JURY IS STILL DROUGHT: REGULATING CITIZENS' WATER USE AND RECYCLING EFFORTS

Climate Change Law, Research & Writing (Spring 2023): Final Paper

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TABLE OF CONTENTS

I. INTRODUCTION 3

II. CALIFORNIA'S CURRENT STATE 6

III. REGULATION VERSUS INCENTIVIZATION 8

IV. CALIFORNIA'S RESULTS WITH WATER CONSERVATION 8

V. MODELING INCENTIVIZING RECYCLING POLICY ON EXISTING REGULATIONS 11

VI. ENSURING REGULATORY SUCCESS 12

A) REGULATION OR INCENTIVIZATION ON CITIZENS' BEHAVIOR? 12

B) CHANGING CITIZENS' DIETS 14

C) EXPANDING REGULATIONS TO CORPORATE BEHAVIOR 15

VII. CONCLUSION 16

I. Introduction

Stop me if you have heard this one– Kim Kardashian, Kevin Hart and Sylvester Stallone walk into a bar… okay, well maybe they did not go into a bar together, but they are all celebrities accused of drought restriction violations in California.[1] Since there is no federal law on recycling or water conservation, states are on their own to create regulations that fight against climate change-induced droughts.[2] Many states are taking big action, such as California's water conservation regulations.

The United States Environmental Protection Agency (hereinafter "the EPA") anticipates that *40 states* will have water shortages by 2024, so the need to conserve water is critical.[3] 2024 is only a year away, which also makes finding a quick and long-lasting solution quite difficult.

California has been in a drought since February 11, 2020.[4] The previous drought lasted from 2011 to 2019.[5] Droughts were at their all-time worse in many parts of the sunny state just in December of last year.[6] Many scholars believe these on-going droughts are due to climate change.[7] Therefore, California wishes to conserve water by reducing the water intake by each individual citizen. This can be done successfully by taking shorter showers, watering plants less, and being overall mindful of one's water intake.[8]

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1. Hayley Smith and Sean Greene, *Kim Kardashian, Kevin Hart and Sylvester Stallone accused of drought restriction violations*, Los Angeles Times (Aug. 22, 2022), https://www.latimes.com/california/story/2022-08-22/kim-kardashian-kevin-hart-california-drought-water-waste.
2. Denise A. Dragoo, *Environment & Climate Change Laws and Regulations USA*, ICLG (March 22, 2023), https://iclg.com/practice-areas/environment-and-climate-change-laws-and-regulations/usa.
3. EPA, *Water Conservation at EPA*, EPA (March 31, 2023), https://www.epa.gov/greeningepa/water-conservation-epa (emphasis added).
4. Sapna Satagopan, *Tracking California's Water Supplies*, Cal Matters (2023), https://calmatters.org/california-drought-monitor/.
5. *Id*.
6. Robyn White, *Why California Drought Isn't Over Yet*, Newsweek (March 6, 2023), https://www.newsweek.com/california-not-out-drought-rain-snow-1785705.
7. *Id*.
8. California Department of Water Resources, *Conservation Tips*, California Department of Water Resources (2023), https://water.ca.gov/water-basics/conservation-tips.

With the water crisis being so critical, California is therefore not the only state working on water conservation. In Boston, Massachusetts, the city requires many buildings to report their water use and comply with any assessments made every five years.[9] This ensures that the water is being "utilized properly" and also requires "buildings to adhere to an Energy Star certification and reduce electricity use which requires water."[10] In 2005, Seattle, Washington was the first city in the United States to become "carbon neutral" through the construction of hydroelectric dams.[11]

Other states are also attentive to not just businesses, but individual citizen's water intake. For example, ordinances in San Francisco vary from low-flow shower heads to faucets/toilets that save on water.[12] Further, "the San Francisco Energy Watch is a program that rewards property owners monetarily[13] for investing in energy saving appliances."[14] And just like Boston, San Francisco also has regulations such as energy codes on large buildings to reduce both energy and water use.[15] This, of course, is not a perfect system by any means, for either businesses or citizens. It can be complicated to know when an individual can water their lawn. Water use and conservation is governed by different local water authorities with different rules.[16]

