INFLUENCES ON AND TRENDS IN STATE ENVIRONMENTAL AGENCY SPENDING: 2000-2014

by

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ABSTRACT OF THE DISSERTATION

Influences on and Trends in State Environmental

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This analysis explores how state environmental agency expenditures have changed between 2000 and 2014 and if there is a pattern or set of factors that are associated with or may be influencing these changes. Findings are supplemented by interviews with selected state environmental agency representatives. After an initial bivariate correlation, seven independent variable data sets were selected for more in depth analysis on their potential influence on environmental agency funding levels: population, per capita income, total state expenditures, gross state product, educational attainment, number of environmental agency (full-time equivalent or FTE) employees, and government ideology. State environmental agency expenditures between 2009 and 2014, adjusted to 2014 dollars, were chosen as the dependent variable for regression analysis.

On a national level, the independent variable data sets most commonly correlated with state environmental expenditures are gross state product, government ideology, per capita environmental agency FTEs, and educational attainment. Possible explanations for these associations are provided. Correlations among these independent variables and individual state environmental spending levels also are described.

Supplementing the statistical analysis, a representative from each state environmental agency was asked to describe the factors that they perceive exert a direct, real-time influence on budgets and staffing levels. Nine state agencies agreed to participate in the survey. Respondents confirm that program responsibilities related to climate change, expanded development of natural resources, or federal mandates have increased substantially. Agency budgets and staffing levels continue to decline and a common sentiment is that state environmental agencies are victims of their own success with funding level increases occurring only as a result of a local environmental need or catastrophe. In addition, even though local environmental quality has improved significantly, most of those interviewed cite a lack of trust as to environmental agency motives by their constituents.

The relationships defined by these correlations are not purely technical or administrative, rather they may echo state constituencies political or social priorities. A deeper understanding of the forces influencing state environmental spending would provide policy makers with an increased insight into the values of their electorates.

Preface

The quality of the air we breathe, the taste of the water we drink, and how the land is used are not abstract, public policy matters. They are real, immediate, quality of life concerns that, like elections, have consequences. And nowhere is this relationship more dramatically illustrated than when environmental agency funding decisions are made.

Our elected officials seek to balance an endless list of competing constituent demands with limited resources. Since the 2008 economic crisis, many environmental agencies have experienced budget cuts. Except in a few rare jurisdictions, these funding reductions are taking place regardless of agency performance, regulatory mandates, or programmatic outcomes. In a modest way, this dissertation seeks to provide some insight into the forces behind these state environmental agency funding paradigms.

As you will read, while on a national level some patterns are apparent, explanations for the often deep cuts experienced by many individual state environmental agencies usually are not readily available. What I hope is that these trends are reversed.

Acknowledgement

I would like to express my deep appreciation and gratitude to my advisor, Dr. Michael R. Greenberg, for the patient guidance and mentorship he provided, from my first hesitant discussions on topics and concepts to completion of this dissertation. Dr. Greenberg's intellectual acumen is matched only by his genuine good nature and willingness to help. I am truly fortunate to have had the opportunity to work with him.

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1.0 Introduction

Since the 1970s, United States' environmental legislation has been based on the implementation of nationwide policy objectives with their management, enforcement, and sometimes enhancement by the states (Welborn, 1988). Congress and the U.S. Environmental Protection Agency (EPA) have enacted laws and regulations with baseline performance and compliance requirements that preempt local rules, although states can set more restrictive standards (Steinway & Botts, 2005). With initial funding and ongoing technical support from Washington, D.C., states have become responsible for administering, permitting, and enforcing federally mandated environmental programs. EPA reluctantly reasserts control only when it finds that state requirements are not in line with federal goals (Woods, 2005).

Obtaining primacy from EPA – assumption of authority for implementation and enforcement of a federal environmental program – is a complex process, requiring state legislative action that includes establishment of long-term, stable funding mechanisms (Crotty, 1987). A state's reason to seek primacy can range from a desire to reduce the regulatory burden on its industries through less aggressive enforcement than might take place under federal supervision to a political desire for bureaucratic control (Lester & O'M. Bowman, 1989). Regardless of motivation, most states assume administrative ownership of federal environmental programs and tailor them to match their special jurisdictional needs (Steinway & Botts, 2005).

Funding allocated to these agencies through state budgetary processes, however, determines program priorities and initiatives which can vary from inspecting hazardous waste storage facilities to keeping parks and waterways clear of litter. While governors

and legislators have significant power to establish or set environmental agency funding levels, they do not get free reign. Policy-makers must operate within a framework of a watchful press, for and not-for profit interest groups of varying strengths and efficacies and, importantly, one that respects the numerous federal programs over which many states have assumed control (e.g., Clean Air Act, Clean Water Act).

1.1 Research Questions

The analysis presented in this dissertation seeks to answer three questions central to state environmental agency spending.

1. How have state environmental agency expenditures changed between 2000 and 2014? This time-frame is significant because it encompasses two major economic events: the dot-com implosion of 1999 and 2001 and the 2007-2008 sub-prime mortgage collapse, the worst since the 1929 stock market failure. Financial downturns are effective stress-tests for a jurisdiction's environmental commitment. It is in times of declining tax revenues and increased unemployment that policy-makers look to stimulate economic recovery; which can mean re-thinking of monetary, fiscal, and regulatory priorities.
2. Is there is a pattern or set of factors that are associated with and may have influenced state environmental agency spending changes? State environmental agency expenditures may be reflective of economic stressors or larger forces could be at work that affect how an environmental agency commits its funding. State programs are driven by federal requirements. While this federal baseline is modified at the state level by cultural attitudes and political leanings, the desirability of a clean environment, like public safety, access to health care, and

quality education, is not in question. It is this more common, although not universal, subset of sociopolitical state environmental agency disbursement drivers that I am trying to identify and better understand.

3. What do environmental agency directors and senior staff consider most persuasive in driving budgetary expenditures? To answer this question, selected state environmental agencies were surveyed with follow-up telephone interviews conducted with nine respondents. This was done to explore their understanding of how agency spending is apportioned and to see if commonalities are present.

The answers to these questions will provide important baseline information on how state environmental agencies have adjusted to EPA's diminishing enforcement and programmatic presence.

