gallons of

water, most of which was extracted in 2015. In 2016 alone, they pumped over sixty-three million gallons of water from White Pine Springs, an increase of 102 percent from 2015 (Ellison, 2016b, 2017a). In 2017, Nestlé sought approval from the Osceola Township Planning Commission to build a pipeline booster station pumping water from its White Pine Springs well to a tanker truck loading dock located three miles away. With the pipeline booster station, Nestlé could increase its extraction to 400 gallons per minute (Ellison, 2017b). The rural roads surrounding the well site could not handle heavy tanker traffic, so Nestlé proposed the pipeline booster station as the most efficient way to pump the additional water. (Ellison, 2017a).

In determining whether to approve Nestlé's permit, the Osceola Township Planning Commission had to decide whether the permit application satisfied local zoning laws. The pipeline booster would traverse land which was zoned for agricultural purposes, and it was not clear if the pipeline would violate the law. Local residents were concerned that the increased pumping rate from the well would negatively affect the watersheds of the nearby Chippewa Creek and Twin Creek. While residents worried about environmental impacts, the Township Planning Commission was legally unable to consider environmental arguments in their decision-making process. In an effort to sweeten the deal, Nestlé offered to replace culverts, plant trees and flowers, and take other conservation measures on the surrounding land. Not everyone was on board with these concessions. Tim Ladd, the Osceola Township supervisor, believed that the community needed jobs and scholarships, and worried that Nestlé's purchase of township land as a wellhead protection area would deprive the community of property tax revenue. Tim Ladd's concerns matched the attitudes of many communities where Nestlé has sought business, with economic rather than environmental concerns being the main driver for local governments in approving or rejecting deals with Nestlé (Ellison, 2017a).

Local Opposition in Osceola County

In 2017 two local residents, Jim Maturen, and John McLane, began conducting personal scientific research along the Chippewa Creek and Twin Creek, testing water temperatures as well as water levels to track any changes that Nestlé's groundwater extraction was having on the creek. They concluded that the creeks' water depths were too low for trout, and that temperature increases also contributed to lower survival rates of trout (Cosier, 2018; France-Presse, 2018). Based on Michigan Department of Environmental Quality (DEQ) records, before Nestlé began extracting water in the area trout swam in both creeks. Maturen and McLane reported that they saw no fish at all in 2017, the year they conducted their study (Cosier, 2018).

Maturen and McLane were not the only ones concerned about the environmental impacts of Nestlé's water extraction. Public meetings to discuss Nestlé's permit to increase extraction from White Pine Springs drew hundreds of local residents from Osceola and Mecosta County. The DEQ also received 80,000 comments opposing Nestlé's permit request compared to only 75 comments in favor (Cosier, 2018). Many local activists joined the Michigan Citizens for Water Conservation (MCWC) in opposing Nestlé, including the local chapter of the Sierra Club. Peggy Case, the president of MCWC, gave voice to many of those opposed to Nestlé's plans when she stated that, "Privatization of water, in our view, is wrong. It belongs to the people, and it belongs to the ecosystem" (Cosier, 2018).

In April 2017, the Osceola Township Planning Commission voted 5-0 to reject Nestlé's application to build the pumping booster station in Evart. The commissioners said that Nestlé did not prove in their application that the station was a "public necessity and convenience" required by the zoning ordinance (Ellison, 2017b). Nestlé then appealed the decision to the Osceola Township Zoning Board of Appeals and in June of 2017, they came to a split decision which

kept the Township Planning Commission's unanimous denial of the permit in place (Ellison, 2017c). Nestlé then filed a lawsuit in the 51st Circuit Court, arguing that its application met the zoning ordinance's standards. Circuit Court Judge Susan Sniegowski issued an opinion in December 2017 ordering Osceola Township to grant the permit to build the pipeline booster. Shortly thereafter, the Osceola Township Board of Trustees voted 4-1 to appeal the decision to the Michigan Court of Appeals (Tunison, 2017). The Michigan Court of Appeals agreed to hear the case and on December 3, 2019, they reversed the lower court decision, siding with Osceola Township against Nestlé (*Nestle Waters NA v. Township of Osceola*, 2019).