California's drought is just one of the many consequences of climate change that the state is dealing with. California is a costal state, in which approximately "85% of California's population live and work in."[17] The sea level is rising increasingly, with an 8-inch increase in the past century.[18] This increase is "projected to rise by as much as 20 to 55 inches by the end of the century. A 55-inch sea level rise could put nearly half a million people at risk of flooding by 2100, and threaten $100 billion in property and infrastructure, including roadways, buildings, hazardous waste sites, power plants, and parks and tourist destinations."[19] People will be forced

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9. impacx team, *Top Cities and Countries that are Breaking the Mold in Water Conservation*, impacx (2021), https://impacx.io/blog/top-cities-breaking-the-mold-in-water-conservation/.
10. *Id*.
11. *Id*.
12. *Id*.
13. This concept, incentivization, will be discussed in a further section.
14. impacx team, *supra* note 9.
15. *Id*.
16. Alastair Bland, *California lifts target for 15% water conservation as yet another storm approaches*, Cal Matters (March 24, 2023), https://calmatters.org/environment/2023/03/california-lifts-target-water-conservation/.
17. State of California Department of Justice, *Climate Change Impacts in California*, Rob Bonta Attorney General, https://oag.ca.gov/environment/impact.
18. *Id*.
19. *Id*.

out of their homes, businesses forced to shut down or move, and California as a state will lose physical land.

Further, climate change leads to a higher risk of fires among California's 100-million acres of forest and rangelands.[20] This is another problem that California is in the news about constantly. Within four months of this year, California has had 505 wildfires and 195 acres burned.[21] Climate change causes public health impacts and habitat destruction. California's citizens already experience horrible air quality and hotter temperatures will only make things worse for humans and other creatures.[22]

The federal government is not doing much in regard to regulations. As for the Biden administration, at the end of 2022, the Inflation Reduction Act is set to use $4 billion in its budget to pay farmers, cities, and Indigenous tribes to cut their water use.[23] As for other states, there is proposed legislation in Utah to spend $200 million on grants that farmers can use to invest in water-saving technology that would otherwise be too costly to afford.[24] Southern Californian's farmers have been paid to skip planting in some of their fields.[25]

There are tools states can use to fight climate change by regulating citizen's water use and recycling. These large, successful regulations should be applied to incentivizing recycling programs. So far, there are ten states that have a recycling program that incentivize citizens and these programs are also successful. California's water regulations and the incentivized recycling programs concepts should be combined in other areas of climate change activism.

This paper will begin briefly with a discussion on California's current state regarding the drought. The paper will then briefly differentiate on regulations versus incentivization. The paper will move on to discuss California's results with the regulation on water conservation, along with a brief history on California's droughts and a look at the specific regulations on water usage. Then, the analysis will focus on how ten states in the United States have successfully implemented an incentivizing recycling policy– a deposit-refund system for beverage containers and its success rate

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20. *Id*.
21. Cal Fire, *Statistics*, The Department of Forestry and Fire Protection (April 24, 2023), https://www.fire.ca.gov/our-impact/statistics.
22. State of California Department of Justice, *supra* note 17.
23. Kenny Torrella, *Let's Talk About the Biggest Cause of The West's Water Crisis*, Vox (April 19, 2023), https://www-vox-com.cdn.ampproject.org/c/s/www.vox.com/platform/amp/the-highlight/23655640/colorado-river-water-alfalfa-dairy-beef-meat.
24. *Id*.
25. *Id*.

at this point. Finally, this work will argue that California should continue its regulation on water conservation. However, there is not only one way for success. States can promote both a business and a citizen-oriented incentivization program in order to change both individual and corporate behavior towards water conservation and recycling.

II. California's Current State

California has been in the news lately regarding record-breaking snow and rain. Rounds and rounds of extreme weather hit the state, causing roads to be shut down, power to go out, extreme wind gust, and individuals stuck in their houses.[26] It was enough to pull California out of the current drought,[27] but according to scientists, it will take years to fix the damages done from the ongoing droughts in the state.[28]

In order words, California is currently no longer in a drought, but the consequences of the last drought and the insecurity of another drought plaguing the state means the California is not done dealing with this situation. Just because the state is currently out of their three-year-long drought does not mean that the issue is gone. Especially when reviewing California's history with droughts, they were only out of their last drought for a year before it began again in 2020.[29] Without continuous rainfall, the lack of drinkable water will remain at large.

