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Cover Image: “Camel's Hump, Duxbury, VT, Lake Champlain View” by Scott Fritz
This Book is dedicated to Professor John Echeverria on behalf of the Vermont Journal of Environmental Law (VJEL) Volume 23 and its prior volumes’ staff.

Thank you for your dedication and mentorship as faculty advisor to VJEL and its Members from 2014 to 2022.
THE HIERARCHY AND PERFORMANCE OF STATE RECYCLING AND DEPOSIT LAWS

Caroline Cecot* & W. Kip Viscusi**

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INTRODUCTION

Motivated by a desire to reduce the amount of waste that ends up in landfills, exploit the potential usefulness of waste products, and avoid wasteful use of natural resources, most states have enacted some type of law to promote recycling behavior.¹ In many instances, these efforts take the form of general recycling laws, which either announce a commitment to promote recycling or establish recycling policy requirements that municipalities must meet. Sometimes these efforts impose fees on beverages sold in containers made of glass, plastic, and cans that are refunded when the containers are returned to recycling centers. The adoption of such laws and their requirements vary across states.

The substantial, but incomplete, coverage of these efforts raises interesting policy questions and provides an opportunity to compare the recycling performance in states with and without such laws. First, are all such

¹ See Jennifer Schultz & Kristen Hildreth, State and Federal Efforts to Revitalize Recycling, 28 LEGISBRIEF No. 41, (2020) (discussing efforts that state and federal organizations have taken to revitalize recycling and their reasons for doing so).
laws equivalent in form or impact? For example, there could be a standardized recycling law template that all states have chosen to adopt. The type of recycling laws states enact may not matter if all such laws have comparable effects on recycling once the state has announced an avowed interest in promoting recycling. This article’s review of these laws finds that recycling laws vary considerably across states in terms of their overall structure and their impact on recycling rates. Second, because there is heterogeneity in the legal approaches, we developed an approach for characterizing the nature of the differences and established a meaningful hierarchy of the degree of stringency of the laws. A principal difference in these laws is not the avowed interest in promoting recycling but rather the degree to which the laws establish concrete mechanisms for promoting recycling. Third, we explore whether there is any evidence that these laws make a difference in increasing household recycling behavior and whether the differences depend, in part, on the form of the recycling law that is introduced. In addition to exploring general recycling laws, we also examine the role of deposit policies, which are separate and more narrowly focused because they are restricted to the types of materials that are covered.

Part II focuses on several different types of recycling laws. While there is substantial heterogeneity in these laws, it is possible to establish a general hierarchy. The more stringent laws usually also include components that can be found in the less stringent interventions. For example, weak recycling laws specify that recycling is a goal, but do not include any requirements that municipalities must meet to promote this goal. Meanwhile, more stringent laws go beyond aspirational expressions of intent by including other components that will foster concrete measures to promote recycling. The ranking of the laws, in terms of their apparent stringency, should ideally influence the extent to which the laws promote recycling behavior. More comprehensive laws, with additional provisions to implement a vigorous recycling effort, should result in a greater impact on the rate of recycling. Using a national dataset of over 400,000 observations of household recycling decisions, we present new recycling rate statistics to explore the extent to which enacting laws of different stringency has led to different rates of recycling across states.

Some states have enacted laws that focus on particular products by establishing deposit policies (primarily for glass, plastic, or aluminum beverage containers) instead of addressing recycling in general terms. Part III explores the breadth and impact of deposit policies. Although states differ in terms of their coverage and the deposit amount, these policies are less

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2. The dataset is the Knowledge Networks survey data. It is not publicly available but is a proprietary dataset made available to the authors.
nuanced in terms of the nature of their policy intervention than are recycling laws. It is also feasible to compare the recycling rates for each of the products covered by deposit policies to assess whether recycling rates for those products vary depending on whether the state has enacted a deposit policy.

The average statistics provide a nice summary perspective on the average effects of recycling laws. But are these differences attributable to other influences in the states with the recycling and deposit laws, such as different demographic compositions of the state and different environmental preferences of the citizenry? Part IV summarizes several studies that have found substantial differences across legal regimes that continue to be evident even after controlling for these factors.

The concluding Part V finds that neither recycling laws nor deposit policies are entirely symbolic. Each of these laws provides a mechanism for promoting higher rates of recycling. It is particularly striking that increasing the level of stringency of recycling laws is associated with higher recycling rates. Deposit policies are also highly effective. There is strong evidence that the intent of these efforts, coupled with mechanisms to achieve the recycling objectives, have been born out in household recycling behavior. The widespread engagement in recycling efforts establishes a recycling norm that has the additional dividend of promoting pro-environmental attitudes more generally.

### I. STATEWIDE RECYCLING LAWS

A relatively broad legal effort to promote recycling consists of recycling laws, which may include many different components and vary across states in their structures. When states contemplate enacting such a law, they should question which components of the law appear to be most consequential in their impact on recycling behaviors. To examine these differences, we identified all statewide general recycling laws and classified them in terms of a hierarchy pertaining to their level of stringency. The focus here is on policies and laws in place during the 2005–2014 period which will be analyzed empirically below.

In our categorization of statewide recycling requirements, 15 states have not enacted any broadly based recycling law.\(^3\) However, this does not mean that these states have no other relevant state laws or local initiatives. For example, two of these states, Massachusetts and Vermont, have enacted deposit policies. These deposit policies provide financial incentives for recycling covered beverage containers and have a targeted impact on

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recycling behavior, as we discuss in Part III. And both Massachusetts and Vermont have notable recycling initiatives at the local level. In Massachusetts, the City of Cambridge requires all households, businesses, and apartments to recycle glass beverage and food containers; metal beverage and food containers; plastic bottles; paper; and a broad range of other products such as cardboard and yard waste. In Vermont, Chittenden County (which includes Burlington) requires households, businesses, and apartments to recycle glass; food and beverage bottles and jars; aluminum and steel cans as well as aluminum foil; and mixed paper and cardboard.

Other states—without either statewide recycling laws or deposit policies—may also have vigorous local recycling initiatives that can serve as a substitute for statewide laws. In Colorado, the City of Boulder has enacted “the [C]ity’s Universal Zero Waste Ordinance that requires all businesses, apartments, and homes to have recycling and composting collection services.” Not surprisingly, Boulder has the highest recycling rate across all businesses and households in the state. If the focus is only on residential rates, then the City of Loveland has the highest recycling rates in Colorado. Loveland has a nationally recognized model that prices trash on a volume-adjusted basis, which “creates a strong financial incentive for households to recycle more and produce less waste.” Although there is no statewide norm for curbside recycling, most cities in Colorado require their residents to opt into a curbside recycling approach. Some waste collection services that

4. MASS. GEN. LAWS ANN. ch. 94, §§ 321–27; VT. STAT. ANN. tit. 10, §§ 1521–30 (1971). Additionally, Vermont adopted another statewide recycling measure in 2012, the Vermont Universal Recycling Law, which banned food scraps from disposal to avoid food waste in landfills and to support composting. However, the law was not implemented until 2014. Because this study analyzes data up until May 2014, we classify Vermont as not having a state recycling law for the four products of interest in our analysis. VT. STAT. ANN. tit. 10, § 6602 (2012); See Yerina Magica, Food to the Rescue: Vermont’s Universal Recycling Law, NAT. RES. DEF. COUNS. (Oct. 24, 2017), https://www.nrdc.org/resources/vermonts-universal-recycling-law (discussing the Vermont recycling law and its effects on food waste).


8. Id.

9. Id. at 18.

10. Id.

11. Id. at 19.
serve more rural Colorado counties may also offer recycling as part of their waste collection services.\textsuperscript{12}

For the states that have enacted statewide recycling laws, we have developed the following order of the recycling law components: recycling goals, recycling plans, recycling opportunities, and mandatory recycling. We refer to this order as a hierarchy because more stringent measures usually include the less stringent components as well.

Laws that we characterize as only specifying a recycling goal are strictly aspirational, as they are limited to advocating a recycling goal. The goal laws do not include any concrete policy mechanism that will assist in meeting that goal. In our categorization of statewide recycling requirements, six states have recycling goals but have not specified more ambitious recycling actions to implement efforts to attain these goals.\textsuperscript{13} Indicating that recycling is a laudatory objective and asserting that the state seeks to meet a particular percentage recycling goal is the first level of policy intervention.

The level of the specified waste reduction goal differs across the states that have enacted goals. Louisiana specifies a goal amount of 25%; Mississippi specifies a waste reduction amount of 25%; Montana specifies a goal amount of 17%; New Hampshire has a waste reduction goal of 40%; Rhode Island has a 35% goal for recycling waste and 50% for recycling beverage containers; and South Dakota has a 50% goal for waste reduction.\textsuperscript{14} Indicating specific environmental goals is not unique to recycling. The United States and other countries have also announced quantitative goals with respect to reducing carbon emissions to reduce global warming.\textsuperscript{15} But in the absence of also committing to mechanisms to advance the goals that have been set, such statements regarding recycling goals are unlikely to be consequential. Economists sometimes refer to pronouncements for which there is no cost to making the assertion as “cheap talk.”\textsuperscript{16} When there is no

\begin{enumerate}
\item See Services, TWINENVIRO SERVS., https://twinenviro.com (last visited May 2, 2022) (describing how Twin Enviro Services provides for garbage pickup for both waste disposal and recycling in Routt County, Moffat County, Fremont County, and Las Animas County).
\item See infra Table A4 (listing the states laws that only have a recycling or waste reduction goal).
\item LA. STAT. ANN. §30:2413(B) (2003); MISS. CODE ANN. § 17-17-221(2)(d) (2022); MONT. CODE ANN. § 75-10-803(2)(a) (2021); N.H. REV. STAT. ANN. § 149-M:2(I) (2019); R.I. GEN. LAWS §§ 23-18.8-2(3), 18.12-3(a)(1) (2022); S.D. CODIFIED LAWS § 34A-6-60 (2022); See infra Table A4 (listing the states laws that only have a recycling or waste reduction goal).
\item See, e.g., Joseph Farrell & Matthew Rabin, Cheap Talk, 10 J. ECON. PERSPS. 103, 104 (discussing “cheap talk” as communication that imposes no costs on the sender if the information conveyed is inaccurate).
\end{enumerate}
cost to the party making such claims, there is no assurance that the claims will be borne out.\textsuperscript{17}

The second level of stringency consists of laws that require municipalities to develop a plan for meeting recycling goals. In this way, these laws go further than simply promoting recycling as a goal. A recycling law mandating the development of a recycling plan is the most common form of recycling law—15 states have recycling plan laws.\textsuperscript{18} These laws impose local planning requirements on counties and municipalities to evaluate their current recycling programs and to develop plans for more comprehensive future programs.\textsuperscript{19} Except for Michigan and Ohio, the recycling laws in all states that require regional waste management plans—including recycling considerations—also specify a recycling or waste reduction goal.\textsuperscript{20} The specified goal amounts in these recycling plan states range from 2 to 25% (AL, IL, TN) and others have a range up to 50% (CA, HI, IA, ME, NE).\textsuperscript{21}

The third level of stringency consists of laws that require that municipalities implement policies to take the recycling effort beyond plans and to provide recycling opportunities for households to engage in recycling. In our categorization of statewide recycling requirements, eight states have recycling opportunity laws (AZ, AR, FL, MN, NV, OR, SC, WA).\textsuperscript{22} Except for Arizona, all states with recycling opportunity laws also specify a recycling goal: 25% (NV), 30% (FL), 35% (MN, SC), 40% (AK), and 50% (OR, WA).\textsuperscript{23} Although the wording of opportunity laws differ by state, the general spirit is captured by the Oregon law provisions:

\begin{quote}
[T]he ‘opportunity to recycle’ means at least that the city, county or metropolitan service district . . . [p]rovides a place for collecting source separated recyclable material . . . located either at a disposal site or at another location more convenient to the population being
\end{quote}

\textsuperscript{17} Id. at 107 (“It is consistent with common knowledge of rationality, and with equilibrium, for cheap talk to be completely ignored.”).

\textsuperscript{18} These states are as follows: AL, CA, HI, IL, IA, ME, MD, MI, NE, NM, NC, OH, TN, TX, VA. See infra Table A3.

\textsuperscript{19} See infra Table A3 (listing states requiring waste management plans with recycling considerations); see also CAL. PUB. RES. CODE § 41821(a)(1) (2021) (requiring most jurisdictions to “submit a report to the department summarizing the jurisdiction’s progress in reducing solid waste.”).

\textsuperscript{20} See infra Table A3 (showing all the states with regional waste management plan requirements that also have specified goals); ALA. Code §22-27-45(4)(a)(3) (1975); 415 ILL. COMP. STAT. ANN. 15/4; TENN. CODE ANN. § 68-211-813; VA. CODE ANN. § 10.1-1411; TEX. HEALTH & SAFETY CODE ANN. § 363.062; CAL. PUB. RES. CODE § 41821; HAW. REV. STAT. § 342G-26; IOWA CODE ANN. § 455B.306; ME. REV. STAT. ANN. TIT. 38, §§2132.1, 2133.1-1-A (WEST 2019); Neb. Rev. Stat. § 13-2031–2032; N.M.S.A. 1978, § 74-9-4-7 (LexisNexis 2022).

\textsuperscript{21} See infra Table A3.

\textsuperscript{22} See state statutes infra Table A2 (listing states with opportunity recycling laws).

\textsuperscript{23} NEV. REV. STAT. ANN. § 444A.040; FLA. STAT. § 403.706; MINN. STAT. § 115A.551(for a county outside of the metropolitan area); S.C. CODE ANN. § 44-96-50; ARK. CODE ANN. § 8-6-720; OR. REV. STAT. §§459A.010(1)(b) (2014); WASH. REV. CODE ANN. § 70.95.090.
served and, if a city has a population of 4,000 or more, collection at least once a month of source separated recyclable material . . . from collection service customers within the city’s urban growth boundary.\textsuperscript{24}

The final level of stringency consists of laws that impose mandatory recycling behavior. These mandates require people to separate their recyclable products from other household waste and recycle those products appropriately. Households need the opportunity to engage in this recycling behavior; this activity should be subsumed in laws making recycling mandatory. In our categorization of statewide recycling requirements, six states and the District of Columbia have mandatory recycling laws.\textsuperscript{25} All except for two of the states (PA, WI) that impose mandatory recycling requirements also specify recycling goals. The recycling goals vary across the following ranges: 25\% (CT), 45\% (DC, NY), 50\% (WV), and 60\% (NJ).\textsuperscript{26} The wording of the Connecticut mandatory recycling law is representative of the stipulations in other mandatory recycling laws:

\begin{quote}
The Commissioner of Environmental Protection shall adopt regulations . . . designating items that are required to be recycled . . . Each person who generates solid waste from residential property shall . . . separate from other solid waste the items designated for recycling pursuant to subsection (a) of this section.\textsuperscript{27}
\end{quote}

Figure 1 illustrates the geographical distribution of the different types of recycling laws, the details of which are summarized in the Appendix tables. The colors of the states indicate different types of recycling laws. Many states in the middle of the country have no recycling laws, and these states are joined by two New England states. The states in green have mandatory recycling laws. This group of states includes Wisconsin and a contiguous cluster of states from West Virginia to Connecticut. The states with opportunity laws are colored in blue and include a continuous set of Pacific states (excluding California) as well as four other states, the most populous of which is Florida. States with plan laws are highlighted in orange. These laws are the most frequent and many highly populated states, including California and Texas, have adopted them. The goal law states are highlighted

\textsuperscript{24} OR. REV. STAT. §459A.005 (2021).
\textsuperscript{25} The six states are as follows: CT, DC, NJ, NY, PA, WV, WI. See infra Table A1.
\textsuperscript{27} CONN. GEN. STAT. § 22A-241b (2021).
in yellow. They tend to be more remote and rural, where recycling may be more difficult due to lower population density.\textsuperscript{28} States with no shading have not enacted any general recycling laws during the sample period that is examined below.

To investigate the impact of recycling laws on recycling behavior, we present new statistical results drawing on a national sample of household recycling behavior. The sample we are using is the Knowledge Networks Panel from 2005 to 2014, a national web-based panel of 171,296 households.\textsuperscript{29} Unlike convenience samples like Amazon Mechanical Turk, Knowledge Networks (KN) recruited the sample based on a probability sample of the U.S. population.\textsuperscript{30} Households that did not have computers or internet access were provided with this capability to promote a representative sample.\textsuperscript{31} One of the authors of this article used subsets of this panel for a series of studies undertaken for the U.S. Environmental Protection Agency.\textsuperscript{32} The panel dataset used here is based on the basic interview administered to all panel members, rather than a subsample that was given a special survey dealing with recycling.\textsuperscript{33} The basic interview included a set of recycling questions inquiring whether households recycled each of the following products in the past year: paper, cans, glass, and plastic.\textsuperscript{34} The wording of the questions was as follows:

\begin{quote}
  Paper: “In the past 12 months, have you recycled your newspapers or other papers?”
  Cans: “In the past 12 months, have you recycled your cans?”
  Glass: “In the past 12 months, have you recycled your glass?”
  Plastic: “In the past 12 months, have you recycled your plastic?”
\end{quote}

These questions elicit the respondent’s stated recycling behavior, but do not ascertain the amount of each material that was recycled. Does the stated

\begin{footnotesize}
\begin{itemize}
  \item[29.] GfK (Growth from Knowledge) subsequently bought Knowledge Networks. We refer to the panel as the Knowledge Networks Panel and to the company as Knowledge Networks (KN). Further information on the current panel is at https://www.ipsos.com/en-us/solutions/public-affairs/knowledgepanel.
  \item[31.] Id. at 117.
  \item[32.] Id.
  \item[33.] See id. at 118 (noting the different surveys conducted by KN).
  \item[34.] See Jason Bell et al., \textit{Fostering Recycling Participation in Wisconsin Households through Single-Stream Programs}, 93 LAND ECON. 481, 483 (2017) (listing four yes or no recycling questions for households).
  \item[35.] Id.
\end{itemize}
\end{footnotesize}
recycling behavior of whether the household recycled any of the materials in the past year correspond to the amount of material the household recycled? Answering this question is possible if one can obtain data on the tonnage of recycling material and explore how it corresponds to the stated recycling effort. For a subset of the KN data, it was feasible to analyze the relationship between the recycling question responses and the tonnage of material recycled in different Wisconsin counties. On average, for every 10% increase in stated recycling behavior, we found an 8% increase in the volume of recycling.\(^{36}\) This relationship indicates that boosting the rate at which people report recycling materials in the survey is strongly correlated with actual differences in the tonnage of material recycled. Increasing the stated percentage of respondents who recycle is correlated with an increased volume of recycling but at a bit less than a one-for-one percentage basis.

The Knowledge Networks Panel includes 171,296 households.\(^{37}\) Because many households were interviewed multiple times, there are 406,952 observations of recycling behavior. We present representative statistics for the first survey that the household completed (171,296 observations). We also present results across all surveys that the household completed (406,952 observations). Households sometimes completed more than one survey. To avoid counting the household more than once, we present representative statistics for the first survey that the household completed. We also present results across all the surveys that the household completed, which are quite similar. Because the results are similar in each case, subsequent figures utilize data from the entire sample rather than just the initial interview. As one might expect, the data gathered over a series of years tends to reflect somewhat greater levels of recycling behavior than is reported in the initial interview with the household. Recycling rates have tended to increase over time nationally so that some upward trend in recycling should be expected.\(^{38}\) In addition, panel members who are interviewed multiple times may be more diligent recyclers; greater recycling behavior may also reflect their stability as members of the panel. Because households reported their state of residence, we were able to match their recycling answers with their state’s recycling laws. This made it possible to examine how recycling behavior differs depending on the state recycling laws.

Figure 2A provides the results based on the full sample of observations, and Figure 2B presents the results for the household’s first interview. In

\(^{36}\) Id. at 484.

\(^{37}\) The summary statistics reported in the remainder of this Part are from the dataset created by the authors using the Knowledge Networks Panel and the state recycling laws. This dataset is on file with the authors.

\(^{38}\) See Viscusi et al., supra note 3, at 10378 (reporting steadily rising recycling rates from 2005 to 2014).
Figure 2A, the full sample reported recycling 2.7 of the four materials on average, which is somewhat greater than the 2.5 average amount of materials recycled in Figure 2B. The recycling rates over the series of interviews for each household are very similar to the recycling rate reported in the household’s initial interview. The overall recycling rates among the different categories of recycling laws are similar but somewhat higher in Figure 2B. Given the similarity and fact that recycling rates have generally increased over time, the rest of this article focuses on the full sample observations.

The recycling rates under the four different categories of laws follow the expected ordering. The recycling rate measure refers to the number of materials out of the four specified materials (glass, cans, plastic, and paper) that the household reported recycling in the past year. The rate does not imply that the household always recycled these materials because the question only addresses whether at some point in the past year the household recycled these materials. The greatest recycling rate out of the four possible materials is: 3.2 materials for households in mandatory law states; 2.9 materials for households in opportunity law states; 2.6 materials in states with plan laws; and 1.9 for states with goal laws. Interestingly, states with no recycling law have a recycling rate of 2.3, which exceeds the rate in the goal law states. This weak performance of goal laws may reflect the extent to which announcing a recycling goal without any practical steps for implementation is not an effective mechanism for increasing recycling. States without recycling laws may have higher recycling rates than states with goal laws because states without laws, like Colorado, have strong local recycling efforts. Also, Vermont and Massachusetts have deposit laws at the state level and local initiatives that encourage recycling behavior apart from the presence of any general recycling law during the sample period.

For all major categories of laws there has been a steady upward trend in the recycling rate. States with the more stringent laws had the highest baseline recycling rates. Consequently, these states displayed the most modest growth of recycling behavior over the 2005–2014 period. Over this period, the recycling rate in the mandatory recycling states increased from 65% to 67%. The recycling rate in the opportunity states increased from 54% to 60%. The recycling rate in the plan states increased from 42% to 50%. The largest gains (11%) were for goal law states and states with no recycling laws. These states increased recycling rates from 30% to 41%. The relatively small increases in states with stronger recycling laws are likely because there may be some ceiling effects that limit the opportunities for additional increases in recycling. The fact that recycling rates increased over time for every category raises the possibility that recycling may be becoming a national behavioral norm as not littering has become an established norm.
Recycling rates are greater in the states with more stringent recycling laws, but how is this level of recycling achieved? What recycling policy mechanisms tend to be engaged as a consequence of these laws? There are differences in the mechanisms that are implemented across states with different recycling laws. Table 1 shows results from a Knowledge Network (KN) 2009 sample survey with questions that inquire where the respondent undertook the recycling behavior: whether the household took the material to a community recycling center, whether the household used curbside recycling, or whether the bottles or cans were returned for deposit.\footnote{The final option is to return the material to obtain a deposit refund. We discuss deposit laws in Part III. Only a minority of states with general recycling laws have such deposit policies so this pattern of returns is less instructive for our analysis of the effect of general recycling laws. In particular, the results show that there is generally not great reliance on returning bottles for deposit in the opportunity law states. Oregon is the only opportunity law state that has a deposit policy. See, e.g., CAL. PUB. RES. CODE §§ 14500-99 (West 2021) (detailing California’s deposit law fees); see infra Table A5 (listing all states with deposit laws).}

The curbside recycling statistics are most telling. In mandatory recycling law states, 76% of the households reported that they used curbside recycling. This percentage drops to 54% for opportunity law states, and 41% for plan law states. Strikingly, the provision of curbside recycling plummets to 11% for goal law states. Because this percentage is well below the 31% rate for the states that use curbside recycling without general statewide recycling laws, it is not surprising that the states without such laws perform better in terms of their recycling rates.

The principal alternative to curbside recycling is dropping off recyclable materials at a location such as a community center. These centers are most widely available in states with a recycling plan, as 26% of respondents reported the use of community centers in these areas. About 15%–17% of respondents in all other states use community centers. On average, one-fifth of the sample uses community centers for recycling.

II. DEPOSIT LAWS

A less popular but potentially effective approach to increasing recycling of specific products is the adoption of deposit laws. These laws impose fees on containers—typically beverage containers made of glass, plastic, or aluminum—that are refunded when the containers are returned to recycling centers.\footnote{See, e.g., CAL. PUB. RES. CODE §§ 14500-99 (West 2021) (detailing California’s deposit law fees); see infra Table A5 (listing all states with deposit laws).} There are ten states that have deposit laws for beverage containers.\footnote{See infra Table A5 (MI, CA, ME, OR, VT, HI, NY, IO, CT, MA).} Figure 1 indicates these states using dots.\footnote{See infra Figure 1.} Two states (NY, CT) with mandatory recycling laws also have deposit laws.\footnote{Compare infra Table A1, with infra Table A5.} Only one state...
(OR) with an opportunity law also has a deposit law.\textsuperscript{44} The greatest overlap between deposit laws and general recycling laws is with the plan law states (CA, IA MI, ME).\textsuperscript{45} None of the goal law states have a deposit policy, while two of the states with no recycling laws (MA, VT) have a deposit law.\textsuperscript{46}

The coverage of these laws differs by state.\textsuperscript{47} Deposits for beer and malt beverages are included in all states, as are deposits for carbonated soft drinks and mineral water.\textsuperscript{48} States differ in some other aspects of the coverage. For example, some states also include deposits for wine coolers (IA, MI, ME, VT, CA, HI, NY).\textsuperscript{49} With some exceptions, the amount of the deposit usually is five cents per container.\textsuperscript{50} Michigan and Oregon (and California for bottles containing at least 24 ounces) have a 10¢ per container deposit, and others have different deposit amounts for wine and liquor (15¢ for beverages at least 50 mL in Maine and 15¢ for liquor in Vermont).\textsuperscript{51}

The presence of a deposit fee imposes a financial cost on the customer if the container is not returned for the deposit refund.\textsuperscript{52} Consequently, deposit policies provide a financial incentive for returning the beverage containers. If the individual does not plan on returning the container for the deposit, the imposition of a deposit cost will raise the overall effective price of the beverage, which should decrease the demand for the product.\textsuperscript{53}

The presence of the deposit policy is related to the frequency of recycling of the products in the expected manner. Figure 3 reports the recycling rates for glass, which are 74\% in the deposit states and 53\% in the states without deposits. The overall recycling rate for glass is 59\%. The recycling rates for plastic reported in Figure 4 are 81\% in the deposit states and 63\% in the non-deposit states. Figure 5 reports the recycling rates for cans, which are 84\% in the deposit states and 71\% in the non-deposit states. The final recyclable material covered in the survey is paper, reported in Figure 6. Even though paper products are not a target of beverage recycling efforts, the recycling rates in deposit states are 73\% in the deposit states and 65\% in the non-deposit states.

\textsuperscript{44} Compare infra Table A2, with infra Table A5.
\textsuperscript{45} Compare infra Table A3, with infra Table A5.
\textsuperscript{46} Compare infra Table A4, with infra Table A5.
\textsuperscript{47} Redemption Rates and Other Features of 10 U.S. State Deposit Programs, CONTAINER RECYCLING INST. (2021), https://www.bottlebill.org/images/PDF/BottleBill10states_Summary41321.pdf; see infra Table A5 (providing citations to the details of each deposit law).
\textsuperscript{48} See infra Table A5 (providing citations to the details of each deposit law).
\textsuperscript{49} Id.
\textsuperscript{50} Id.
\textsuperscript{51} Id.
\textsuperscript{52} See, e.g., PETER BOHM, DEPOSIT-REFUND SYSTEMS: THEORY AND APPLICATIONS TO ENVIRONMENTAL, CONSERVATION, AND CONSUMER POLICY 437 (1981) (describing a deposit-refund law as a combination of a tax and a subsidy).
\textsuperscript{53} Id.
The differences between the deposit and non-deposit states in recycling rates are instructive. As shown in Figure 7, the greatest boost in recycling rates in the deposit states as compared to the non-deposit states occurs for glass, for which there is a 21% difference between the deposit states and the non-deposit states. Glass containers are heavier than plastic and cans, which may require more effort to recycle. The deposit inducement may motivate that effort and be more consequential for products that impose greater effort costs to recycle. Deposits increase plastic recycling by 18%. The recycling of cans is 13% higher in the deposit states. The 8% boost to paper recycling may reflect a positive spillover effect that deposits have in encouraging people to engage in recycling more generally. Such an increase could occur if the presence of deposit policies led households to return the covered items to a recycling center where it was also possible to recycle paper. Another possible explanation is that establishing the norm that bottles and cans covered by deposits should be recycled may also lead households to believe that they should recycle paper. Figure 7 shows that the greatest boost in recycling rates occurs for glass in the deposit states as compared to the non-deposit states, for which there is a 21% difference.

III. IMPLICATIONS OF RELATED STUDIES

The overall differences in recycling rates between states suggest the potential influence of recycling and deposit laws. But there may be other characteristics of the households or aspects of these states that explain the differences. For example, if pro-environmental residents tend to congregate in the states with mandatory laws, those differences in household environmental attitudes may be responsible for the higher recycling rates in these states. A review of a multiple statistical analyses indicates that there is evidence that general recycling laws and deposit policies matter because they promote greater rates of recycling behavior. All the studies discussed below are regression analyses that include a variety of variables for household and regional characteristics.

Viscusi et al. (2011) analyzes the determinants of how many out of every 10 plastic water bottles the respondent has recycled in the past year. The data analyzed consists of a subsample drawn from the 2009 KN survey and included 608 households that used bottled water. In 2011, Viscusi et al. analyzed the determinants of how many out of every 10 plastic water bottles the respondent year. States with deposit policies that do not cover water

55. Id.
56. Id. at 68.
bottles also benefit from the deposit policy, as recycling rates out of every 10 plastic bottles purchased are 1.1 bottles higher.\textsuperscript{57} General recycling laws also promote plastic water bottle recycling. Compared to states that have no recycling laws, the effect is a rate of 2.7 out of 10 water bottles for states that have a mandatory or opportunity law.\textsuperscript{58} There is a positive, but somewhat smaller effect of 1.2 bottles out of 10 for states that have laws requiring a recycling plan.\textsuperscript{59} In this sample, there is no statistically significant difference in recycling rates of plastic bottles between goal law states and states with no recycling laws.