This dissertation is distinguished from prior research in five ways. It looks at possible drivers or influences on state funding at the national level (across the United States) as well as within all 50 state geographies. My analyses also is more longitudinal than presented in the existing literature; examining the possible relationships between independent and dependent variables over 14 years in all 50 states. In addition, I have selected environmental agency funding as the dependent variable comparing it to over 20 different measures of social, economic, and cultural status compiled for each state. Prior research chose other dependent variables such as environmental quality outcomes (e.g., pounds of air pollutants emitted), monetary fines levied or inspections/enforcement actions completed as a response measure to changes in much less comprehensive sets of independent variables. Data from two major economic downturns: the 2002 "Dot Com" stock market crash and the 2007-2008 Great Recession has been featured in my analyses.

Few events have impacted state finances and budgets as significantly as these two economic downturns and incorporation of 2000 through 2014 spending data permits a consideration of their effects on individual state environmental programs. Finally, the environmental agency survey and follow-up staff interviews also differentiates this dissertation from other research. The survey and interviews offer perspectives from staff directly responsible for the implementation of programs and services most affected by budgetary changes.

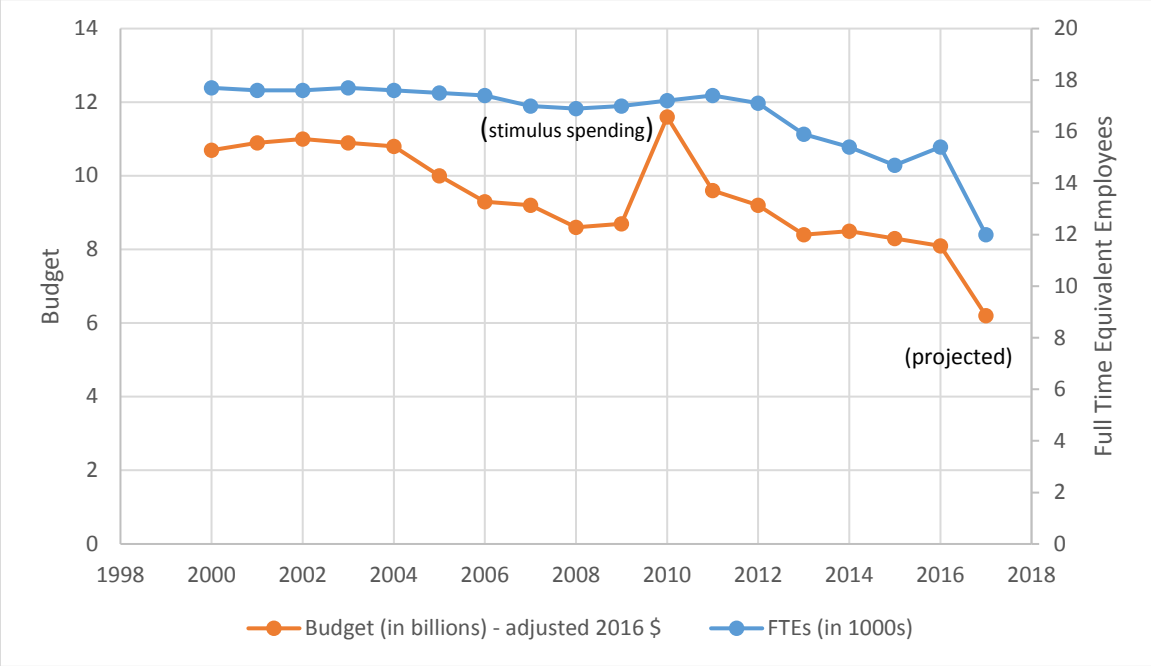
1.2 EPA's Decreasing Capacity

A key part of any state's environmental agency spending is its relationship with EPA. It is EPA that sets minimum nationwide standards and it is EPA that, until recently, often provided essential financial and technical resources to assist state agencies in working with their regulated communities to achieve compliance.

With the assumption of primacy for a federal regulatory program comes a statutory performance obligation for a state's environmental agency which can be difficult to maintain especially when viewed in terms of EPA's decreasing capacity. An EPA Office of Inspector General report (EPA, 2015) concluded that the EPA's increasing workload, coupled with downward pressure on budgets, have drastically affected EPA's ability to provide meaningful oversight related to implementation of state environmental programs, provide effective guidance to communities in managing health risks related to the redevelopment and reuse of contaminated (Brownfield) property, and to evaluate data needed to comply with its court-mandated obligations to assess the environmental safety of new industrial and commercial chemicals.

Between 2000 and 2015, after adjusting for inflation, EPA budgets remained stagnant and staffing levels, the number of FTEs or full time equivalent employees, were cut by approximately 16 percent (Figure 1).[1]

Figure 1 - EPA Budgets & FTEs: 2000 to 2015 (EPA 2015)



Exacerbating these funding issues was the change in political climate that took place at the agency during the Bush administration (2001-2009). During those eight years, EPA regulatory staff frequently were at odds with political appointees who favored a gentler, compliance assistance approach rather than enforcement (McGarity, 2013). This uneasy and often overtly hostile difference in views – carrot versus stick regulatory paradigms – was exemplified during implementation of the Clean Air Act New Source Review controversy. EPA's political appointees tried to amend or creatively re-interpret the underlying rules of the statute to legalize previously prohibited pollution emission

[1] A portion of EPA funding shown on Figure 1 represents resources associated with climate change research, which may have been re-allocated to other governmental or non-governmental agencies (e.g., NOAA, National Academy of Sciences).

activities (Drew & Oppel, 2004). With the arrival of the Obama administration in early 2009 most internal political obstacles to a more aggressive enforcement mindset were removed (Mintz, 2013). However, the availability of resources needed to actively pursue often complex and vigorously defended enforcement actions remained under the control of a less enthusiastic Congress.

Between 2010 and 2014 injunctive (i.e., monetary) relief awarded by the courts because of EPA enforcement actions decreased by half, from $20 billion in 2011 to $10 billion in 2014 (EPA, 2014b). Correspondingly, between 2010 and 2014 federal administrative and civil judicial penalties (exclusive of those related to the 2010 Deepwater Horizon oil spill) have stayed flat, averaging about $130 million per year. Over this time, the number of civil enforcement cases initiated by EPA in such program areas as hazardous waste, clean water, safe drinking water, etc. dropped from about 3,500 in 2010 to 2,300 in 2014, an almost 35 percent reduction. Facility inspections also decreased by more than 25 percent from 21,000 per year to around 15,000 annually (EPA, 2014b).