Despite this small success against Nestlé, Osceola Township officials generally support Nestlé's presence in the community. They want the ability to step in to protect certain local interests but overall do not object to Nestlé's business (Ellison, 2019). Osceola Township supervisor Tim Ladd claimed that the township's intension was never to block Nestlé from extracting water, but rather to enforce the zoning ordinance by rejecting Nestlé's pipeline booster, adding that the two matters of zoning and environmental opposition are commonly conflated. (Ellison, 2019). In contrast to Tim Ladd's opinion, the community came together for environmental reasons to defend the zoning decision of the township against Nestlé; as of 2018 they had crowdfunded about $30,000 to pay for the legal expenses in the fight against Nestlé. (Ellison, 2018a).

State Support for Osceola Expansion Project

In addition to needing local approval to build the pipeline booster station, (which Nestlé did not obtain), Nestlé needed DEQ approval to increase their extraction quantity from 250 to 400 gallons per minute. In contrast to Osceola Township, the DEQ approved Nestlé's permit in April 2018, despite the 2005 court case where the same level of extraction was deemed

unreasonable in Mecosta County (Tower, 2018). Former Republican Governor Rick Snyder defended the DEQ's decision on the basis that the decision was made based on "sound science," claiming the increased withdrawal amount would not lead to negative environmental effects. In June 2018, he also signed into law legislation that relaxed the DEQ review process for large quantity groundwater withdrawals (Ellison, 2018b). Under this new legislation if the DEQ does not flag a permit application within 20 days of submission, the property owner may go ahead with the withdrawal. The legislation also expedites the process even if the DEQ flags an application, including special rules for bottled water companies making it easier to get approval (Devereaux, 2018). Despite the state's permit approval, Nestlé could not physically pump the additional water without the pipeline booster station, so with the township's denial and the Court upholding the decision, Nestlé was unable to pump additional water from White Pine Springs.

Key Takeaways

The reasonable use doctrine allows a lot of leeway for corporations to extract an almost unlimited amount of water as long as the local or state government agrees that bottled water is a reasonable use of water. The addition of requiring a permit from the state does add an obstacle for corporations. But as this case illustrates, with governor and agency support this does little to create a barrier for corporations to extract water amounts that may have negative environmental impacts on important water sources.

In many communities the success they achieve against corporations is not due to concerns over the environmental implications of water extraction. Although the MCWC opposed Nestlé increasing the amount of water they were pumping from White Pine Springs on environmental grounds, they were only able to find success because the local interests of the Osceola Township conflicted with Nestlé over the zoning ordinance laws (Ellison, 2019). With

the economic power Nestlé has in Mecosta and Osceola County in offering jobs and property tax revenue, they continue to have widespread support from the local and state government.

IV. Hood River County, Oregon Case

Introduction

In Oregon the legal framework in place is the rule of prior appropriation, which requires landowners to obtain a water right from the state to extract water (Ford-Stille, 2020). This case is unique, however, because Nestlé tried to become a commercial water customer of the city of Cascade Locks, Oregon rather than obtain the water rights themselves (Sheeran & Zhou, 2011). This case highlights how economic incentives often motivate local government to support Nestlé's business even when it is in conflict with the public interest to protect the environment and prevent the commodification of public water. See Table 4 for overview of the events I discuss in this section.

Table 4: Timeline of Events

Year	Event(s)
2008	Nestlé seeks to build a water bottling plant in Cascade Locks and enters into negotiations with the Oregon Department of Fish and Wildlife (ODFW) for an exchange of water rights between ODFW and Cascade Locks.
2009	The community begins organizing with Food & Water Watch to oppose the bottling plant.
2012	The Crag Law Center files two protests challenging the approval of the water exchange permits between ODFW and Cascade Locks.
2015	The Local Water Alliance is founded, led by campaign director Aurora del Val.
2016	The Water Protection Act passes by a 70 percent vote, banning Nestlé's ability to produce and transport bottled water in Hood River County.
2017	Democratic Governor Kate Brown instructed ODFW to halt the water rights exchange necessary for Nestlé's water bottling deal to go through.