Things are improving, however. The number of individuals facing the drought went from 33 million to 4.6 million.[30] More specifically, "since October 1, the start of the water year, Los Angeles has received more than 24 inches of rain, which is nearly 200% [more] normal for the time period. In addition, San Francisco, Oakland, Sacramento, Stockton and Fresno have also all seen 150% to 200% of their normal rainfall since then."[31]

The improvement is a good sign, but like mentioned above, it does not completely solve the issue. Parts of California, such as the Sacramento Valley, North Coast, and Colorado River hydrological areas are still seeing below average rainfall

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26. Associated Press, *Storm Brings Wind, Rain and Snow to California,* NBC News (March 21, 2023), https://www.nbcnews.com/news/us-news/spring-brings-rain-snow-saturated-california-rcna75948.
27. Rachel Ramirez, *Record snowpack, nearly full reservoirs: Here's the state of California's drought after an epic winter*, CNN (March 27, 2023), https://www.cnn.com/2023/03/23/us/atmospheric-river-winter-california-drought-climate/index.html.
28. *Id*.
29. Satagopan, *supra* note 4.
30. Ramirez, *supra* note 27.
31. *Id*.

in regard to the water year.[32] Further, the reservoirs are saved for a short-term but the continued need for water will not dissipate after just a few months of rainfall.[33]

This change in weather also means a change in regulations. Some of California's emergency provisions and/or regulations ended and some are still in place.[34] According to state officials, the act of wasteful use of water, such as rinsing sidewalks and watering decorative grass on commercial property will remain banned.[35] The state, however, "is ending its requirement that local water agencies implement Level 2 drought contingency plans, which are locally written water use regulations— such as limits on watering lawns — that are invoked during water shortages."[36] According to Governor Gavin Newsom, overall, out of the 81 drought-related provisions were enacted since April 2021, just 33 remain in place.[37] Many state officials worry that this will mean things will go back to old ways, and citizens will stop conserving water.[38]

California is not the only area dealing with this crisis. Spain is currently pleading with the European Union to help their framers during a historic drought.[39] Specifically, "[a]round 27% of Spain is experiencing droughts classified as 'emergency' or 'alert', according to the Ecological Transition ministry, and water reserves are at 50% of capacity nationally. The lack of water has forced many farmers to forego spring planting, especially cereals and oilseeds."[40] Spain is also suffering from a lack of rainfall and is forced to conserve water just like California.[41] Spain's "network of dams" is beginning to fail since there is no rainfall to replenish the dams.[42] California can potentially be right back where the state was just a few short months ago and where Spain currently is due to the unpredictability of rainfall. Thus, the solutions to this issue must be addressed now, before the next drought.

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32. Satagopan, *supra* note 4.
33. Ramirez, *supra* note 27.
34. Bland, *supra* note 16.
35. *Id*.
36. *Id*.
37. *Id*.
38. *Id*.
39. Associated Press, *Spain pleads for aid from EU after historic drought devastates its farmers*, euronews (April 26, 2023), https://www.euronews.com/2023/04/26/spain-pleads-for-aid-from-eu-after-historic-drought-devastates-its-farmers.
40. *Id*.
41. Valentin Bontemps, *Drought forces water use rethink in Spain*, Phys.org (Aug. 8, 2022), https://phys.org/news/2022-08-drought-rethink-spain.html.
42. *Id*.

III. Regulation versus Incentivization

Unfortunately, entities, including regular citizens, do not change their behavior without either being forced to or incentivized to.[43] Governments are uniquely situated to employ either option on businesses and individuals through either passing regulations or extending tax incentives.[44] There are other incentives that will be mentioned throughout this paper, such as monetary incentives to change an individual's behavior. Corporations, on the other hand, deal with many regulations every day, such as regulations that the government passes to require "good corporate citizenship or social responsibility."[45] These regulations become an issue when it interferes with the stakeholders' goals of being profitable.[46]

Ultimately, the government must decide when it is a good idea to either regulate or incentivize a citizen or business. Ultimately the decision on "whether to legislate certain corporate behavior or incentivize" comes down to whether regulation is possible in the first place, and if so, whether it would be effective to do so.[47] The actual subject of the incentive or regulation helps determine which method would be most efficient.[48] For example, "certain subjects are beyond the scope of regulation—such as where or whom a corporation may hire—and certain subjects are unusual for regulation. These are ideal areas for incentivizing corporate behavior to achieve desired corporate behavior."[49]

IV. California's Results with Water Conservation

The situation in California is dire and California cannot afford to waste water. It is important to look at why California is in such a difficult situation with their water supply.