Initial budget proposals by the Trump administration signal a continuation of this diminishing trend in enforcement capability and regulatory capacity (Waste360, 2017) that began during the Obama presidency. Although the suggested funding levels are controversial and no doubt subject to revision during a contentious, bipartisan budget process, they are (as described in the next chapter) a clear and unambiguous harbinger of policy priorities. If these or similar budget proposals are enacted, EPA funding would be the lowest in inflation adjusted dollars since the early 1990s. Staffing levels with these types of appropriations would be equivalent to those with which the agency operated in the 1980s. Because of these budget cuts, as the role of EPA potentially becomes less

relevant or meaningful to maintaining environmental quality, state environmental agencies become indispensable in pollutant monitoring, responding to citizen complaints, and enforcing environmental regulations.

2.0 State Environmental Agency Expenditures

Regardless of the reasons for the changes to EPA budgets, the regulatory burdens associated with managing environmental quality has been shifted to the states. Assessments prepared by ECOS: Environmental Council of the States (Brown & Green, 2001 and Blakeslee & Rong, 2006) found that state environmental protection agencies *"…were making substantial and effective contributions to environmental enforcement…"*. ECOS further determined that state environmental agencies were responsible for the collection (on average) of 94 percent of environmental quality data present in six EPA national compliance and enforcement tracking systems (Table 1). State environmental agencies are now the primary organizations collecting data for federal information management and environmental pollutant reporting systems.

Table 1 – Percentage of Data Collected by States in Six National Environmental Reporting Systems (Brown & Green, 2001)

System	Type of Data in System	% Data Collected by States
Air Facility System (AFS)	A repository for information about air pollution in the United States.	99
Air Quality System (AQS)	EPA's data set of ambient air quality measurements. AQS stores measurements from over 10,000 state operated monitors, 5,000 of which currently are active.	99
Safe Drinking Water Act Information System (SDWIS)	Contains information about public water systems and their violations of EPA's drinking water regulations.	99
Permit Compliance System (PCS)	Provides information on companies which have been issued permits to discharge waste water into rivers and streams.	83
Storage and Retrieval	A repository for water quality data. It is used by state environmental agencies, EPA, and	90

System	Type of Data in System	% Data Collected by States
(STORET) Data Warehouse	other federal agencies, as well as universities and private citizens.	
Biennial Reporting System (BRS)	Collects data on the generation, management, and minimization of hazardous waste. Captures detailed information on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage, and disposal facilities.	92

In addition to data collection, reporting, and processing, the state's permit and monitor treatment plants operating under Safe Drinking Water Act regulations. Forty-eight are authorized by EPA to manage hazardous wastes under the Resource Conservation and Recovery Act or RCRA. Forty-six states have responsibility for point source water pollution management and enforcement as part of the Clean Water Act, and every state regulates major air pollution emitters in accordance with Title V of the Clean Air Act.

By policy design, necessity, or happenstance, state environmental agencies have developed into the principal ways public health and quality of life is managed and protected within the United States. These regulatory agencies and bureaus serve as first-responders during and after environmental disasters (man-made or natural), track and identify individuals and businesses that violate anti-pollution statutes, and function as scientific and data-gathering centers for policy makers.

2.1 EPA Funding of State Environmental Agencies

The vigor of state environmental agencies budgets has been used as one of numerous surrogate measures of a state's environmental commitment or "greenness" (Patten, 1998; Newmark & Witko, 2007; Konisky & Woods, 2012). However, state environmental agencies are not insulated from EPA's budget and staffing woes. State and Tribal Technical Assistance Grants (STAG) are monies awarded to implement, operate, and enforce the nation's environmental laws (Table 2). The intent of these grants is to establish and foster a decentralized, nationwide infrastructure to protect public health and the environment (EPA, 2014a).

Table 2 – Summary of EPA Funded STAG Grants
(adjusted to 2014 $, in millions – EPA 2014a)

Year	Amount ($)	Preceding Year $ Change	Preceding Year Percent Change
2004	1,348	---	---
2005	1,270	-78	-5.8
2006	1,204	-66	-5.2
2007	1,171	-33	-2.7
2008	1,092	-79	-6.8
2009	1,113	+21	+1.9
2010	1,116	+3	+.03
2011	1,070	-46	-4.1
2012	1,034	-36	-3.4
2013	1,007	-27	-2.6
2014	1,046	+39	+3.7
Average	1,134	-30.2	-2.5

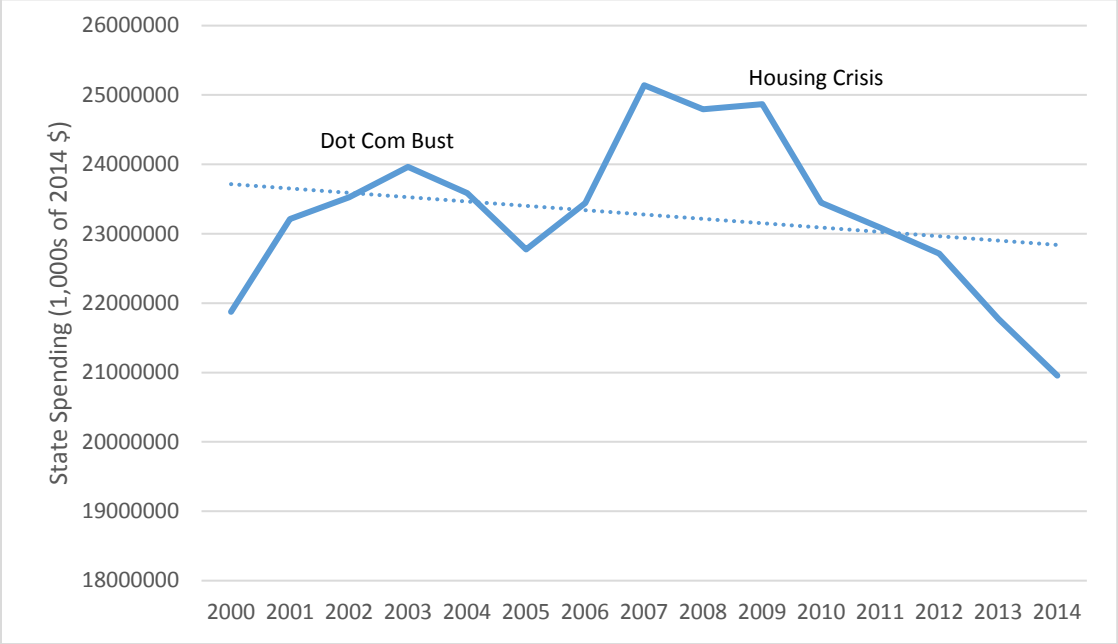
STAG funding levels have been, on average, decreased by $30 million (about 2.5 percent) between 2004 and 2014. Numerous studies have correlated state environmental agency actions with STAG funding levels. These include Clean Air Act and Clean Water Act enforcement (Rechtchaffen, 2003; Mintz, 2005), the strength of hazardous waste