Background

Nestlé began considering Cascade Locks, Oregon as a prime location for building a bottled water plant in 2008. Cascade Locks is located in Hood River County, Oregon surrounded by the carefully regulated Colombia Gorge National Scenic Area, and along the Colombia River,

the largest river in the Pacific Northwest and the fourth largest river in the United States (See Appendix C). The Colombia River and its tributaries have historically been crucial both culturally and economically in the region (Sheeran & Zhou, 2011).

Cascade Locks has two wells that draw from Herman Creek, which are the city's exclusive water production systems. In 2011, the two wells had the capacity together to pump 1.93 million gallons of water a day. On average the residents of Cascade Locks used 150,000 gallons per day during the winter and 300,000 gallons per day during the summer (Sheeran & Zhou, 2011).

Nestlé was interested in bottling both spring water from Oxbow Springs and municipal water from the two wells located in Cascade Locks at their bottling plant under two of Nestlé's bottled water brands, Arrowhead and Purelife. In Oregon the law that regulates access to water such as Oxbow Springs is the rule of prior appropriation, which requires landowners to obtain a water right from the state (Ford-Stille, 2020). This is a unique case in that the Oregon Department of Fish and Wildlife (ODFW), a state agency, has the exclusive right to the water from Oxbow Springs. Nestlé entered negotiations with the state for an exchange of water rights between ODFW and Cascade Locks so that Nestlé could become a commercial water customer of Cascade Locks rather than obtain the water rights themselves (Sheeran & Zhou, 2011).

Water Rights and Jurisdiction

Nestlé's proposed plan was a $50 million investment to construct a 250,000 square foot state-of the-art two-line production facility in Cascade Locks to produce and distribute bottled water. In addition to the water from Oxbow Springs, Nestlé wanted to draw 432,000 gallons per day of municipal water from Cascade Locks (Sheeran & Zhou, 2011). Nestlé, to execute this

proposal, wanted to buy the spring water directly from Cascade Locks rather than gain the rights to the water themselves. When Nestlé was crafting their proposal, the water rights to Oxbow Springs in Cascade Locks was owned by ODFW who use the water to feed the nearby Oxbow Hatchery. In 2009, the ODFW and Cascade Locks entered into an agreement that laid out the basic details for how this exchange of water rights would take place. Some of the motivation for this exchange of water rights on the part of state regulators was to shift the responsibility of local public interest on the issue to the city (House, 2015; Sheeran & Zhou, 2011).

Elite Support, Public Opposition

This section describes the conflict over whether to allow Nestlé access to Oxbow Springs. Members of the community were largely opposed, although many elected officials supported the deal with Nestlé. Several non-profit organizations, most notably Food & Water Watch, helped the local community oppose Nestlé's plans. This case illustrates some of the key points common to these conflicts: debate over economic impact; the role of non-profits in organizing public opposition; and a disconnect between the public and elites.

Early on in the fight against Nestlé's proposal, the non-profit and national environmental advocacy group, Food & Water Watch got involved in Hood River County to help the local community fight the proposal. In early 2009 they circulated a petition throughout Oregon to pressure the state to refuse the exchange of water rights between ODFW and Cascade Locks. Food & Water Watch also hired Julia DeGraw as a local organizer, who was heavily involved in the successful passage of the Water Protection Act. Food & Water Watch helped to finance a May 2016 ballot initiative to pass the Water Protection Act which banned any operation from the production or transportation of 1,000 gallons or more bottled water a day for sale within the

county. This act essentially made it illegal for Nestlé to produce bottled water in the quantities planned for the plant in Cascade Locks (Shotola-Schiewe, 2017; Wallace, 2020).