The results reported in Viscusi et al. (2013) also focus on plastic bottle recycling but have a broader focus.\textsuperscript{60} The empirical results similarly indicate that laws are consequential even after accounting for household and regional characteristics.\textsuperscript{61} Recycling rates vary with a variety of personal characteristics and are greater for self-described environmentalists, those with better education, higher incomes, and homeowners.\textsuperscript{62} The effect on the number of recycled plastic water bottles out of 10, due to the various laws, can be estimated by controlling for these and other potential influences. This analysis focused on a KN sample from 2008 and 2009 consisting of 5,213 survey participants, including 3,158 households that used bottled water.\textsuperscript{63} The impact of deposit laws compared to non-deposit states increases recycling rates by 0.6 bottles out of 10 if the state has a deposit law and by 2.1 bottles out of 10 if the deposit law covers water bottles.\textsuperscript{64} Compared to states with no recycling laws, the impact on recycling rates is 1.9 bottles out of 10 if the state has either mandatory recycling or a recycling opportunity law, 0.7 bottles out of 10 if the state has a recycling plan, and no statistically significant impact if the state has a recycling goal.\textsuperscript{65}

Households are also more likely to avail themselves of recycling amenities in states with vigorous recycling laws. In the sample used in Viscusi et al. (2013), deposit laws are not significantly correlated with the use of curbside recycling.\textsuperscript{66} However, compared to states without any recycling law, households with mandatory recycling laws or recycling opportunity laws are 26\% more likely to use curbside recycling, and in states

\textsuperscript{57} Id. at 67–68.
\textsuperscript{58} Id. at 68–69.
\textsuperscript{59} Id. at 68.
\textsuperscript{60} Discontinuous Behavioral Responses, supra note 30, at 110.
\textsuperscript{61} Id. at 139–140.
\textsuperscript{62} Id. at 129–130.
\textsuperscript{63} Id. at 117–118.
\textsuperscript{64} Id. at 126.
\textsuperscript{65} Id.
\textsuperscript{66} Id. at 134 (reporting statistically insignificant coefficients for deposit laws in regressions predicting curbside recycling).
with a recycling planning law curbside use is 7% greater.\textsuperscript{67} Additionally, curbside recycling use for households in states with recycling goals does not differ significantly from states that lack any recycling law.\textsuperscript{68} Deposit laws increase the probability of returning plastic water bottles to a recycling center or for deposit by 0.1, and deposit laws covering water bottles increase this probability by 0.2.\textsuperscript{69}

The Viscusi et al. (2013) article also examined the effect of including water bottles in the bottle deposit policy.\textsuperscript{70} This change in policies occurred in 2009 for Oregon and Connecticut.\textsuperscript{71} For these states, it was possible to examine plastic water bottle recycling before and after the policy shift. After the policy shift to include plastic water bottle deposits, the percentage of recycling or returning these bottles increased in these states.\textsuperscript{72}

Using a larger set of KNs’ data consisting of about 250,000 responses in 2006, 2009, and 2012, Viscusi et al. (2014) examined the effect of recycling and deposit laws on the average recycling rates on a county-wide basis.\textsuperscript{73} The county averages considered were the average rates for glass, plastic, cans, and paper, as well as the overall county average recycling rate. The direction of the effects on recycling behavior are consistently similar in all instances.\textsuperscript{74} For deposit laws, the comparison in the statistical analysis is the impact of deposit laws relative to the performance of states that have no deposit laws. Deposit laws, excluding deposits for water bottles, are associated with greater recycling rates, including higher recycling rates for paper—which is not covered by the deposit policies.\textsuperscript{75} Deposit laws that exclude deposits for water bottles are associated with greater recycling rates for paper—which is not covered by the deposit policies.\textsuperscript{76} Mandatory laws, opportunity laws, and plan laws all exhibit positive effects on counties’ recycling rates compared to counties in states that have no recycling laws.\textsuperscript{77} Meanwhile, the counties in states with recycling goals exhibit slightly lower recycling rates.\textsuperscript{78}

The presence of laws and deposit policies also may have a reinforcing effect on social norms with respect to the appropriateness of recycling behavior. To explore this mechanism, Huber et al. (2020) used two waves of
the Growth for Knowledge (GfK) Knowledge Panel, formerly known as Knowledge Networks. The dataset consisted of 1,027 households in 2009 and 984 households in 2014. The survey asked whether respondents would be personally upset if their neighbors failed to recycle. If respondents recycled all four materials (glass, plastic, cans, and paper) or if the average recycling rate in their county was high, they were more likely to be personally upset. Even after controlling for this influence (as well as personal characteristics such as whether the respondent is a self-described environmentalist), mandatory recycling laws have an additional positive effect on whether households would be personally upset if their neighbors failed to recycle. These results are consistent with the belief that laws and deposit policies that promote recycling rates help to establish recycling as a behavioral norm.

People who live in states with vigorous recycling laws and deposit policies may differ on their personal attitudes toward recycling, as compared with those in states without such requirements. Is there a more refined test to explore whether the positive relationship between recycling behavior and the various legal structures is an indication that the laws are instrumental in determining this behavior? The approach taken in Viscusi et al. (2020) examines people who move to a new recycling regime as a consequence of moving out of state. Some moves may not change the recycling regime that people face. For example, a person could move from a mandatory recycling state to another mandatory recycling state. But there also are many households who may experience a change in their recycling legal environment. The sample analyzing these movers contained a subsample from the Knowledge Networks’ GfK Panel consisting of 3,902 households that moved either out of their county or out of state. For 2,404 of these households, the move was an in-state move, so there would be no change in the legal regime at the state level. For the remaining 1,498 households, the move was out-of-state. The within-state movers are still useful for comparative purposes. Moves are disruptive, so comparing the effect of out-

80. Id. at 6.
81. Id. at 16.
82. Id.
84. Id. at 4. The discussion indicates that 3,902 households moved out of their county. Of these 3,902 households, 1,498 households relocated to a new state and 2,404 households relocated to a different county within the same state (author’s analysis).
85. Id. at 4, 9.
86. Id. at 4.
of-state moves with local moves provides a useful reference point for examining the effect of changes in the pertinent legal environment—as opposed to the impact of moving alone. Moving to states with stronger laws boosted the number of materials recycled, as did moving from a non-deposit state to a deposit state.\textsuperscript{87} Meanwhile, moving from a state with a deposit policy to a state without a deposit policy had the opposite effect.\textsuperscript{88} For some households, once the household no longer received the financial inducement of deposit policies, recycling rates declined.\textsuperscript{89} This result is consistent with financial incentives being instrumental in fostering recycling behavior.\textsuperscript{90} In contrast, moving to states with weaker recycling laws did not lead to a slackening of recycling behavior that was sufficiently great enough to be statistically significant. Households accustomed to recycling may continue to do so even in a new locale. Moving away from a regime with deposit policies differs from moves involving changes in the general recycling law, to the extent that the absence of a deposit policy also changes the mechanism for recycling. For example, if bottles and cans could be returned to retail establishments for refunds in a deposit state, that option will no longer be available when there is no deposit policy.

CONCLUSION

Most households cannot initiate recycling activity unilaterally. While it is possible to reuse some items within the household, having an external mechanism that facilitates a more broadly based recycling effort is essential. The two principal sets of legal interventions examined here consist of general recycling laws and container deposit policies. Each of these interventions can serve to boost recycling rates. While laws that simply announce a recycling goal are not influential, the findings discussed above indicate that enacting more stringent laws successfully boosts recycling rates. The hierarchy that we have found instructive for ordering the impact of these interventions is, in decreasing order of impact: mandatory recycling laws, recycling opportunity laws, and recycling planning laws. Similarly, container deposit laws also are effectively boost the recycling rates of affected products.

Recycling and deposit laws may also serve to promote pro-recycling social norms. Recycling of paper waste material increases after deposit policies encourage recycling of beverage bottles and cans.\textsuperscript{91} Diligent recyclers, particularly those in mandatory recycling states, indicate that they

\begin{itemize}
\item \textsuperscript{87} Id. at 18–19.
\item \textsuperscript{88} Id. at 19.
\item \textsuperscript{89} Id.
\item \textsuperscript{90} Id.
\item \textsuperscript{91} See infra Figure 6 (showing recycling rates for paper in states with deposit laws compared to those without deposit laws).
\end{itemize}
are upset with their neighbors if they do not also recycle.\footnote{Huber et al., supra note 79, at 15–17.} Broader impacts of recycling policies on social norms could merit exploration in future studies. Engaging in recycling activity is a widespread pro-environmental household activity. Does recycling lead households to think more broadly about the importance of protecting the environment (possibly raising support for other environmental policies)? Many statistical analyses have found that households that label themselves as pro-environmental are more likely to recycle.\footnote{See, e.g., Discontinuous Behavioral Responses, supra note 30, at 140 (concluding that deposit laws have less of an impact on pro-environmental households that are already more likely to recycle).} While the causality may be due to environmental attitudes making recycling more attractive, additionally, recycling may encourage people to have greater concern for the environment. The studies cited above did not ascertain the direction of causality in this relationship.\footnote{See, e.g., Quasi-Experimental Evidence, supra note 83, at 1–2 (“While households in states with strict recycling laws or deposit regimes trend to exhibit greater recycling rates, it is not clear whether this difference is due to state environmental laws or is simply reflective of environmental preferences withing the state.”).}

A policy question arising more frequently in recent years is whether recycling passes a broader economic test regarding the benefits outweighing the costs. The studies of this issue to date have focused on quantifiable economic effects, such as the costs of pickup, household recycling effort, landfill costs avoided, and the prices that can be gained by selling the recyclable materials.\footnote{See, e.g., Promoting Recycling, supra note 54; see also e.g., Private Recycling Values, supra note 73; see also e.g., Huber et al., supra note 79; see also e.g., Quasi-Experimental Evidence, supra note 83.} Recycling may generate benefits exceeding the costs in some states but may have a different effect elsewhere.\footnote{See David Aadland & Arthur J. Caplan, Curbside Recycling: Waste Resource of Waste of Resources?, 25 J. POL’Y ANALYSIS & MGMT. 855, 855 (2006) (discussing mixed results on the economic merits of recycling).} Particular recycling approaches, such as the use of single-stream recycling, may pass a benefit-cost test, but there is no assurance that all recycling measures will be economically viable.\footnote{See, e.g., Orion Donovan-Smith, When Does Recycling Your Plastic Make Sense? The Answer Isn’t So Simple, PBS (Mar. 31, 2020), https://www.pbs.org/wgbh/frontline/article/what-plastic-types-to-recycle/ (claiming that the benefits of recycling are clear for certain materials—like aluminum and paper—but less clear for plastics).} Fluctuations in recycled material prices may lead some to question recycling’s economic desirability.\footnote{See, e.g., Gill Plimmer, Recycling Industry Feels Strain of Falling Prices, FIN. TIMES (Aug. 23, 2016), https://www.ft.com/content/cc2f1612-63c2-11e6-8310-ecf0bddd227 (“The fall in prices for recycled goods has put pressure on every part of the waste management industry.”).}

However, we hope that policymakers continue to think more broadly about recycling policies before contemplating any changes that would scale them back. Recycling behavior for households tends to be fairly stable from year-to-year. Temporary scaling back of recycling policies may disrupt this
continuity in recycling habits, creating challenges in terms of regaining the recycling activity. Also, problems may arise in publicly communicating recycling’s value if government officials change their attitudes on whether recycling is desirable based on recycled material’s temporary price fluctuations.

Recycling policy assessments, seeking to monetize the costs and benefits of recycling, have not considered potentially broader impacts on support for pro-environmental policies. If engaging people in perceived pro-environmental household recycling efforts makes them more inclined to support environmental protection generally, incentivizing such efforts could pay dividends that go beyond the financial merits of recycled materials.
Figure 1
USA Recycling and Deposit Laws

Green: Mandatory Laws
Blue: Opportunity Laws
Orange: Plan Laws
Yellow: Goal Laws
White: No Laws
Dots: Deposit Laws
Notes: Sample consists of 406,952 observations, 2005–2014, Knowledge Networks Panel.

Notes: Sample consists of 171,296 observations based on respondent’s first survey, 2005–2014, Knowledge Networks Panel.
Notes: Sample consists of 406,952 observations, 2005–2014, Knowledge Networks Panel.

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APPENDIX - TABLES

Table 1
Percentage Who Report Recycling Opportunity for Different Recycling Laws

<table>
<thead>
<tr>
<th>Legal Regimes</th>
<th>Use curbside recycling</th>
<th>Use community center</th>
<th>Return for deposit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory laws</td>
<td>76</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Opportunity laws</td>
<td>54</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>Plan laws</td>
<td>41</td>
<td>26</td>
<td>7</td>
</tr>
<tr>
<td>Goal laws</td>
<td>11</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>No laws</td>
<td>31</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Full sample</td>
<td>47</td>
<td>20</td>
<td>6</td>
</tr>
</tbody>
</table>

Table A1
States With Mandatory Recycling Laws

<table>
<thead>
<tr>
<th>State</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC</td>
<td>D.C. Code § 8-1007.</td>
</tr>
</tbody>
</table>

Note: Categorizations are based on the state laws in place during the study period (2005–2014).
Table A2
States With Opportunity Recycling Laws

<table>
<thead>
<tr>
<th>State</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>Fla. Stat. § 403.706.</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Minn. Stat. § 115A.552.</td>
</tr>
<tr>
<td>Oregon</td>
<td>Or. Rev. Stat. § § 459A.005 to .010.</td>
</tr>
</tbody>
</table>

Note: Categorizations are based on the state laws in place during the study period (2005–2014).
Table A3
States That Require Waste Management Plans With Recycling Considerations

<table>
<thead>
<tr>
<th>State</th>
<th>Source for plan requirements</th>
<th>State recycling or waste reduction goal?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>Ala. Code § 22-27-45.</td>
<td>Yes (25%)</td>
</tr>
<tr>
<td>Iowa</td>
<td>Iowa Code Ann. § 455B.306.</td>
<td>Yes (50%)</td>
</tr>
<tr>
<td>Maryland</td>
<td>Md. Code Ann., Envir. § 9-505.</td>
<td>Yes (20%)</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Neb. Rev. Stat. § § 13-2031 to 2032.</td>
<td>Yes (50%)</td>
</tr>
<tr>
<td>New Mexico</td>
<td>N. M. S. A. 1978, § 74-9-4-7.</td>
<td>Yes (50%)</td>
</tr>
<tr>
<td>Ohio</td>
<td>Ohio Rev. Code Ann. § 3734.53.</td>
<td>No</td>
</tr>
<tr>
<td>Tennessee</td>
<td>Tenn. Code Ann. § 68-211-813.</td>
<td>Yes (25%)</td>
</tr>
<tr>
<td>Texas</td>
<td>Tex. Health &amp; Safety Code Ann. § 363.062.</td>
<td>Yes (40%)</td>
</tr>
<tr>
<td>Virginia</td>
<td>Va. Code Ann. § 10.1-1411.</td>
<td>Yes (25%)</td>
</tr>
</tbody>
</table>

Note: Categorizations are based on the state laws in place during the study period (2005–2014).
Table A4
States That Only Have a Recycling or Waste Reduction Goal

<table>
<thead>
<tr>
<th>State</th>
<th>Source</th>
<th>Goal amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mississippi</td>
<td>Miss. Code Ann. § 17-17-221.</td>
<td>25% (waste reduction)</td>
</tr>
<tr>
<td>Montana</td>
<td>Mont. Code Ann. § 75-10-803.</td>
<td>17%</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>R.I. Gen. Laws § § 23-18.8-2 to .12-3.</td>
<td>35% (recycling waste); 50% (recycling beverage containers)</td>
</tr>
<tr>
<td>South Dakota</td>
<td>SDCL § 34A-6-60.</td>
<td>50% (waste reduction)</td>
</tr>
</tbody>
</table>

Note: Categorizations are based on the state laws in place during the study period (2005–2014).
Table A5
State Bottle Deposit Law Citations

<table>
<thead>
<tr>
<th>State</th>
<th>Relevant Deposit Laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>Iowa Code Ann. § § 455c.1-17. (West 2021)</td>
</tr>
</tbody>
</table>

Note: Categorizations are based on the state laws in place during the study period (2005–2014).
INTRODUCTION

Environmental law is an odd field. While it has an extensive pre-history, modern environmental law comes from an array of federal statutes passed during the 1970s. The Environmental Protection Agency (EPA) and Council on Environmental Quality were created during the Nixon administration. This administration also saw the passage of the National Environmental Policy Act (NEPA), Clear Air Act (CAA), Federal Water Pollution Control Act, Endangered Species Act, Toxic Substances Control Act (TSCA), and Resource Conservation and Recovery Act (RCRA), among others. The

* Research & Reference Librarian, Nova Southeastern University, Shepard Broad College of Law.
2. Id. at 70.
broad scope and quick implementation of these acts lead to material benefits in human health and in wilderness and species conservation. Over time, limitations inherent in an area of law created almost entirely by disparate statutes have become more apparent.³

Chief among these limitations is environmental law’s lack of a central organizing principle. As environmental statutes and case law have increased, so have complaints that the field is overly complex and fragmented. This positive, statutory law has failed to develop into a cohesive structure and is “seldom read against a common law or constitutional base or taken as a source of new general principles.”⁴ This failure is reflected in the Supreme Court’s mostly inconsequential early decades of environmental decisions.⁵ The Court tended to “fritter away docket space on oddball environmental cases with little precedential value,”⁶ including one particularly strange case on psychological trauma and nuclear power.⁷ The Court left large areas of environmental law, including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)⁸ liability and toxic tort litigation basically untouched.⁹ The Court often denied environmental appeals, was substantively deferential to administrative agencies, and resolved cases on narrow technical grounds.¹⁰ A review of Supreme Court environmental decisions undertaken in 2000 found that most Justices considered environmental ramifications unimportant to their vote.¹¹ Justices tended to see environmental cases as just the factual background to more important crosscutting issues of law. This failure has limited environmental law’s development as an autonomous field.

Environmental law’s status as a predominantly statutory area of law has led it to struggle to adapt to new conditions and remain overly subject to changing political winds.¹² Throughout their history, environmental regulations have been withdrawn, altered, and underenforced by hostile

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³ A. Dan Tarlock, *Is There a There There in Environmental Law?*, 19 J. Land Use & Envt’t L. 213, 216 (2004) (“Environmental law’s rapid rise and great success is nonetheless a mixed blessing because it postponed consideration of the hard questions about the content and legitimacy of the field and of environmental protection generally.”).


⁶ Id. at 550.


⁹ Farber, supra note 5, at 553.

¹⁰ Id. at 555–62.


¹² Tarlock, supra note 3, at 232.
administrations. In recent decades the Court has become increasingly politically polarized and at times averse to the environmental cause. Richard J. Lazarus’ 2000 environmental protection score rankings revealed dramatic decreases in these scores over time, with a substantial drop from the 1970s to the 1980s and a further decrease throughout the 1990s. He noted the increasing importance of personal anti-environmental opinions among the Justices—including Scalia’s stated opposition to the judiciary’s “long love affair with environmental litigation” and Justice Powell’s experiences in private practice. This trend continued in the Court’s 2003–2004 term. By the October 2008 term, Justices’ environmental decision-making was firmly polarized—with the Court’s four liberal Justices’ environmental protection scores all sitting above 66% and the conservative Justices all around 33%. Justice Scalia’s record is illustrative. After 2000, his opinions in environmental cases became less stridently textualist where the method would have led to a victory for environmental advocates. Political risks to the field remain incredibly high, with the EPA’s ability to regulate carbon emissions at issue in this term’s West Virginia v. EPA.

There have been a few attempts to craft a non-positivist framework for environmental law. Dan Tarlock’s Is There a There There in Environmental Law proposes five structural principles. The principles are intended to legitimize and contour the field, create some “legal drag on the amplitude of political oscillations,” and provide a background structure for negotiations.

A second proposal is found in Todd S. Aagaard’s Environmental Law as a Legal Field: An Inquiry in Legal Taxonomy. Aagaard identifies two

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15. Lazarus, supra note 11, at 729–30; John C. Jeffries, Jr., Justice Lewis F. Powell Jr., 125–28, 189–93, (1994) (noting while Justice Powell worked at Hunton & Williams, he represented a variety of industrial clients, including the Albermarle Paper Company, Cheseapeake Corporation of Virginia, and the Virginia-Carolina Chemical Corporation. This included representing the Albermarle Paper Company in its acquisition of the Ethyl Corporation, a producer of tetraethyl lead, then used as a gasoline additive.).
21. Id. at 220–21.
defining characteristics of the field—physical public resources and pervasive interrelatedness—and secondary characteristics including temporal and spatial disjunctions and scientific uncertainty. From these, he created a conceptual diagram for environmental law that focuses on use conflicts. Tarlock reviewed proposals from Aagaard and others and found them insufficient. Tarlock challenges the Constitutional or common law right to a healthy environment, a more comprehensive public trust doctrine, an expanded conception of public property rights, and the extension of legal personality to ecosystems. Instead, he proposes an alternative set of principles modeled on international environmental law.

Complicating these attempts is the fact that environmental law does not fit neatly within the liberal ideological framework. David A. Westbrook defines liberalism as “a social theory built upon the value of autonomy, which is the individual’s capacity to make choices.” Foundational here is the idea that value statements are just expressions of personal taste. Rules should be crafted to emphasize individual freedom. Liberalism restricts environmental law to “harms that can be expressed as reductions of autonomy.” General environmental harms—to wilderness areas, vulnerable species, and entire ecosystems—fall outside this framework. Westbrook considers a few attempts to articulate environmental values within a liberal framework, including public trust, public nuisance, and intergenerational equity arguments, and finds them inadequate. He notes that “to speak of nature is to discuss both the purpose and bounds of humanity”—a conversation that liberalism retreats from. A full realization of environmental goals requires “a political discourse more comprehensive than contemporary liberalism, a discourse that can articulate the future.”

This article considers whether the environmental movement needs to integrate the insights of the past to prepare for the future. Over the past few years, internal disagreements on the right have begun manifesting themselves in new and unexpected ways. One development has been a revived interest in the classical legal tradition. Adrian Vermeule’s Common Good Constitutionalism is the clearest articulation of this development. Vermeule calls for a strong administrative power to protect the vulnerable from both

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23. Id. at 279, fig 2.
25. Id. at 192–93.
27. Id. at 694.
28. Id. at 695–708.
29. Id. at 710.
30. Id. at 710–11.
climate change and “the underlying structures of corporate power” that contribute to it. This proposal stands in marked contrast to conservative jurisprudence on environmental matters over the past 40 years. For this reason alone, environmentalists should take an interest in understanding his approach.

Part I situates the classical law revival in its political context. An examination of the blog Ius & Iustitium reveals five traits of the classical law revival. Following is an outline of the Common Good Constitutionalist (CGC) framework. Part II lays out a Common Good Constitutionalist environmental jurisprudence. Applying CGC principles to environmental law would lead to beneficial results in a variety of areas. Courts would be broadly deferential to legislative and administrative environmental actions and would interpret statutes in light of their purposes and aspirations. Property rights would be understood within their ecological and social context. Localities would be empowered and protected from state-level meddling. A more communal view of standing requirements would benefit conservation organizations. Part III argues that proponents of Common Good Constitutionalism should take environmental considerations seriously and ends with an argument for a substantive environmental law.

I. COMMON GOOD CONSTITUTIONALISM

A. Political Background

Conor Casey traces the origins of Common Good Constitutionalism to deep dissatisfaction within the conservative movement. The present fusionist approach combines a cultural traditionalism with limitations on state regulatory power. This approach limits state regulatory power by “pursuing the privatization or reduction of government services, promoting international free trade and economic globalization,” and through “deregulation of the financial industry.” In recent years an increasing number of conservatives have begun to feel that economic liberalism is incompatible with social traditionalism.

34. Id. at 6.
Some broadly postliberal conservatives see the Trump presidency as an opportunity to begin forging a new conservative politics. They oppose attempts to reconstruct the pre-Trump conservative status quo. The postliberals are deeply critical of liberalism, believing that “its master commitments are a common dedication to individual autonomy and freedom from constraint inconsistent with a politics that can safeguard human flourishing.” Both parties are seen as fundamentally liberal and as having a shared commitment to both cultural and economic deregulation. Conservative postliberals criticize neoliberal economics on issues of inequality, trade, and the drug epidemic.

B. Five Traits of the Classical Law Revival

This dissatisfaction with the status quo has coincided with an interest in a revival of the classical law tradition. The blog Ius & Iustitium (I&I) has become a gathering place for those looking for “a fundamental re-thinking of jurisprudence that rejects the positivism and liberalism embedded in mainstream conservative thought and embraces the classical legal tradition.” While writers in I&I have covered a wide variety of topics and are not always in agreement, their articles reveal five core themes. First, a deep interest in on the history of the classical legal tradition, particularly as expressed in Roman and medieval law. Second, a foreign and comparative nature. Third, emphasis on social issues, including abortion and gender issues. Fourth, the insights of the classical legal tradition are extended into economic matters, even when doing so conflicts with deregulatory orthodoxy. Finally, the movement includes a staunch criticism of originalism and textualism.

First, the classical law revival replaces originalism’s emphasis on the founding generation and the framers of the Constitution with references to Roman, medieval, and canon law. Cicero and Justinian replace Jefferson

35. Id. at 6–7.
37. Id.; see generally PATRICK DENEEN, WHY LIBERALISM FAILED (2018).
39. Casey, supra note 33, at 8.
and Hamilton. St. Isidore,\textsuperscript{43} St. John of Capistrano,\textsuperscript{44} St. Benedict,\textsuperscript{45} St. Thomas Aquinas,\textsuperscript{46} and St. Thomas More\textsuperscript{47} remain as relevant today as five hundred years ago. The revivalists see religion not as a personal quirk but as having unavoidable consequences for law. Sir John Fortescue,\textsuperscript{48} Archbishop Wulfstan of York,\textsuperscript{49} and Dante\textsuperscript{50} make appearances. One writer recovers the classical conception of jurisprudence as a “subaltern” science, one “arrayed at the service of metaphysically and theologically rich conceptions of the common good.”\textsuperscript{51} Another particularly interesting article compares contemporary natural law revivalists with the Bologna jurists who rediscovered Justinian’s \textit{Corpus Juris Civilis} in the 11th Century.\textsuperscript{52} Instead of “uncouth Germanic war bands,” todays revivalists battle “the tangled vines of liberalism, positivism, and a panoply of related errors.”\textsuperscript{53} The revivalists look to use the classical legal tradition to slowly—but surely—restore law in service of the common good.\textsuperscript{54}

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\textbf{47. See generally JAF, Thoughts on the Feast Day of St. Thomas More, IUS & IUSITIUM (June 22, 2020), https://iusetiustitium.com/thoughts-on-the-feast-day-of-st-thomas-more/ (explaining St. Thomas More’s history and advocacy).}
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\textbf{53. Id.}
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\textbf{54. Id.}
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The classical law revival transcends national boundaries. Writers from Venezuela, Scotland, Canada, Austria, Ireland, Russia, and Spain have contributed to *Ius & Iustitium*. Canadian scholars advocate for an interpretation of Section 33 of the *Canadian Charter of Rights and Freedoms* “as a prophylactic for the shortcomings of an overly judicialized rights discourse, which may sometimes prescind from questions of the common good.” Revivalists view the Scottish Court of Session’s decision overturning a pandemic restriction of public worship as an instance of a temporal power preventing interference with the independent legal order of the Church. The Irish judicial system is held up an example of Common Good Constitutionalism in action. Irish judges have been deferential to legislative and executive determinations of how best to achieve the common good. They have not been hesitant to use the 1937 Constitution’s preamble “to pour substantive moral content into rights interpretation.” Native American tribal sovereignty issues have been reviewed several times. Laws as disparate as the Canon Law of the Catholic Church and the European Union’s Class Action Directive have been held up as examples of law serving the common good. The classical law revival draws from both the past and from foreign and tribal law.

60. Lukina, supra note 46.
62. Sun et al., supra note 57.
63. Hernández G., supra note 55.
64. Lessons from the Irish Constitution, supra note 59.
Social issues, particularly abortion and religious liberty, are important to the movement. The Supreme Court’s decision in June Medical Services L.L.C. v. Russo lead to a series of five articles. These five articles in Ius & Istitutium encapsulate some conversations among the classical law revivalists. The first criticizes originalists, noting that, in this instance, a consistent originalism on the part of Chief Justice Roberts lead to a defeat for the pro-life cause.\(^\text{67}\) Another casts Chief Justice Roberts as playing the moderate in a drama that will always incline towards liberalism.\(^\text{68}\) A third article criticizes the “Burkean virtue of epistemic humility” claimed by Roberts, and notes that, paradoxically, excessive deference to precedent actually places past judges in the arrogant position of fixing law for all time.\(^\text{69}\) A fourth compares the pro-life movement to a bull in a bullfight—destined to lose under rules stacked against it.\(^\text{70}\) The final article ties Burke’s Reflections (quoted by Roberts in the decision) negatively to the “economic ‘system’ of capitalism.”\(^\text{71}\) Other topics of discussion include Bostock,\(^\text{72}\) ministerial exceptions and the Catholic Church,\(^\text{73}\) 14th Amendment personhood for the unborn,\(^\text{74}\) and the Court’s decision in Fulton v. City of Philadelphia.\(^\text{75}\)

The natural law revivalists often take economic stances at odds with those of the existing conservative movement. The common good is

\(^{67}\) Pat Smith, Don’t Let the Sunshine Fool You, IUS & ISTITIUM (June 29, 2020), https://iusetiustitium.com/dont-let-the-sunshine-fool-you/.

\(^{68}\) Rafael de Arizaga, John Roberts, Conservative, IUS & ISTITIUM (June 29, 2020), https://iusetiustitium.com/john-roberts-conservative/.

\(^{69}\) Adrian Vermeule, True and False Humility, IUS & ISTITIUM (June 29, 2020), https://iusetiustitium.com/true-and-false-humility/ (“Because the ‘private stock of reason . . . in each man is small, . . . individuals would do better to avail themselves of the general bank and capital of nations and of ages.”) \(^\text{3}\) EDMUND BURKE, REFLECTIONS ON THE REVOLUTION IN FRANCE 110 (1790)).