policies (Cline & Davis, 2007) and responsiveness to environmental justice issues (Konisky, 2009). These and other studies generally correlate decreases in federal funding with a decline in state environmental agency performance.

2.2 State Environmental Agency Funding

The perfect storm of deceasing federal environmental capacity in combination with the relentless drop-off in EPA financial support for state programs, has resulted in intense economic pressure on state environmental agency resources (Figure 2).

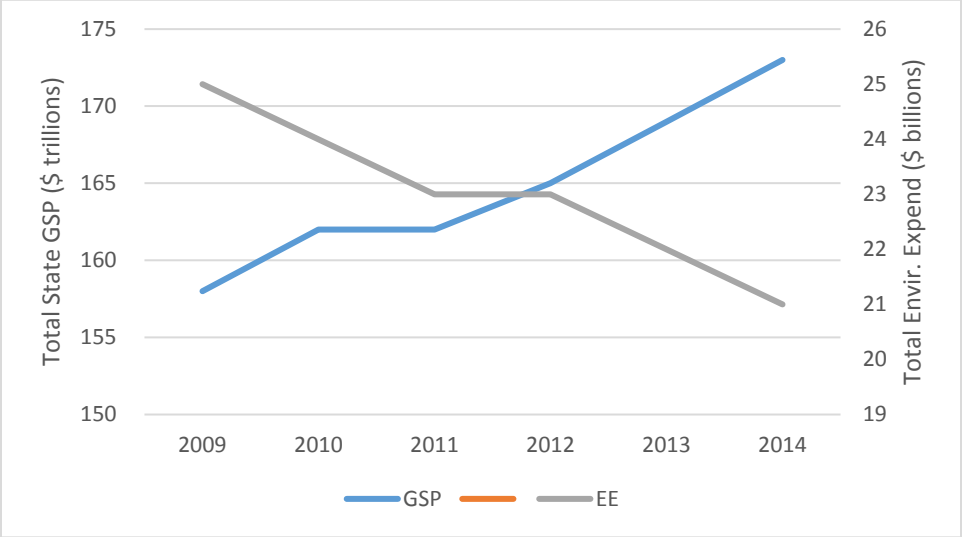
Figure 2 – State Environmental Program Spending 2000-2014 (US Census Bureau)



Decreases in state environmental agency expenditures accelerated after 2009, on average approximately 3.4 percent per year. STAG funding to states during this same period (2009-2014) decreased on average 0.8 percent per year. State spending on environmental programs have yet to show signs of recovering, as they did after the 2001 Dot Com/Tech Bubble collapse (Anderson et al., 2010). Between 2009 and 2014 total state spending for environmental agencies decreased by approximately 20 percent, from $25 billion to $21 billion. At the same time, total Gross State Product (Figure 3), a measure of all goods and

services produced by the states, increased by 10 percent from $158 trillion to just over $173 trillion (BEA, 2016).

Figure 3 – Gross State Product (GSP) vs. State Environmental Agency Expenditures (EE): 2000-2014 (Bureau of Economic Analysis, 2016)



Similar increases in total state revenues, from $1.8 trillion to $2.4 trillion occurred between 2009 and 2014 while total state expenditures for this same time stayed roughly flat at $2 trillion. These trends indicate increasing pressure on state environmental agencies as economic activity increased, yet despite flat or slight increases in state tax revenues, environmental agency finding levels experienced double digit decreases.

During this period, 36 states incurred average annual environmental expenditure decreases ranging from -10.8 percent for Delaware to -0.1 percent for Idaho. Fifteen states increased environmental agency expenditures; albeit at very modest rates with eight states experiencing annual increases of two percent or less. Seven states enjoyed average annual spending increases of three percent or more with grand prizes of five percent or more going to state environmental agencies in South Dakota (5.1 percent), Vermont (5.2 percent) and North Dakota (13.7 percent) over these five years. Table 3

lists average state environmental expenditures between 2009 and 2014 and the average annual percent change in those expenditures.

Table 3 – Average Annual State Environmental Agency Expenditures
(US Census Bureau, 2000-2014)

State	2009-2014	
	Average Annual Environmental Agency Expenditures in 2014 $ (x1,000)	**Average Annual Percent Change in Environmental Agency Expenditures**
Alabama	$297,103	-3.9%
Alaska	$371,496	0.8%
Arizona	$279,524	-2.5%
Arkansas	$280,699	0.1%
California	$4,289,591	-5.3%
Colorado	$372,456	-6.5%
Connecticut	$160,169	3.0%
Delaware	$91,612	-2.0%
Florida	$ 1,284,897	-7.2%
Georgia	$500,348	-2.5%
Hawaii	$112,074	-2.8%
Idaho	$208,417	-0.1%
Illinois	$275,525	0.1%
Indiana	$334,616	-0.3%
Iowa	$328,030	-3.1%
Kansas	$235,283	-2.3%
Kentucky	$350,081	-2.0%
Louisiana	$785,502	0.5%
Maine	$179,914	-4.8%
Maryland	$530,558	-6.8%
Massachusetts	$389,926	-1.2%
Michigan	$321,799	-3.9%
Minnesota	$640,667	3.0%
Mississippi	$288,748	-1.3%
Missouri	$362,464	-4.6%
Montana	$268,318	-1.5%
Nebraska	$259,364	4.6%
Nevada	$126,899	-6.0%
New Hampshire	$71,882	0.1%
New Jersey	$628,923	-7.6%
New Mexico	$220,182	-5.3%
New York	$504,994	-7.0%
North Carolina	$620,347	-9.1%
North Dakota	$304,704	13.7%
Ohio	$405,040	-1.9%