Those who opposed the Water Protection Act, including the city government officials negotiating with Nestlé, favored the deal with Nestlé. They argued that it was an economic win for the community and would help fill a hole created by the contraction of Oregon's timber industry, something that heavily impacted Hood River County. The prospect of new jobs and the increased tax revenue appealed to this group (House, 2016). The deal with Nestlé also had strong support from the Cascade Locks City Council, who voted 6-1 to adopt a resolution opposing the Water Protection Act. The Mayor of Cascade Locks, Tom Cramblett, believed the benefits of the deal outweighed the costs, and stated that his priority was to secure jobs for the people of Cascade Locks. City Administrator Gordon Zimmerman agreed with the mayor that jobs and tax revenue were priorities, although he admitted that the city could not require Nestlé to hire locally (Button, 2016).

The Crag Law Center, a Portland based non-profit that provides free and low-cost legal aid to environmental groups and activists, also donated its services in the fight against Nestlé. In 2012 they filed two protests to challenge the Oregon Water Resources Department's (ODRW) approval of Nestlé's water exchange permits between ODFW and Cascade Locks (Wallace, 2020). In their continued support they also defeated early challenges to the Water Protection Act against the county who initially rejected the proposal by the Local Water Alliance (Zimmer, 2016).

The Local Water Alliance was founded in 2015 and led by the group's campaign director Aurora del Val, a resident of Cascade Locks and retired English teacher. Del Val was concerned about not only the environmental impact but the economic consequences of Nestlé's presence in

the community. She focused community efforts on canvassing door-to-door to get bipartisan support for the Alliance, and in September of 2016 was responsible for gathering enough signatures to file the Water Protection Act as a ballot initiative (Wallace, 2020; Zimmer, 2016).

Despite Nestlé spending $105,000 to oppose the Hood River County Water Protection Act (which was twice the amount of supporters), it passed with an almost seventy percent vote (O'Keeffe, 2016; Wallace, 2020; Zimmer, 2016). The Local Water Alliance had worked alongside the coalition, Keep Nestlé Out of the Gorge, which was comprised of a diverse group of local and state-wide organizations opposed to Nestlé's bottling facility. The coalition succeeded in engaging over 30,000 Oregonians to protest the exchange of water rights between Nestlé and ODFW by contacting the governor to share their opinion. The coalition included groups such as Food & Water Watch and Crag Law Center as well as the local Sierra Club chapter, Bark, a local environmental non-profit, public sector unions, and Native American tribes also joined the coalition including the Yakama Nation, and Confederated Tribes of Warm Springs and Umatilla and Nez Perce tribes, all of whom strongly opposed Nestlé's proposal (Keep Nestle Out of the Gorge, 2011; Wallace, 2020).

In September 2016 Chairman JoDe Goudy of the Yakama Nation spoke against Nestlé on the steps of Oregon's capitol, sharing the Yakama Nation's intentions to sue the state of Oregon if Nestlé was permitted to bottle water from Oxbow Springs (Wallace, 2020). He was at the capitol alongside activist Anna Mae Leonard, who leading up to the event fasted for five days to bring attention to the disregard of treaty rights by ODFW's deal with Nestlé (O'Keeffe, 2016; Quirke, 2015). Additionally, the Confederated Tribes of Warm Springs and Umatilla and Nez Perce tribes sent a letter to former Democratic Governor Kate Brown expressing their opposition to Nestlé's bottling plant, although it received no response (Quirke, 2015; Wallace, 2020).