It is important to take a moment to define droughts as droughts and wildfires are one of the main issues caused by a lack of a water supply. The definition is based on what impacts water users.[50] Since California is a big state, the impact varies within locations, so some parts of California (specifically the ones who rely on

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43. Margaret Ryznar and Karen E. Woody, *A Framework on Mandating Versus Incentivizing Corporate Social Responsibility*, 98 Marq. L. Rev. 1667 (2015).
44. *Id*. at 1668-9
45. *Id*. at 1669.
46. *Id*.
47. *Id*. at 1694.
48. *Id*.
49. *Id*.
50. California Department of Water Resources, *Drought*, California Department of Water Resources, https://water.ca.gov/drought.

precipitation only) are affected by droughts more than others. Further, a "[d]rought is a gradual phenomenon, occurring slowly over a period of time. Storage, whether in surface water reservoirs or in groundwater basins, buffers drought impacts and influences the timing of when drought impacts occur."[51]

As of today, droughts are still a major issue for the Golden State.[52] The issue stems from a lack of precipitation; specifically, "at the end of the water year, spanning October 1, 2020 to September 30, 2021, the State received only 11.87 inches of precipitation, approximately half of [the] average."[53] This becomes a public health and safety issue as the "impacts are primarily associated with catastrophic wildfire risks and drinking water shortage risks for small water systems in rural areas and private residential wells."[54] Interestingly enough, California has a water code[55] that declares access to water as a human right.[56]

The following is an excerpt from an August 2022 news article explaining how dire of a situation it is in the Los Angeles area:

> Fueled by climate change and high temperatures, the drought has placed most of the state's reservoirs below historical averages. On June 1, the Metropolitan Water District imposed outdoor watering restrictions for areas of Los Angeles, Ventura and San Bernardino counties that are dependent on supplies from the State Water Project -- a network of reservoirs and canals that channel water from Northern California to the south. The agency had never before ordered such widespread restrictions, and officials warned that more restrictions could be imposed if residents did not significantly cut use. The measures, MWD officials have said, are tough but necessary to ensure the health and safety of Californians.[57]

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51. *Id.*

52. To monitor droughts in California and other states in live time, go to https://www.drought.gov/states/california.

53. David L. Osias and Tara E. Paul, *United States: Drought Continues And Groundwater Regulations Heat Up In California*, mondaq (March 23, 2022), https://www.mondaq.com/unitedstates/environmental-law/1175098/drought-continues-and-groundwater-regulations-heat-up-in-california.

54. California Department of Water Resources, *supra* note 50.

55. Specifically, it states, "It is hereby declared to be the established policy of the state that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes."

56. CA Water Code § 106.3 (2020).

57. Hernandez, Salvador, *Drip by drip, state water conservation improves; Northern California tops the Southland in cutting use. Officials call it 'encouraging.' LA Times*, August 3, 2022.

This in turn leads to regulations regarding water usage so that drinkable water can be conserved and used later. One of the first modern conservation effort was an executive order that went into effect April 1, 2015 due to an extreme drought.[58] This executive order's goal was to extend conservation measures.[59] Further, California has both a regulation statute and a conservation aspect of the California Code. The regulation of water will mean "the direct diversion of water to a tank or reservoir in order that the water may be held for use at a rate other than the rate at which it may be conveniently diverted from its source. For licensing purposes, refill, in whole or in part, held in a tank or reservoir for less than 30 days shall be considered regulation of water."[60]

There are currently 24 Californian reservoirs that the State Park manages[61]. The system can store 24 million acre-feet of water and with reservoir levels currently at 16 million acre-feet of water; therefore, these reservoirs are at 67% of capacity.[62]

California's Water Code also adds that the districts may conserve water when needed.[63] Specifically, the districts may do what they need with the water when it comes to beneficial and useful purposes.[64] This includes spreading, storing, distributing, buying and selling water in whatever way the district deems right in order to conserve water properly.[65] And although things are looking up with the recent rainfall, it can actually be a bad thing to have too much water over such a short period of time, as this can lead to flooding and mudslides, which can damage property and potentially put people at risk.[66]