State	2009-2014	
	Average Annual Environmental Agency Expenditures in 2014 $ (x1,000)	**Average Annual Percent Change in Environmental Agency Expenditures**
Oklahoma	$243,687	-3.2%
Oregon	$476,202	0.7%
Pennsylvania	$688,236	-2.5%
Rhode Island	$51,590	2.1%
South Carolina	$222,608	-3.7%
South Dakota	$168,858	5.1%
Tennessee	$330,773	-6.0%
Texas	$1,035,946	2.6%
Utah	$179,009	-2.5%
Vermont	$85,736	5.2%
Virginia	$405,819	-0.4%
Washington	$900,909	-1.3%
West Virginia	$238,320	2.2%
Wisconsin	$695,923	-0.3%
Wyoming	$402,487	-2.9%
Average	**$456,024**	**-3.2%**

Expenditure amounts listed in Table 3 were compiled from US Census Bureau sources (US Census Bureau, 2000-2014). A table summarizing individual state environmental agency expenditure data for 2000 through 2014 is in Appendix A.

2.3 Per Capita Environmental Expenditures

In addition to describing state environmental agency spending on an annual dollar basis, these expenditures also can be characterized based on population (per capita spending). Table 4 summarizes average per capita environmental agency expenditures between 2009 and 2014. Population data are from the U.S. Census Bureau Population Estimation Program which publishes total population estimates and demographic components for the United States. The reference (cutoff) dates are July 1 for each year between 2009 and 2014.

Table 4 – Per Capita Environmental Agency Expenditures: 2009-2014
(adjusted 2014 $, Appendix B)

State	Average Per Capita Expenditures	$ Change per year		State	Average Per Capita Expenditures	$ Change per year
Alabama	$ 62	$ (1.46)		Montana	$ 268	$ 1.87
Alaska	$ 514	$ 5.53		Nebraska	$ 140	$ 2.93
Arizona	$ 43	$ (0.61)		Nevada	$ 46	$ (1.86)
Arkansas	$ 96	$ 1.51		New Hampshire	$ 54	$ (0.04)
California	$ 112	$ (4.61)		New Jersey	$ 71	$ (2.08)
Colorado	$ 72	$ (5.84)		New Mexico	$ 107	$ (4.15)
Connecticut	$ 45	$ 1.06		New York	$ 26	$ (0.99)
Delaware	$ 93	$ (3.42)		North Carolina	$ 64	$ (5.39)
Florida	$ 67	$ (5.43)		North Dakota	$ 436	$ 27.06
Georgia	$ 51	$ (0.38)		Ohio	$ 35	$ (0.13)
Hawaii	$ 82	$ (3.76)		Oklahoma	$ 64	$ (1.65)
Idaho	$ 127	$ (0.67)		Oregon	$ 122	$ (1.63)
Illinois	$ 21	$ (0.05)		Pennsylvania	$ 54	$ (0.67)
Indiana	$ 51	$ (0.35)		Rhode Island	$ 49	$ 1.35
Iowa	$ 97	$ (2.23)		South Carolina	$ 47	$ (2.06)
Kansas	$ 77	$ (1.56)		South Dakota	$ 203	$ 5.45
Kentucky	$ 73	$ (0.43)		Tennessee	$ 52	$ (3.02)
Louisiana	$ 155	$ 2.95		Texas	$ 40	$ 0.34
Maine	$ 121	$ (5.23)		Utah	$ 63	$ (1.90)
Maryland	$ 79	$ (6.76)		Vermont	$ 137	$1.52
Massachusetts	$ 62	$ (1.67)		Virginia	$ 50	$ 3.65
Michigan	$ 31	$ (1.02)		Washington	$ 131	$ 4.29
Minnesota	$ 129	$ 0.74		West Virginia	$ 129	$ 3.17
Mississippi	$ 88	$ 0.28		Wisconsin	$ 122	$ (0.08)
Missouri	$ 60	$ (2.04)		Wyoming	$ 707	$ 12.51
				Average	**$ 113**	**$ (1.62)**

Values shown in parenthesis ($0.00) represent a decrease in per capita environmental agency expenditures.

Appendix B contains the 2009-2014 population and environmental expenditure data by state upon which Table 4 is based. Values shown in parenthesis ($0.00) in Table 4 represent a decrease in per capita environmental agency expenditures. Average annual U.S. per capita environmental agency expenditures between 2009 and 2014 were $113. Six of the 10 states which had the lowest per capita environmental spending (Illinois,

New York, Michigan, Ohio, Connecticut, and Rhode Island) were in the Midwest or Northeast. These states spent, on a per capita basis, between $21 and $49, the least of the 49 states and less than half the United States per capita average of $113.

Six of the top per capita environmental spending states (Louisiana, Nebraska, South Dakota, Montana, North Dakota, and Wyoming) ranged from $140 to $707. These high per capita spend states also are the ones most affected by the shale gas (fracking) exploration boom and the environmental concerns associated with the exploitation and development of that resource. Within this group only Wyoming has had a consistent decrease in per capita environmental agency spending, averaging -$12.51 per year for every year between 2009 and 2014.

2.4 Environmental Expenditures and Total State Spending

Table 5 illustrates average 2009-2014 average environmental expenditures as a percentage of average total state expenditures for that same period. Total state expenditures are payments (normalized to 2014 dollars) compiled by the U.S. Census Bureau for a state government and its agencies net of correcting transactions and recoveries or refunds, and excluding government-operated enterprises (e.g., lotteries), utilities, and public trust (pension) funds. Summarized data are in Appendix C.