Early Economic Concerns

Nestlé's interest in Cascade Locks aligns with a pattern of Nestlé seeking out small, economically distressed towns as the location for water bottling plants or water extraction locations. In 2010, according to census data Cascade Locks had a median income of $42,917 and unemployment rate of 15.5 percent, this compared to the national median income of $50,000 and unemployment rate of 9.6 percent (*Digest of Education Statistics*, 2011; *State Unemployment Rates in 2010,* 2011; Wallace, 2020). These economic circumstances provide Nestlé with an advantage when they approach a community and offer economic benefits in exchange for acceptance and compliance (Wallace, 2020). Nestlé frequently brings the promise of jobs and tax revenue to these communities, although the benefits promised very rarely outweigh the costs. The proposed facility would only generate forty-eight local jobs and some of the potential costs associated with Nestlé's proposal include increased electrical costs for the county, additional costs associated with roadways, and wastewater treatment facilities. The city in 2011 was already operating at about 80% capacity of its electric service and would need to upgrade to support the additional capacity (Sheeran & Zhou, 2011). Additional truck traffic coming to and from the plant for the transportation of the bottled water would require roadway improvements and ongoing repairs. In Nestlé's proposed plan, they did not agree to pay for these expenses, so by default they would fall to the city (Sheeran & Zhou, 2011). These economic concerns in conjunction with the environmental impact on Oxbow Springs, and the risks to the city's groundwater supply, are what motivated seventy percent of Hood River County to vote yes for the Water Protection Act.

State Support

In the wake of the Water Protection Act's passage, Governor Kate Brown took no immediate action, and Nestlé and ODFW continued to pursue the water rights exchange in defiance of the Water Protection Act. After pressure from local media and the residents of Hood River County, Governor Brown in October 2017 instructed ODFW to halt the water rights exchange necessary for Nestlé's water bottling deal (Wallace, 2020). In Governor Brown's letter, she instructed the director of ODFW to halt the exchange of water rights, citing economic rather than environmental reasons for stopping the deal. Governor Brown mentioned that after the residents of Hood River County passed the Water Protection Act the state would incur significant new costs in negotiating the water rights exchange. Although Governor Brown cited economic rather than environmental concerns in her decision to oppose the deal, this was a victory for the communities in Hood River County, who had spent nine years opposing Nestlé. Governor Brown's decision still allowed Cascade Locks to sell city water from their wells for use at Nestlé's bottling plant, but Cascade Locks officials decided against going forward with any deal with Nestlé (Borrud, 2017).

Key Takeaways

Nestlé targeted Cascade Locks in part because it is an economically distressed town, and the types of economic promises Nestlé is able to make are a stronger incentive in communities that are looking for ways to improve economically. Nestlé hopes that communities like Cascade Locks will ignore the environmental impact of water extraction if there are economic benefits. Nestlé also targeted Cascade Locks because they could attempt to purchase the water straight from the city, with whom they had a positive relationship, rather than go through the process of obtaining the water rights from the state themselves, which could have been more difficult.

While Nestlé did not have to obtain a permit themselves, the rule of prior appropriation required Nestlé to seek an exchange of the water rights to Oxbow Springs, which provided the community with time to organize against Nestlé. Although rare, the success of the Hood River County community in their fight against Nestlé was facilitated by their ability to target the state government, which was more sympathetic than the city government in their quest to get the deal shut down. Their ability to pass the Water Protection Act by garnering support from seventy percent of the community was also critical to their success in gaining the attention of the governor.

V. Conclusion

The current legal frameworks in place for regulating groundwater extraction are not enough on their own to protect local public interest and the environment from large-scale water extraction. As seen in Maine, the common law doctrine provides no limits for corporations, incentivizing extensive resource use to garner favor with state and local governments. Once a corporation is established in the state it becomes virtually impossible for communities to take legal action against them. In Michigan, the reasonable use doctrine (even with the addition of a permit requirement) still allows a lot of leeway for corporations to extract an almost unlimited amount of water as long as the local or state government is supportive. Compared to the common law doctrine, the reasonable use doctrine does give communities slightly more legal recourse, although success is rare. As seen in Osceola County, the success the community enjoyed was largely due to the interests of Osceola Township conflicting with Nestlé. Oregon has the strictest state law in place, the rule of prior appropriation, which requires corporations to get a permit to engage in large-scale water extraction. This more onerous process, which required Nestlé to navigate the transfer of the water rights to Oxbow Springs, created the time for the Hood River County community to organize to pass the Water Protection Act. The community was also able to target the state as a more sympathetic venue to activists which expanded the scope of the conflict and helped in halting Nestlé's operation in Cascade Locks.