\(^{74}\) See generally Yves Casertano, Yes, Courts Can Enforce the Fourteenth Amendment Personhood for the Unborn, IUS & ISTITIUM (April 5, 2021), https://iusetiustitium.com/yes-courts-can-enforce-fourteenth-amendment-personhood-for-the-unborn/ (supplementing a Supreme Court ruling could provide concrete legal protection for the unborn under the 14th Amendment).

implicated in patent law,76 copyright,77 trademarks, freedom of speech, and the conflict of laws and public health.78 American antitrust law is seen as insufficient in “the absence of a legitimate moral authority that can anchor antitrust regulation to the common good.”79 One particularly interesting article (referenced further below) places property rights within the context of larger discussions of the common good.80 Another draws on the Code of Canon Law and the writings of Pope Francis to discuss charity and the penal law.81 Corporate law must also be made subject to the common good.82 One article even reviews—and praises!—some of Joe Biden’s executive orders as conducive to the common good.83

Finally, the revivalists are strongly critical of originalism and textualism. The originalist project is seen to have been fundamentally confused. It serves as an attempt to escape judicial value judgements through commitment to “the Madisonian constitution, the legitimacy of the judiciary”—itself a value.84 The way forward is not through shrinking from judicial value judgements but through grounding them in the truths of the natural legal tradition.85 One article by a scholar of Lacanian psychoanalysis posits that textualism is fundamentally deconstructionist and describes Justice Gorsuch as “the deconstructionist’s useful idiot.”86 Another notes that the Court’s decision in United States v. Curtiss-Wright Export Corp.87 breaks the originalist vs. living constitutionalist paradigm by holding that sovereignty

85. Id.
was not created anew by the Constitution, but results as a transfer of sovereignty from the British Crown.\footnote{\textsuperscript{88}}

\textit{C. Theory}

The classical law revival has seen its fullest expression in the form of Adrian Vermeule’s Common Good Constitutionalism. This method holds that law must focus on the common good of a given political community.\footnote{\textsuperscript{89}} This common good is not mere preference aggregation or the summation of a number of private, individual goods but is rather the flourishing of the community itself.\footnote{\textsuperscript{90}} This flourishing incorporates individual success but cannot be reduced to it. The common good is defined as follows:

1. [I]t is the structural, political, economic, and social conditions that allow communities to live in accordance with the precepts of justice, yielding (2) the injunction that all official action should be ordered to the community’s attainment of those precepts, subject to the understanding that (3) the common good is not the sum of individual goods, but the indivisible good of the community, a good that belongs jointly to all and severally to each.\footnote{\textsuperscript{91}}

Proponents see all legal systems as assuming some conception of morality, even if that conception is left only hidden or implied.\footnote{\textsuperscript{92}} Common Good Constitutionists straightforwardly state that human flourishing is an objective good that should be sought by legal and political authorities. This flourishing is by its nature broad and includes, for example “health; bodily integrity; vigor; safety; the creation and education of new life; friendship in its various forms ranging from neighborliness to its richest sense in marriage; and living in a well-ordered, peaceful, and just polity.”\footnote{\textsuperscript{93}} Environmental justice is a particularly clear example of a common good. Indeed, Vermeule

\begin{footnotesize}
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\item \textsuperscript{88} Adrian Vermeule, “The Union Existed Before the Constitution”, \textit{IUS & IUSTITIUM} (Oct. 6, 2020), https://iusiusstitium.com/the-union-existed-before-the-constitution/.
\item \textsuperscript{89} Conor Casey & Adrian Vermeule, \textit{Myths of Common Good Constitutionalism}, 45 \textit{HARV. J. L. & PUB. POL’Y} 103, 105 (2022).
\item \textsuperscript{90} \textit{Id.} at 109–10.
\item \textsuperscript{91} \textit{Id.} at 110–11.
\item \textsuperscript{92} See Vermeule, supra note 31 (“[A]ll legislation is necessarily founded on some substantive conception of morality, and that the promotion of morality is a core and legitimate function of authority.”).
\item \textsuperscript{93} Casey & Vermeule, supra note 89, at 114–15; see also \textit{id.} at 117 (noting that law is also seen to have an educative function, as “[t]hey can encourage citizens subject to the law to form desires, habits, and beliefs that better track and promote communal, and indeed their own, well-being”).
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notes that a right relationship to the environment is “arguably a precondition for the enjoyment of other goods.”

Legal structures have an important role to play in promoting the common good. The classical legal tradition distinguishes between the broad, often vague principles of the natural law and the positive law determined by lawmakers. Lawmakers are charged with using reason to make determinations, or “the prudential process of giving content to a general principle drawn from a higher source of law, making it concrete in prudential application to local circumstances or problems.” Governments have wide latitude in creating positive law to advance the common good. Once these laws are created, they ought to be interpreted in light of, and harmonized with, the background principles of natural law.

In practice, this method would read “substantive moral principles . . . into the majestic generalities and ambiguities of the written Constitution.” These include respect for authority and hierarchy, solidarity, subsidiarity, and an understanding of the moral ramifications of law. Vermeule holds that existing rulings on “free speech, abortion, sexual liberties, and related matters will prove vulnerable under a regime of common good constitutionalism.” The economic and administrative law ramifications of the approach are more central to environmental law. Common Good Constitutionalism would defer to strong presidential power and a strong administrative state. Rather than be seen through a originalist lens as a debatably constitutional and certainly inefficient bureaucracy, Vermeule sees administrative agencies as “the strong hand of legitimate rule.” The state should protect individuals and communities from unjust economic forces and, notably, “from corporate exploitation and destruction of the natural environment.” The state does not look to replace local institutions like trade unions and other solidaristic associations but will instead enable their flourishing. Importantly, the state will be able to protect the weak even in the face of claims of competing private rights.


94. Adrian Vermeule, Common Good Constitutionalism: Recovering the Classical Legal Tradition, 173.
95. Casey & Vermeule, supra note 89, at 120.
96. Id. at 124–25.
97. Id.
98. Id.
99. Id.
100. Id.
101. Id.
102. Id.
of a judicial opinion written along these lines. Common Good Constitutionalism is situated not as an innovation but as a long running—and previously unsystematized—tradition in American law. Vermeule contrasts this with originalism, “a modern movement that has attempted, unconvincingly, to inscribe itself in the past.” He notes a variety of cases beginning in the decades after the Civil War in which the Court upheld regulatory measures aimed at public benefit. These include *Munn v. Illinois*, *Mugler v. Kansas*, *Holden v. Hardy*, and *Jacobson v. Massachusetts*. Vermeule uses Justice Harlan’s opinion in *Mugler* to organize a framework for common good jurisprudence, as follows:

1. The public authority may act for the common good;
2. By making reasonable determinations about the means to promote its stated public purposes; and,
3. When it does, judges must defer.

Vermeule sees this framework as derived “from the whole conception of the aims of government and of constitutionalism in the classical tradition.” Under this reading, Common Good Constitutionalism, rather than something novel, is a return to form. He sees both progressive attempts to modernize jurisprudence and libertarian and conservative attempts to limit the size of government (itself a modern project) as in rebellion against the core of the common good tradition. In opposition to both, “the police power framework has firm roots in the classical legal tradition.”

*Lochner*, of course, used the theory of freedom of contract to invalidate a maximum hour law for bakers. Vermeule draws a contrast between Justice Holmes’ and Justice Harlan’s dissents. Holmes based his dissent on judicial deference to the outcomes of the democratic process. Lost to
democratic deference is “the classical idea of a genuinely common good that transcends preference aggregation and that is entrusted to the care of the public authority.” Harlan, on the other hand, forthrightly wrote that the state retains the power to regulate economic activity for the common good, even when this violates what market participants see as their rights.

Vermeule ends by noting two ways in which, from a Common Good Constitutionalist perspective, judges can go astray. The first is through insufficient deference to public authorities. While there is no hard and fast determination for the balance of power between courts and public officials, “maturity is the realization that the absence of such a metric is hardly a decisive objection.” The second is skepticism, either of the existence of an objective common good or that such a common good can be enacted through government action.

II. COMMON GOOD CONSTITUTIONALIST ENVIRONMENTAL JURISPRUDENCE

A. Statutory Interpretation

One of the biggest benefits of a Common Good Constitutionalist approach is that it places environmental law in its broader context. Environmental statutes often consist of an unstable combination of broad, aspirational language about goals and purposes with more restrictive implementation provisions. The first purpose of the Clean Air Act (CAA), for example, is “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.” Textualists tend to overvalue enforcement provisions when they limit the applicability of otherwise broad and aspirational environmental statutes. There are counterexamples where courts use the broad purposeful language as a lens through which to interpret the rest of the statute, as with the district court in National Wildlife

115. Id.
116. Id.
117. A Model Opinion, supra note 104.
118. Id.
120. Clean Air Act, 42 U.S.C. § 7401(b)(1).
Common Good Constitutionalism

Federation v. Gorsuch. Common Good Constitutionalists would favor the latter approach.

Illustrative here is a CGC reading of the Irish Constitution. The Irish Constitution’s preamble uses religious and moral language and posits government as created to secure the common good. Indeed, “Irish courts have drawn prolifically on the preamble to the 1937 Constitution . . . to pour substantive moral content into rights interpretation.” This method is just as applicable to American environmental law. Environmental protection is inextricably tied to the common good. Centering the aspirational language of environmental statutes will help put them into full effect.

Irish Courts understand that the exhortation to promote the common good is not limited to them alone. They have often found that “public authorities have ample authority and leeway when promulgating laws to secure the common good, even if individual entitlements or interests must give way.” The Irish Courts have maintained that the state has a wide latitude to regulate private uses of property. They are conscious of their role and broadly deferential to the legislature. In the American context, courts called upon to interpret environmental statutes would be conscious of the common good. They would be broadly deferential to legislative and administrative attempts to protect the environment. Courts would see themselves as cooperating with the other two branches to effectuate environmental protection.

B. Property

Contemporary property law has struggled to integrate an understanding of ecological injury. One ahistorical but common view is of property as

123. Lessons from the Irish Constitution, supra note 59.
124. CONSTITUTION OF IRELAND 1937 (preamble), http://www.irishstatutebook.ie/eli/cons/en/html (last visited Oct. 5, 2021). (“In the Name of the Most Holy Trinity, from Whom is all authority and to Whom, as our final end, all actions both of men and States must be referred, We, the people of Eire, Humbly acknowledging all our obligations to our Divine Lord, Jesus Christ, Who sustained our fathers through centuries of trial, Gratefully remembering their heroic and unremitting struggle to regain the rightful independence of our Nation, And seeking to promote the common good, with due observance of Prudence, Justice and Charity, so that the dignity and freedom of the individual may be assured, true social order attained, the unity of our country restored, and concord established with other nations, Do hereby adopt, enact, and give to ourselves this Constitution.”).
126. Id.
127. Id.
128. Id.
129. Id.
consisting of a “bundle of rights” able to be excised by an owner that went almost unimpeded up until modern times. The enduring myth of strong, individualist property rights presents several problems in the environmental context. Individual landowners can create environmental issues that impact others. Even land uses that could be practiced by one or a few landowners without issue can become destructive in the aggregate. Intensive land uses have led to situations where “[e]cosystem processes are disrupted in ways that threaten the long-term fertility and health of entire regions.” On the other hand, individual landowners are unable to resolve environmental issues on their own. Many problems can only be understood and remedied system wide. Eric T. Freyfogle sees among the challenges of modern environmental law the “need to reconceive and reshape landed property rights.”

The nature of environmental injury itself presents other problems. Environmental injuries can be irreversible and catastrophic, with far ranging economic, societal, and ecological effects. Harms can change over time and manifest themselves across long distances. These factors present inherent problems to legal systems used to adjudicating distinct violations of property rights. Uncertainty, caused by the “sheer complexity of the natural environment and, accordingly, how much is still unknown about it[,]” presents additional problems. Ecological problems are often the result of multiple causes over time. Perhaps most problematic for the current model of property rights is the existence of purely (or at least in some combination with human and economic) ecological injury. Ultimately, “[t]he environmental dimension of environmental law teaches that the nonhuman, nonmonetizable dimensions of ecological injury not only exist but are worth protecting.”

The Court’s decision in Lucas is emblematic of the problems with the current conception of property and its resistance to incorporating the insights of ecology. The majority saw the land at issue as distinct asset—no different

134. Id. at 784.
135. Id.
136. Id.
137. Id. at 785.
138. Lazarus, supra note 11, at 745.
139. Id. at 746.
140. Id. at 747.
141. Id. at 748.
than any other plot. The actual land at issue had been often partially or fully coved by water, and in fact “during the past fifty years, the shoreline itself had been landward of the landowner’s property 50 percent of the time because of the competing forces of accretion and erosion.” 143 An understanding of the complex ecosystems of coastal South Carolina would shed light on the reasoning of the Coastal Council. Moreover, the “economic loss” test used by the Justices failed to take in account the very ecological losses considered by lawmakers.144

Among the shortcomings of the environmental movement is “a particularly disturbing reluctance to phrase goals in terms of the common good.” 145 The movement’s language has tended to be liberal and individualistic—with an emphasis on personal effort and responsibility—or else clinical and scientific.146 Eric T. Freyfogle calls for a reevaluation of property rights that takes the good of the surrounding community into greater account.147 He advocates for a conservationist common good “conceived broadly enough to include ecological, economic, and general quality-of-life issues.”148 Rachel Walsh sees similarities between this approach and St. Thomas Aquinas’s views on property rights.149 While a person can privately possess property, this possession is always subject to the evolving needs of the community.150 This principle is often known as the universal destination of goods. 151 Walsh correctly notes that the classical legal tradition’s conception of property as limited by the demands of the common good will “help smooth the way for tackling difficult problems like housing and climate change.”152

A Common Good Constitutionalist approach to property law will integrate the insights of modern ecology. Possession of property is not purely the assumption of rights but also serves as an assumption of responsibilities toward the community at large. Individual land use decisions, both solely and in aggregate, affect other people and the environment. The complex nature of environmental injury makes the importance of wise regulation particularly pressing. A CGC approach would be broadly deferential to federal, state, and local environmental restrictions on the exercise of property rights. After all,

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143. Lazarus, supra note 11, at 754.
144. Id. at 754–55.
145. Freyfogle, supra note 133, at 790.
146. Id.
147. Id. at 787–88 (“Property rights are sanctioned and supported within communities because community members collectively decide or sense, in one way or another, that a private-property regime will benefit them.”).
148. Id. 791.
149. Walsh, supra note 80.
150. Id.
151. Id.
152. Id.
rulers can exercise authority “for the good of subjects [in this case landowners] if necessary, even against the subject’s own perceptions of what is best for them.” 153 Rather than standing as an obstacle against environmental land use regulation, the judiciary would see themselves cooperating with the other branches in the promotion of the ecological common good.

C. Environmental Federalism

Local governments are increasingly on the front lines of climate change response. Federal failure to respond to environmental problems has forced states and localities to attempt to fill the gaps. 154 While localities are unable to solve such systemic issues on their own, they can play an important role of mitigating harms and protecting their citizens. 155 Levels of local ability to act on environmental matters varies widely. 156 Most states have some grant of home rule authority that “combines elements of immunity from state interference and authority to take action on the local government’s own initiative.”157 Local governments with this authority can act on local issues but are subject to state preemption. 158 State policy has begun to break along partisan lines. 159 Conservative state houses have begun to aggressively use preemption to prevent local regulation. 160 Even without explicit targeting, questions of preemption can be complex and leave localities unsure of how to proceed with attempts at reform. 161 Localities are not clearly included in the federal structure of the Constitution, which leaves them vulnerable to

153. Vermeule, supra note 31 (editorial comment added).
155. Fox, supra note 154, at 123–24. For an empirical look at local government capacity for climate mitigation, see Uma Outka & Richard Feiock, Local Promise for Climate Mitigation: An Empirical Assessment, 36 WM. & MARY ENV’T L. & POL’Y REV. 635, 668 (2012) (citing the study conducted by the authors of Florida municipalities with over 1,000 residents finding that local government action had been “modest at best” but that there existed significant opportunities for improvement).
156. Fox, supra note 154, at 125.
157. Id.
158. Id. at 126. For one example of how state preemption can limit local action—in this instance Pennsylvania’s Uniform Construction Code’s impact on green buildings, see Shari Shapiro, Who Should Regulate—Federalism and Conflict in Regulation of Green Buildings, 34 WM. & MARY ENV’T L. & POL’Y REV. 257, 269 (2009).
159. Fox, supra note 154, at 147.
161. Fox, supra note 154, at 126.
state preemptions of their ability to protect local environments. One idea to circumvent hostile state governments is through creative use of Congressional funds. Another is to use federal regulatory authority to empower local governments. While precedent supports the latter idea, it has not been tried out in front of the current Court.

Vermeule identifies one of the principles of the common good as the “appropriate subsidiarity, or respect for the legitimate roles of public bodies and associations at all levels of government and society.” Subsidiarity is a complex concept within Catholic social teaching that aims to properly allocate power within society. Smaller social groups or associations are generally seen as being better able to respond to social needs. As such, their role should not be unnecessarily usurped by more powerful and larger bodies. Subsidiarity takes two considerations into account. The first is a pragmatic view that the common good is most effectively served by local associations. The second is that certain functions are properly the role of particular institutions. This propriety determination is made “prior to and apart from the consequences that may be generated by that distribution of authority.” These two factors often create a productive tension. Subsidiarity seeks to “prescribe limitations on the reach of the state while also resisting unfettered liberal individualism.”

Subsidiarity is often invoked in the American context as a purely devolutionary principle. This oversimplification fails to see that the principle allows for higher level action when that action is pragmatically necessary or appropriate to a governmental or non-governmental association’s societal role. Calabresi and Bickford write that subsidiarity and constitutional federalism can be linked by allowing the lowest competent

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162. Id. at 168.
163. Id. at 136.
164. Id. at 137.
166. Vermeule, supra note 31.
168. Id. at 528.
169. Id.
170. Id. at 529.
171. Id. at 535.
172. Id. at 529.
173. See Robert K. Vischer, Subsidiarity as a Principle of Governance, 35 IND. L. REV. 103 (2001) (noting that during the George W. Bush administration “subsidiarity is treated as a strictly devolutionary principle compelling the reallocation of social functions from higher to lower government bodies, or from the government to non-government entities”); Golemboski, supra note 170, at 530 (“Subsidiarity, in particular, is routinely interpreted as a synonym for unequivocal devolution of authority and has been misguidedly appropriated as a justification for policies more consistent with small-government libertarianism.”).
level of government to make decisions. Additionally, power allocation should be made on the grounds of greatest economic efficiency.\textsuperscript{175} This and other accounts differ from the Common Good Constitutionalist concept of subsidiarity because they do not adequately integrate the factor of propriety.\textsuperscript{176}

Subsidiarity relies on a concept of natural law pluralism.\textsuperscript{177} Societal entities are not antagonistic but “possess their own unique ends and dignity and occupy a distinct and intrinsically meaningful place in society.”\textsuperscript{178} This complicates the devolutionist view, as there are plenty of roles best suited to national and even international organizations. Importantly, natural law pluralism includes not only governmental but nongovernmental associations as well.\textsuperscript{179} This includes close consideration on how “market activity relates to, supports, or undermines the various forms of association, political and nonpolitical alike.”\textsuperscript{180} Associations need to be evaluated in their appropriate context.\textsuperscript{181}

The interactions between local and state environmental regulations are likely to increasingly end up in front of the Court. Judges should implement the principle of subsidiarity to leave localities able to act for the common good, while still allowing them to involve state and federal enforcement as necessary. A correct understanding of the proper role of differing societal entities will help make these determinations. Local governments are often most understanding of, and responsive to, local needs. This is especially true in the face of increasingly nonresponsive state and federal legislatures. Environmental advocacy groups are often able to have the biggest impact locally. Even associations that are not explicitly environmental in nature can have their voices heard. On the other hand, localities can be subject to the market effects, creating a race to the environmental bottom. A few businesses may be able to wield outsized influence.

A Common Good Constitutionalist approach would treat state environmental laws and regulations as floors rather than ceilings. Localities would be free to protect their citizens while being somewhat protected themselves from market pressures. States can set environmental rules that work effectively statewide with the assurance that localities can fill gaps. The subsidiarity approach to local environmental regulation would empower cities without leaving states and the federal government unable to pass broad and generally applicable environmental laws. Common Good

\textsuperscript{175} Id. at 537.
\textsuperscript{176} Id.
\textsuperscript{177} Id. at 539.
\textsuperscript{178} Id. at 539–40.
\textsuperscript{179} Id. at 542.
\textsuperscript{180} Id.
\textsuperscript{181} Id.
Constitutionalism holds that “a just state is a state that has ample authority to protect the vulnerable from the ravages of pandemics, natural disasters, and climate change.” Protecting local government’s ability to regulate would contribute to the functioning of this just state.

**D. Environmental Standing**

Environmental cases have played an integral role in the development of the modern standing doctrine. Under common law there existed a right to bring actions on behalf of the public, and this right was affirmed by the Supreme Court in 1875. At issue in *Scenic Hudson Preservation Conference v. Federal Power Commission* was the Federal Power Act which included a requirement that a party must be “aggrieved” by a Federal Power Commission action in order to bring suit. The Second Circuit held that the category of the “aggrieved” included those “who by their activities and conduct have exhibited a special interest” in the “aesthetic, conservational, and recreational” aspects of a Commission action. This decision created a limitation on the expansive conception of standing found in the common law.

In *Sierra Club v. Morton* the Sierra Club argued for standing to challenge the construction of the ski resort not “over a possible interference with the Sierra Club’s pack trips” but over “the injury to its concrete aesthetic and conservational interest in Mineral King.” It intentionally chose this strategy to establish a right to standing for environmental organizations with an interest in particular environmental issues. An Amicus brief filed by the National Environmental Law Society notes that there are many situations where no individual suffers a loss but society as a whole suffers an environmental loss. In these instances “a demonstrated interest, though non-economic, in environmental protection and preservation of natural resources” should be enough to establish standing.

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187. Reply Brief for the Petitioner at 6, Sierra Club v. Morton, 405 U.S. 727. The Sierra Club notes that “This activity is of so little importance to the Club that it would not incur all of the disadvantages of litigation in an attempt to protect it.”
188. Id. at 6.
189. Id. at 60.
190. Brief for the National Environmental Law Society as Amicus Curiae at 9, Sierra Club v. Morton, 405 U.S. 727.
191. Id. at 21-22.
An Amicus brief filed on behalf of the Wilderness Society, Izaak Walton League of America, and Friends of the Earth agreed that there should be an expanded right of standing for environmental organizations. They make this case on four separate grounds. First, national conservation organizations have a special interest in environmental protection that should—on its own—satisfy standing requirements. This was shown by the organization’s longstanding and substantial interest in environmental protection. National organizations are particularly well suited to protect the national environmental interest in cases where local groups prefer development. Second, in this case the Sierra Club has standing as a local organization with a then eighty-year history of advocacy for protection of the Sierra Nevadas. Finally, if those arguments did not prove persuasive, the Sierra Club deserved standing on behalf of individual members with a citizen’s interest in lands held in public trust, or on the grounds of the Club and its members use of the area in question.

The Court held that while aesthetic and recreational interests could qualify a party for standing, it also “requires that the party be himself among the injured.” In the opinion, Justice Stewart went on to note that the Sierra Club could gain standing if it could show that its members would have “any of their activities or pastimes” affected by the development of the ski resort in Mineral King. In his dissent, Justice Douglas advocated that a right to standing should be extended to natural object themselves. In doing so, he drew heavily on Christopher D. Stone’s Should Trees Have Standing—Toward Legal Rights for Natural Objects.

Justice Blackmun’s dissent noted the limitations of the standing doctrine in light of “the Nation’s and the world’s deteriorating environment with its resulting ecological disturbances.” He advocated for an expanded conception of standing that would “enable an organization such as the Sierra Club, possessed, as it is, of pertinent, bona fide, and well-recognized attributes and

192. Brief for the Wilderness Society, Izaak Walton League of America, and Friends of the Earth as Amici Curiae at 14, Sierra Club v. Morton, 405 U.S. 727. The brief is critical of use requirements on the grounds that: (“There is frequently no present use (such as a suit to preserve the wilderness) or no use is possible (such as a suit to protect eagles).”
193. Id. at 34–38.
194. Id. at 42–43.
195. Id. at 54–55.
196. Id. at 62.
197. Sierra Club, 405 U.S. at 734–35.
198. Id. at 735.
199. Christopher D. Stone, Should Trees Have Standing—Toward Legal Rights for Natural Objects, 45 CAL. L. REV. 450, 450 (1972); see CHRISTOPHER D. STONE, SHOULD TREES HAVE STANDING? LAW, MORALITY, AND THE ENVIRONMENT xi-xvi (3rd ed. 2010) (demonstrating more on the interesting story behind Stone’s attempt to get the article in front of Douglas before the ruling, as well as the broader reaction to the article, including via multiple poems).
purposes in the area of environment, to litigate environmental issues.” He wrote that this would be a relatively minor change to the standing doctrine and courts would still be free to exercise their judgement in standing determinations. Blackmun connected this idea to Douglas’s more imaginative argument, noting that they both added a requirement that “the litigant be one who speaks knowingly for the environmental values he asserts.”

Through application of the principle of subsidiarity, a Common Good Constitutionalist approach would arrive at a position similar to Justice Blackmun’s dissent in Sierra Club v. Morton. As noted above, subsidiarity is not a purely devolutionary principle. It holds that society is not composed only of the individual and the state but includes a variety of intermediary associations or societies. These each have “their own proper ends, which imply the authority, principles of actions, and rights that are appropriate to that individual society.” It is important that these intermediary associations be free to effectively play their assigned role. This natural law pluralism requires complex systems of interaction between individuals, various associations, and the state. In the environmental context, this would recognize the important role played by conservation organizations. Individuals with an interest in conservation rarely have the resources and expertise to adequately defend their rights. National conservation organizations are designed to effectively advocate for the natural world and those who enjoy it. These organizations can represent the national interest in environmental protection against potentially hostile state structures and local interests. Ultimately, this approach would allow conservation organizations to protect the environmental common good.

III. SUBSTANTIVE ENVIRONMENTAL LAW

Common Good Constitutionalists and environmentalists have at least one thing in common: discontent with our current legal paradigm. This article is intended as the start of a long and fruitful discourse at the intersection of the classical law tradition and the insights of modern ecology. This conversation should be important to Common Good Constitutionalism’s

200. Sierra Club, 405 U.S. at 757 (Blackmun, J., dissenting).
201. Id.
202. Id.
203. Golemboski, supra note 167, at 536.
204. Id.
205. Id. at 540–41.
206. Brief for the Wilderness Society as Amici Curiae at 14, Sierra Club, 405 U.S. 727, at 38 (No. 70-34).
207. Vermeule discusses the importance of allowing standing for general, common harms. Vermeule, supra note 94, at 174–77.
proponents. As noted above, environmentalism fits naturally into a framework centered on making communities flourish. Indeed, one of the most interesting sections of Common Good Constitutionalism concerns the public trust doctrine and the importance of stewardship. Ecology can help the movement better refine its thinking on a variety of areas of law. Importantly, this is one area where the Common Good Constitutionists can distinguish themselves from adversaries within the conservative legal movement. Criticisms from originalists and libertarians see the movement as a definitive break from the conservative status quo. In the environmental context, the risk is not of too great a break but too little of one. Attempts at crafting a halfway position, like Josh Hammer’s Common Good Originalism (an inherently unstable project) fail to adequately consider the ecological common good. Emphasizing the environmental aspects of a common good proposal will also prove effective at attracting attention from across the legal field.

For environmentalists, the approach points towards a substantive basis for environmental law. Environmental law is very much a new field created primarily by statute. It fits uneasily in liberalism’s framework that denies that “humans can ever discern the truth or agree on the good amidst the chaos of life” and limits its conception of harms to those done (even indirectly) to people. Liberalism’s reliance on market forces fails to take noneconomic goods into account. As seen at length above, consistent application of the Common Good Constitutionalist framework would have beneficial results in the areas of statutory interpretation, property, federalism, and standing.

One does not need to subscribe to the Common Good Constitutionalist approach to see its utility as an example for environmentalists. Discontent with the existing conservative legal movement lead to a resurgence in interest in the classical law tradition. The tradition’s focus on substantive goods

208. Id. at 177–78.
209. See Randy E. Barnett, Common-Good Constitutionalism Reveals the Dangers of Any Non-originalist Approach to the Constitution, THE ATLANTIC (Apr. 3, 2020), https://www.theatlantic.com/ideas/archive/2020/04/dangers-any-non-originalist-approach-constitution/609382/ (criticizing attempts at public debates about morality, holding that “legislators will just vote their own morality and the legislative majority will prevail.” As CGC proponents correctly note, morality and law are closely linked, and there is no legal philosophy without a substantive account of the good—whether that be individual autonomy, property rights, or something else).
213. Segall, supra note 32.
214. Westbrook, supra note 26, at 710.
215. See Casey, supra note 33, at 3.
has given its advocates a framework for discussion and collective action. The environmental movement itself has an existing substantive tradition, associated with figures like Henry David Thoreau, John Muir, Gary Snyder, and Marjorie Stoneman Douglas and organizations like the Sierra Club and National Audubon Society.\textsuperscript{216} This substantive vision—that the natural world has value apart from its utility to humans—has been a motivation for environmental advocates throughout American history.\textsuperscript{217} David A. Westbrook notes that “[a] vision of nature adequate to inform environmental jurisprudence would have to account for the way we understand nature in our lives, and the way we understand ourselves in nature.”\textsuperscript{218} Making existing presumptions overt and stating them not as an expression of individual preference but as a statement of objectively existing values would assist in crafting an environmental jurisprudence up to the significant challenges we face.

CONCLUSION

It remains to be seen how successful the Common Good Constitutionalist movement will be. The movement’s success—wholly or in part—would have major ramifications to environmental law. While interpreting statutes, the method is broadly deferential to the environmental protection efforts of elected officials and administrative agencies. It gives weight to the expansive and aspirational language of environmental statutes. Common Good Constitutionals would be supportive of environmental restrictions on property rights. Through a correct understanding of the principle of subsidiarity, they would empower localities to act on ecological problems and give environmental advocacy groups standing in court. Understanding the importance of environmental law will help Common Good Constitutionism’s proponents to refine their thinking, distinguish themselves from their competitors, and attract attention from the curious. Environmental advocates can benefit both from considering the common good constitutionalist approach in its own right and as a catalyst for action. Recognizing and refining the substantive tradition in American environmental law is essential to prepare for the future of the field.

\textsuperscript{216} Author’s assertion.
\textsuperscript{217} Author’s assertion.
\textsuperscript{218} Westbrook, \textit{supra} note 26, at 711.