Table 5 – Average Environmental Agency Expenditures as a Percent of Average Total State Expenditures: 2009-2014

State	Percent of Total State Expenditures		State	Percent of Total State Expenditures
Alabama	1%		Nebraska	2.6%
Alaska	3%		Nevada	0.9%
Arizona	0.8%		New Hampshire	0.9%
Arkansas	1.4%		New Jersey	0.9%
California	1.5%		New Mexico	1.2%

State	Percent of Total State Expenditures		State	Percent of Total State Expenditures
Colorado	1.3%		New York	0.3%
Connecticut	0.5%		North Carolina	1.1%
Delaware	1%		North Dakota	4.9%
Florida	1.5%		Ohio	0.5%
Georgia	1.5%		Oklahoma	1%
Hawaii	0.9%		Oregon	1.7%
Idaho	2.4%		Pennsylvania	0.8%
Illinois	0.3%		Rhode Island	0.6%
Indiana	0.9%		South Carolina	0.7%
Iowa	1.6%		South Dakota	3.7%
Kansas	1.4%		Tennessee	1%
Kentucky	1.2%		Texas	0.8%
Louisiana	2.3%		Utah	1.0%
Maine	1.9%		Vermont	1.4%
Maryland	1.3%		Virginia	0.8%
Massachusetts	0.7%		Washington	1.9%
Michigan	0.5%		West Virginia	1.8%
Minnesota	1.6%		Wisconsin	1.8%
Mississippi	1.4%		Wyoming	6.7%
Missouri	1.1%		Average	1.5%
Montana	3.7%			

Spending by state environmental agencies, as a percentage of overall state spending, averaged 1.5 percent between 2009 and 2014. With 33 states allocating less than the national average to their respective environmental agencies. New York and Illinois dedicated 0.3 percent of state expenditures (on average) to environmental agency funding, the lowest of any state. Alaska (three percent), South Dakota and Montana (both 3.7 percent), North Dakota (4.9 percent), and Wyoming (6.7 percent) committed the highest percentages of state expenditures to their environmental agencies.

Tables 3 through 5 are descriptive of state environmental agency expenditure patterns which, in turn, may be related to broader socioeconomic and political drivers. Of more

interest are those factors or combination of factors that might be determinative in allocating funding to state agencies for environmental programs. As described in the next section, an extensive body of research has been developed that attempts to identify, measure, and integrate the influence social, economic, cultural, and political considerations have on the allocation of state environmental agency funding.

3.0 Prior Studies and their Relationship to this Dissertation's Research Question

This dissertation asks two questions: How have state environmental agency expenditures changed between 2000 and 2014? The preceding section offers a partial quantitative answer with more state-specific data provided in Section 4.0. However, the second question – what cultural, economic or political factors influence or affect state environmental agency funding – is the more fundamental (and interesting) subject. The type and character of potential environmental agency funding drivers and the changes to them as perceptions of environmental risks matured, as sophisticated and comprehensive environmental data sets became more available, and as state environmental agencies developed into well-established, politically viable bureaucracies, has been evaluated to one degree or another by numerous researchers.

Four general themes emerge in the literature that provide context for prior research exploring the variations among state's environmental agency funding: indexing, socioeconomics, politics, and multi-dimensionality. These four themes also provide a rough framework to summarize the findings of prior research related to this dissertation's central question: What influences state environmental agency spending?

3.1 State Agency Budgeting

Before delving into the literature specific to environmental agency spending, a brief overview on state budgeting processes is needed. State environmental agency funding and subsequent spending reflect the larger tension between demands placed on state

government to respond to societal problems and the willingness or capacity of state government to respond to those demands (Joyce & Pattison, 2010).

On a macroscale, state budgets are expressions of two drivers: mandatory or constrained spending and spending on discretionary policy priorities (Guerra & Sancho, 2011; Daniel & Gao, 2015). Examples of mandatory spending would include statutorily required payments to pension systems and Medicaid plans; while discretionary spending might include establishment of pre-K educational programs or expansion of drug treatment centers. The role and importance of the primary actors in the state budgeting process – governors, state legislatures, and the agencies – shifts depending upon political status, financial capacity (i.e., money available), and institutional savvy (Thompson, 1987; Fisher & Wassmer, 2015).

Governors come into office with a political agenda reflective of their personal beliefs, the ideology of the political party to which they belong, and constituent demands (Stallman & Deller, 2010). The budgets they propose largely are dedicated to federal and state mandates related to certain programs (e.g., Medicare, education, pensions) as well as that lesser, discretionary dollar amount directed towards other priorities such as tax relief, infrastructure, or job creation. Legislatures take the governor's budget proposals and analyze, refine, and perfect them in light of their own preferences and voter requests. During this process, the affected agencies and bureaus exert pressure on governors and legislators to maintain or grow staff, expand or jettison services, and generally enhance their position or status within the administration (Daley & Garand, 2005).

Since the late 1990s, state budgets have gyrated wildly. A decade of strong growth increased revenues and fueled unprecedented government expansion but was followed by

the recession of 2001 which resulted in significant retrenchment in budgets and programs (Gamage, 2010). The national economy strengthened throughout most of the 2000s, but in 2008 the Great Recession arrived and decimated government revenues and spending, which for many states have yet to recover to pre-Great Recession levels (Ermasova, 2013). Researchers cite several reasons for this lack of financial resiliency at the state level. Conant (2010) and Campbell & Sances (2010) point to increased reliance on income and sales taxes as the primary revenue generating mechanisms, both of which decrease during economic downturns. Those few states and the many municipalities that rely on property tax revenues also saw major shortfalls as home values plummeted.

Rubin (2005), Conant (2010), and Smith & Hou (2013) make a compelling case that the need to balance budgets on an annual basis hamstring state governments by preventing deficit spending to stimulate economic growth when times are bad. Rather, states are forced to cut programs and/or raise taxes to make up short-term (annual) revenue imbalances, which tend to slow recoveries. These authors also make the point that this response is countercyclical to federal economic stimulus programs, which are not bound by yearly budget balancing requirements. Galle (2014) and Louk & Gamage (2015) argue anti-tax movement initiatives (e.g., candidate pledges not to increase taxes, statutory spending limits) further restricts states' abilities to respond and adjust to changing economic conditions.

Sosin (2012) and Smith & Hou (2013) present sobering analyses of the various budgeting gimmicks used by states to respond to the periodic economic downturns that have occurred over the last 20 years. These include unpaid furloughs of state employees, sale of assets, reducing or eliminating aid to cities, diversion of revenues from dedicated

funds (e.g., Tobacco Settlement money), securitization of future revenues such as tolls or tax payments, and hidden borrowing (not fully funding pension obligations).