The state regulatory structures alone are not deterministic of the outcomes of the legal battles communities face against Nestlé. Rather, they change the methods Nestlé uses to enter the communities and the loopholes in local and state law they take advantage of to promote their interests. Even at their strictest, the state laws currently in place do not go far enough to regulate corporate large-scale water extraction for bottling. The close relationships companies like Nestlé

form with state governments mean that the public interest and the environmental impacts of the bottled water industry are neglected in favor of corporate profits. More must be done to regulate the corporate commodification of water and to protect the environment from the negative impacts of large-scale water extraction.

VI. Policy Recommendation

To further regulate large-scale groundwater extraction and empower communities in their fight against corporate commodification of water, I recommend that states extend the public trust doctrine to include groundwater.

The public trust doctrine dates back to sixth-century Roman civil law. Early American jurisprudence adopted England's version holding navigable waters in trust for the public with the intention of protecting navigability and promoting commerce. The United States Supreme Court has recognized that each state has their own version of the public trust doctrine in place, which is shaped both by common law and statutory law (Tuholske, 2008). In the most basic sense, the public trust doctrine holds that the states' common resources (including water) remain in trust for the benefit of the people and that private property owners must account for the public's interest when using said resources. The interest of the public is held to be superior to private rights to natural resources (Westmaas, 2021). The 1970s marked the beginning of a move to expand the public trust doctrine from navigable waters to common resources. This was meant to fill a gap in environmental decision making and protection by giving citizens and communities legal recourse against those infringing on their right to public resources (Tuholske, 2008). Over time, the public trust doctrine has been interpreted broadly to include holding water in the public trust for recreational purposes and environmental protection, but few states have extended the public trust doctrine to include groundwater (Russell, 2013).

There is some precedent of states applying the public trust doctrine to groundwater, and Food & Water Watch has promoted the application of the public trust doctrine to groundwater for many years. In 2007, New Jersey and New Hampshire both applied the public trust doctrine to groundwater, and Hawaii's common law applies the public trust doctrine to groundwater as

well (Westmaas, 2021). Some other states have attempted to follow in their footsteps. In 2021, Michigan passed a House Bill which would subject groundwater to the public trust, although it has stalled in the Senate (*House Bill 5290*, 2021; Westmaas, 2021). In 2019, the Maine legislature introduced a House bill to implement a public trust for Maine's groundwater over a two-year period (during which a moratorium on large-scale groundwater extraction would be in place), but the bill was not enacted (HP 160, 2019; Westmaas, 2021). The basic principle of the public trust doctrine, that some resources should be shared by the public and managed by the state with future generations in mind, is well suited for groundwater. The inclusion of groundwater fits with many states supreme court's interpretation of the public trust, namely that strict adherence to navigable waters rather than common resources is outdated. Many states also have language in their constitutions that would provide a solid foundation for extending the public trust doctrine to groundwater. Most states have language that references the protection of natural resources as a state responsibility, and the states that have already extended the public trust to groundwater have rooted their decisions in their state constitutions (Tuholske, 2008).

Extending the public trust doctrine is not a silver bullet. It will not directly regulate corporate water extraction, but it assigns to the state the responsibility of managing groundwater resources for current and future generations to ensure that public interests are held above minority private interests for private gain. In applying the public trust doctrine to include groundwater, it gives communities legal recourse in their fight against corporate commodification of water, and also provides an opportunity to shift the societal mindset towards the protection of public resources (Tuholske, 2008).