**ZONING, NATURAL RESOURCES, AND RECLAMATION: OPPORTUNITIES FOR ENVIRONMENTAL JUSTICE IN A FLOWERING INDUSTRY**

*Richard Spradlin*

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INTRODUCTION

The cultivation, production, and consumption of cannabis is at an all-time high.1 Presently, 47 states, the District of Columbia, Guam, the Northern Mariana Islands, and Puerto Rico have all passed some form of measure regulating cannabis for adult-use, with more states and local governments facing legislative action every year.2 Even when COVID-19 has much of the country operating from home or at a distance, cannabis operations were generally (although inconsistently) deemed “essential,” allowing them to remain open despite other business closures.3 There are attractive economic incentives that likely motivate states to entertain cannabis legalization: consumer spending,4 employment,5 and community reinvestment.6 Indeed, the prospect of capitalizing on a multibillion-dollar industry provides powerful motivation to at least investigate pathways for opening up to cannabis cultivation, production, and distribution opportunities. Inversely, an

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1. “Cannabis,” as it is used in this Article, generally refers to a grouping of three plants from which the psychoactive chemical delta-9-tetrahydrocannabinol may be derived, produced, and consumed: Cannabis sativa, Cannabis indica, and Cannabis ruderalis. Although it is commonly referred to as “marijuana” in the existing literature, at least one commentator has questioned the appropriateness of using the word. See Michael Vitello, Marijuana Legalization, Racial Disparity, and the Hope for Reform, 23 LEWIS & CLARK L. REV. 789, 797 (2019) (“Even the name ‘marihuana’ or ‘marijuana’ reflects a subtly racist appeal: until the influx of Mexicans [during the Mexican Revolution], ‘cannabis’ was the usual term of art.”). Accordingly, the word will only be used in this article where it is quoted by another source.


4. Fertig et al., supra note 3; Tortolani supra note 3; see also Paulina Firozi, This University Will be the Latest to Offer a Cannabis Major, WASH. POST (Feb. 10, 2020), https://www.washingtonpost.com/education/2020/02/10/colorado-cannabis-major/ (discussing economic influence of cannabis industry in Colorado); Andrew DePietro, Here’s How Much Money States are Raking in From Legal Marijuana Sales, FORBES (May 4, 2018), https://www.forbes.com/sites/andrewdepietro/2018/05/04/how-much-money-states-make-cannabis-sales/sh=3b3df115f181 (listing estimated cannabis sales per state); Chris Roberts, California Liberals Talked a Big Game About Weed Justice. Then Big Cannabis Took Over, VICE (Nov. 20, 2019) (discussing the changing cannabis economic landscape in California); see also Jeffrey E. Anderson et al., The Highs and Lows of Startups in the Cannabis Industry: A Pestle Analysis of the Current Issues, 27 BUS. F. 26, 29 (2019) (stating profits from cannabis sales increased 35%).

5. Anderson et al., supra note 4, at 29; see also DRUG POL’Y ALL., FROM PROHIBITION TO PROGRESS: A STATUS REPORT ON MARIJUANA LEGALIZATION 24 (Jan. 22, 2018), https://www.drugpolicy.org/sites/default/files/dpa_marijuana_legalization_report_feb14_2018_0.pdf (estimating 165,000 to 230,000 employees in cannabis industry).

6. DRUG POL’Y ALL., supra note 5, at 6.
established corporation with millions (or even billions) of dollars in capital may be capable of investigating, identifying, and lobbying communities to pursue industry-favorable cannabis regulations given their ability to recognize the value that corporate establishments may bring to an unestablished cannabis market.\(^7\)

On a parallel track, the Environmental Justice Movement demands full recognition of the disparate impacts of policy on the environmental conditions of marginalized persons and a meaningful inclusion of those persons in environmentally affective decision making at all levels.\(^8\) These two tracks intersect at the point where cannabis cultivation, production, and distribution meet prohibitory and regulatory schemas that explicitly prevent, or functionally exclude, meaningful involvement by minority, impoverished, and other marginalized communities. This junction presents lawyers, activists, legislators, and other regulatory bodies with unique opportunities to produce and enact environmentally just cannabis regulations that seek to remediate the systemic, exclusionary harms of cannabis prohibition.\(^9\)

Part I of this Article will briefly explore the racialized history of cannabis prohibition and highlight aspects of state legalization efforts that warrant further exploration. Part II will examine the relationship between cannabis cultivation and the environment, with an emphasis on those problematic aspects of the relationship which demand recognition of possible environmental justice interests. In Part III, this Article will identify three specific areas of the cannabis industry ripe for environmental justice consideration: zoning, natural resources, and economic (re)development. This Article argues not only that existing cannabis regulations should be amended and to incorporate those environmental justice (EJ) interests, but also that all future cannabis regulation efforts must implement policy and regulations which enable disenfranchised communities to meaningfully engage in and reconstruct their relationship with cannabis. Following the primary argument, Part IV will speak to the difficult balance of interests, ask some tough questions, and look forward to the direction of the industry. Ultimately, this Article is targeted at anyone involved in, or interested in becoming involved in, cannabis regulation with the aim of offering some

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\(^8\) See, e.g., Letter from Southwest Organizing Project to the “Group of Ten”, SW. ORG. PROJECT (Mar. 16, 1990) (describing a call to action for the “Group of Ten” environmental organizations to include representatives from communities impacted by environmental contaminates).

\(^9\) See DRUG POL’Y ALL., supra note 5, at 36 (explaining that regulating the cannabis industry can improve accessibility and equity).
guidance on how legislation and regulation can be utilized to accomplish environmental justice goals.

I. RACIALIZED CRIMINALIZATION AND ATTEMPTED RESTORATION

A. Criminalization

The United States has undoubtedly enacted a racially emphasized effort to prohibit and criminalize cannabis. This history is well documented in the relevant restatements by appropriate authorities on the subject.\(^{10}\) To avoid simple restatements of analysis which has been thoroughly developed elsewhere, this Article will explore several impacts of disproportionate cannabis enforcement in communities of color. Specifically, to the extent that cannabis initiatives purport to be borne of such injustices,\(^ {11}\) it is essential to consider the effects of concentrated, racially biased policing tactics before assessing what sort of cannabis policies may be a best fit for impacted communities.

Beginning with the premise that cannabis policing efforts have been racially biased, one need look no further than California to find corroborating evidence.\(^ {12}\) Although the specific statistical likelihoods vary by group, area surveyed, time period, and other variables and externalities, one conclusion holds fast amongst the literature reviewing cannabis-oriented arrests: Black and Latinx persons are more likely to be arrested and punished for cannabis crimes than are Caucasians.\(^ {13}\) This may be unsurprising considering that cannabis’ initial entry into, and prohibition from, United States markets was

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13. Id. at 14; see also DRUG POL’Y ALL., supra note 5, at 31 (stating that a “Black person in D.C. is 11 times more likely than a White person to be arrested for public consumption of marijuana”); Holmes, supra note 11, at 954–55 (discussing the history of cannabis criminalization before and after the war on drugs); EDWARDS ET AL., supra note 10, at 4, 21, 66 (generally outlining the history of racial discrimination against minority groups involving cannabis); see also Lynda Garcia, The War on Marijuana Has a Latino Data Problem, ACLU (June 14, 2013), https://www.aclu.org/blog/smart-justice/sentencing-reform/war-marijuana-has-latino-data-problem (noting that calculation of arrest disparities is complicated by the fact that “most Latino arrests were likely counted as ‘white’ arrests, meaning that the white arrest rate was artificially inflated . . . obscur[ing] the devastating impact that marijuana arrests can have on Latino communities.”).
motivated by the racist, xenophobic, and blatantly ignorant beliefs of politicians like Harry Anslinger. The racially charged foundation for cannabis’ prohibition paved the way for the hearts and minds of white Americans to develop an association between cannabis, violence, and crime—an association which affected perceptions of cannabis and its use for generations to come. Although Americans were generally moving away from “overt appeals to race” by the 1960s, President Richard Nixon utilized more nuanced racial references to “chip away at the Democrats’ advantage among white working-class voters.” This helped President Nixon garner support for his so-called War on Drugs—a devastating intra-national criminal enforcement effort furthered under the Reagan and Clinton administrations, which continues to this day.

The lasting (and ongoing) effects of the failed War on Drugs are too numerous to exhaust in this Article, but they include: disenfranchisement of minority voting rights, mass incarceration, and loss of employment, housing, and federal aid opportunities. These first-order harms of the War on Drugs have historically given way to second-order, systemic harms such as familial breakdown. In turn, they fuel “a debilitating cycle of failure and


15. Vitiello, supra note 10, at 799–800.


22. Nekima Levy-Pounds, Can These Bones Live?—A Look at the Impacts of the War on Drugs on Poor African-American Children and Families, 7 HASTINGS RACE & POVERTY L.J. 353, 354–55 (2010) (“When poor African-American mothers and fathers are imprisoned, their children suffer a multitude of harms: They are more likely to become incarcerated themselves or become engaged in harmful activities such as gang involvement or substance abuse.”); see also Inge Fryklund, Want to Solve Inequality and Child Poverty? End the War on Drugs, HUFFPOST (May 31, 2015), https://www.huffpost.com/entry/want-to-solve-inequality-and-child-poverty-end-the-war-on-drugsb6978462 (discussing the effect of ending the war on drugs on poor children).
marginalization that may be perpetuated from generation to generation.”

With limited ability to vote or find a job comes limited resources; with limited resources comes decreased opportunity for socioeconomic mobility; with limited socioeconomic mobility comes entrenchment in a system that successfully keeps communities of color locked in to cycles of government reliance, poverty, and violence.

B. Legalization

Following the long, bleak, “and ugly racist history” of cannabis prohibition in the United States, the stage was set for the nation’s first steps into the territory of legalization. In 1996, California was the first state to legalize cannabis for medical consumption. As of January 22, 2021, 18 states, two territories, and the District of Columbia have regulated non-medical cannabis use. However, a slew of states are facing efforts to regulate adult-use cannabis in some form for the upcoming legislative cycle. Despite that progress, questions remain as to how successful these efforts have been at addressing the underlying and systemically marginalizing effects of America’s racially biased War on Drugs.

1. Canna-colonialism

Without question, the recreational and medicinal cannabis industry is a white, male dominated space. For instance, several estimates of Black

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27. Bender, supra note 12, at 21; see also Nick Charles, Black Entrepreneurs Struggle to Join Legal Weed Industry, NBC NEWS (Feb. 11, 2020), https://www.nbcnews.com/news/nbcblk/black-entrepreneurs-struggle-join-legal-weed-industry-n1132351 (“Less than a fifth of the people involved at an ownership or stake-holder level were people of color... black people made up only 4.3 percent.”); see also Jeremy Berke & Yeji Lee, Top Executives at the 14 Largest Cannabis Companies are Overwhelmingly White Men, an Insider Analysis Shows, INSIDER (Jun. 30, 2021), https://www.businessinsider.in/retail/news/top-executives-at-the-14-largest-cannabis-companies-are-overwhelmingly-white-men-an-insider-analysis-shows/articleshow/83989346.cms (“White men comprise 70% of the C-suite at the 14 largest publicly traded cannabis companies by market value in the U.S.”).
dispensary ownership sit as low as 1–2%. This unfortunate exclusionary trend adds insult to already particularized, systemic, racial marginalization suffered alongside the War on Drugs. In conjunction with the general, macro-level harms that accompany the disproportionately greater likelihood of being profiled and punished, current legalization efforts have fallen short of addressing the nearly impassable barriers-to-entry faced by would-be minority cannabis entrepreneurs. Some of the biggest barriers are lack of wealth, lack of access to capital, and the disproportionate likelihood of permit denial. Moreover, fears of federal sanctions disincentivize financial institutions from working with the industry, compounding the existing wealth disparities currently afflicting communities of color. Accordingly, with some estimates placing the costs of starting a legal cannabis operation at upwards of $250,000, it is no wonder that the barriers to entry into the cannabis market exclude communities who have been socioeconomically gutted by the social violence of the War on Drugs. Indeed, Ham


29. See Bryon Adinoff & Amanda Reiman, Implementing Social Justice in the Transition from Illicit to Legal Cannabis, 45 AM. J. DRUG & ALCOHOL ABUSE 673, 679 (2019) (exploring the effect of legalization on past injustices); see also Posner, supra note 28 (estimating approximately 80% of cannabis executives are white); Lewis, supra note 14 (discussing how a man was denied employment in the cannabis industry because of past drug possession felonies).

30. Unlocked Potential, supra note 2, at 9 (Statement of Dana Chaves); see also Ben Adlin, New House Bills Would Make Cannabis Businesses Eligible for Federal Small-Business Aid, MARIJUANA MOMENT (Apr. 20, 2021) (“Fear of sanctions has kept many banks and credit unions from working with the industry, forcing marijuana firms to operate on a cash basis that makes them targets of crime and creates complications for financial regulators.”).

31. Lewis, supra note 14; see also Adinoff & Reiman, supra note 29, at 680 (noting that Colorado licensing and regulatory fees can total several hundred thousand dollars).

32. Bender, supra note 12, at 966-97; see also BLUE RIBBON COMM’N ON MARIJUANA POL’Y, PATHWAYS REPORT: POLICY OPTIONS FOR REGULATING MARIJUANA IN CALIFORNIA 54, at 41 (2015), https://www.aclunc.org/sites/default/files/20150721-brc_pathsways_report.pdf (discussing approaches to overcome barriers of entry into legal cannabis market); Vitiello, supra note 10, at 820 (describing the “running start” given to wealthy investors who had already pumped billions of dollars into California
mersvik et al. aptly identified the Catch-22 of cannabis production and cultivation 10 years ago. They recognized that to maintain a successful cannabis operation, one often needs the kind of capital inaccessible to marginalized and disenfranchised people, or the kinds of practical and logistical experience which have been denied to those people—to their current licensing disadvantage.

Moreover, and in truly colonial fashion, non-white and non-affluent communities are uniquely susceptible to the overwhelmingly white, profit-driven and cash-infused businesses exploiting their communities for profit. Taking advantage of favorable zoning, comparatively lower rents, and the incentive of profit divestment, commercial cannabis growers and dispensaries have a tendency to target and locate themselves in comparatively disadvantaged neighborhoods. Not just a mere occupation of space, such tactics accelerate the gentrification of that space.

before smaller operations had the opportunity to compete in the same markets); Rose Hackman, A Billion-Dollar Industry, a Racist Legacy: Being Black and Growing Pot in America, GUARDIAN (June 15, 2017), https://www.theguardian.com/us-news/2017/jun/15/legal-marijuana-industry-racism-portland-jesse-horton (“There is an obvious chasm between the number of people of color who have been jailed for simple possession during the ‘war on drugs’ and the number of white men who are starting to make millions in profit from the industry.”); see also DRUG POL’Y ALL., supra note 5, at 27 (discussing the lasting impacts of cannabis prohibition).

33. Eirik Hammersvik et al., Why Small-Scale Cannabis Growers Stay Small: Five Mechanisms that Prevent Small-Scale Growers from Going Large Scale, 22 INT’L J. DRUG POL’Y 458, 462 (2012); of Sophie Quinton, Black-Owned Pot Businesses Remain Rare Despite Diversity Efforts, PES CHARITABLE TRS. (Jan. 15, 2021) (“Laura Herrera, a cannabis consultant who advises social equity entrepreneurs in Oakland, said the application process in the city is akin to getting planning permission for a housing development... ‘Nobody’s really prepared, except for big firms, for the bureaucracy and then the compliance requirements, and all the operation requirements,’ she said. ‘It’s a huge lift.’”).

34. Hammersvik et al., supra note 33, at 460.

35. See Vitiello, supra note 10, at 818 (“While minority communities may not experience the economic benefits of a successful marijuana industry, they will continue to suffer some of the costs of that industry.”); see also Todd Subriztky et al., Issues in the Implementation and Evolution of the Commercial Recreational Cannabis Market in Colorado, 27 INT’L J. DRUG POL’Y 1, 4 (2016) ("long-term advocates such as NORML have pointed out that cannabis legalization movements appear to be ‘losing their innocence’ as enterprises focus on profit maximization.”).


37. The process of gentrification has had identified, “distinct stages” since as early as 1979. See Peter Moskowitz, HOW TO KILL A CITY: GENTRIFICATION, INEQUALITY, AND THE FIGHT FOR THE NEIGHBORHOOD 14-15 (2018) (“First, a few ‘pioneering’ gentrifiers move in to the neighborhood, followed by a rush of more gentrifiers. Then corporations such as real estate companies and chain retail
By way of analogy, Samuel Walker and Chloe Fox Miller analyzed the possible contribution of craft breweries to gentrification in a way that closely mirrors the process of gentrification identified by Peter Moskowitz.38 Craft brewery entrepreneurs, faced with high startup costs, specialized equipment, and particular zoning needs, are attracted to the economic opportunities, relatively cheaper rents, and increasing disposable income offered by gentrifying neighborhoods.39 The changing image of those new communities fuels rent hikes, and subsequently displaces residents and business owners.40

The cannabis industry’s explosive growth fits neatly within the model of gentrification, especially considering the marginalizing economic incentives present in the status quo.41 Established cannabis dispensary chains find new opportunities for geographic expansion with every state and local regulation effort. These out-of-state, profit-driven entities will logically seek the most favorably zoned and priced areas for new investment opportunities. These investment opportunities are in predominantly non-white, industrial, and/or disadvantaged communities—populations who are unlikely to benefit from either the jobs or the profits that the hosted cannabis venture will bring with them. Without effective, localized incentives for minority and disadvantaged communities to be meaningfully involved in cannabis policy, the processes for minority or community involvement can be co-opted by the asymmetrical capital advantages that corporate cannabis holds over smaller, budding entrepreneurs.42 In this way, rather than ameliorate the harms of cannabis

stores, seeing an opportunity to profit from the arrival of the pioneers, become the main actors in a neighborhood. It’s not that corporations are necessarily conspiring to overpower the pioneers, but because corporate buying power is so much greater than that of individuals, gentrification inevitably leads to corporate control of neighborhoods. Finally . . . the only entities powerful enough to change and hypergentrify an already gentrified landscape are corporations and their political allies.”); see also Samuel Walker & Chloe Fox Miller, Have Craft Breweries Followed or Led Gentrification in Portland, Oregon? An Investigation of Retail and Neighborhood Change, 101 GEOGRAFISKA ANNALER: SERIES B, HUMAN GEOGRAPHY 102, 103 (2018) (“The arrival of new commercial spaces helps gentrifiers stake claim to a changing neighborhood. For gentrifiers, new commercial establishments offer spaces of conviviality and community building. In the early stages of gentrification new merchants are likely to be residential gentrifiers themselves, who are looking to establish a ‘hangout’ for themselves and their friends.”); see also id. (“There is often a racial as well as socioeconomic element to the commercial gentrification process, with the arrival of white-owned businesses catering to white, middle-class gentrifiers contributing to exclusion of existing non-white residents.”).

38. See Walker & Miller, supra note 37, at 104 (analyzing how craft breweries contribute to gentrification).
39. Id.
40. Id.
42. For example, because “less sophisticated operators” are forced to compete with established business under Oakland, California’s equity application program, the “‘guarantee of execution’ that accompanies corporate investments rewards more wealthy applicants and aggregates industry profit away
criminalization, profit-driven cannabis initiatives have the very real ability to leave behind, and fundamentally alter, the communities that should, instead, reap the primary benefits of legalization. This exploitative use and denial of land is, therefore, an environmental injustice, to the extent that communities consequently lose stake in their land, property, energy, and natural resources.

But where does that leave us? At the end of the day, the onus is on all actors to promote, establish, and oversee regulatory schemes to usher in a more just era of cannabis cultivation, production, and distribution. This is why environmental justice efforts must be at the forefront of every effort to legalize, decriminalize, or otherwise regulate the cultivation, production, and distribution of cannabis in these United States. There is a particular burden on states, however, insofar as they are: (1) responsible for their own collective and proportioned roles in the War on Drugs; (2) responsible for enacting and delegating new cannabis regulations; and, (3) imperiling land and natural resources by doing so improperly. Environmentally just lawmaking must ultimately fall on state actors working with disproportionately affected communities to craft fitting provisions. If marginalized communities are denied a significant role in shaping cannabis policy, harmful regulations will continue to be implemented at their peril. And, without an understanding of how we got here, it will be nearly impossible to proceed with assessing the options.

II. RELATIONSHIP BETWEEN THE ENVIRONMENT AND CANNABIS CULTIVATION/PRODUCTION

While not ignored by the cannabis industry or its legislative and regulatory proponents, the intense energy demands of cannabis cultivation require greater consideration if the cultivation, production, and distribution of cannabis are to be environmentally just.

from the communities hosting the business opportunities. See Alex Halperin, Cannabis Capitalism: Who is Making Money in the Marijuana Industry?, GUARDIAN (Oct. 3, 2018), https://www.theguardian.com/society/2018/oct/03/cannabis-industry-legalization-who-is-making-money (because “less sophisticated operators” are forced to compete with established business under Oakland, California’s equity application program, the “‘guarantee of execution’” that accompanies corporate investments rewards more wealthy applicants and aggregates industry profit away from the communities hosting the business opportunities).

43. See, e.g., Nate Seltenrich, Most States Legalizing Marijuana Have Yet To Grapple With Energy Demand, ENERGY NEWS NETWORK (June 27, 2019), https://energynews.us/2019/06/27/west/most-states-legalizing-marijuana-have-yet-to-grapple-with-energy-demand/ (“Among the 11 states to permit recreational use of cannabis, only Massachusetts and . . . Illinois . . . have included energy-efficiency standards for indoor cultivation, a practice that requires nearly nonstop use of lights and various heating, ventilation and air conditioning systems.”).

44. See generally Evan Mills, The Carbon Footprint of Indoor Cannabis Production, 46 ENERGY POL’Y 58 (2012). For example, at that time, Mills determined that cannabis’ energy demands contributed
In 2012, Evan Mills concluded that cannabis was among the least energy-efficient industries when measured by the amount of energy required to create economic value. In a 2021 update, he points out the reason why indoor cannabis production is so problematic in this regard: light requirements necessary to “simulate and maintain artificially cloudless tropical environments while suppressing disease-causing humidity year-round” are coupled with the injection of “[i]ndustrially manufactured carbon dioxide . . . to artificially boost plant growth.”

Maintaining this level of energy output “can require as much energy as a similarly sized data center.” And while the relatively recent and increasing use of large-scale greenhouses resulted in somewhat increased energy efficiency, the fact remains that they require “prodigious amounts of lighting, cooling, heating, and dehumidification in most climates.” Even when these operations utilize “hydro power,” they have been connected to “reduced salmon populations, and starvation issues facing salmon-eating killer whales (orcas) in the Pacific Northwest.”

With the exorbitant energy demands of larger-scale cannabis operations comes externalities which are disproportionately impactful on impoverished communities and communities of color: “moisture damage to buildings, nighttime light pollution, power plant emissions and other environmental impacts, power theft, and outages and other constraints on the broader grid caused by unchecked electrical load growth.” This structural erosion of the surrounding communities is not experienced by the cultivator in the same way that it is experienced by the residents of those communities, and it will remain these communities’ problem long after the cultivator has relocated their operation. There are additional concerns regarding the emission of pollutant-catalyzing volatile organic compounds (VOCs), with at least one study suggesting that “600 cultivation facilities within the city of Denver[,] Colorado could double the prevailing level of VOCs, while air pollution in

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45. Id. at 62.
47. Id.
48. Id.
49. Id. at 10.
50. Id.
that city already periodically violates federal limits." Further considering these operations are associated with greenhouse gas emissions, mercury release, and wastewater discharges, communities abutting large-scale cannabis cultivation operations almost certainly experience disproportionate and significant health impacts as a result of the industry’s preference for those spaces. If the general projection holds true that energy demands of cannabis cultivation outpace improvements to energy efficiency, large-scale indoor facilities will indefinitely continue to wreak havoc on surrounding communities.

Although outdoor cannabis cultivation has the relative advantage of nearly eliminating energy costs, energy consumption is only part of the picture. In many ways, the War on Drugs distorted our ability to meaningfully consider the environmental harms of outdoor (and indoor) cannabis cultivation. Indeed, a line can be traced from federal cannabis prohibition to the devastating impacts of illegal cannabis operations. The black market for cannabis, borne of its criminalization, has been documented as pushing illegal growers into U.S. National Forests and other public lands. This leaves “severe and lingering ecological damage in [their] wake.” To use land, illegal growers often utilized clear-cutting to ensure suitability for cultivation—a method which causes erosion and watershed alteration. In the West and Southwest regions of the United States, illegal grow operations can also exacerbate drought and yield reductions of surface water levels,

51. Id. at 11.
52. Id.
53. See Desert Research Institute, Emissions from Cannabis Growing Facilities May Impact Indoor and Regional Air Quality, SCI. DAILY (Sep. 18, 2019), https://www.sciencedaily.com/releases/2019/09/190918100230.htm (“The concentrations of BVOCs and butane that we measured inside of these facilities were high enough to be concerning,’ explained lead author Vera Samburova . . . . ‘In addition to being potential[ly] hazardous to the workers inside the cannabis growing and processing facilities, these chemicals can contribute to the formation of ground-level ozone if they are released into the outside air.”).
54. See Mills & Zeramby, supra note 46, at 12 (“The energy forecasting authority in the Pacific Northwest projects an 82% increase in energy demand despite improving energy efficiency.”).
55. Id. at 63.
56. Harper, supra note 20, at 59 (citing Warren Eth, Up in Smoke: Wholesale Marijuana Cultivation Within the National Parks and Forests, and the Accompanying Extensive Environmental Damage, 16 PENN ST. ENV. L. REV. 451, 471–72 (2008)) (“By prohibiting legal, regulated cannabis production, the federal government has created a thriving black market marked by indifference to the externalities of grow operations.”); see also Mills & Zeramby, supra note 46, at 2 (“Decades spent in the shadows of the black market precluded opportunities to understand the energy use of indoor cannabis cultivation and compel the industry to keep its environmental consequences in check.”).
57. Harper, supra note 20, at 59; see also Michael Polson, Making Marijuana an Environmental Issue: Prohibition, Pollution, and Policy, 2 ENV. & PLANNING E. NATURE & SPACE 229, 232 (2019) (noting that the environmental harms of cannabis cultivation “cannot be disentangled from prohibitionist policies, which incentivize production in remote, hard-to-detect, ecologically sensitive locations and energy-intensive indoor locations.”).
59. Id. at 60.
which increases the risk of wildfires and requires expensive restoration projects.\textsuperscript{60} Because illegal growers were (and are) not particularly concerned with governmental regulations, they generally engaged in unregulated pesticide use, contaminating soil and water, and secondarily exposing wildlife in the process.\textsuperscript{61} Compounding these particular, prohibition-consequent harms is the subsequently impaired collection, reporting, and dissemination of data.\textsuperscript{62} This data would reveal the extensive environmental harms propagated by cannabis criminalization and otherwise inadequate or unregulated cultivation practices.\textsuperscript{63}

But even legal cannabis cultivators and regulators must still reckon with the fact that cannabis itself is a water-intensive crop.\textsuperscript{64} As one commentator explained: whereas grapes use 271 million liters of water per cultivated square kilometer per growing season, cannabis consumes over 430 million liters in the same time frame.\textsuperscript{65} To be fair, common crops such as corn, potatoes, tree fruits, and alfalfa all require considerably more water than does cannabis.\textsuperscript{66} But inconsistently illegal and un(der)-regulated water use still contributes to ecosystem destruction by inadequately preventing clear-cutting, the diversion of water from streams and wetlands, and exposures from unregulated pesticides and rodenticides.\textsuperscript{67}

\textsuperscript{60} Id. at 60, 64.

\textsuperscript{61} Harper, supra note 20, at 60; see also Craig M. Thompson et al., \textit{Impacts of Rodenticide and Insecticide Toxicants From Marijuana Cultivation Sites on Fisher Survival Rates in the Sierra National Forest, California}, 7 CONSERVATION LETTERS 91, 97 (2013) (estimating that pesticide contamination at illegal cannabis sites is “more akin to leaking chemical weapons stockpiles than typical use or misuse of agricultural products.”); Madison Park, \textit{Use of Federal Lands for Illegal Pot a Growing Concern, California Officials Say,} CNN (May 30, 2018), https://www.cnn.com/2018/05/30/us/california-illegal-marijuana-federal-lands/index.html (stating that illegal growers grow cannabis on federal land and use banned pesticides); Mills, supra note 44, at 63 (additionally noting that illegal cannabis cultivators can compromise “fisheries, and other ecosystem services.”); see also Anderson et al., supra note 4, at 31 (citing Ian J. Wang et al., \textit{Cannabis, an Emerging Agricultural Crop, Leads to Deforestation and Fragmentation}, 15 \textit{FRONTIERS ECOLOGY & ENV’T} 495 (2017)) (“cannabis agriculture has been found to be detrimental to the livelihood of diverse ecosystems surrounding,” by causing “forest fragmentation, stream modification, soil erosion, and landslides.”).

\textsuperscript{62} See Polson, supra note 57, at 232 (noting that the environmental harms of cannabis cultivation).

\textsuperscript{63} Id.

\textsuperscript{64} Scott Baur et al., \textit{Impacts of Surface Water Diversions for Marijuana Cultivation on Aquatic Habitat in Four Northwestern California Watersheds}, 10 PLOS ONE 1, 2–3 (2015); see Harper, supra note 20, at 61 (“cannabis production requires large amounts of water, which has exacerbated droughts in states already experiencing water shortages.”); see also Jennifer K. Cara et al., \textit{High Time for Conservation: Adding the Environment to the Debate on Marijuana Legalization}, 65 \textit{BIOSCIENCE} 822, 823 (2015).

\textsuperscript{65} Harper, supra note 20, at 63.