The above described characteristics briefly lay-out those real-world political and economic conditions within which government agencies must operate. They influence budgetary decisions and allocations for the universe of state services. But sub-national priorities vary by geography, culture, and fiscal capability (Lewis et al., 2015; Jordan et al., 2017). These macroeconomic and electoral factors, which are driving mandatory or constrained state spending, then are customized by other, more specific modifying forces with the outcome being an agency budget (Reddick, 2003; Ryu et al., 2007). I have grouped into four categories (indexing, socioeconomics, politics, and multi-dimensionality) the research into identifying, quantifying, and evaluating these customizing forces which may be acting on state environmental agency budgets.

3.2 The Role of Environmental Quality Indices in Environmental Agency Budgeting

A 1972 *Science* editorial (Train, 1972) urged researchers to develop indices that policy makers and regulatory agencies could use to track and compare environmental quality conditions around the United States. This call was answered within a few years by Inhaber (1976) and Ott (1978) in their seminal books on the theory and practice of assembling, operationalizing, and working with environmental indices. Over the next 10 to 15 years, numerous environmental indices would appear in the literature, many prepared using the methodologies and concepts formalized by Inhaber and Ott. A few of these indices, described below, formed the basis for major contributions to the understanding of environmental policy development and program implementation.

FREE Index – The Fund for Renewable Energy and the Environment (Ridley, 1988) published an index to measure the strength of each state's environmental program. This one-time, primarily legislative-based assessment assembled information on state laws regarding air quality, hazardous waste management, and ground water quality.

Green Index – Up through the late 1990s, this was a widely-cited index of state environmental status based on over 250 measures of public health and environmental quality. Compiled by researchers from the Institute of Southern Studies (Hall & Kerr, 1991), each state is ranked by eight key areas of environmental policy including Congressional leadership, state policy initiatives, energy use, and spending on wastewater treatment, environmental, and natural resource preservation programs. It is a one-time snap-shop, albeit a comprehensive one, that draws data from government and private sources into an overall assessment of environmental conditions within each state and, to a lesser extent, regionally.

Southern States Index – By 1994, Hall & Kerr's 1991 Green Index had morphed into the Southern States Index. More modest in scope, the Southern States Index, prepared by the University of South Carolina's Institute of Southern Studies, also ranked the states and used a composite scoring schema of 20 environmental quality measures that included air quality, spending on environmental programs, pollution levels and waste generation. By the early 2000s, The Southern States Index had renamed itself the Environment Index and become an investigative periodical providing commentary on environmental and energy issues in the south and southwestern United States.

National Environmental Scorecard – This index (scorecard) is tabulated annually by the League of Conservation Voters. Founded in 1969, the League of Conservation Voters

(LCV) is a liberal political advocacy organization that assists candidates who it believes support a pro-environment agenda (O'Brien, 2014). Since 1970, the *National Environmental Scorecard* has tracked the environmental voting records of all members of Congress. The Scorecard represents the consensus of experts from approximately 20 environmental and conservation organizations who select key votes on which members of Congress should be scored. The Scorecard remains to this day a widely-used method to rate members of Congress on environmental, public health, and energy issues (Nelson, 2002; Fisher & Taylor, 2006; Tanger et al., 2011).

The use of indices as one of the independent/dependent variables to measure state commitment to and effectiveness of environmental programs was common into the 1990s. However, the reliance on point-in-time state grades or standings began to fade as access to more in depth and comprehensive data sets became available. Indexes still are compiled today (The Heinz Center, 2008; Environment Canada & USEPA, 2010; Emerson et al., 2012) but are now focused on sustainability metrics and serve less as research variables and more as policy inputs and public awareness tools for decision makers and non-governmental organizations.

Those indices developed and refined throughout the 1970s and early 1980s as nascent federal and state environmental programs began to beneficially affect air, water, and land use conditions, served as early measures of environmental quality. Publicized in the press and by environmental advocacy groups, the indices provided a semi-quantitative or at least comparative baseline of environmental status of a state or region. This would mobilize constituent concerns to which policy makers would then respond, or not. A

response or, in some states, lack of response, was most easily measurable as changes to state environmental agency funding.

By themselves, indices were not drivers of state environmental agency funding. But they did provide an initial snapshot of the environmental attributes of an area or region as well as a way to assess changes to air, water and other environmental quality indicators over time as resources were committed to making improvements. Thus, the relationship between environmental quality and environmental indices is complex. Environmental quality may be determinative of the index (the chicken) or the index could be driving environmental quality (the egg).

Indices also played a significant role in the direction of later scholarly research as well as in the central question of this dissertation. They compiled and evaluated the first set of independent variables associated with state environmental quality, providing a starting point for the identification and assessment of dependent variables. The Green Index, for example, measured pollution (i.e., pounds of hazardous waste generated, tons of air toxics emitted, etc.) as well as spending on environmental and natural resource programs. However, there was no attempt to interrelate these two metrics. Later research, as described below, would seek to segregate environmental quality or outcomes into cause and effect drivers, be they agency spending, advocacy group effectiveness, or industrial activity.

3.3 Socioeconomic Factors and Their Role in Environmental Agency Budgeting

By the 1980s and 1990s state environmental agencies had been functioning for over a decade and been integrated into most bureaucratic systems. Environmental indices as

measures of environmental quality or as possible influences on state policy/spending began to fade, being replaced by more quantifiable agency metrics (e.g., inspections performed, permits issued). The research cited in this section is representative of attempts to identify and quantify those economic, cultural, and political factors possibly influencing state environmental agency capability or strength, broadly taken here to be a measure, either directly or indirectly, of funding.

As responsibility for implementation of federal programs was passed to the states, the influence on state environmental agency capability (i.e., funding levels) of social, economic, and political factors could start to be evaluated within the framework of individual and regional budgetary processes. In the 1980s, under the Reagan presidency, enforcement of federal environmental laws shifted to the states and researchers began to focus on the organizational capability of non-national agencies and the role of partisanship (i.e., political ideology) and how interest group activities (industrial and environmental) interacted to influence environmental policy and agency capability (i.e., funding).

In one of the earlier papers incorporating these factors, Lester (1980) used a combined set of legislative outputs that included, among other things, adoption of wetlands management regulations and surface mining restrictions as the dependent variable, to consider the effects of partisanship, urbanization, industrialization, per capita income, and educational level on environmental policy development in all 50 U.S. states. He concluded that the organizational capability that each state's environmental agency operated within, together with the overlying partisanship culture, strongly influenced the formulation of state environmental policy.