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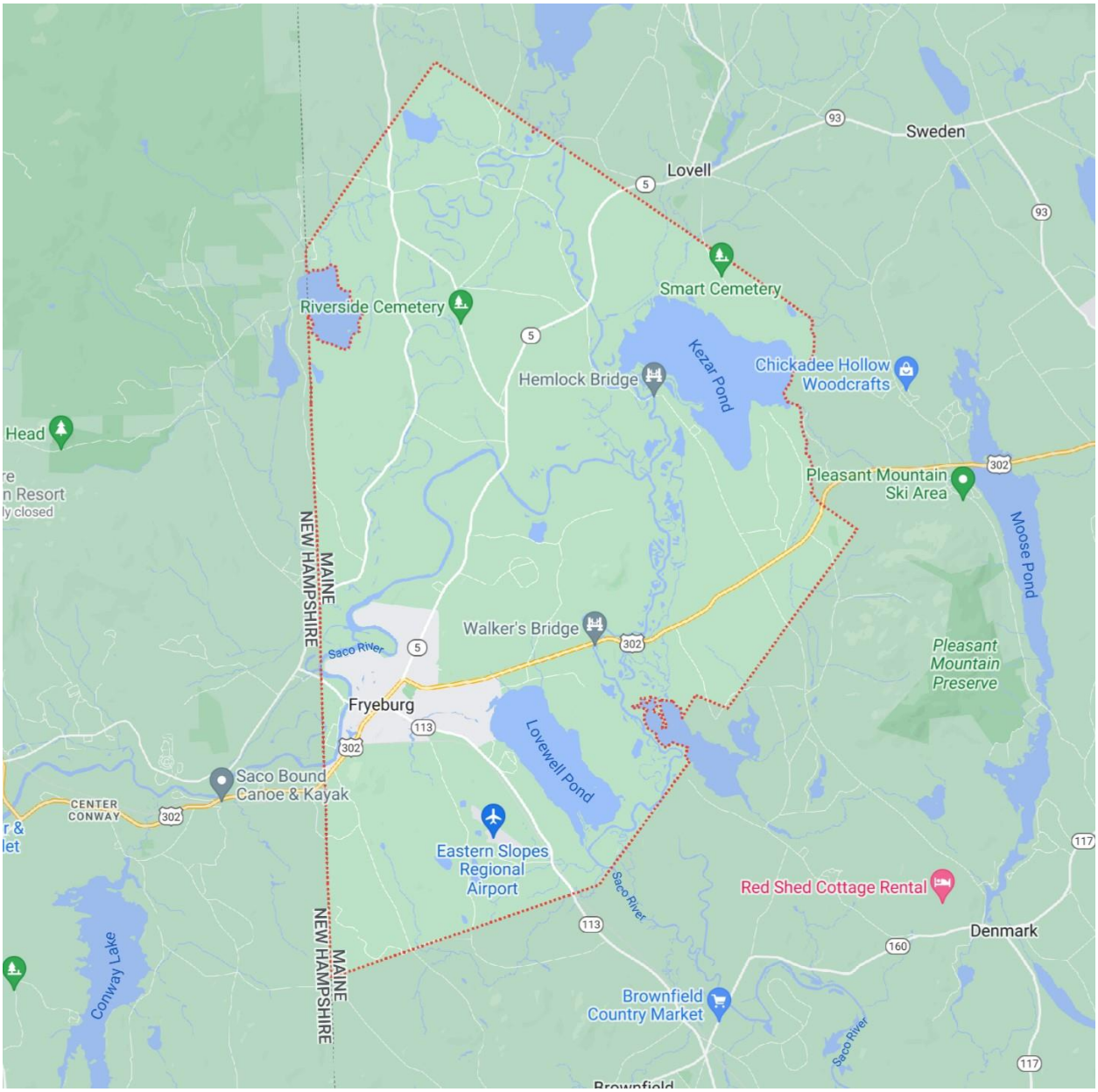
Appendix A