\textsuperscript{67} Id.
By encouraging commercial cannabis cultivation without regard for cannabis’ natural resource costs, state legislators and regulators turn a blind eye to the multiplied and magnified environmental effects on marginalized communities. Specifically, disadvantaged rural and minority farming communities bear the disproportionate brunt of these harms because they (1) are less likely to survive the invasion of corporate, commercial cannabis operations, 68 and (2) are more likely to be directly and adversely affected by environmental degradation.69

To the first point, well-documented and years-long patterns of USDA loan discrimination drastically reduced the number of non-white and non-male farmers. 70 With reduced numbers and the inhibited ability to amass community or generational capital, 71 marginalized farmers are unlikely to


69. See, e.g., Gwen M. Pfeifer, Pesticides, Migrant Farm Workers, and Corporate Agriculture: How Social Work Can Promote Environmental Justice, 27 J. PROGRESSIVE HUM. SERVS. 175, 178–79 (2016) (“Pesticide drifts have been found to be a major form of pesticide exposure for farm workers and others near fields in which pesticides are used. . . . Drifts affect not only farm workers and their families but also other community members living, attending school, or working in affected areas.”); see also Michael Gochfeld & Joanna Burger, Disproportionate Exposure in Environmental Justice and Other Populations: The Importance of Outliers, 101 AM. J. PUB. HEALTH 53, 57 (“Rural areas may be close to agriculture (farms, feedlots, swine facilities), where pesticide and animal waste exposures occur. . . . Home-grown livestock and produce are a vector for pesticides, water pollutants, and soil contamination. . . . Neighbors [of farms] may also experience exposure to pesticides from wind drift or runoff.”).


71. Mario Parker, More Black U.S. Farmers, But Fewer Own Land or Earn Top Income, BLOOMBERG (Apr. 11, 2019), https://www.bloomberg.com/news/articles/2019-04-11/more-black-u-s-farmers-but-fewer-own-land-or-make-big-bucks (“There’s also an income gap, with 2/3 of black farmers running operations that made $50,000 a year or more in 2017, compared with 492,000 for white farmers.”); see also CASTRO & WILLINGHAM, supra note 67, at 2 (“In 2017, the average full-time white farmer brought in $17,190 in farm income, while the average full-time black farmer made just $2,408. . . . Today [black farmers] suffer from severe economic challenges, among them a poverty rate twice that of rural whites.”); Skyler Swisher, ‘We Don’t Have the Generational Wealth.’ Black Farmers Left Behind in Florida’s Medical Marijuana Boom, ORLANDO SENTINEL (Nov. 5, 2021), https://www.orlandosentinel.com/news/florida-marijuana/os-ne-black-marijuana-farmers-20211105-lcqibepah5dzbr7f06h5y5e7um-story.html (talking to a local Floridian about the difficulties of obtaining cannabis growing permits without generational wealth).
enter, succeed in, or benefit from the cannabis industry because the land and capital requirements for profitable ventures are beyond their reach. Systemic inequality, combined with the grossly asymmetrical wealth of commercial cannabis operations, has reconstructed the barriers to entry around minority farms and doomed them to dismal odds of success. 72

As for the second matter, the racially participatory exclusion ensured by industry dominance means that already drastically reduced minority farming populations will be disproportionately impacted by negatively affected watersheds. 73 Not only will the amount of available water decrease, but the condition of the remaining soil and surface waters renders farming in the shadows of corporate cannabis farms a hazard to human health and the environment. 74 Minority-owned cannabis cultivation operations will, in turn, be forced to compete against much larger and less environmentally conscious operations, with the disadvantage of having a smaller share of viable and healthy land, water, and capital. Even non-cannabis farmers in those circumstances will be forced to make do with a lessened and poisoned share of surface water from the watershed, thereby suffering the continuing effects of environmental practices and policy that have historically worked against them. 75

The lack of adequate state or federal regulations specific to pesticide use 76 or water ownership 77 for cannabis cultivation perpetuates cultivation schemes which are not strictly “legal,” and unquestionably hamstrings the

73. See generally Baur et al., supra note 64.
74. See, e.g., Gochfield & Burger, supra note 69, at 58 (“Proximity to farms may result in exposures and adverse outcomes. The amount of cropland within 750 meters of a house predicted the amount of herbicide residue on carpets. In California, pregnant mothers who lived within 500 meters of fields on which agriculture pesticides were applied . . . had a 6.1 odds ratio for having a child with autism-spectrum disorder . . . Poor minority schools in North Carolina were closer to swine confinement factories and were more likely to experience animal waste odors than were White high schools.”).
75. See Baur et al., supra note 64, at 17 (estimating the negative effects of water-intensive cannabis on watersheds).
76. Subritzky et al., supra note 35, at 93; see also Leah N. Sandler et al., Cannabis as Comundrum, 117 PERSP. CROP PROT. 37, 39, 41, 43 (2018) (discussing how “Current [federal and state level] regulations are not long-term solutions and cannot replace an overarching pesticide labeling system for Cannabis”).
77. Only Oregon and California have taken steps to require permits and/or proof of a water right for usage of water on cannabis cultivation. See Theresa Davis, State’s Water Takes A Hit From Cannabis Farms, ALBUQUERQUE J. (Jan. 5, 2020), https://www.abqjournal.com/1406718/states-water-takes-a-hit-from-cannabis-farms.html. California does have a system for water rights permits generally, but only for facilities that use more than 5,000 gallons of surface or groundwater per day. See STATE WASH. DEP’T ECOLOGY, MARIJUANA LICENSING AND THE ENVIRONMENT (last visited Apr. 9, 2020), https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Guidance-for-marijuana-businesses (stating that California does have a system for water rights permits generally, but only for facilities that use more than 5,000 gallons of surface or groundwater per day) [hereinafter MARIJUANA LICENSING].
efficacy of state-level efforts to address these systemic disadvantages. A patchwork of state laws either leaves cultivators in a legal gray-zone or incentivizes them to break federal and state laws in ways that are not covered by protections currently built into legalization legislation. While some states have taken steps to incorporate environmental concerns into permitting and licensing processes, the lack of federal guidance means that each state’s regulatory efforts must fully acknowledge the environmental impacts of cannabis cultivation. Otherwise, the disproportionately impactful environmental harm will further marginalize already devastated populations.

III. EJ AND CANNABIS: CONSIDERATIONS AND OPPORTUNITIES

At this juncture, the framework of Environmental Justice must be applied to the injustices facing marginalized populations seeking involvement in the cannabis industry. The framework proposed by this Article is that of Robert Kuehn, who articulated “a four-part categorization of environmental justice issues: (1) distributive justice; (2) procedural justice; (3) corrective justice; and (4) social justice . . . [which] offers a method of collapsing the seemingly broad scope of environmental justice and identifying common causes of and solutions to environmental injustice.”

Within this framework, distributive justice refers to the equal treatment of persons, in terms of how goods and opportunities are distributed amongst them. Procedural justice refers to meaningful involvement by way of concern and respect for the distribution of these goods and opportunities. Corrective justice refers to the punitive response to damages inflicted upon marginalized communities, as well as the repairs to those damages. Social

78. See e.g., DRUG POL’Y ALL., supra note 5, at 29 (California requires that “marijuana industry licensees . . . comply with environmental regulations or risk losing their license and facing civil fines or criminal prosecution.”); MARIJUANA LICENSING, supra note 77 (noting Washington state environmental laws “may potentially apply” to cannabis facilities, based on both the size and location of those operations); MASS. CANNABIS CONTROL COMM’N, ENERGY AND ENVIRONMENT COMPILED GUIDANCE 8 (2020) (Massachusetts licensees “are . . . required to meet all applicable environmental laws, regulations, permits, and other applicable approvals, including those related to water quality and solid and hazardous waste management, prior to obtaining a final license.”); see also Amy Antonioli & David M. Loring, Tips for Satisfying the Illinois Cannabis License Application Environmental Plan, NAT’L L. REV. (Dec. 16, 2019), https://www.natlawreview.com/article/tips-satisfying-illinois-cannabis-license-application-environmental-plan (Illinois “[a]pplicants seeking to best position themselves for [a] dispensing license are advised to provide an environmental plan of action . . . that demonstrates how the applicant will ‘minimize the carbon footprint, environmental impact, and resources needs for the dispensary.’”).

79. See Robert R. Kuehn, A Taxonomy of Environmental Justice, 30 ENV’T L. REP. 10681, 10703 (2000) (“This taxonomy offers the opportunity for greater awareness of what justice means to impacted people of color and lower income communities and improved environmental conditions that are the shared goals of all Americans.”).

80. Id. at 10683.

81. Id. at 10688.

82. Id. at 10693.
justice refers to the accountability of privileged classes to those with marginalized resources and opportunity. Therefore, to the extent that the historically established, systemic harms of criminalized and colonized cannabis present issues that square neatly with each of these four pillars. The framework provides a unique opportunity to meaningfully involve marginalized communities in cannabis-oriented policy making. This Article explores two dimensions of the cannabis industry which are ripe for such an analysis: zoning and licensing practices, and the protection of natural resources. The problems with both, as well as potential regulatory and legislative solutions, are explored below.

A. Zoning, Licensing, and Community Rebuilding

Zoning authority is a powerful tool that gives local governments the opportunity to dictate what space businesses can occupy within their jurisdiction. Unfortunately, with an historically criminalized industry, the broad discretion of zoning authorities to relegate unsavory and “nuisance” operations towards industrial sectors—or otherwise away from affluence—tends to push dispensaries and cultivation operations to low-income, minority, or otherwise marginalized communities. Zoning regulations in California, for example, have contributed to the disproportionate presence of cannabis dispensaries in California’s Hispanic-populated neighborhoods, near points of highway accessibility, and areas of concentrated alcohol outlets. The results are similar in Colorado, offering further evidence that a kind of “sacrifice zone” is created by discretionary, procedurally unjust cannabis policy; as marginalized communities are forced to bear the burden of becoming the undesirable centers of nuisance industry, rich, white business owners extract profits from that community. Unfortunately, decades

83. Id. at 10698.
84. Holmes, supra note 11, at 940 (citing Urgent Care Med. Servs. v. City of Pasadena, 230 Cal. Rptr. 3d 892, 894 (Cal. 2018)) (“Under Proposition 64, local governments now regulate marijuana by exercising land use controls which governments commonly use to cordon off anything associated with disorder.”).
85. Crystal Thomas & Bridget Freisthler, Examining the Locations of Medical Marijuana Dispensaries in Los Angeles, 35 Drug & Alcohol Rev. 334, 334 (2016), Crystal Thomas & Bridget Freisthler, Evaluating the Change in Medical Marijuana Dispensary Locations in Los Angeles Following the Passage of Local Legislation, 38 J. PRIMARY PREVENTION 265, 275 (2017) (explaining that Proposition D’s zoning restrictions and caps caused “some dispensaries . . . [to] re-locate . . . to areas with less commercial zoning and higher proportions of Black residents.”).
86. Holmes, supra note 11, at 950–51.
87. Here, “sacrifice zone” is used to refer to the process “in which people and their existing or desired land use practices are sacrificed in the name of . . . growth and development aspirations.” See Lindsay Shade, Sustainable Development or Sacrifice Zone? Politics Below The Surface in Post-Neoliberal Ecuador, 2 EXTRACTIVE INDUS. & SOC. 775, 776 (2015) (explaining how subsurface land grabs slowly lead to sacrifice zones in Ecuador).
88. Holmes, supra note 11, at 949–50.
of devastating drug policy and inconsiderate legalization efforts have left communities wishing to resist canna-colonialism—lacking the resources and agency to fight back.89

Nor are affected communities meaningfully or adequately represented in the cannabis industry because of the currently prohibitive and exclusionary licensure schemes which bar their participation based on criminal status and/or stigma. 90 Recalling the systemically oppressive and racially disproportionate enforcement of cannabis prohibition, minority communities impacted by the War on Drugs are “significantly more likely to be affected by these statutory restrictions . . . [and] are effectively blocked from entering this new market.”91 But even when individuals are not outright barred from applying for a license, state licensing schemes which favor large, commercial cannabis operations maintain the industry’s whiteness92 at the same time that they inflate licensing and startup costs. 93 This further suppresses the representation of marginalized voices from participating in industry-related decision-making.94 Together with the outsized likelihood of being legally or practically disenfranchised of voting rights, marginalized communities are

89. See Chris Morrison et al., The Economic Geography of Medical Marijuana Dispensaries in California, 25 INT’L J. DRUG POL’Y 508, 513 (2014) (“The development of new dispensaries will be greater in low-income areas and in communities that lack the social and economic resources to resist their establishment.”).

90. In Washington, the statutory point system has “the same practical effect as those states with a blanket ban for those with felony convictions.” See Maya Rahwanji, Hashing out Inequality in the Legal Recreational Cannabis Industry, 39 NW. INT’L L. & BUS. 333, 352 (2019) (discussing the discriminatory treatment within regulation of legal recreational cannabis); see also Bender, supra note 12, at 21 (referring to discriminatory access and outcomes as a result of California’s Proposition 64 licensing and capital requirements); see e.g. ALASKA STAT. § 17.38.200(i) (2018) (owner, officer, or agent may not register if they have been convicted of a felony within five years of attempted registration, or if they are currently on probation or parole); COLO. REV. STAT. § 12-43.4-306(g)(1)-(II) (2016) (no licensure for applicants with a felony in the last five years, except for felonies related to possession or use of cannabis); see also WASH. ADMIN. CODE § 314-55-040(1)-(3) (2021) (describing a “point system” which considers an applicant’s criminal history in determining the applicant’s qualification for licensure).

91. Rahwanji, supra note 90, at 336.

92. Vitiello, supra note 10, at 816 (explaining how one factor in the lack of racial diversity of ownership among cannabis operations “is the Bureau of Cannabis Control’s decision to allow entities to own more than one license. Such a decision invites larger, better capitalized entities to dominate the legal industry.”).

93. See Hackman, supra note 32 (“In Pennsylvania, . . . wannabe growers were required to pay a $10,000 non-refundable application fee, together with a $200,000 deposit. They also had to provide $2 [million] in funding, with at least $500,000 in the bank.”); see also Nick Kovacevich, The Hidden Costs of The Cannabis Business, FORBES (Feb. 1, 2019), https://www.forbes.com/sites/nickkovacevich/2019/02/01/the-hidden-costs-of-the-cannabis-business/#f2fc02f7da3d (discussing expenses for cannabis grower startups); Lewis, supra note 14 (discussing barriers to entry into legal cannabis industry); see also Adinoff & Reiman, supra note 29, at 679 (discussing how cannabis statutes fail to address cannabis use outside of the statute, which falls under prior criminal statutes).

94. See, e.g., Sarah Milov, Marijuana Reform Should Focus on Inequality, ATLANTIC (Oct. 5, 2019), https://www.theatlantic.com/ideas/archive/2019/10/marijuana-reform-should-focus-inequality/599383/ (“licensure system for marijuana cultivation is poised to replicate some of the oligopolistic features of the tobacco program, while thwarting its genuinely redistributive ones.”).
systemically deprived of opportunities for meaningful involvement. Therefore, unmitigated canna-colonialism has created, and will maintain, a parasitic, unjust, exploitative relationship between the cannabis industry, the environment, and the marginalized people who bear the disproportionate burden of the economic and environmental harms.

In pursuit of restorative and procedural justice, some states have taken steps to address these disqualifiers. California, for example, has taken the step of barring only license applications for drug felonies relating to the trafficking of controlled substances such as heroin, cocaine, meth, amphetamines, and PCP, a measure specifically calculated to address disparities resulting from the War on Drugs. Local governments have buttressed that effort by establishing a “social equity program” to provide those in low-income areas, Drug War-impacted area, and “Disproportionately Impacted Areas” with target support in the way of priority application consideration, licensing navigation, and networking support. Additionally, local governments have implemented workforce development and job placement programs. To help fill in remaining gaps, community and private sector efforts such as the “Hood Incubator” program similarly provides Black and Hispanic populations with essential business assistance and networking opportunities. Maine similarly prohibits “disqualifying drug offense[s]” within 10 years of the application but has a discretionary exception for conduct which would now be legal under Maine state law. Perhaps more importantly, Maine applicants are afforded the opportunity to explain their criminal history and show that they have been rehabilitated by submitting character references, as well as educational and

95. See NATIONAL CONFERENCE OF STATE LEGISLATURES, FELON VOTING RIGHTS (2019) (commenting on laws relating to the restoration of voting rights of felons in 21 states where rights are restored upon release, 16 states where rights are restored on completion of parole or probation, and 11 states where restoration requires additional action beyond completion of parole or probation – such as a governor’s pardon, an application process, or some additional waiting period); see also Michael Wines, Protection of Voting Rights for Minorities Has Fallen Sharply, a New Report Finds, N.Y. TIMES (Sep. 12, 2018), https://www.nytimes.com/2018/09/12/us/voting-rights-minorities.html (showing a sharp decline in federal actions to protect voting rights for minorities).


97. Rahwanji, supra note 90, at 355.

98. CITY L.A. DEPT CANNABIS REG., SOCIAL EQUITY PROG. OVERVIEW (last visited Apr. 12, 2022), available at https://cannabis.lacity.org/licensing/social-equity-program; see also Rahwanji, supra note 90, at 355 (“Oakland, California created a cannabis dispensary equity program whose goal was to address past disparities in the cannabis industry by prioritizing victims of the war on drugs and minimizing barriers of entry into the industry.”); see also Vitiello, supra note 10, at 819 (“San Francisco, Los Angeles and Sacramento have sought to address equity issues with reforms similar to Oakland’s equity program.”).

99. CITY L.A. DEPT CANNABIS REG., supra note 98; see also Rahwanji, supra note 90, at 355; see also Vitiello, supra note 10, at 819.

100. Posner, supra note 28.

101. ME REV STAT. ANN. 28-B §202(4) (2017); 18-691 C.M.R. Ch. 1 §2.3.1(E)(2)(a–b) (2019).
build wealth within communities of color where opportunities to amass property have been denied. Communities across the Southeast, cannabis cultivation on a human scale, rather than a corporate one, can initiate negotiations between host communities and cannabis entities (highlighting two equity provisions: a social equity program and economic empowerment program).

Massachusetts’s plan to create a statewide social equity program; see也 Mass. G.L.A. 94G § 5(b)(4) (Mass. Dec. 2016) (persons convicted of felonies will not be licensed to run a cannabis establishment in Massachusetts).

Alexander Lekhtman, Massachusetts Advances Its Unique Cannabis Social Equity Program, FILTER (July 26, 2019), https://filtermag.org/massachusetts-cannabis-equity/ (“to be eligible for the program, someone must either have a past drug conviction or be the spouse or child of a person with a drug conviction, who has lived in Massachusetts for the last 12 months. Alternatively, the person could have lived in a community classified as an area of disproportionate impact for at least five years and have income below 400 percent of the federal poverty level.”); see also M.G.L.A. 94G § 5(b)(4) (Mass. Dec. 2016) (persons convicted of felonies will not be licensed to run a cannabis establishment in Massachusetts).


See Mass. Cannabis Control Comm’n, supra note 103 (recommending municipalities initiate negotiations between host communities and cannabis establishments).

See, e.g., Milov, supra note 94 (“Much as small-scale tobacco farms anchored entire communities across the Southeast, cannabis cultivation on a human scale, rather than a corporate one, can build wealth within communities of color where opportunities to amass property have been denied— frequently at the hands of the government.”).
promises to give small operations a head-start, but it also hindered minority access to the industry. \(^{108}\) Additionally, it created concentrated, environmental safety hazards where those operations established themselves. \(^{109}\) Proposition 64 presents one example of how the failure to rein in industry domination begets shortcomings of restorative, distributive, and procedural justice because it frustrated meaningful efforts elsewhere to impactfully involve Drug War communities in the industry. \(^{110}\)

It is nonetheless essential to recognize that, as the proverbial gatekeeper to the cannabis industry, licensing bodies hold the key for the marginalized communities devastated by cannabis prohibition to entirely flip and reconstruct the stigmatic narrative they endure. If licensing schemes truly prioritized and guaranteed licensure applicants from affected marginalized communities, the subsequent shift towards smaller and more inclusive operations would provide the industry with previously criminalized knowledge, ethics, and growing practices. \(^{111}\) This would upend the exploitative nature of zoning and profiteering while mitigating the environmental impacts of cultivation, production, and distribution. Moreover, inverting the industry’s racial makeup would enable Drug War-affected communities to make substantial progress in rebuilding from the environmental injustices of cannabis prohibition. \(^{112}\)

\(^{108}\) See Sam Levin, “This was supposed to be reparations’: Why is LA’s Cannabis Industry Devastating Black Entrepreneurs?,” GUARDIAN (Feb. 3, 2020), https://www.theguardian.com/us-news/2020/feb/03/this-was-supposed-to-be-reparations-why-is-las-cannabis-industry-devastating-black-entrepreneurs (discussing the negative effect of cannabis legalization, which was intended to be reparations); see also Vitiello, supra note 10, at 816 (noting that California’s equity programs “work against minority access” as a result of “built in preference for those already in business . . . [which is] likely [to] skew the racial composition of license holders.”); see also Roberts, supra note 4 (discussing the impact of corporatized “Big Weed”).

\(^{109}\) Subritzky et al., supra note 35, at 7.

\(^{110}\) Both Maryland and Massachusetts have seen disproportionate licensing outcomes, despite efforts to seek equitable licensure. See Ross, supra note 7 (despite calling on regulators to actively seek “racial, ethnic, and geographic diversity” in their licensing efforts, “after [Maryland] set up the process to vie for its first 15 grower licenses, none went to a black applicant.”); see also Roberts, supra note 4 (“In Massachusetts, only two of 184 statewide weed licenses are held by equity program applicants.”).

\(^{111}\) Polson, supra note 57, at 238–39.

\(^{112}\) U.S. CENSUS BUREAU, QUICKFACTS, LOS ANGELES COUNTY, CALIFORNIA; CALIFORNIA (2019), available at https://www.census.gov/quickfacts/fact/table/losangelescountycalifornia,CA/PST045219; see also Bender, supra note 12, at 21 (“With a majority-minority population comprised of 49 percent Latinos and 10 percent African Americans, Los Angeles alone can help rewrite the recent experience of white entrepreneurs presiding over an industry that imprisoned so many dealers of color.”); Chelsea L. Shover & Keith Humphreys, Six Policy Lessons Relevant to Cannabis Legalization, 45 AM. J. DRUG & ALCOHOL ABUSE 698, 702 (2019) (“[L]egalization is an excellent opportunity to reduce the damage of prior criminal penalties by expunging the records of individuals arrested for possession as well as low-level dealing. This group is disproportionately poor and minority, and their arrest record limits their ability to obtain housing, work, and education. It also keeps people with expertise out of the emerging and overwhelmingly white-dominated, cannabis industry.”); see also Gentry, supra note 28 (“Zechariah Lord is . . . an African-American dispensary owner, Lord says he’s tired of turning away otherwise
dominance narrative, would, in this case, be accompanied by the net benefit of an increased share of a multibillion-dollar industry. Accordingly, it is imperative that states with cannabis regulations (and those seeking to enact them in the future) greatly expand efforts to examine the prohibitive nature of licensing schemes. They must also tailor them to address the harms affecting uniquely impacted populations and include host community input on licensure and zoning decisions.

B. Natural Resource Justice and Reclamation

Separate from any concerns of licensing and zoning, two New Mexico communities offer a clear example of the justice-imperatives for adequately addressing the environmental concerns of corporate cannabis. Sile and Peña Blanca, New Mexico, are two primarily Hispanic, rural, “census designated places” in the state responsible for overseeing their own mutual domestic water and sanitation systems. New Mexico’s Department of Health (Department) promulgates rules for and oversees the state’s cannabis regulation regime and does so without requiring that growers (of medical cannabis) provide the Department with the source of the water used for cannabis cultivation. Mutual domestic water systems are considered subdivisions of the state under New Mexico law. They are vested with the powers to operate the water systems, shut off “unauthorized . . . [or] illegal connections,” enforce rules for connection or disconnection, and recover costs associated with disconnecting water.

promising job applicants because they have a record of disqualifying marijuana offenses. ‘That’s why it’s so important to get these records expunged[,]’ he says. ‘I think it deters a lot of people from even applying.’

113. The Massachusetts equity guidance recommends that community outreach be used in conjunction with “zon[ing] cannabis businesses based on the nature of their primary business operations,” suggesting that “[i]t may be most appropriate . . . for cultivators, microbusinesses, and cooperatives to be zone, respectively, as agricultural, industrial, and manufacturing businesses, while cannabis retailers would be zoned in the same manner as any other retailer.” MASS. CANNABIS CONTROL COMM’N, supra note 103. Specialized zoning such as this, coupled with meaningful community input, acts as both a check on the targeting of disadvantaged communities, and as a legally codified, municipal protection of marginalized community interests. Alternatively, and additionally, one unique approach to “[s]ocial equity” licensing is being put forward in Washington. Nick Thomas, Washington State to Allow Social Equity Applicants Exclusive Access to Revoked Cannabis Licenses, MARIJUANA BUS. DAILY (Mar. 11, 2020), https://mjbizdaily.com/washington-state-to-allow-social-equity-applicants-exclusive-access-to-revoked-cannabis-licenses/.

114. See Author’s analysis, supra note 113.

115. Davis, supra note 77; see also Theresa Davis, Marijuana Farms May Be Straining New Mexico Water, ASSOC. PRESS (Jan. 6, 2020), https://upnews.com/299ac3e10107d81c8df417843997ba7 (highlighting that “medical marijuana regulations have not kept up with the increased strain on rural water supplies.”) [hereinafter Marijuana Farms].


117. N.M. STAT. ANN. § 3-29-6(D) (2017).
Nevertheless, the communities feel powerless to combat the excessive, commercial usage of domestic water by exploitative, out-of-state cannabis growers. Without regard for the domestic-use requirements of the Sile and Peña Blanca water systems, the growers purchased property and proceeded to illegally pump large quantities of water for commercial cannabis cultivation, putting added strain on a water system already lacking the resources for necessary repairs. In response, the Sile Mutual Domestic Water Association sent a cease and desist letter to one cultivator but found themselves unable to disconnect the cultivator without compliance of the county sheriff—who himself refused to comply without a court order. Without the resources to pursue a civil claim in New Mexico state court, Sile and Peña Blanca were forced to send a letter to state agencies representatives articulating their concerns, demanding that their voice be heard, and asking the State to require proof of a “valid water right” before issuance of a cannabis license.

Even still, Sile and Peña Blanca do not have unlimited time to wait for a court order, administrative rulemaking, or legislative solution—they require intervention on behalf of the natural resources that they depend on for survival. They also require codified, infrastructural, and governmental assistance that is targeted to remediate the harms to their communities.

To address the second of these necessities across the State, the Southwest, and the remaining cannabis frontier, the first steps in future regulatory efforts should look towards Oregon as a model for codifying meaningful natural resource protections. “With a few exceptions, . . . irrigators, businesses, and other water users must obtain a water right from the [Oregon] Water Resources Department to use water from a well, spring, stream or other source.” Further, “[v]iolations of Oregon Water laws can result in civil penalties or prosecution for a class B misdemeanor.” But such an approach must be supported by meaningful inclusion of marginalized communities, or corporate industries will be able to take advantage of the decreased barrier to acquisition. Just as well, structures that do not prioritize the inclusion of marginalized voices will magnify current distributive injustices related to water access and force disadvantaged communities to

118. Davis, supra note 77.
119. Marijuana Farms, supra note 115.
120. Id.
121. Id.
123. Id.
disproportionately suffer the effects of environmental harm and degradation.\textsuperscript{124}

In this way, Sile and Peña Blanca capture the ways in which environmental justice must encompass an environmentalism as well as a humanism. A human-centric approach can still produce disproportionate outcomes relative to each individual’s relationship with, and access to, the environment. That environment must also be shielded by legal protections to protect it from degradation resulting from the disproportionality of subsequent, individualized harms. One resource-oriented proposal to address the harms of cannabis cultivation is structuring legislation to “establish a maximum number of cultivated acres that may be permitted for cannabis cultivation within their state.”\textsuperscript{125} This proposal is based on a calculation of the “current gross and net amount of water available within the state” such that the permitted acreage “may be no higher than the burden on the water supply may bear.”\textsuperscript{126} This type of regulatory measure would, in theory, address some short-term water shortages by putting a state and industry-wide cap on the amount of water that could be used for cannabis cultivation—effectively buying the state some time to separately protect and preserve its water supply.\textsuperscript{127} Like the catch limits established for federal fisheries under the Magnuson-Stevens Fishery Conservation and Management Act, licensed cannabis growers could be limited to growing only a number of plants that (1) are in proportion to a sustainable portion of a state’s available water; (2) will not burden the state, municipal, or local water supply; and, (3) which correspond to a provable water right.\textsuperscript{128}

Within these parameters—and accompanied by environmentally just licensing and zoning practices—communities can be brought into the cannabis industry. Subsequently, they can be given control over the environment and the natural resources that they will invariably need to occupy some share of the available land and water. In Sile and Peña Blanca, this would allow residents to share the promises that industry brings while ensuring that their statutorily guaranteed authority to oversee the allocation of water will best benefit their communities.\textsuperscript{129} In turn, the money sustainably

\textsuperscript{124}See Wikstrom et al., Environmental Inequities and Water Policy During a Drought: Burdened Communities, Minority Residents, and Cutback Assignments, 36 REV. POL’Y RES. 4, 21 (2018) (“environmentally unjust outcomes may result from ingrained institutional factors rather than explicit acts of discrimination. Copious work . . . indicates that institutional design matters, particularly in the distribution and use of water . . . [W]e expect that minority burdens are so institutionalized that even well-meaning organizations operating in haste may lead to minority communities repenting at leisure.”).

\textsuperscript{125}Harper, supra note 10, at 83.

\textsuperscript{126}Id.

\textsuperscript{127}Id.

\textsuperscript{128}Id. at 84.

\textsuperscript{129}See Davis, supra note 77 (explaining communities’ opportunity to participate within the industry and assurance of water allocation is statutorily protected).
reaped from the industry could be used to provide infrastructural support for Sile and Peña Blanca, or could alternatively be used to return their communities to state-level water-use compliance. We can only hope some solution reaches them before the water dries up.

To address the prodigious energy needs of indoor and outdoor communication, a cap-and-trade type licensing scheme has also been proposed. The licensing scheme would “limit the proportion of cannabis produced indoors by capping indoor permits at a percentage of [allowable] outdoor permits.”\(^\text{130}\) Without creating an actual limit on indoor cannabis production, the proportional relationship would greatly reduce the energy burdens and carbon footprint that massive and uninhibited proliferation indoor operations would invariably create.\(^\text{131}\)

In tandem with favorable zoning and licensing schemes, environmentally just water and energy policy can therefore allow marginalized communities to reclaim the industry-colonized cannabis landscape by:

(1) Equitably distributing the opportunities and harms associated with cultivation and dispensary operations;
(2) Creating community opportunities for procedural involvement in defining and protecting the community’s relationship with the cannabis industry;
(3) Ensuring greater representation of criminalized, marginalized communities in the industry, and;
(4) Empowering communities to reverse and reconstruct the harmful narratives and cycles that cannabis prohibition brought upon them.