Climate change also affects natural water conservation that happens in California. The Sierra Nevada snowpack, located in California, "functions as the most important natural reservoir of water… Under current conditions, the snowpack is created in fall and winter and slowly releases about 15 million acre-feet of water in the spring and summer, when California needs it most."[67] The issue is that the dams and water storage facilities in California are built to handle the melting of the snow as it did in the past, but now with higher temperatures, the snowpack is melting

58. Governor's Exec. Order No. B-29-15 (April 1, 2015).
59. *Id*.
60. Cal. Code Regs. tit. 23, § 657.
61. Satagopan, *supra* note 4.
62. *Id*.
63. Cal. Water Code Ann. § 122-5.5.
64. *Id*.
65. *Id*.
66. Satagopan, *supra* note 4.
67. State of California Department of Justice, *supra* note 17.

earlier and all at once.[68] This will create earlier and larger releases of water, that could ultimately overwhelm California's water storage facilities, leading to risk of floods and water shortages.[69]

V. Modeling Incentivizing Recycling Policy on Existing Regulations

Most recycling programs in the United States work on an honor system, in which individuals decide whether to recycle their trash or not.[70] There are only a few states that will fine citizens for not recycling properly, such as in Connecticut.[71] As of today, ten states have an incentivizing recycling policy, which is a deposit-refund system for beverage containers. Those ten states are: California, Connecticut, Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, Oregon, and Vermont. (Guam also follows a recycling policy.)[72]

For each beverage recycled, the average deposit amount is five cents, with the highest being 15 cents in Maine and the lowest being 2 cents in Oregon for standard refillable items.[73] States look at what can be recycled as either what beverages are covered or what type of container is covered. For beverages, those tend to include beer, malt, wine, carbonated soft drinks, bottled water and a usual exclusion of milk products.[74] Containers usually include containers made out of aluminum, glass, plastic, and bi-metal.[75] Of course, one would have to look at the specific rules of the state to know exactly what they can recycle and the amount they would receive for it.[76]

Scholars have looked at the impact of these policies to better understand the willingness of stakeholders to participate. One study in specific held three conclusions from this research: "first, an increase in incentives or in penalties increases the probability that collectors and recyclers will participate in the recycling process. Second, policy support incentives encourage collectors and recyclers to participate in

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68. *Id*.
69. *Id*.
70. Dylan Heyden, *Norway Developed an Ingenious Recycling-Incentive Program That's Cutting Plastic Waste*, The Inertia (Feb. 8, 2018), https://www.theinertia.com/environment/norway-developed-an-ingenious-recycling-incentive-program-thats-cutting-plastic-waste/.
71. *Id*.
72. National Conference of State Legislators, *Summary: State Beverage Container Deposit Laws,* NCSL (March 13, 2020), https://www.ncsl.org/environment-and-natural-resources/state-beverage-container-deposit-laws.
73. *Id*.
74. *Id*.
75. *Id*.
76. *Id*.

plastic waste recycling earlier than subsidy incentives do. Finally, recyclers are more sensitive than collectors to government-imposed penalties."[77] This study was quite interesting as it looked not just at the participants who recycle but also the collectors.

The United States can look to other countries' recycling programs for inspiration. In Norway, for example, Norwegians recycle almost 97% of their plastic bottles through an incentivization program that is quite innovative.[78] Norwegians first have to pay extra for anything that they buy in a plastic bottle.[79] Once they return the plastic bottle to a collection machine, the machine creates a receipt for the bottle that is good for an extra amount than what the person paid for the bottle in the first place.[80] The difference between Norway and the United States' incentive programs are that in United States, these programs are inconvenient for the individual since that individual must store up waste for a single trip and work with the personnel's schedules, whereas in Norway, these programs are automated and in many stores.[81]

VI. Ensuring Regulatory Success

When it comes to fighting climate change, citizens need direction in order to change their behaviors. Citizens in California were not conserving water on their own, this paper has already dived into what the government did to ensure that action be taken. The next question, of course, would be if it was successful. The answer is complicated, as each regulation came from a different water authority depending on where the citizen lived.

a) Regulation or Incentivization on Citizens' Behavior?