Map of Fryeburg, Maine



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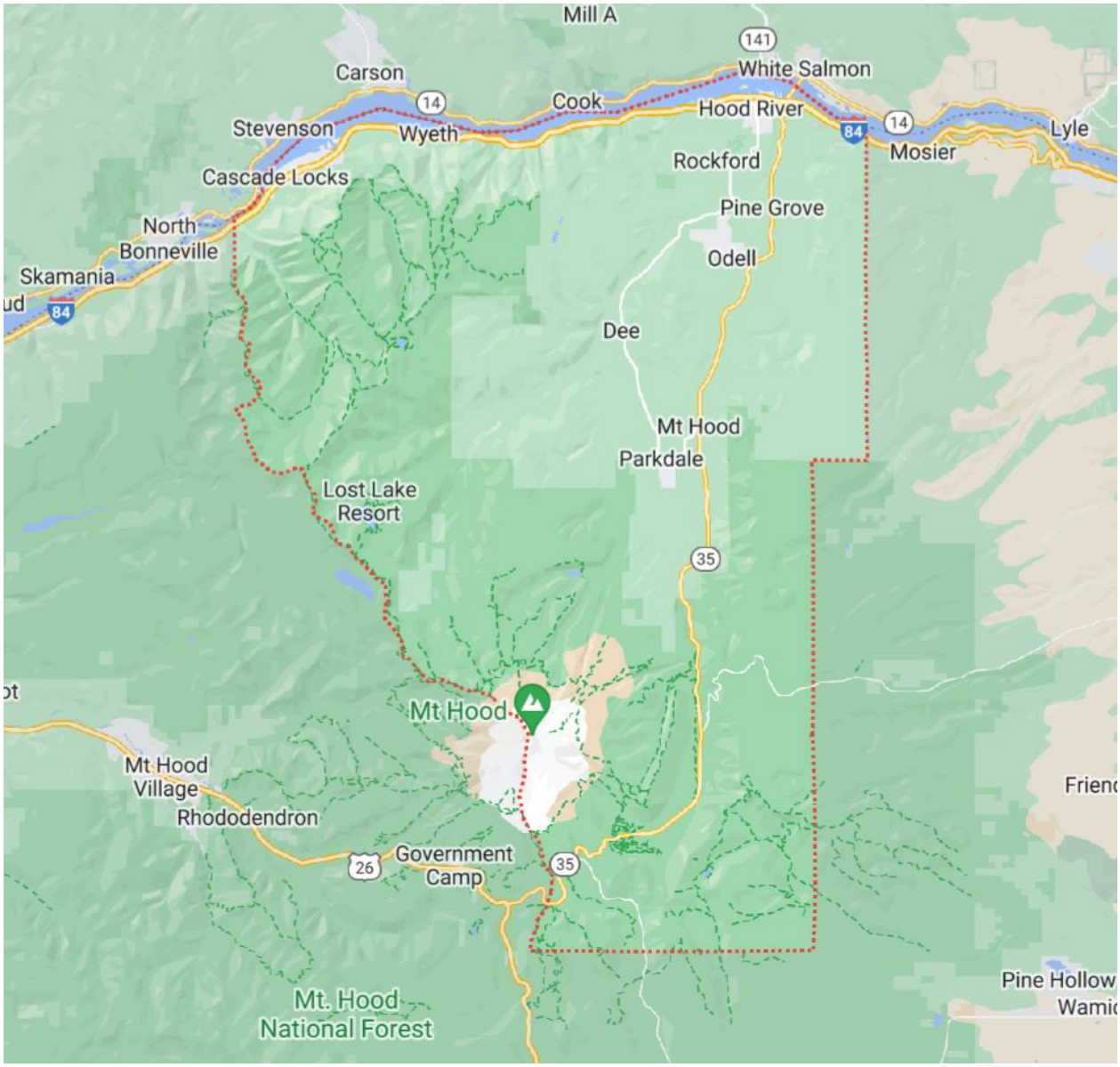
Appendix B

Map of Osceola County and Mecosta County, Michigan

(Ellison, 2016b)

Appendix C

Map of Hood River County, Oregon



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