The need for such a transformative approach to cannabis policy is especially prescient when one recalls the connection between such policy and the tragically “odd” results of cannabis criminalization:

rather than locating the causes of environmental degradation and regulatory hindrances in an increasingly discredited prohibitionism, which over eight decades incentivized ecological destruction by preventing regulation, inflating prices, and instilling fear of governmental engagement, blame is instead placed on prohibition’s criminalized targets. This placement of blame ineluctably blends with social logics of degeneracy and danger, expanding into entire racialized groups as it has through prohibition’s history, whether they be spectral Mexican (or other “foreign”) cartels or deficient,

\(^\text{130}\) Harper, \textit{supra} note 20, at 82.
\(^\text{131}\) Id. at 63, 82; \textit{see also} Mills, \textit{supra} note 4, at 59 (comparing cannabis industry energy usage to that of hospitals).
polluting groups of white people described as outsiders or lower class, like ‘diesel dopers’ (mostly white, young men so named for their noise-making, polluting diesel generators). Criminalized groups, as criminal, cannot present in the public debate; they can only be spoken of by others.  

Returning to the four-part environmental justice framework, it is clear that the cannabis industry has unique opportunities to align environmental law with the racially and economically disproportionate impacts of the War on Drugs. Meaningful steps towards environmental justice can be achieved with appropriately tailored policy. But, if cannabis policy is not pursued with an eye towards enviro-humanism—with the proper acknowledgment of remediation mechanisms for the systemic, marginalizing impacts of the War on Drugs—it will struggle to accomplish any of these essential transformations.

C. Financial Incentives and Economic Divestment

As a final point for consideration, the financial dimension of the cannabis industry stands as perhaps the most oppressive threshold to success for aspiring entrepreneurs. At every level, non-white persons face comparative financial disadvantage when measured against white persons. On top of a well-documented, racially divided wealth gap is data suggesting that minorities separately face a significant number of structural barriers to building wealth and closing that gap.

Perhaps the most notorious contribution to these barriers was the Home Owners’ Loan Corporation’s (HOLC) historical practice of redlining...
neighborhoods as “hazardous . . . credit risks” in the 1930s. By taking steps that would ensure the diversion of homeowner funds away from certain neighborhoods—nearly two-thirds of which are now predominantly Black and Latinx populated—the now-defunct HOLC laid the foundations for communities to build the wealth gap into the fabric of urban and suburban America. Black women experienced (and continue to experience) unique generational harms of redlining, and non-white women more broadly are limited by much of the same systems that prevent non-white, non-male persons from closing the wealth gaps. Upward economic mobility in the United States has also been declining over the last 80 years. Low-income communities are also economically immobile because of structural inhibitors to economic mobility for the impoverished. Incarceration further impacts

135. Tracy Jan, Redlining was Banned 50 years ago. It’s Still Hurting Minorities Today., WASH. POST (Mar. 28, 2018), https://www.washingtonpost.com/news/wonk/wp/2018/03/28/redlining-was-banned-50-years-ago-its-still-hurting-minorities-today/ (quotation marks omitted); see also Stephen M. Dane et al., Discriminatory Maintenance of REO Properties As a Violation of the Federal Fair Housing Act, 17 CUNY L. REV. 383, 388 (2014) (“HOLC’s redlined maps profoundly influenced mortgage lending throughout the country as both private banks and the Federal Housing Administration (responsible for federal home loan guarantees) adopted HOLC’s criteria, including the focus on neighborhood racial composition.”); Julie Gilgoff, Local Responses to Today’s Housing Crisis: Permanently Affordable Housing Models, CUNY L. REV. 587, 594–95 (2017) (“Redlined communities were also targeted decades later by policies such as ‘reverse redlining,’ whereby minority groups were singled out for predatory loans that offered onerous mortgage terms that set them up to default.”); see also Aaron Glantz & Emmanuel Martinez, Modern-Day Redlining: How Banks Block People of Color From Homeownership, CHI. TRIBUNE (Feb. 17, 2018), https://www.chicagotribune.com/business/ct-biz-modern-day-redlining-20180215-story.html (discussing racial discrimination in home lender financing).

136. See Jan, supra note 135 (explaining the primarily Black and Latinx neighborhoods “have a significantly greater economic inequality”).

137. See Mark Michaud, Legacy of Racism in Housing Policies Continues to Impact Maternal Health, UNIV. ROCHESTER MED. CTR. (Oct. 4, 2021), https://www.urmc.rochester.edu/news/story/legacy-of-racism-in-housing-policies-continues-to-impact-maternal-health (quoting URMC Department of Public Health Sciences economist Elaine Hill, “‘historic redlining was associated with worse outcomes in pregnancy and childbirth experienced by Black women in the modern day.’”).

138. See NAT’L P’SHIP FOR WOMEN & FAMS., QUANTIFYING AMERICA’S GENDER WAGE GAP BY RACE/ETHNICITY 1 (2020) (“Women of color in the United States experience the nation’s persistent and pervasive gender wage gap most severely”).


140. See Annalisa Merelli, Poverty in America is so Expensive it now has its Own Inflation Value, QUARTZ (Nov. 6, 2019), https://qz.com/1742839/inflation-inequality-is-making-americas-poor-even-poorer/ (“While all official statistics apply the same rate of inflation to the income of people living in all income brackets, evidence highlighted by the [Columbia University] study suggests that inflation is much higher for people at the lower end of the income scale. This is a phenomenon that Xavier Jaravel, a researcher at the London School of Economics and one of the author of the report, calls ‘inequality inflation.’ For the bottom 20%, Jaravel has found, inflation is 0.44 percentage points higher than it is for the top 20%.”); see also Jan, supra note 135 (“Racial discrimination in mortgage lending in the 1930s shaped the demographic and wealth patterns of American communities today . . . with 3 out of 4 neighborhoods ‘redlined’ on government maps 80 years ago continuing to struggle economically. [A new] study . . . shows that the vast majority of neighborhoods marked ‘hazardous’ in red ink on maps drawn by
the upward economic mobility of low-income and colored communities by doubling-down on the existing wealth gaps and accumulation hurdles.\textsuperscript{141}

Regarding cannabis, a connection can be made between the marginalizing effects of its prohibition to the expansion of the broader racial wealth gap in a way that can fit within the environmental justice framework. The practice of redlining, and its diversion of homeownership loans and funds, concentrated poverty at the same time (the 1930s) that racialized cannabis prohibition was molding America’s enforcement attitude.\textsuperscript{142} Despite the eventual cessation of overt redlining policies (beginning with the passage of the Fair Housing Act of 1968),\textsuperscript{143} the imposed poverty coincided with federal policing incentives (arrest-based awards from the Department of Justice Byrne Memorial Jag Grant funds) to concentrate enforcement of drug laws in low-income communities.\textsuperscript{144} The result of this targeted enforcement and racially biased prohibition was disproportionate and systemic harm for minorities, who were relegated to geographic and economic immobility by the structural deficiencies in amassed and accumulable wealth.\textsuperscript{145} As cannabis legalization and decriminalization progressed, industry success was aggregated to the largest, best funded, and therefore, “whitest” entrepreneurs. Meanwhile, those with controlled substance (and other) felony convictions were barred from even applying for the licensure necessary to enter the

\begin{verbatim}
the federal Home Owners’ Loan Corp. from 1935 to 1939 are today much more likely than other areas to comprise lower-income, minority residents. ‘It’s as if some of these places have been trapped in the past, locking neighborhoods into concentrated poverty.”\textsuperscript{146}

\textsuperscript{141} P\textsuperscript{E}\textsuperscript{W} CH\textsuperscript{H}A\textsuperscript{T}R\textsuperscript{A}B\textsuperscript{I}L TR\textsuperscript{U}ST\textsuperscript{S}, COL\textsuperscript{L}ERTA\textsuperscript{L} COST\textsuperscript{S}: INCARCER\textsuperscript{A}TION’S EFFECT ON ECONOMIC MOBILITY 17–18 (2010) (“Overall…the fiscal consequences of the nation’s incarceration boom extend beyond strained state budgets, impairing the livelihoods of former inmates and, by extension, the well-being of their families and communities. . . . Disrupted, destabilized and deprived of a wage-earner, families with an incarcerated parent are likely to experience a decline in household income as well as an increased likelihood of poverty.”); see also COMMITTEE ON CAUSES & CONSEQUENCES HIGH RATES INCARCERATION, NAT’L RESILIENCE COUNCIL NAT’L ACAD’S, THE GROWTH OF INCARCERATION IN THE UNITED STATES 283 (Jeremy Travis et al. eds. 2013) (“The communities and neighborhoods with the highest rates of incarceration tend to be characterized by high rates of poverty, unemployment, and racial segregation. In particular, the geography of incarceration is contingent on race and concentrated poverty, with poor African American communities bearing the brunt of high rates of imprisonment.”).

\textsuperscript{142} JONATHAN P. CAULKINS ET AL., MARIJUANA LEGALIZATION: WHAT EVERYONE NEEDS TO KNOW 191–92 (2d ed. 2016); cf. Jan, supra note 135.

\textsuperscript{143} According to some, it is unclear whether the Fair Housing Act of 1968 actually eliminated the practice. See Kriston Capps & Kate Rabinowitz, How the Fair Housing Act Failed Black Homeowners, CITYLAB (Apr. 11, 2018), https://www.citylab.com/equity/2018/04/how-the-fair-housing-act-failed-black-homeowners/557576/ (noting that “[t]oday, Northern and Midwestern cities . . . see huge gulfsm in mortgage approvals between black and white households,” with as few as “5 percent of black residents in the city of St. Louis receiv[ing] . . . conventional mortgage[s]—despite making up 48 percent of the overall population.”).

\textsuperscript{144} German Lopez, These Maps Show the War On Drugs is Mostly Fought in Poor Neighborhoods, VOX (Apr. 16, 2015), https://www.vox.com/2015/4/16/8431283/drug-war-poverty.

\end{verbatim}
cannabis market. With the industry developing in a racially homogenized fashion, it is poised to benefit from the systemic disadvantages of concentrated poverty and nuisance zoning magnified by decades of Drug War enforcement efforts. Ultimately, this process of canna-colonizing concurrently extracts the profits and natural resources from marginalized communities and deprives them of any role or voice in the cannabis industry. The ouroboros of wealth disparity swallows its tail—this is the environmental injustice which lies at the heart of the cannabis industry.

Yet, there remains one angle of injustice left unexposed. In addition to the difficulties presented by licensure, zoning, and natural resources law, the tremendous capital requirements of entering, and remaining, in the cannabis industry begs the question: how can anyone afford such an endeavor? The answer ties together many of the elements laid out in this Article. Simply put, they are not. Beyond the licensing hurdles discussed in Section III(A) of this Article, the capital required for the physical, spatial entry into the cannabis market are prohibitive to all but the most wealthy and well-connected entrepreneurs.146 If we then consider the existing structures that divert financing options away from low-income and minority communities, those hurdles are compounded by the lack of federal financing for cannabis operations.147 The subsequent hesitancy of state banks to take cannabis money renders the minority barriers to entry effectively insurmountable.148

The only short-term solution that presents itself is some form of massive cash infusion directly into the hands of marginalized individuals and communities. Such a measure is necessary because, assuming that the high cost of entering and competing in the cannabis industry will either stay static or continue to rise, accomplishing industry-wide change means that the barriers to entry must be lowered—at both the community, procedural level

146. See Kovacevich, supra note 93 (noting that, in addition to capital requirements of $150,000-250,000, annual legal work and opening up an actual storefront can cost a minimum of $250,000, with additional costs for security measures); see also Posner, supra note 28 (“Across all industries, people of color face obstacles to building businesses that whites do not, like lack of access to capital, advisers, and networks, as well as discrimination from banks while applying for small business loans.”); Hammersvik, et al., supra note 33, at 462 (stating most cannabis growers are small-scale); Adinoff & Reiman, supra note 29, at 679 (discussing how cannabis-related convictions are a barrier to entry in most states); see also Lewis, supra note 14 (stating fewer than 1% of cannabis dispensaries are black-owned).

147. Unlocked Potential, supra note 2, at 9 (statement of Dana Chaves, Senior Vice President, First Federal Bank of Florida) (noting that Schedule I status eliminates availability of Small Business Administration Loans, 504 Certified Development Company loan programs, Microloans, and other sources of federal funding); see also Ben Adlin, New House Bills Would make Cannabis Businesses Eligible for Federal Small-Business Aid, MARIJUANA MOMENT (Apr. 20, 2021) (Banking legislation would permit financial institutions to take on cannabis business without fear of the federal government).

148. See Robb Mandelbaum, Where Pot Entrepreneurs Go When the Banks Just Say No, N.Y. TIMES (Jan. 4, 2018), https://www.nytimes.com/2018/01/04/magazine/where-pot-entrepreneurs-go-when-the-banks-just-say-no.html (“Banks tend to take their cues from the federal government. Not only does selling marijuana violate federal law; handling the proceeds of any marijuana transaction is considered to be money laundering. Very few banks are willing to bear that risk.”).
and the individual, distributive level. But that money must come from somewhere. Given the extant correlation between access to capital resources and success in the cannabis industry, individuals and communities will need to be catapulted to a point on the correlative spectrum that meaningfully ensures competitive success. Such a radical, industry-wide transformation could take the form of a redistributive tax scheme for existing, burgeoning, and forthcoming cannabis markets, preceded by an equitably distributive influx of real dollars that will quickly place marginalized individuals and communities at the helm of competitively viable cannabis operations. However, without some sort of concurrent effort to reduce the up-front costs of achieving viability in the industry, the costs to ensure the transformation alone may doom such a policy even before the radically progressive nature of such a policy would ensure its rapid death in the current political climate.¹⁴⁹

The United States government is no stranger to compensating marginalized communities who have suffered at the hands of its policies.¹⁵⁰ One example is the creation of the Indian Claims Commission (ICC) for the purpose of compensating federally recognized tribes for land seized by the United States.¹⁵¹ Conceptually, the ICC was intended to be a funnel for federal money to tribes, but “[t]he results were disappointing for Native Americans.”¹⁵² Despite ultimately paying out approximately $1,000 for each Native American in the United States by the time the Commission dissolved,¹⁵³ the ICC became a tool to foreclose Native Americans from traditional claims for relief, discount their damages, limit the remedies available to them,¹⁵⁴ and limit tribal access to treaty rights.¹⁵⁵ Even in Alaska, ¹⁴⁹. See Eric K. Yamamoto, Racial Reparations: Japanese American Redress and African American Claims, 19 B.C. THIRD WORLD L. J. 477, 496–97 (1998) (“Reparations for one group may stretch the resources or political capital of the giver, precluding immediate reparations (or enough reparations) for others. The very dynamic of reparations process, even where salutary for recipients, can generate backlash and disappointment.”).
¹⁵⁰. See Adeel Hassan & Jack Healy, American has Tried Reparations Before. Here is How It Went, N.Y. TIMES (Jun. 19, 2019), https://www.nytimes.com/2019/06/19/us/reparations-slavery.html (“There is no direct template for reparations [to descendants of enslaved African-Americans], but Americans have received compensation for historical injustices before. Examples include Japanese-Americans interned during World War II; survivors of police abuses in Chicago; victims of forced sterilization; and black residents of a Florida town that was burned by a murderous white mob.”).
¹⁵¹. Id.
¹⁵². Id.
¹⁵³. Id.
where tribes were able to achieve a $962 million victory, the award was placed in the hands of corporations, with tribal beneficiaries only having access to those funds by way of stock shares in those corporations.\textsuperscript{156}

An alternative claims-based approach was born of litigation against the United States Department of Agriculture (USDA) for the farming discrimination referred to in Section II of this Article and could present a model for the kinds of corrective and distributive justice ends that cannabis policy should pursue. The settlement in \textit{Pigford v. Glickman}\textsuperscript{157} was the first to create a claims process for black farmers impacted by USDA’s discriminatory practices, including monetary relief and the opportunity for debt discharges and foreclosure restorations.\textsuperscript{158} But after Congress found that the notice process for filing a claim was inadequate, § 14012 of the Farm Bill\textsuperscript{159} was enacted to provide a cause of action for class members subsequently affected by the deficient claims process.\textsuperscript{160} A series of 17 class action lawsuits followed, and the settlement in the consolidated case expanded the \textit{Pigford II} claims process to make recovery easier.\textsuperscript{161} The new claims process, absent the earlier requirement that claimants provide a “similarly situated white person” against whom their discrimination and appropriate relief can be measured,\textsuperscript{162} was specifically intended to increase the number of people who would file and prevail on their claims.\textsuperscript{163} The result was that “[a]ll individuals: (1) who submitted late-filing requests under Section 5(g) of the \textit{Pigford v. Glickman} Consent Decree on or after October 13, 1999, and on or before June 2, 2008; but (2) who had not obtained a determination on the merits of their discrimination complaints” were effectively presumed to have been discriminated against by the USDA, and were thus entitled to a claims process that greatly favored their recovery.\textsuperscript{164}

\textsuperscript{156} Hassan & Sealy, supra note 150.


\textsuperscript{158} Kindaka Jamal Sanders, \textit{Re-Assembling Osiris: Rule 23, the Black Farmers Case, and Reparations}, 118 PENN ST. L. REV. 339, 352 (2013); see also Moon, supra note 70 (discussing the lasting impacts of USDA discrimination are startlingly apparent over the last century: African-American farmers made up around 14 percent of U.S. farmers in 1910, but just 1.6 percent in 2012.”); see also Robinson, supra note 70 (claiming USDA discriminated against women farmers).


\textsuperscript{160} Sanders, supra note 158, at 353.

\textsuperscript{161} \textit{Id.} (citing In re Black Farmers Discrimination Litigation, 820 F. Supp.2d. 78, 82–84 (D.D.C. 2011)); \textit{see also} In re Black Farmers Discrimination Litigation, 856 F. Supp.2d. 1, 33–34 (D.D.C. 2011) (eliminating the need for proof of a “‘similarly situated white farmer’” to prevail on a “Track A” claim for relief, in light of the prejudice that such a requirement had on claims that would otherwise provide “‘virtually automatic relief’” to claimants lacking any documentary evidence).

\textsuperscript{162} \textit{Pigford}, 185 F.R.D., at 95.

\textsuperscript{163} \textit{Black Farmers Discrimination}, 856 F. Supp.2d., at 34.

\textsuperscript{164} \textit{Id.} at 79–80.
Two rounds of class-action litigation should not be a preferred means of seeking immediate and structurally impactful redress at either the state or the federal level. If a presumed-discrimination model could be adopted into an economic-oriented policy solution, built on strong data and sound, environmentally-just regulations, marginalized individuals would be better incentivized to join the cannabis industry and be positioned for success.

At least on the level of individual states or communities, existing momentum for cannabis equity could be translated into policy efforts lifting up those individuals and communities who: (1) could plausibly state an individual or community nexus to cannabis prohibition or the War on Drugs (e.g., low-income or minority status) and (2) were subsequently unable to enter the cannabis industry, through disqualifying convictions, lack of access to startup resources, commercial favoritism, or other barriers discussed in this Article. This would function similarly to the Pigford and Black Farmers Discrimination settlements by establishing a built-in assumption that the industry has disproportionately impacted and excluded marginalized voices and their respective communities.

One advantage of blueprinting a litigation settlement into a policy proposal (besides avoiding the time and resources needed for class action litigation) is that it would not require individuals to take on the federal government or a massive corporate entity—at least not directly. Rather, it is an example of how a community or a state legislature could codify their interests in a way that the federal government currently cannot—and arguably should not. Because the individual and community most acutely experience how systemic disadvantage impacts them, they are better positioned to discretely perceive the reform that is best for them. Again, the inclusion of those voices is the only way to protect against further, enhanced, disproportionate environmental impacts related to cannabis prohibition. The Black Farmers Discrimination settlement is, therefore, remarkable in how neatly it fits in as a model for building policy within the environmental justice framework, and which comports with the United States Environmental Protection Agency’s (EPA) definition of environmental justice.165

If we can similarly target the licensing, natural resources, and financial barriers to entry of the cannabis industry with marginalized interests at the forefront, we can build the industry around those marginalized persons to transform the relationship the industry currently has with marginalized

165. “Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys: the same degree of protection from environmental and health hazards, and equal access to the decision-making process to have a health environment in which to live, learn, and work.” EPA, ENV’T JUST. (last updated Mar. 27, 2020), https://www.epa.gov/environmentaljustice.
communities. This would then allow those communities to alter the colonial narrative that has wrought systemic harm upon them. Such a radical, restorative alteration of the industry is necessary in order to reach the ends of distributive, procedural, and social justice.

As an example, a targeted policy effort may be found in California’s Community Reinvestment Grants (CalCRG). This program intends to divert a baseline $10 million per year (until fiscal year 2022–2023, when the annual baseline disbursement becomes $50 million) to “local health departments” of Drug-War impacted communities in order to oversee the administration of job placement programs, mental health and substance abuse treatment, “system navigation services,” legal services addressing reentry barriers, and other medical treatments. Without question, CalCRG’s focus on funding programs that remedy some of the unique, structural harms resulting from state and federal drug enforcement is important—focusing on the cannabis misses the forest for the trees. CalCRG has, however, shown slow progress in awarding grants “to cannabis-industry specific community reinvestment measures.”

This might be because less-aggressively framed policy is more palatable at all levels. It may also be because CalCRG only factors in drug enforcement impacts by prioritizing the direction of funds to impacted communities, rather than to impacted applicants. The approach may have the practical effect of a utilitarian distribution of resources to organizations with the most capacity and resources to put together proposals. The end result may be a diversion of funds away from

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166. See CAL. REV. & TAX. CODE § 34019(d) (2017) (establishing reinvestment grants fund designed to rebuild “communities disproportionately affected by past federal and state drug policies.”). For those interested, Massachusetts and Illinois have established similar programs; see also MASS. GEN. LAWS ANN. CH. 94G § 14(b)(v) (2017) (establishing Marijuana Regulation Fund, allocating tax revenue to “programming for restorative justice . . . services for economically disadvantaged persons in communities disproportionately impacted by high rates of arrest and incarceration for marijuana offenses.”); see also 410 I.L.C.S. § 705/10-40 (2019) (establishing Restore, Reinvest, and Renew Program, giving preference in cannabis licensure to persons “disproportionately impacted by both poverty and cannabis drug law enforcement,” and ‘provide[s] low-interest rate loans . . . job training and technical assistance to these businesses.”).


169. Indeed, California’s relevant jurisprudence strongly suggests that racially focused measures may be just short of impossible. See Coral Constr. Inc. v. City & Cnty. S.F., 235 P.3d 947, 960 (Cal. 2010) (“even in the rare case in which racial preferences are required by equal protection as a remedy for discrimination, the governmental body adopting such remedies must undertake an extraordinary burden of justification ‘to assure all citizens that the deviation from the norm of equal treatment of all racial and ethnic groups is a temporary matter, a measure taken in the service of the goal of equality itself.’”).

organizations in marginalized communities that specifically wish to host, be engaged in, and benefit from the cannabis industry itself. This tension once again raises the need for more targeted legislation that prioritizes marginalized procedural involvement beyond the community and facial levels of priority allocation. While legislative relief can strengthen broader social services and programs addressing the societal harms of drug prohibition, such relief should concurrently divert funds to organizations and individuals seeking competitive establishment within the industry.\(^\text{171}\) To that end, local organizations with that focus should be empowered and given priority among other, non-industry organizational applicants.\(^\text{172}\) Ultimately, even those policies that do not reach the most progressive ends of these proposals and solutions can still push the industry in a more inclusive, restorative direction that equitably distributes procedural opportunities in policy- and business-crafting. This is a result worth fighting for.

IV. BALANCING INTERESTS: TOUGH QUESTIONS AND PATHS FORWARD

A. Competing Justice Interests and Definitions

The tension identified at the end of Section III begins to touch on a broader set of difficult questions: how do we balance the diversity of interests implied by environmentally-just cannabis policy? Must certain interests be prioritized? Why or why not? What does “justice” actually look like in the context of structural, societal indifference? Can the demand for cannabis be met by environmentally just policies for cultivation, production, and distribution? Should that demand be met, or is it more environmentally just to cap the available amount of cannabis?

\(^\text{171}\) See MINORITY CANNABIS BUS. ASS’N, MODEL STATE ADULT-USE LEGISLATION (last visited Apr. 22, 2020), https://minoritycannabis.org/mcb/ (for a progressive, working model of this kind of cannabis legislation).

\(^\text{172}\) An example of the kind of entrepreneur and organization that should be so prioritized is Andrew DeAngelo, co-founder of the Last Prisoner Project, whose work focuses on “free[ing] and reintegrate[ing] cannabis prisoners into society” as well as “helping equity businesses, start-ups, and international cannabis organizations.” Warren Bobrow, An Interview with Cannabis Industry Pioneer Andrew DeAngelo, A Visionary Leader, FORBES (Apr. 20, 2020), https://www.forbes.com/sites/warrenbobrow/2020/04/20/an-interview-with-cannabis-industry-pioneer-andrew-deangelo-a-visionary-leader/#2698456d2a6c. Along the same lines, California has just recently announced the provision of $30 million in grant money in support of “equitable business development,” including $23 million for “licensees or business applicants ‘identified by local jurisdiction as being from communities most harmed by cannabis prohibition.” Kyle Jaeger, California Announces $30 Million Grant Program to Promote Marijuana Industry Social Equity, MARIJUANA MOMENT (Apr. 21, 2020), https://www.marijuanamoment.net/california-announces-30-million-grant-program-to-promote-marijuana-industry-social-equity/. To address financing concerns, willing states could support financing organizations like Colorado credit union “Partner Colorado,” who “provides checking accounts expressly for the marijuana industry, in clear violation of federal law.” Mandelbaum, supra note 148.
Speaking to the first set of generally justice-related questions, the concerns are well-captured by Chicago Mayor Lori Lightfoot’s efforts to lay the foundations for cannabis’ entry into the city. When she first unveiled her proposed zoning rules, which would have created a cannabis dispensary “exclusion zone” in downtown Chicago, Mayor Lightfoot stated her belief that such a measure would create “unique opportunities for entrepreneurs from communities victimized by (the) war on drugs to be at the forefront of developing equity and wealth from this emerging industry.” The proposal was immediately met with backlash, facing criticism for its removal of economic opportunity from neighborhoods that stood to benefit from the industry’s presence. After residents, business owners, industry advocates, and city alderpersons voiced these concerns at community meetings, Mayor Lightfoot then revised her proposal to allow cannabis businesses to operate much closer to the so-called “Magnificent Mile,” an attractive location for cannabis entrepreneurs to take advantage of a prime retail location. On the one hand, the equity from such a forced distribution of industry may be derived from the enabling of otherwise disadvantaged entrepreneurs to have competitive opportunities outside of the geographical corridor where commercial cannabis may be better positioned to corner the market. But on the other hand, the relocation of cannabis opportunities may overall reduce the amount of money raised by those operations.

One other question posed by Chicago’s model: if the business and regulatory model intends tax revenue to be drawn back down to benefit marginalized communities — and under Illinois’ “R3” program, it is — is it a just distribution of opportunity to force all industry operations outside a corridor that would likely provide the industry with the most profits for reinvestment? Thinking about it another way, even if the R3 program can create competitive cannabis industry opportunities for marginalized persons, if those opportunities are located such that they are comparatively disadvantaged in terms of competitiveness and profit-potential, at what point are those opportunities tokenistic? How can these programs be structured to


174. Id.


176. Pratt & Zumbach, supra note 173.

balance industry success and the environmental injustices which have historically come with it? Without adequate economic support, minority-championed cannabis operations may fall victim to the structural and cyclical harms that motivated the redistribution of procedural, restorative, and socially-just cannabis opportunities in the first place.

We can still learn from the Chicago saga that a justice-oriented cannabis regulation regime, which meaningfully involves the interests of communities whose land and resources are at stake, can produce material alterations and shifts in how cannabis opportunities are distributed. Alderpersons, residents, business owners, and other interests are capable not only of coalescing to fundamentally alter municipal approaches to legalizing and regulating cannabis, but also coming to an understanding of the different justice issues implied by zoning proposals. But the voices must be loud and the policymakers properly oriented and receptive to hearing them. Without any kind of meaningful involvement, efforts at environmentally just cannabis regulation will be doomed to fail.

B. Proceeding in a Legally Uncertain and Unstable Climate

It is also essential to consider how to balance the competing federal and state interests in a world that seems to be trending towards a substantive federal legalization effort. While the Tenth Amendment police powers generally serve to guarantee the states’ rights to enact cannabis legalization schemes, the uncertain possibility of federal enforcement still lurks in the shadows until some sort of federal recognition of cannabis makes it through either the courts or the legislature. The Department of Justice has continued to functionally follow Obama-era guidelines regarding non-enforcement of the Controlled Substances Act (CSA) against cannabis businesses.178 That said, and without diving into a thorough exploration of federalism,179 the benefit that a federal legalization scheme may have in producing “uniformity” in the interpretation and application of law.180 In addition to removing the fear of federal CSA enforcement, a uniform body of federal, environmentally just cannabis law may be preferable for addressing certain aspects of cannabis’ environmental injustices. It could ensure greater

protections against exploitation by recognizing existing land and water rights. It could also trigger environmental assessments and other wildlife protections for proposed large-scale (or commercial) cannabis operations. Finally, it could structure financing programs and tax incentives which enable historically disenfranchised communities better access to industry and law.

That being said, it is by no means abundantly clear that a federal cannabis regulatory scheme would be the best solution to address the environmental justice goals this Article discussed for future cannabis regulations. But if the alternative is a patchwork of laws across the 50 states, it is difficult to imagine that such an inconsistency would produce more environmentally just outcomes.