Californians were steadily reducing their water intake; in May of 2022, statewide savings were just 3.1 percent.[82] However, around August of last year, cities and towns across the state decreased their water intake by 7.6 percent in June, compared to the same month in 2020.[83] Although California's Governor Gavin

77. Zhen Wang, Jiazhen Huo and Yongrui Duan, *The impact of government incentives and penalties on willingness to recycle plastic waste: An evolutionary game theory perspective*, Frontiers of Environmental Science & Engineering, Jan. 19, 2020.
78. Heyden, *supra* note 70.
79. *Id.*
80. *Id.*
81. *Id.*
82. Hernandez, *supra* note 52.
83. *Id.*

Newsom wanted citizens to voluntarily reduce their water intake by 15 percent, there was still significant improvements continued.[84] Northern California was doing a better job at conserving water than Southern California.[85] By the end of last year, Los Angeles' residents saved 6 billion gallons of water during the hottest summer months.[86]

The biggest aspect of encouraging change in citizen's behavior is either incentivizing them or enforcement through regulations. Since California's emergency water conservation has been somewhat successful, an emergency recycling program could also be successful if it does not just follow voluntary restrictions. It would be a bit more complicated than just regulating citizens to recycle as many individuals simply do not have the time, energy or recourses to recycle consistently.

The solution comes from a Vanderbilt University study, in which it was concluded that there are two policy instruments that states can use to encourage recycling. Those instruments are: direct financial incentives and requiring cities to provide recycling services.[87] The citizens would be the entity that would be incentivized to participate in recycling programs, whereas the states/cities would be regulated to ensure recycling services and programs. Both aspects are important because even if an individual is incentivized to recycle, they cannot do so if there is not a recycling program within their area. The study also found that after the states enacted water bottle deposits, people recycled 15 percent more water bottles and "over 20 percent more people became diligent recyclers."[88]

These concepts should be broadened to small towns and rural areas as well. For some, a city could be a few hours away, but if there is a recycling program in their hometown, the extra push of monetary incentivization would better equip that individual to recycle.

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84. *Id.*
85. *Id.*
86. Pineda, Dorany, *L.A. answers call as water use plummets; Residents save 6 billion gallons during summer*; L.A. Times, Nov. 8, 2022.
87. W. Kip Viscusi Vanderbilt University, Joel Huber Duke University, Jason Bell Duke University, and Caroline Cecot Vanderbilt Law School, *Discontinuous Behavioral Responses to Recycling Laws and Plastic Water Bottle Deposits*, American Law and Economics Review, March 18, 2013, https://law.vanderbilt.edu/files/archive/317_Discontinuous-Behavioral-Responses-to-Recycling-Laws-and-Plastic-Water-Bottle-Deposits.pdf.
88. *Id.*

Economic issue might arise from an increased incentivization program.[89] "Monetary incentives have two kinds of effects: the standard direct price effect, which makes the incentivized behavior more attractive, and an indirect psychological effect. In some cases, the psychological effect works in an opposite direction to the price effect and can crowd out the incentivized behavior."[90] This might apply to recycling policies since the ultimately goal is for individuals to care about climate change. If they do not truly care, and the incentivization stops (for example, a recession), the behavior of consistently recycling will stop. Further, if the individual only cares about monetary gain, unless that monetary incentivization trickles into other concepts of change in behavior due to climate change (taking public transportation, not drinking out of a straw, etc.), the individual will not continue to make positive changes in other aspects of their lives.

b) Changing Citizens' Diets

It has already been discussed how citizens are being asked to change their behaviors when it comes to water conservation but there is another change they could make that would greatly change their impact on climate change. The change would come not from shorter showers but from an individual's diet, specifically eating less meat.[91] The vast majority of water that is taken from the reservoirs is used by farmers, not the average citizen, which account for just 13% of water drawn from the Colorado River.[92] The Colorado River is being drained for beef and dairy produce; specifically 79% of the river's water goes to crop irrigation.[93] The water is used for the wheat, grass, and other foods used to fatten up the cows.[94] This is causing a vicious cycle in which the use of "water supplies that have been shrunk in part by climate change to produce food… will in turn worsen climate change."[95] There would need to be a shift in diets with foods that use too much water, which ultimately would be less meat and dairy, "as well as fewer water-intensive tree nuts[96] like almonds, pistachios, and cashews."[97]

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89. Uri Gneezy, Stephan Meier, and Pedro Rey-Biel, When and Why Incentives (Don't) Work to Modify Behavior, 25 J. Economic Perspectives, 191 (2011).
90. *Id*. at 192.
91. Torrella, supra note 23.
92. *Id*.
93. *Id*.
94. *Id*.
95. *Id*.
96. Nut milks still require less water than it takes to produce cow's milk.
97. *Id*.