Without taking a position on the precise contours of federal cannabis legalization, perhaps the most obvious (if not vague) answer, then, is to tow a line somewhere in the middle. The federal government could eliminate most cannabis-related offenses in the United States Code, creating a sort of baseline upon which states can continue to craft targeted, inclusive, community and population-specific zoning, natural resource, and community reinvestment schemes. A federally centralized authority in cannabis policy making may be unable or unwilling to address those unique and localized harms of the War on Drugs. Policies may face immense political and legal scrutiny within the current socio-political milieu, at least to the extent that they are progressive, federal, environmental, racially motivated, and financially redistributive.181

Simply de-scheduling cannabis at the federal level and removing the lion’s share of its criminal penalties could open the way for federal financing opportunities to would-be marginalized entrepreneurs. At the same time, states and local governments could help marginalized entrepreneurs by taking the lead on specializing licensure and zoning procedures, as well as relevant environmental laws and regulations. There is at least one proposal that a clear and strict application of the “clear statement” rule—requiring an “unmistakably clear” statement within a statute to commandeer and direct the actions of state officials—could allow heterogeneous industry development without upending state-level cannabis efforts as they exist

However, this Article is only intended to focus on the immediate and local efforts that advocates, regulators, and industry can focus on to deliver environmentally just cannabis to all communities—especially those marginalized by the structural devastation wrought by the War on Drugs.

In the context of federal cannabis legalization, localized laws, regulations, and ordinances must not be commandeered or preempted by federal law, otherwise the most meaningfully opportune junctures for the involvement of marginalized persons will disappear. Although some maintain that full-fledged federal legalization is inevitable, it may be worthwhile to think about the form that federal legalization can and should take.

CONCLUSION

Despite the multi-faceted and oftentimes competing interests and definitions of justice, the explosion of the cannabis industry presents unique opportunities for the reclamation of criminalized spaces and the advancement of minority stake in—and agency over—themselves and their communities. Indeed, the ACLU has demanded that:

[w]hen states legalize, they must center legalization in racial justice by seeking to repair past harms wrought on communities of color by marijuana prohibition and ensure that people of color have opportunity and access to the burgeoning marijuana marketplace. Upon legalization, states should offer expungement and resentencing for past convictions, so that hundreds of thousands of people—disproportionately Black and Brown—do not remain marginalized for prior offenses.

182. See Schwartz, supra note 179, at 626, 638 (stating the “clear statement” rule and concluding that “[a]plying the anti-commandeering clear statement rule, the CSA would not apply to state officials at all.”).

183. See, e.g., David L. Nathan et al., The Physicians’ Case for Marijuana Legalization, 107 AM. J. PUB. HEALTH 1746, 1746 (positing that “[f]ederal support of state cannabis laws is critical and all but inevitable, because more than 60% of Americans in both red and blue states now favor full legalization for adults.”); see also Reihan Salam, Is It Too Late to Stop the Rise of Marijuana, Inc.?, ATL. (Apr. 19, 2018), https://www.theatlantic.com/politics/archive/2018/04/legal-marijuana-gardner/558416/ (looking at the future of legalized cannabis as it relates to business and politics).

The ACLU’s demands are tantamount to, and encompass demands for, environmental justice. Future cannabis policies should be environmentally just to recognize the marginalizing effects that the structure of cannabis prohibition has had on the birth, growth, and explosion of the cannabis industry. The solutions should account for the land and resource impacts of cannabis cultivation, production, and distribution to best accomplish these ends.

By acknowledging and codifying the interests and underlying principles supporting such a re-distributive reconstruction of the cannabis industry, the tools of law related to zoning, business licensure, natural resource rights, and tax schemes can be utilized in future cannabis legislation. This would mitigate the harms of the industry’s physical and socio-economic impacts of the Drug War on marginalized communities. These tools give individual entrepreneurs, community leaders and advocates, and legislators at all levels the tools to re-shape the predominantly white, commercially-dominated cannabis industry, and re-write the narrative to which impacted communities have been confined. Although balancing the competing interests and definitions of justice under such a restructuring of a multibillion-dollar industry begs tremendously difficult questions, it is essential that any future cannabis-regulating policies account for—and specifically include—marginalized voices. This necessarily includes the voices of our land and natural resources. If we, as a nation, wish to continue our relationship with cannabis, we must listen.
Riding the Trail to Expanding Vermont’s Economy: The Case for Simple Recreational Trail Regulation

Bradford R. Farrell*

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INTRODUCTION

The one certainty surrounding Vermont’s Act 250 is that there is no shortage of opinions regarding its merits and shortcomings. The most recent controversy added to the Act 250 debate is the regulation of the recreational trail networks in Vermont.\(^1\) The legislature formed a working group as part of Act 194 relating to rural and economic development.\(^2\) The group is called the recreational trails working group, and it “evaluate[s] the strengths and challenges associated with regulation of recreational trails under 10 V.S.A. Chapter 151 (Act 250).”\(^3\) This Note will discuss the implications of Act 250’s application to recreational trails, and why, based on its history and structure, it is inadequate for trail regulation.

The Vermont Legislature passed Act 250 in the spring of 1970,\(^4\) and from its inception, the Act has been ripe for contention.\(^5\) The Act was introduced in response to the opening of the interstate highways in the 1960s, which ushered in a new era for Vermont’s economy.\(^6\) Opening the interstate highway resulted in a transition from a primarily agricultural economy towards a more recreational and second home-oriented interest in rural lifestyles.\(^7\) The industrial shift in Vermont raised property values, increased the tax base, and lead to rapid development with little oversight.\(^8\)

Then-Governor Dean C. Davis realized the issues associated with this rapid development while campaigning in Windham, Bennington, and Windsor Counties.\(^9\) While on the campaign tour, the governor witnessed...
projects that “w[ere] almost entirely connected to ski area development which was going along very rapidly at the time.” Governor Davis noticed problems like hastily designed roads that were inadequate for winter travel—and even “open sewers running into ditches.” These issues reached a boiling point in the summer of 1968, when the International Paper Company proposed a 20,000-acre recreation and vacation development project in Stratton and Winhall. For many Vermont residents, this proposed development encompassed the fear of permanent and unregulated alterations to the state’s natural beauty. The Stratton and Winhall developments were the final straws for this growing problem in Vermont, and Governor Davis sought to control the situation by forming the Governor’s Commission on Environmental Controls. This commission began a legislative undertaking that resulted in Act 250.

Act 250 was a much-needed control on “large-scale . . . environmentally sensitive developments.” However, the breadth of Vermont’s evolving development illustrates that the Act is too inflexible to evolve with Vermont’s needs. The debate over Act 250’s scope charges emotions for both supporters and opponents; as lobbyist Ed Larsen said, “[w]henever changing [Act 250] comes up, the developers scream, the environmentalist scream, the lawyers scream and the judges scream.” With the addition of the current debate over the Act’s application to trail networks, bikers, hikers, sport vehicle operators, and horseback riders now have reason to join the screaming.

This Note will explore the jurisdictional issues surrounding Act 250 and Vermont’s recreational trails. Part I of this Note will discuss Act 250’s history and the structure of the Act. Part II will discuss the specific issues surrounding Act 250’s application to recreational trails. Part III will discuss whether recreational trail networks can trigger Act 250. Part IV will discuss the options for an alternative regulatory model governing recreational trail networks. Finally, this Note will conclude by recognizing the need for some form of oversight on this growing industry but will reassert the need for a more accommodating system of review.

10. Id.
11. Id.
13. Id.
14. Id.
16. Id.
18. Act 250 Revamp Mired in Montpelier Quagmire, supra note 5.
I. BACKGROUND

A. Legal History

To understand whether Act 250 should encompass recreational trail networks, it is crucial to understand the history that necessitated Act 250’s implementation. Before Act 250, Vermont wholly lacked a legal framework for protecting its natural vitality and combating modern sprawl. Planning and municipal oversight were never recognized in Vermont until a municipal ordinance following “the great Montpelier fire of 1875.”20 In response, the town Select Board said all town buildings were to be constructed out of brick or stone to prevent future fires.21 However, the Supreme Court of Vermont voided the ordinance in 1916 based on an invalid exercise of the police power.22 Montpelier’s attempt at municipal control was hardly land-use planning, but it does illustrate the concerns that laid the foundation for future Vermont municipal and state planning.23

Despite continued attempts at forming state leadership that could have had foresight regarding development, Vermont failed to implement any meaningful state or municipal planning.24 There was an attempt to form the Vermont Development Society in 1897, the Vermont Improvement Association in 1906, and the Vermont Board of Trade in 1911.25 None of

20. Paul Heller, Out of the Ashes Two Fires in 1875 Redefined Montpelier’s Heroes- and Future, TIMES ARGUS (Nov. 10, 2014), https://www.timesargus.com/news/out-of-the-ashes-two-fires-in-1875-redefined-montpelier-146-heroes-151-and/article_db3af4ce-33ea-5b7e-b3e2-b76534e3e504.html. The great Montpelier fire of 1875 was actually two fires that redefined the town and shaped what it is today. Id. The first fire started in a Mainstreet tin shop at 12:45 a.m. in early March. Id. Fire crews were immediately summoned and were able to subdue the fire, but only after it destroyed multiple buildings. Id. Unfortunately, at 2:50 a.m. the Montpelier Fire Chief noticed a light in a nearby building, and “[w]hile . . . still discussing whether or not it was a reflection from the burning ruins, the flames burst from the roof just above the window and the flames began anew.” Id. Flames quickly consumed the building that was built mainly of wood. Id. The fire continued to spread west, quickly engulfing the whole commercial block, at which point the exhausted fire brigades sent for help. Id. Help arrived from Barre, “pulled by a four-horse team” one hour and forty-five minutes after the request. Id. Although the Barre crew was quite helpful in the fire’s ensuing battle, the damage was extensive and resulted in the capital city’s first building codes, many of which were later struck down by the Supreme Court of Vermont in 1916. Id.; State v. Gitchell, 90 Vt. 57, 96 A. 383 (1916).


22. Gitchell, 90 Vt. at 57 (“the ordinance is an unreasonable interference with property rights, and therefore not a valid exercise of the police power.”).

23. VT. BY DESIGN, supra note 21, at 48.


25. Id.
these organizations (which were aimed at developing leadership for a “bigger better Vermont”) gained traction until 1912 with the Greater Vermont Association. Although this organization offered the promise of statewide planning and foresight, the absence of an actual plan led to the continued duplication of work and the wasting of valuable energy.

The absence of planning was the central premise in a pamphlet written by K.R.B. Flint, a prominent political science professor who led the Department of Social Studies at Norwich University. Norwich University printed the pamphlet that advocated for strong statewide planning capabilities. It noted the town planning movement had received careful consideration in most American states but had received little attention in Vermont:

In the average Vermont community, industries are located by accident, streets are laid out as the need requires, and sewers are laid down with no thought of how they will fit with extensions of the new sewerage system; a man builds a house, not knowing whether it will sometime be on a wart or in a ditch; the danger of fire is always present; trees are planted in haphazard fashion and the natural beauties marred—because there is no plan, no thought of the morrow.

The pamphlet called for a legal framework to support town and land-use planning, noting that it “would be unwise for a municipal corporation to prepare a plan at considerable cost without first having obtained authority to carry it into execution.” Vermont took a major step towards land-use planning with the Planning Act of 1921. Although it is not certain K.R.B. Flint’s pamphlet influenced the Planning Act, the pamphlet is indicative of the issues that lead to the legislation. The 1921 Act regulated public property through town officials by mandating that they consult municipal plans designed to give structure to the development of the town's highways and public areas before they made any binding decisions. The Planning Act did not authorize municipal control

26. Id.
27. Id. at 11.
28. Id.
29. See generally id.; VT. BY DESIGN, supra note 21, at 7–8.
30. See generally Flint, supra note 24 (illustrating the need for state and municipal planning).
31. Id. at 7–8.
32. Id. at Introductory Note.
33. Id. at 8–9
34. VT. BY DESIGN, supra note 21, at 8.
35. Id.
over private areas in the town.\textsuperscript{36} Because the Act lacked control over private property, it was a very limited advancement in Vermont land-use planning.\textsuperscript{37}

Finally, in 1968, a modern version of Vermont municipal planning came to light.\textsuperscript{38} Vermont is a Dillon’s Rule state, which means towns have no authority to conduct planning and regulation unless the State expressly grants them authority to do so.\textsuperscript{39} Even though the legislature expressly granted the authority in 1968, the legislation did not mandate planning and zoning development.\textsuperscript{40} In some cases, the Vermont Supreme Court voided municipal ordinances on procedural violations of the 1968 legislation.\textsuperscript{41} And in many cases, the Court struck down municipal zoning ordinances for overstepping their granted authority under the state’s enabling legislation.\textsuperscript{42} Then the interstate highway system opened, causing a shift in Vermont demographics and ultimately resulting in extreme land-use issues.\textsuperscript{43} The narrow authority of the state’s enabling act for municipal zoning did not adequately protect Vermont’s natural vitality. Governor Dean C. Davis recognized the need for controlling the rapid development and put together the commission that established Act 250 as it is known today.\textsuperscript{44}

Examining Act 250’s development plainly reveals that the legislature never contemplated recreational trail regulation. The Act’s structure is even more revealing because the criteria applied to an Act 250 property creates inequitable confusion. When going through the application process, James Cochran (general manager of Cochran’s Ski Area) was informed by an Agency of Natural Resources (ANR) official that they “look at this bike trail

\textsuperscript{36} Id.
\textsuperscript{37} Id.
\textsuperscript{38} Id. at 8–9.
\textsuperscript{39} Valcourt v. Vill. of Morrisville, 104 Vt. 119, 121, 158 A. 83, 85 (1932). This case was a tort action against a municipal corporation utility provider who allegedly provided equipment and maintenance for the transmission of electricity. Negligent maintenance paired with the disposal of surplus electricity resulted in high voltage being passed to the plaintiff’s farm and burning down the buildings. Id. at 84. The Court adopted the definition of municipal power as stated by Justice John F. Dillon in his work on municipal corporations which says: “It is a general and undisputed proposition of law that a municipal corporation possesses and can exercise the following powers, and no others: First, those granted in express words; second, those necessarily or fairly implied in or incident to the powers expressly granted; third, those essential to the accomplishment of the declared objects and purposes of the corporation—not simply convenient, but indispensable.” Id. at 85 (quoting John F. Dillon, \textit{THE LAW OF MUNICIPAL CORPORATIONS} 173 (James Cochcroft et al. eds. 2nd ed. 1873)). In relying on the Dillon rule, the Court ruled Valcourt had the authority to dispose of the surplus electricity outside of its municipal boundaries, but since they were not expressly authorized to do so by the state, the disposal was a purely contractual arrangement, and the municipal corporation was not protected by the doctrine of ultra vires. Id.
\textsuperscript{40} VT. BY DESIGN, supra note 21, at 8–9.
\textsuperscript{41} See, e.g., Flanders Lumber & Building Supply Co. v. Town of Milton, 128 Vt. 38, 258 A.2d 804 (1969) (saying Milton’s zoning ordinance was unlawful because it was not enacted in pursuit of a valid municipal plan).
\textsuperscript{42} See, e.g., Morse v. Vt. Div. of State Bldgs., 136 Vt. 253, 388 A.2d 371 (1978) (saying unless the town has express authority it must yield to state control).
\textsuperscript{43} \textit{History of Act 250}, supra note 4.
\textsuperscript{44} \textit{Origins of Act 250}, supra note 9.
the same way [they] would look at a 20-unit housing development.” Given that the “passage of Act 250 represented the culmination of an effort to create a process that would subject subdivisions and other large developments in Vermont to administrative review so as to ensure economic growth without environmental catastrophe[.]” it is easy to see why there is confusion regarding trail jurisdiction.

The purpose behind Act 250 shows why it is appropriate for and has been successful at large scale development control. The structure further demonstrates that “Act 250 was never intended to cover every land-use change or ‘interfere with local land-use decisions, except where substantial changes in land use implicate values of state concern.’”

B. The Structure

Act 250 permit applications are complicated. The application process requires extensive document filings with multiple copies of the “proposed development [plan] . . . showing the intended use of the land, the proposed improvements, [and] the details of the project.” Notice of the project must be sent to planning commissions, town clerks, the environmental board, and local newspapers; the applicant must also provide a list of all adjoining landowners and notify the adjoining landowners as the District Commission deems appropriate. If any adjoining landowner requests a hearing, one must be held on the application for the permit.

Permit applications are required if Act 250’s jurisdiction is triggered. The Act’s relevant jurisdictional sections are defined in the following manner:

The construction of improvements on a tract or tracts of land, owned or controlled by a person, involving more than 10 acres of land within a radius of five miles of any point on any involved land, for

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46. PAUL S. GILLIES, UNCOMMON LAW, ANCIENT ROADS, AND OTHER RUMINATIONS ON VERMONT LEGAL HISTORY 283 (The Vermont Historical Society, 2013) (quoting Southview Associates Ltd. v. Bongartz, 980 F.2d 84, 878 (2nd Cir. 1992)).
48. GILLIES, supra note 46, at 283 (quoting In re Agency of Admin., 141 Vt. 68, 71, 444 A.2d 1349, 1352 (1982)).
50. 10 V.S.A. § 6083(a)(1)–(4) (2022).
51. 10 V.S.A. § 6084 (2022).
52. 10 V.S.A. § 6085 (2022).
53. 10 V.S.A. § 6081 (2022).
commercial or industrial purposes in a municipality that has adopted zoning and subdivision bylaws.\textsuperscript{54}

The Act also applies to the construction of improvements on more than one acre of land in a town that has not adopted zoning or subdivision bylaws.\textsuperscript{55} However, if a town has adopted zoning or subdivision bylaws, the town may still elect to have the Act 250 requirements imposed.\textsuperscript{56} Despite the fact the statute establishes definitions that trigger Act 250 Jurisdiction, it does not define the triggering language within the statute itself. The important jurisdictional terms related to this issue are the following: construction of improvements, commercial purpose, involved land, and the limitations on jurisdiction imposed by Rule 71.\textsuperscript{57}

Act 250 does not define construction of improvements, and the NRB promulgated rules to provide additional Act 250 implementation guidance.\textsuperscript{58} Rule 2(C)(3) defines construction of improvements as “a physical change to a project site” but exempts actions taken in preparation of a permit that have no significant impact on the criteria listed in § 6086(a)(1) through (10).\textsuperscript{59} The exemption must be de minimis construction that a person demonstrates will have no significant impact on the criteria listed in § 6086(a)(1) through (10).\textsuperscript{60}

Additionally, Rule 2(C)(4) defines commercial purpose to mean “the provision of facilities, goods or services by a person other than for a municipal or state purpose to others in exchange for payment of a purchase price, fee, contribution, donation or other object or service having value.”\textsuperscript{61} Although this seems to provide adequate guidance regarding the commercial purposes that trigger Act 250 review, the definition has been subject to continuing litigation.

For example, in In re Baptist Fellowship of Randolph, Inc., the Vermont Supreme Court held that a mandatory fee-for-service was not necessary to

\textsuperscript{54} 10 V.S.A. § 6001(3)(A)(i) (2022).
\textsuperscript{55} 10 V.S.A. § 6001(3)(A)(ii) (2022).
\textsuperscript{56} 10 V.S.A. § 6001(3)(A)(iii) (2022).
\textsuperscript{57} 12-4-060 VT. CODE R. § 2(C)3–5, 71 (2022). Act 250 has many statutory definitions in both the Act and NRB rules, the majority of the confusion surrounding trail regulation stems from these four areas of the NRB rules. See 10 V.S.A. § 6001–6111 (2022) (consisting of numerous statutory and regulatory definitions).
\textsuperscript{59} 12-4-060 VT. CODE R. § 2(C)(2) (2022). The criteria that cannot be significantly impacted are: (1) air and water pollution; (2) water supply; (3) impact on water supply; (4) erosion and soils ability to hold water; (5) transportation; (6) educational services; (7) municipal services; (8) aesthetics and natural scenic beauty; (9) impact of growth on the earth, soil, conservation, utility services, settlement patterns, and effects of scattered development; and lastly (10) local and regional plans. 10 V.S.A. § 6086 (2022).
\textsuperscript{60} 12-4-060 VT. CODE R. § 2(C)(2) (2022); 10 V.S.A. § 6086 (2022).
\textsuperscript{61} 12-4-060 VT. CODE R. § 2(C)(4) (2022).
satisfy the exchange for element. This understanding of commercial purpose supports a definition that encompasses a donation-based organization, but the court limited this definition in a later opinion in *In re Laberge Shooting Range*. There the court said, “[b]ecause Laberge did not charge a fee or rely on donations to provide use of the range, the environmental court properly concluded that the range did not operate for a commercial purpose and was therefore not under Act 250 Jurisdiction.” Therefore, the definition of commercial purpose only encompasses organizations that either provide a service in exchange for a fee or accept donations and—rely—on those donations for providing the service.

The next important definition for understanding Act 250 Jurisdiction is involved land, which Rule 2(C)(5) defines. The NRB rule provides a lengthy definition that consists of three situations. The first is land that is within a radius of five miles from the land used as part of the project when “there is a demonstrable likelihood that the impact on the values sought to be protected by Act 250 will be substantially affected by reason of that relationship.” Second, for municipal projects, involved land is understood to include “[t]hose portions of any tract or tracts of land to be physically altered and upon which construction of improvements will occur for state, county, or municipal purposes including land which is incidental to the use.” Further, for the incidental land “there [must be] a demonstrable likelihood that the impact on the values sought to be protected by Act 250 will be substantially affected by reason of that relationship.” The third definition for involved land is a narrow definition for stormwater offset projects. The land is limited to land owned and controlled by the applicant that is actually used for the offset project.

Notably, the NRB narrowed the area around a trail that can be controlled by Act 250 once the trail has triggered one of the jurisdictional definitions in 10 V.S.A. § 6001(3)(A). This limitation is NRB Rule 71, which was promulgated to limit the jurisdictional territory of Act 250 to a trail corridor with a width of ten feet. However, the district commissioner evaluating the trail may extend or narrow the corridor if they deem it appropriate. Additionally, any land outside the corridor that is “directly or indirectly impacted by the construction, operation or maintenance of the trail

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64. Id.
65. 12-4-060 VT. CODE R. § 2(c)(5)(a) (2022).
66. 12-4-060 VT. CODE R. § 2(c)(5)(b) (2022).
67. 12-4-060 VT. CODE R. § 2(c)(5)(b) (2022).
68. 12-4-060 VT. CODE R. § 5(c) (2022).
69. 12-4-060 VT. CODE R. § 71 (2022).
70. 12-4-060 VT. CODE R. § 71 (2022).
71. 12-4-060 VT. CODE R. § 71 (2022).
corridor” will fall within Act 250 Jurisdiction. These determinations are made after Act 250 is triggered, and their outcomes have severe impacts on private landowners and Vermont’s recreational trail network viability.

Once a project is determined to involve more than one or ten acres of land under the definition in Rule 2(C)(5), the evaluating district commissioner will review the project based on ten criteria designed to protect the purposes of Act 250. The ten criteria are: (1) air and water pollution; (2) water supply; (3) impact on water supply; (4) erosion and soils ability to hold water; (5) transportation; (6) educational services; (7) municipal services; (8) aesthetics and natural scenic beauty; (9) impact of growth on the earth, soil, conservation, utility services, settlement patterns, and effects of scattered development; and lastly (10) local and regional plans.

Even though these criteria limit the scope of review, the Vermont Supreme Court has stated that Act 250 has a broad purpose: “to protect and conserve the environment of the state.” Further, “[t]o achieve this far-reaching goal, the Environmental Board is given authority to conduct an independent review of the environmental impact of proposed projects, and in doing such, the Board is not limited to the considerations listed in Title 10.” Crucially, jurisdiction must be determined before a review is triggered; whether Vermont recreational trail networks should trigger or already trigger Act 250 Jurisdiction is the central issue facing recreational trail networks.

The central jurisdictional issue is further complicated by follow-up considerations like the addition of new trails or alteration to existing trails. The project’s completion does not end the relationship with Act 250; its jurisdiction runs with the land, and any material change to the completed project requires an amended permit. Additionally, if a change to the existing development is substantial, the project must go through a new application process and be reevaluated based on the criteria listed above.

II. WHETHER RECREATIONAL TRAILS TRIGGER ACT 250

At the outset, it is important to note that both the working group established by the legislature to review Act 250’s jurisdiction over recreational trails and a large number of the stakeholders (trail networks) agree that some level of state oversight is necessary for trail networks of a
certain size. However, whether Act 250 is the appropriate mechanism for that oversight is highly debatable. There is no doubt that in some situations, a trail network will trigger Act 250. This Note will now examine three possible situations that trigger Act 250 Jurisdiction: one-acre projects; ten-acre projects; and qualification of the trail for a state, county, or municipal purpose. The analysis of these three jurisdictional scenarios will illustrate that both the complexity of the process and the criteria used to evaluate trail networks are ill-suited for recreation trail management and should remain in place to control modern sprawl and large developments as initially designed. This Note will explore the entirety of the process by examining the relevant differences between a one-acre and ten-acre jurisdiction. Finally, this Note will examine what advantages trails offer as a public purpose.

A. One-Acre Jurisdiction

As noted in Part II, a project involving more than one acre in a town that has not adopted zoning or subdivision bylaws triggers Act 250. Vermont is nearly split in half with the numbers of towns, cities, or gores that have or have not adopted some form of zoning ordinances. One hundred thirty of Vermont’s 262 towns qualify as one-acre jurisdictions. The first determination made in a one-acre town is the purpose of the project. Is it personal, commercial, or state-oriented? As the Supreme Court of Vermont noted, the “primary indication of the intent of Act 250’s drafters is that they explicitly chose to include language limiting Act 250 Jurisdiction to control modern sprawl and large developments as initially designed.”

Not all the cases cited in this section are from one-acre jurisdictions. However, the legal analysis is the same once jurisdiction is triggered. Furthermore, the takeaway of these examples is that Act 250 is being applied to and not standards of review associated with the appeals.

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79. Id.
81. Gillies, supra note 46, at 283 (quoting Southview Associates Ltd. v. Bongartz, 980 F.2d 84, 87–88 (2nd Cir. 1992)) (saying Act 250 is an “effort to create a process that would subject subdivisions and other large developments in Vermont to administrative review so as to ensure economic growth without environmental catastrophe.”).
82. Id.
83. Not all the cases cited in this section are from one-acre jurisdictions. However, the legal analysis is the same once jurisdiction is triggered. Furthermore, the takeaway of these examples is that Act 250 is being applied to and not standards of review associated with the appeals.
84. Mark Bushnell, A Use for Vermont’s Leftover Bits and Pieces, VTDIGGER (Mar. 26, 2017), https://vtdigger.org/2017/03/26/then-again-a-use-for-vermonts-leftover-bits-and-pieces/. Gores are relatively small land areas that were not allocated to towns when Vermont was initially surveyed in 1787. At one-point, Vermont had sixty gores in various locations around the state; today, only three remain. For more on gores visit ld.
86. Id.
to only those improvements operated for a commercial purpose.”

Therefore, when a trail network is operated and made available in exchange for donations (not even required purchases), and the trail network relies on those donations to expand and maintain the trails, Act 250 Jurisdiction is triggered.

The next step is to determine whether there is enough “actual land disturbance” to meet the one-acre requirement. This is where the ambiguity starts, and it does not end for the remainder of the process. As previously noted, involved land is:

[t]he entire tract or tracts of land, within a radius of five miles, upon which the construction of improvements for commercial or industrial purposes will occur, and any other tract, within a radius of five miles, to be used as part of the project or where there is a relationship to the tract or tracts upon which the construction of improvements will occur such that there is a demonstrable likelihood that the impact on the values sought to be protected by Act 250 will be substantially affected by reason of that relationship.

Determining what constitutes the disturbed land should be rather simple to calculate. However, based on the statutory definition provided, the calculation ends up being quite convoluted due to the disturbed land’s subjective nature.

The evaluation is not limited to the actual construction areas; instead, it includes areas that may be used on a semi-regular basis to support and maintain the trail system. For example, when an old log lands in areas in which vehicles may park to access the trail network. The evaluation includes areas where tents are erected to host different events. The evaluation will also include other areas that the district commissioner determines are involved in the construction, improvement, or maintenance of the trails, including seemingly attenuated areas that illustrate a relationship

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89. See id. at 454; In re Baptist Fellowship of Randolph, Inc., 144 Vt. 636, 639, 481 A.2d 1274, 1276 (1984) (ruling that when a nonprofit receives and relies on donations it is operating for a commercial purpose).
93. See 12-4-060 VT. CODE R. § 2(c)(5)(a) (2022); Conservation Collaboratives LLC., JO #7-286 (May 3, 2019) (showing how areas that are incidental to the main development are used to calculate the project’s acreage).
94. Id.
95. Id.
to the trail network and substantially affect the values protected by Act 250.\footnote{12-4-060 VT. CODE R. § 2(e)(5)(a) (2022).} Thus, if a district commissioner believes a trail network should pass through the Act 250 process, they have considerable latitude to make determinations that trigger jurisdiction.

The ambiguous nature of one-acre town jurisdiction is further complicated if it is in a town that has elected to keep Act 250 standards under 24 V.S.A. Chapter 59 even after adopting its own zoning and subdivision bylaws. Notably, the section defining this jurisdiction refers to construction or improvements on land involving more than one acre “owned or controlled by a person.”\footnote{10 V.S.A. § 6001(3)(A)(iii) (2022) (emphasis added).} The lexical ambiguity regarding who controls the involved land and whether landowner agreements are sufficient to demonstrate control of the property raises many unanswered questions for Vermont’s recreational trail networks.

The Supreme Court of Vermont has not spoken directly on the issue of control in a trail context. However, in a declaratory ruling regarding \textit{In re Trono Construction}, the Court “considered commonsense criteria such as common ownership or management, common funding, shared facilities and continuity in time of development” to help determine whether there was common ownership or control.\footnote{In re Declaratory Ruling # 149 Trono Constr. Co., 146 Vt. 591, 592, 508 A.2d 695, 696 (1986).} The \textit{In re Trono Construction} ruling likely constitutes jurisdiction for all trails in a network so long as they are developed through a common trail organization. The control determination raises many questions for these different lot owners and how Act 250 affects their property. This includes questions about the extent of the jurisdiction, and what an owner can do to take their property out of Act 250 once the jurisdiction over the trail corridor has been triggered.\footnote{Luckily, Governor Phil Scott issued Executive Order 04-20 that limits Act 250 Jurisdiction to the trail corridor determined by the District Commissioner, but this is a temporary gesture and does not provide the necessary overall clarity for landowners wishing to allow the public to benefit from utilizing trails on private land. \textit{Promoting and Providing Regulatory Certainty for Recreational Trails}, OFF. GOVERNOR PHIL SCOTT (Oct. 5, 2020), https://governor.vermont.gov/sites/scott/files/documents/EO%2004-20%20Promoting%20and%20Providing%20Regulatory%20Certainty%20for%20Recreational%20Trails_1.pdf.}

Once the commissioner establishes jurisdiction over a recreational trail network, they evaluate the network based on the criteria laid out in 10 V.S.A. § 6086 to determine whether the project will receive a permit.\footnote{10 V.S.A. § 6086(a)(1) (2022).} The first criterion is that the project must “not result in undue air and water pollution.”\footnote{See 10 V.S.A. § 6086 (2022) (listing criteria for evaluation).} The commissioner should evaluate headwaters, waste disposal, water conservation, floodways, streams, shorelines, and wetlands in making
this determination. Admittedly, some of these sub-criteria should be considerations for any conscientious trail builder, such as the effect on streams and wetlands. Trail builders should always get the appropriate wetland permit if operating in a qualifying area for something other than an allowed use. However, waste disposal and water conservation are likely not necessary considerations for even the most considerate trail builder. The remote nature of these trails means they do not have waste disposal receptacles throughout the trail network, and there is likely no system that will directly draw on the municipalities water resources.