Therefore, if there would be another aspect to regulate or incentivize regarding citizen's behavior, it would be their meat consumption. Regulation would be quite difficult, as it is a personal choice on what someone eats in their diet, but incentivization might work. Still, this idea would also be difficult to execute as it would be difficult to prove the diet of an individual. However, businesses, prisons, and both private and public schools could get monetary incentives for incorporating meatless meals into their food programs.

c) Expanding regulations to corporate behavior

It is important to note counterarguments to this paper. One might state that it is not fair to regulate citizens alone. Climate change activities should instead advocate to regulate big businesses. This is an argument for all sectors of climate change regulation. Some scholars argue that because individuals are statistically blameless and corporations should take the lead on climate activism, corporations and businesses should be held responsible.[98] It is true that "a recent report found that just 100 companies are responsible for 71% of global emissions since 1988" and "a mere 25 corporations and state-owned entities were responsible for more than half of global industrial emissions in that same period."[99]

The reality is that businesses pollute because it is often included in the price of "doing business" as an externality. The process of regulating businesses to stop this action has already begun.[100] For example, the Security and Exchange Commission (SEC) in the United States is trying to place regulations regarding sustainability reports within large corporations. The SEC's goal is to have these reports act the same as financial reports so that these businesses can be audited if their energy-efficient disclosures are not correct. This would ensure that the companies' sustainability reports would be reliable and consistent.[101]

Even so, the better approach would be to regulate both citizens *and* businesses. Further, it would be important to understand that regulations do not need to take

98. Morten Fibieger Byskov, *Climate change: focusing on how individuals can help is very convenient for corporations*, The Conversation (Jan. 10, 2019), https://theconversation.com/climate-change-focusing-on-how-individuals-can-help-is-very-convenient-for-corporations-108546.

99. *Id.*

100. Melissa Kreger, *How Climate Change is Impacting Corporate Regulation,* globalEDGE (Feb. 3, 2022), https://globaledge.msu.edu/blog/post/57090/how-climate-change-is-impacting-corporat.

101. *Id.*

place simultaneously to be successful. An effort to change individual's behavior does not cancel out the opportunity to also hold business' accountable as well.

VII. Conclusion

Although the current drought is no longer devastating California, the state must continue to take action to protect its citizens through climate change activism, including conserving water. Many scientists believe that droughts are getting worse due to climate change.[102] Therefore, the water crisis in California is only going to continue.[103] Water conservation is regulated in California via many efforts, including California's Water Code but usually through local ordinances.[104] These regulations must continue on.

This paper looked at regulation versus incentivization, which is a difficult aspect for states to decide upon but at least one concept must be done when it comes to the different aspects of climate change law. This paper also examined California's results with water conservation through regulation, which was not a steady progress, but did show promising results.[105] The next section discussed the incentivization programs regarding recycling.[106] These programs can be more successful if recycling was enforced through regulations just as water use is in California. In other words, California's regulations on water use can be broadened by making what is currently only incentivized recycling programs mandatory through regulations. This paper also discussed broadened these concepts to include either regulating or incentivizing individual's diets and ensuring businesses are also being regulated, as they are the main polluters.[107]

Although the debate about whether to regulate or incentivize citizen's climate change activism, one thing remains true– at least one must be going on to make a difference. It is shown time and time again that unless a person is mandated to or monetarily incentivized, they will not conserve water or recycle. Once this concept is truly understood, climate change law will have a basic underlying concept to always follow to ensure success.

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102. White, *supra* note 6.
103. *Id*.
104. Bland, *supra* note 16.
105. Hernandez, *supra* note 52.
106. Wang, *supra* note 77.
107. Byskov, *supra* note 98.