In a traditional commercial context, a criterion-one analysis bears little similarity to an appropriate trail evaluation. In In re North East Materials Grp., LLS/Rock of Ages Corporation Act 250 Permit, the Supreme Court of Vermont evaluated the North East Materials Group’s air quality measuring method’s sufficiency. The takeaway of this analysis is less about the legal standard that was applied to evaluate the air quality measuring method’s sufficiency and more about the situation it was applied to. In In re North East Materials Grp., LLS/Rock of Ages Corporation Act 250 Permit the Supreme Court of Vermont reviewed lower court findings regarding a challenge to a quarrying operation’s Act 250 permit. The quarrying operation consists of “approximately 930 acres in Barre and 230 acres in Williamstown.” The activities on those 1,160 acres consists of crushing, drilling, blasting, removing, and transporting rock to crushing equipment. This is where the appropriate Act 250 review takes place—not on the recreational trail corridors in Vermont that are a maximum of 10 feet wide.

The second criterion is water supply. The statutory language asks whether the project has “sufficient water available for the reasonably foreseeable needs of the subdivision or development.” This criterion is not designed for trail evaluation and is only applicable to trailside development, but that is where the relationship ends.

The case, In re Hinesburg Hannaford Act 250 Permit, provides an example of where a proper criterion-two analysis is applied. Although

105. Id. at ¶ 1.
106. Id.
107. Id.
110. 10 V.S.A. § 6086 (2022).
Hannaford sought approval under Act 250 for all criteria except criterion two, the situation demonstrates where criterion two is applicable. The store did not seek approval under criterion two because the town of Hinesburg was updating its municipal water supply system, and the current system was incapable of supplying the necessary water for the Hannaford project. A recreational trail network will not be a draw on a municipal water supply. This criterion is applicable for stores and lodging built to support crowds using a recreational trail network, but it is ambiguous and impracticable for the trail network itself.

The third criterion is relatively simple; it mandates that the project “[w]ill not cause an unreasonable burden on an existing water supply if one is to be utilized.” This criterion can largely be ignored for trail jurisdiction purposes, as the trail project itself will not be a drain on the existing water supply.

In the case In re Pike Industries, Inc. and Inez Lemieux, the NRB reviewed an application for a quarrying operation in Williamstown, Vermont. The criterion-three analysis involved sampling metamorphic rock and evaluating the quarry’s risk of creating a depression that would pull groundwater from all directions, thereby reducing water levels in the aquifer. Responding to these concerns, Pike Industries agreed to periodic monitoring of the neighboring wells to evaluate their impact on the aquifer. This project illustrates where a criterion-three analysis is paramount to ensuring basic amenities for properties surrounding a commercial project. However, a recreational trail network does not require this type of analysis; trail building is surface-level excavation incapable of creating depressions that affect neighboring water supplies at a level warranting Act 250 review.

The fourth criterion mandates that the project “[w]ill not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result.” This condition is relevant to trail building. Trails must be built in a structurally sound manner to ensure erosion control and consistent safety for the public benefiting from the trail’s availability. This criterion is in line with preexisting sustainable trail building techniques that have been commonplace in the industry for more than ten years.

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112. Id.
113. Id.
116. Id. at 10.
117. Id. at 14.
118. 10 V.S.A. § 6086(a)(4) (2022).
Admittedly, soil erosion is a concern for conscientious trail builders, but Act 250 level review is still unwarranted. In the commercial context, criterion four is satisfied by obtaining one of three permits: (1) a Construction General Permit; (2) an Operational Storm Water Discharge Permit; or (3) a Multisector General Permit. Obtaining one of these permits entitles the applicant to a presumption of compliance with criterion four. A Construction General Permit is for the construction phase only. The permit is then cancelled and does not deal with the maintenance of the project. The Operational Storm Water Discharge Permit’s is limited in application to impervious surfaces (e.g., a parking lot). If a recreational trail network has parking lots that trigger the jurisdictional requirements when evaluated in the aggregate, then a criterion-four analysis would be appropriate. Otherwise, it is improbable that the trails themselves would be considered impervious, and therefore, they are outside of criterion-four review. The final permit, a Multisector General Permit, deals with post-construction project operations. This permit aims at preventing industrial waste from entering waterways; however, it is not concerned with erosion. Because erosion is a main concern of conscientious trail builders, it is clear this permit is ill-suited for trail building purposes.

The fifth criterion requires that the project “[w]ill not cause unreasonable congestion or unsafe conditions with respect to the use of highways, waterways, railways, airports and airways.” Transportation to and from trail networks may become overly congested in limited situations. In 2019, East Burke, Vermont, hosted 4,000 attendees for the New England Mountain Bike Association (NEMBA) festival. The number of individuals at this festival exceeded the town’s infrastructure, which prompted the organizers to “apologize for unmanaged growth and size.” NEMBA fest was canceled in East Burke for the 2020 season partially due to concerns surrounding events like this and their impact on the local population. Responses like the cancellation underscore the need to evaluate these concerns at a local level but do not necessarily highlight a need for state-level review.

121. Id.
122. Id.
123. Id.
124. Id.
125. Id.
126. Id.
127. Id.
130. Id.
131. Id.
An example of warranted state-level review is *In re Agency of Transportation.*\(^{132}\) The Agency of Transportation appealed an Environmental Board decision requiring a more extensive cattle underpass in a highway improvement project.\(^{133}\) The Board determined that without the larger cattle underpass, the project failed criterion five of its Act 250 permit.\(^{134}\) The Supreme Court of Vermont upheld the Board’s determination.\(^{135}\) However, the important takeaway is the nature of the project. The Act 250 permit review evaluated the safety of roadway conditions based on cattle crossings. Although bikers and hikers may cross state highways in the same manner as cattle, the trail project is not where a criterion-five review should take place. Instead, if there is a need for an underpass, the trail organization should have to pay for the update in the same manner as a farmer would for his cattle.\(^{136}\) Just as the farmer should not be subject to Act 250 review for having cattle in their field, the trail organization should not undergo Act 250 review for having runners and riders on the trails.

The sixth criterion requires that the project “[w]ill not cause an unreasonable burden on the ability of the municipality to provide educational services.”\(^ {137}\) Trail networks do not negatively impact educational services. There may even be evidence to the contrary. In 2019, an engineering company named Precision Composites based out of Lyndonville, Vermont, was filling positions by leaning on the outdoor recreation incentives provided through Kingdom Trails.\(^ {138}\) This model could presumably be used to attract teachers in addition to engineers, and the additional $16 million coming into the local economy through trail visitors certainly increases the funding available for local education.\(^ {139}\)

In the case *In re Wal-Mart Stores, Inc.*, the Supreme Court of Vermont upheld an Environmental Board finding that Wal-Mart failed criterion six in their Act 250 application.\(^ {140}\) The case is a good illustration of multiple criteria, but the criterion six issue arose because the Wal-Mart application illustrated an increased burden on the local educational system by estimating the project would add six children to the local school system.\(^ {141}\) Even though

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133. *Id.* at 203.
134. *Id.* at 207.
135. *Id.*
136. See *id.* (saying when a larger than standard underpass is required the farmer must pay one fourth of the difference in cost).
137. 10 V.S.A. § 6086(a)(6) (2022).
141. *Id.*
Wal-Mart did not “bear the burden of proof,” once it made a showing of any increased educational burden, the board is allowed to require a showing of why that increase is not undue.142 This criterion may be applicable for a small number of the state’s larger networks in the recreational trail context. However, the increased revenue to the town should offset any increase in educational burden, and if required, the networks should have little trouble making this showing.143

Criterion seven mandates that the project “[w]ill not place an unreasonable burden on the ability of local governments to provide municipal or governmental services.”144 Trails may provide some burden on local services, as seen with the NEMBA fest, but they also offer economic stimulation that enables municipalities to update and maintain their services. The Vermont Trails & Greenways Council145 reported that four trail networks in Vermont bring $30.8 million to the state annually.146 Even if a trail network is burdening a local municipality (an unlikely event for most trail networks), it can provide the solution by offering funds to the local municipal services to expand as necessary.

The inquiry under criterion seven focuses on the reasonableness of the burdens imposed on the local government.147 This often requires a secondary growth study to illustrate the reasonableness of the burdens imposed in a commercial context.148 Again, In re Wal-Mart Stores, Inc., provides a good example of this criterion. In that case, the Environmental Board required similar showings of reasonableness under criteria six and seven aimed at determining whether the Wal-Mart would cause an undue burden on the town’s financial capacity.149 Recreational trail networks should have little trouble satisfying the required showings for two reasons. First, they are an asset to the community, as illustrated in the criterion six analysis. Second, it is important to look at the differences between the applicants. Wal-Mart is a national corporation capable of making large scale changes to the community landscape. Recreational trail networks are local organizations run by people in the community and are inherently concerned with preserving the values

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142. Id.
143. See infra, Part V (illustrating the financial benefits of a recreational trail network).
144. 10 V.S.A. § 6086(a)(7) (2022).
145. What to Know about VTGC, VT. TRAILS & GREENWAY COUNCIL, https://vermontgc.org/about (last visited May 2, 2022). “The Vermont Trails and Greenways Council (VTGC) is an independent advisory board that works with the Vermont Agency of Forests, Parks and Recreation (FPR) to support Vermont trails and recreation.” Id.
148. Id.
149. Id.
that have made the trail network possible. Therefore, it is apparent that a criterion-seven review is far more appropriate in situations like *In re Wal-Mart Stores, Inc.* compared to a local recreational trail network aimed at increasing access to Vermont’s beautiful wilderness.

Criterion eight focuses on the project’s impact on the area’s scenic and natural beauty and protecting “the irreplaceable natural area.” This criterion is possibly the most important Act 250 criteria, and it provides methods for challenging a development when it threatens endangered species and wildlife habitat. It mandates a balancing test for the project’s economic and recreational benefit compared to the losses it may impose. It requires all feasible means of limiting destruction of a habitat to be implemented. Finally, organizers must consider whether there are acceptable alternatives within the control of the applicant. Vermont’s scenic beauty is mostly undisturbed by trail networks, and the networks provide a vehicle for people to experience Vermont’s natural beauty. To be clear, this is not to suggest there is no impact of trails on Vermont’s environment. Still, there needs to be a more specific way to evaluate the impact and not subject the trails to the same balancing considerations as a twenty-unit housing development.

The case *In re Quechee Lakes Corp.* illustrates a relevant criterion-eight application. The Quechee Lakes Corporation appealed a finding by the Environmental Board regarding criterion eight. The Environmental Board rejected the assertions of a Quechee Lakes Corporation’s expert who testified that the condominium development would have little impact on the landscape’s natural aesthetics. The Supreme Court of Vermont held that the Board was the proper authority to determine the expert’s veracity because it is the trier of fact. However, the more important takeaway is that criterion eight applied to a “twenty-eight-unit condominium project on a high ridge overlooking the Quechee valley.” This type of project is unequivocally appropriate for applying Act 250 criterion-eight review and is in stark contrast to the prototypical low impact recreational trail network meandering through the Vermont woods.

Criterion nine is vast; it includes twelve sub-criteria and another twelve sub-sub criteria. The criterion intends to require developments to be in

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150. 10 V.S.A. § 6086(a)(8) (2022).
151. 10 V.S.A. § 6086(a)(8) (2022).
152. 10 V.S.A. § 6086(a)(8) (2022).
155. See *In re Quechee Lakes Corp.*, 154 Vt. 543 (1990) (analyzing the criterion-eight application).
156. *Id.* at 554.
157. *Id.* at 555.
158. *Id*.
159. *Id.* at 543.
“conformance with a duly adopted capability and development plan, and land use plan when adopted.”\textsuperscript{161} This is an important consideration for Vermont’s trail networks. However, as discussed below in the alternative regulatory model and policy sections,\textsuperscript{162} there are more effective ways of achieving this criterion without subjecting trail networks to the extensive and ambiguous Act 250 analysis.

Criterion nine and its vast sub-criteria were appropriately applied in \textit{In re Wal-Mart Stores, Inc.}\textsuperscript{163} There, the Supreme Court of Vermont reviewed the Environmental Board’s decision to deny an Act 250 permit to Wal-Mart based on a failure to comply with criterion 9(A).\textsuperscript{164} Criterion 9(A) requires the Board to review a town or region’s ability to accommodate growth.\textsuperscript{165} In \textit{In re Wal-Mart Stores, Inc.}, the Board determined that the competitive market in the town was unable to sustain the Wal-Mart development, and the market’s ability to accommodate growth is central to the meaning of criterion 9(A).\textsuperscript{166} The Court upheld that determination, securing “financial capacity” as a factor under criterion 9(A).\textsuperscript{167} This holding is important because it illustrates the importance of criterion nine for safeguarding a community’s holistic wellbeing. Importantly, a recreational trail network is an addition to the holistic wellbeing as opposed to a detriment to the area’s financial and aesthetic prosperity.\textsuperscript{168}

The tenth and final criterion requires compliance with local and regional plans.\textsuperscript{169} This is something that trail networks should be required to consider, and local municipalities should be empowered to review and regulate. However, it is not something that needs to be evaluated by already-busy state agencies that are charged with reviewing and managing large scale developments.

In the commercial context, \textit{In re Times & Seasons, LLC.} provides a case study for an appropriate denial of an Act 250 permit due to failure to satisfy criterion ten.\textsuperscript{170} Times & Seasons wished to build a 4,800 square foot gift shop and deli in South Royalton, Vermont.\textsuperscript{171} However, the company failed to show that its project “would not be feasible if located as directed by the

\begin{footnotes}
\footnotetext[161]{10 V.S.A. § 6086(a)(9) (2022).}
\footnotetext[162]{See infra, Part IV.}
\footnotetext[163]{In re Wal-Mart Stores, Inc., 167 Vt. 75, 78–79, 702 A.2d 397, 405 (1997).}
\footnotetext[164]{Id. at 81.}
\footnotetext[166]{\textit{In re Wal-Mart Stores, Inc.}, 167 Vt. at 78–79.}
\footnotetext[167]{Id. at 81.}
\footnotetext[168]{See infra, Part V (showing the financial boost a recreational trail network brings to a community).}
\footnotetext[169]{10 V.S.A. § 6086(a)(10) (2022).}
\footnotetext[170]{See generally \textit{In re Times & Seasons, 2008 VT 7, 183 Vt. 336, 950 A.2d 1189}.}
\footnotetext[171]{Id. at ¶ 1–2.}
\end{footnotes}
town plan.” Absent showing financial infeasibility, the current site did not fall within the town plan, and therefore, it failed to satisfy criterion ten.\textsuperscript{172} This enforcement illustrates an appropriate application of Act 250 to limit modern sprawl and maintain Vermont’s natural beauty. However, recreational trail networks seek to increase access to that natural beauty, not place 4,800 square-foot gift shops in Vermont’s rural areas.

The foregoing criteria are designed for “reviewing and managing the environmental, social and fiscal consequences of major subdivisions and developments in Vermont.”\textsuperscript{173} The Act has been successful in combating speculative development and modern sprawl while maintaining traditional settlement patterns based around village centers.\textsuperscript{174} Combating urban sprawl and maintaining Vermont’s scenic beauty is essential for the preservation of Vermont’s culture and values. However, there is no need for this protection to extend to a recreation industry that already relies on the values being protected by Act 250. A regulatory framework is warranted, but that framework must balance the policy concerns associated with growing Vermont’s outdoor industry and the protection of the state’s forest block and wild areas. A regulatory framework with industry-specific goals would eliminate much of the ambiguity explained in the criteria above.\textsuperscript{175} Unfortunately, under the current framework, ten-acre towns fair similarly to the one-acre towns, and the ambiguity in the evaluation criteria persists.

### B. Ten-Acre Jurisdiction

Ten- and one-acre jurisdictions are similar in multiple ways. First, the definition of \textit{construction of improvements} is the same.\textsuperscript{176} Second, the definition of \textit{commercial purpose} remains the same.\textsuperscript{177} Third, the determination of \textit{involved land} remains the same, but the triggering acreage increases to ten acres.\textsuperscript{178} Fourth, they are both equally challenging to navigate regarding jurisdictional determinations.\textsuperscript{179} Finally, the same criteria apply after jurisdiction is triggered.\textsuperscript{180}

\begin{thebibliography}{99}
\bibitem{172} Id.
\bibitem{175} Supra Part III(A) (author’s discussion of how Act 250 factors are ambiguous).
\bibitem{176} 12-4-060 VT. CODE R. § 2(c)(3) (2022).
\bibitem{177} 12-4-060 VT. CODE R. § 2(c)(4) (2022).
\bibitem{178} 12-4-060 VT. CODE R. § 2(c)(5)(a)–(c) (2022).
\bibitem{179} See In re Agency Admin., 141 Vt. 68, 81, 444 A.2d 1349, 1355 (1982) (saying Act 250 is a complicated matter).
\bibitem{180} 10 V.S.A. § 6086 (2022).
\end{thebibliography}
Once a trail network is determined to have a commercial purpose, a commissioner makes an acreage determination to determine jurisdiction.\textsuperscript{181} This determination may be even more ambiguous at the ten-acre level than the one-acre level. With the higher number of trails usually involved in a ten-acre determination, a larger area is more likely to be classified as “impacting the values sought to be protected by Act 250.”\textsuperscript{182} These areas can include the acreage between the trails if the network impacts wildlife movement, the parking lots used for the trail network (even if they are preexisting for other purposes), and even open fields where a tent is placed on a predictable schedule to run events.\textsuperscript{183}

The ambiguity used to determine the acreage involved in the project is an immediate indicator of Act 250’s inability to constructively regulate recreational trails. The ambiguity means that districts will have varying determinations regarding what qualifies a trail for Act 250 review. These district determinations will force some trail systems to appeal decisions from the district level. In contrast, others will avoid the process entirely. The uneven application of the Act 250 system results in extreme legal and regulatory impositions on limited trail networks because it is based solely on local officials’ ambiguous determinations. There needs to be an alternative model that creates a best practices regulatory framework that balances industry considerations with the important values Act 250 seeks to protect. This suggested model will be discussed below.

\textbf{C. Qualifying for a State or Municipal Purpose}

Before evaluating that alternative model, there is a current classification limiting the acreage determination to land that has been disturbed.\textsuperscript{184} The Vermont Trail System (VTS) is a classification that trail networks can apply to become a part of under 10 V.S.A. Ch. 20.\textsuperscript{185} Governor Phil Scott issued Executive Order No. 04-20, requiring the chair of the NRB to clarify that “a VTS trail project will require ten acres or more of actual land disturbance to trigger Act 250 Jurisdiction, regardless the size of the parcel(s) the trail may cross.”\textsuperscript{186} The disturbance of ten-acres established through Executive Order 04-20 means that trail networks that are part of the VTS can build roughly

\begin{itemize}
\item \textsuperscript{181} GILLIES, supra note 46, at 283.
\item \textsuperscript{182} 12-4-060 VT. CODE R. § 2(C)(2) (2022).
\item \textsuperscript{183} Conservation Collaboratives LLC., supra note 19.
\item \textsuperscript{184} 12-4-060 VT. CODE R. § 71 (2022); Promoting and Providing Regulatory Certainty for Recreational Trails, supra note 99.
\item \textsuperscript{186} Promoting and Providing Regulatory Certainty for Recreational Trails, supra note 99.
\end{itemize}
twenty miles of hand-built trails and ten miles of machine-built trails.\textsuperscript{187} The Executive Order also requires recommendations from the Commissioner of Vermont Forests, Parks, and Recreation (FPR) for future improvements to recreational trail oversight by March 1, 2021.\textsuperscript{188} Executive Order 04-20 is an excellent step in the right direction that hopefully pulls recreational trails out of Act 250 review. Additionally, the Executive Order calls for best-management-practices based on regulatory recommendations from the Commissioner of the FPR.\textsuperscript{189} This regulatory framework largely already exists and will be examined below.\textsuperscript{190}

\textit{D. The Takeaways}

Once a recreational trail network plans to expand past the one-acre or ten-acre jurisdictional thresholds, then Act 250 is the only current state level review. However, just because Act 250 is an available regulatory model does not mean it should be applied. The ambiguity involved in the Act 250 process renders the Act inefficient for regulating recreational trails and relies too heavily on subjective district level determinations. Trail development is unlike housing and commercial development and should not be subject to the same system of review. Act 250 plays a vital role in maintaining Vermont’s beauty and natural landscape, and Vermont should establish an alternative regulatory model to carry these goals forward in Vermont’s recreational trail networks. In the words of the Act 47 Commission (established to examine Act 250 issues),\textsuperscript{191} “\textit{t}he purpose of \textit{t}he Act 250 jurisdictional threshold is to focus Act 250 review on projects that have the greatest potential for significant impact due to their size or scope, or where the forms of adequate regulatory review do not exist.” \textsuperscript{192} The Supreme Court of Vermont recognized limitations on Act 250’s purpose saying:

\begin{quote}

[A]lthough the purposes of Act 250 are broad, the Legislature . . . did not purport to reach all land use changes within the state, nor to impose the substantial administrative and financial burdens of the Act, or interfere with local control of land use decisions, except
\end{quote}

\textsuperscript{188} \textit{Promoting and Providing Regulatory Certainty for Recreational Trails}, supra note 99.
\textsuperscript{189} Id.
\textsuperscript{190} See infra, Part III.
\textsuperscript{192} \textit{Act 250 and Trails Questions for Comments}, DEPT FORESTS, PARKS & RECREATION, https://fpr.vermont.gov/sites/fpr/files/About_the_Department/Commissioner/Library/VMBA.pdf (last visited May 2, 2022).
where values of state concern are implicated through large scale changes in land utilization.\textsuperscript{193}

Recreational trail networks do not fit within this purpose of Act 250. In Southview Associates Ltd., the Supreme Court of Vermont recognized that “the Legislature intended Act 250 to protect Vermont’s environmental resources with an eye towards maintaining . . . existing recreational uses of the land—such as hunting, for example—and preserving lands, when possible, that have special values to the public.”\textsuperscript{194} Bike riding and hiking are much closer to hunting than building a superstore in what used to be a farmer’s pasture. Recreational trails have special value to the public and are what Act 250 intends to protect, not regulate. Act 250’s unsuitability for trail regulation is why Vermont needs to implement an alternative regulatory model to remove any question about the relationship between Act 250 and recreational trails.

III. ALTERNATIVE REGULATORY MODEL: AMENDING ACT 250 TO EXEMPT TRAIL NETWORKS THAT ARE MEMBERS OF THE VERMONT TRAIL SYSTEM.

On October 5, 2020, Governor Phil Scott issued Executive Order 04-20 calling on the Commissioner of Forests, Parks and Recreation (FPR) to report back and make recommendations for a “best-management-practices driven program” for recreational trail management.\textsuperscript{195} The Governor called on the Commissioner of the FPR to recommend a regulatory framework that largely already exists.

The Vermont Trail System (VTS) recognizes “the important role that trails play in Vermont.”\textsuperscript{196} Currently, the Agency of Natural Resources (ANR) and FPR recognize the VTS.\textsuperscript{197} The VTS is declared a public purpose, which means the ANR may spend public funds in support of the VTS.\textsuperscript{198} The VTS statute offers a regulatory avenue for recreational trails in Vermont that does not involve Act 250 review. The VTS statute says the ANR may:\textsuperscript{199}

\textsuperscript{194} Southview Associates Ltd. v. Bongartz, 980 F.2d 84, 89 (2nd Cir. 1992).
\textsuperscript{195} Promoting and Providing Regulatory Certainty for Recreational Trails, supra note 99.
\textsuperscript{197} Id.
\textsuperscript{198} 10 V.S.A § 441(c) (2022).
\textsuperscript{199} 10 V.S.A § 444 (2022) (emphasis added).
(1) acquire land by permission to develop and maintain the VTS; 200
(2) purchase land in fee simple absolute or any lesser property interest to develop and maintain the VTS; 201
(3) assign the responsibility for any trail to a nonprofit agency so long as they manage it for the public purpose defined in the statute; 202
(4) coordinate governmental entities that wish to help develop the VTS; 203
(5) distribute maps and information that help develop and maintain the VTS; 204
(6) “[d]evelop and oversee the implementation of the Vermont trails plan . . . which] may include guidance on expenditure of funds, standards, provision for uniform signing, user and landowner education programs[,]” 205 and
(7) provide for public involvement with the VTS. 206

Section 444 in title ten of the Vermont statutes provides the necessary enabling legislation for the Vermont ANR to regulate the members of the VTS without the heavy-handed presence of Act 250. Subsection 6 of § 444 allows the ANR to develop a “Vermont trails plan . . . which] may include . . . standards.” 207 The Agency may make applications and membership in the VTS dependent on adhering to the standards promulgated by the ANR. Existing VTS networks and the ANR can develop the standards together, so they represent a sustainable long-term plan which evaluates the VTS’s impact on the climate, environment, wildlife, and forest blocks. The benefit of this review over the Act 250 model is that it allows for the enforcement of the standards without a subjective, lengthy, and expensive permitting process.

However, establishing this model alone will not cure the Act 250 issue. One of the two following alternative actions needs to happen to solidify this new regulatory model. First, the legislature could amend Act 250 to exempt recreational trail networks that are members of the VTS. Alternatively, the Natural Resources Board (NRB) could amend rule 71 of its Act 250 rules to

201. 10 V.S.A § 444(2) (2022).
202. 10 V.S.A § 444(3) (2022). The statutory purpose is “to provide access to the use and enjoyment of the outdoor areas of Vermont, to conserve and use the natural resources of this state for healthful and recreational purposes, and to provide transportation from one place to another, it is declared to be the public policy of this State to provide the means for maintaining and improving a network of trails to be known as the ‘Vermont trails system.’” 10 V.S.A § 441(a) (2022).
203. 10 V.S.A § 444(4) (2022).
204. 10 V.S.A § 444(5) (2022).
205. 10 V.S.A § 444(6) (2022).
207. 10 V.S.A § 444(6) (2022).
clarify the Act does not apply to members of the VTS. The second option involving the NRB updating rule 71 is the more efficient form of regulatory overhaul, but it may violate chapter 2 § 5 of the Vermont Constitution. Based on the possible constitutional violation, the most secure reform option is to impress upon the legislature the need to amend Act 250 to exclude members of the VTS from its definition of development in § 60013(A) of Act 250. Although amending Act 250 has been no easy task, there are extensive economic policy considerations supporting the exemptions of VTS members from Act 250 review.

IV. POLICY BEHIND THE REGULATORY REFORM

In Executive Order 04-20, Governor Phil Scott stated the recreation economy in Vermont accounts for “34,000 direct jobs and $2.5 billion in consumer spending.” Additionally, the Vermont Trails & Greenways Council (an advisory council for the FPR on the VTS) released a recent report that four major trail networks alone account for $30.8 million per year in economic activity. Of that $30.8 million, $15 million is “considered net new to the state” of Vermont. These figures are consequential for a state that is known for its aging population and diminishing taxable workforce. Census Bureau data shows that as of 2018, 18% of Vermont’s population was over the age of 65. Additionally, over a ten-year period the population of Vermont only grew 0.8% while the number of people over the age of 65 increased by 57%. And even more concerning is the decline in individuals aged 34–44 by 23%. What does this all mean for the future of Vermont’s taxable income and fiscal health? It means there is an aging population with less taxable income and a lack of young workforce participants to fill the gap. Even though there is a perception that Vermont is a good place to

208. 12-4-060 VT. CODE R. § 2(C)3–5, 71 (2022) (clarifying Act 250’s jurisdiction over trails).
209. VT. CONST. Chapter 2 § 5 (“The Legislative, Executive, and Judiciary departments, shall be separate and distinct, so that neither exercise the powers properly belonging to the others.”).
213. Economic and Fiscal Impact Analysis of the Vermont Trails and Greenway Council Member Organization, supra note 146.
214. Id. (emphasis added).
216. Id.
217. Id.
218. Id.
219. Id.
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retire, recent migration patterns suggest that “[s]ince 2010, there has been a modest outward migration [of higher reporting income individuals].”

This data supports Vermont’s outdoor industry expansion because Vermont’s economy needs alternative forms of tax revenue. The evidence shows that only four recreational trail networks bring in $15 million in new sales and $2 million in new tax revenue for the state. These numbers outline the benefits . . . [that] these trails allow . . . organizations as well as the state and legislature to rightfully prioritize recreation in Vermont as a major source of tourism income and local spending. Danny Hale, the Executive Director of the Vermont ATV Sportsman’s Association, Inc. and Chairman of the Trails & Greenways Council added, “[i]t’s high time that we all recognize this opportunity.” It is also high time that Vermont creates an alternative regulatory framework for recreational trails that does not involve Act 250 review to capitalize on the public good these trails offer.

CONCLUSION

Act 250 is not an effective system for recreational trail oversight. There are too many jurisdictional ambiguities regarding the acreage required to trigger Act 250, and the criteria in § 6086 are not adequately related to the trail building practices. Alternatively, the legislature should consider the proposed regulatory scheme in Part III to establish the necessary best practices regulatory model that will expand a much-needed sector of Vermont’s economy while maintaining the principles sought in Act 250 review.

221. Taxes: 5 Risks to Vermont’s Tax Base, supra note 215 (explaining that this group accounts for 46% of filers in the state of Vermont).
223. Id.
224. Id.