In a continuation of this work, Lester et al., (1983) developed four conceptual frameworks, which they hesitantly called models, describing a set of factors that they concluded helped explain the processes by which public environmental policies were formulated. Their underlying thesis was centered on pollution severity (hazardous waste generation) and economic capability: states that had greater wealth (measured by percent of population living in poverty) and severe pollution problems would generate more policy outcomes. This economic capability captured funding for state agency enforcement and program development.

In 1984 Williams & Matheny published a study using "market failure" influences (number of hazardous waste sites in a state and spending by private businesses on environmental management) on state expenditures for land and water quality. They also examined other fiscally-related metrics including the size of the state's environmental agency budget, the economic strength of a state's hazardous waste producing industries, and the role of business and environmental interest group activity.

Williams & Matheny concluded that market failure, what others will later call "problem severity", does not play much of a role in driving public spending on environmental issues, rather it is the influence of environmental groups that seems to dominate state resource allocations. Their paper tends to confirm the complexity of the environmental quality versus environmental spending dynamic. In this case, they concluded that environmental quality was not compelling funding for state environmental agencies. Williams & Matheny's findings also are illustrative of the debate that was beginning among researchers at that time as to whether fiscal or non-fiscal data were the best indicators of a state's environmental management effort.

In an in-depth, well research work Hayes (1987) examines changes in post-World War II United States socioeconomic and societal standards (e.g., increasing income, rising educational levels, emergence of science and technology) through the lens of environmentalism. His analysis of pro (conservation) and con (develop) forces working to advance or thwart environmental protection initiatives are closely associated with national and regional politics, economics, and culture. He is especially prescient in the role that energy and urbanization (i.e., land use) will play in determining environm4ental policy for the rest of the century and beyond. He attempts to describe how Americans integrate and resolve these and other competing environmental principles using legislative, administrative, and judicial mechanisms.

As the 1980s ended, a paper by Lester & Lombard (1990) succinctly characterized state environmental policy research, identified data bases that were available or being developed that could be used to enhance evaluative programs, and offered suggestions for new investigative areas. Importantly, they stated what was becoming more and more apparent to the research community: that there is no single explanation for differences in state development and implementation of environmental policies. Those studies seeking to offer explanations or even generalizations about state environmental policy must be longitudinal and consider fiscal and non-fiscal variables. Lester & Lombard use as one of their key metrics environmental agency funding and they explore how it influences and is influenced by other state economic and cultural characteristics.

Throughout the 1990s, researchers began to consider more comprehensive approaches to those factors determinative of state environmental policy making and agency funding. Papers by Ringquist (1994), Stanton & Whitehead (1994) and Agthe et al., (1996) are

representative of the research being conducted that captured the political as well as economic facets of state policies, especially how outside actors such as environmental groups and intra-governmental professionals (legislators and governor's offices) influence the strength (i.e., funding level) of state pollution prevention programs.

Rinquist's 1994 research supported a finding that three factors – organized interests (e.g., unions, business associations, advocacy groups), economic characteristics (e.g., per capita wealth), and political institutions (e.g., liberal or conservative electorates, legislative professionalism) are significant predictors of the strength and scope (funding) of state water quality and hazardous waste management programs. Stanton & Whitehead (1994) agree. They examined relationships among political partisanship, special interests, and economic wealth variables and concluded that these features are complimentary in explaining the status of state environmental agency funding.

A few years later Agthe et al. (1996) expanded this approach to include 48 states and the relative importance of other economic and political factors such as total per capita state spending and percent of budget dedicated to environmental programs. They found that total per capita spending is strongly influenced by economic variables while environmental program spending is more likely to be determined by political factors.

By the mid to late 1990s the number and size of data bases being used had increased and those focused on fiscal, rather than non-fiscal metrics were being emphasized. Bacot et al., 1996 and Bacot & Dawes, 1997 offered in depth assessments of factors that possibly were affecting state environmental management capability (i.e., funding). Their analyses were weighted towards fiscally-related metrics influence on organization capability of state environmental agencies such as per capita income and political partisanship.

This research trend continued into the 2000s and beyond. Futrell (2000) argues that state environmental programs have been constrained by pro-business policies conducive to capital accumulation (i.e., low operating costs). He analyzes delays and reductions in environmental agency budgets, selective enforcement patterns, staff reductions, and the reigning in of agency powers and authority as symptomatic by the desire of the state's political establishment to establish a social and regulatory climate supportive of business capital management objectives.

Rudolph & Evans (2005) evaluate the relationship between political trust, ideology, and public support for government spending, including spending on environmental programs. They confirm a statistically significant link between an affective (emotional) view of government (political trust) and policy spending. Constituents are more likely to demand consistent or increased spending on services they perceive as valuable and being delivered effectively and in a trustworthy manner; although political ideology (conservative or liberal) does exert a moderating effect.

Atlas (2007) assessed whether states dialed back enforcement activities when implementing federally delegated environmental programs. His 32 state, 14-year analysis included penalty amounts, number of enforcement actions, economic conditions, and agency funding levels. Atlas concluded that the economic importance of regulated industries within a state are not related to enforcement stringency. Rather, prior environmental compliance history and agency structural issues (e.g., mandatory or discretionary fines) were the principal factors, among other things, that explained enforcement disparities.

McCright et al. (2014) examined the effects of political polarization on support for government spending on environmental protection. While controlling for five demographic variables, they tested for the effect of ideological politics between 1993 and 2012 on state environmental agency funding. McCright et al. found that the divide along party line politics and environmental agency funding is real and likely will endure for the foreseeable future. This polarization also will inhibit the development and implementation of environmental policy.

Schwadel & Johnson (2017) added a religious component to the assessment of political attitudes and environmental spending. Using cross-sectional data compiled between 1984 and 2012, they gauged evangelical Protestant support, controlled for party affiliation, income, gender, and race for environmental agency funding. Schwadel & Johnson found that biblical teachings are the fundamental cause of evangelical's lack of support for environmental programs, with political partisanship also playing a large role in those findings. Their research and other ongoing studies highlighted the increasing prominence of non-economic and non-environmental quality issues in the funding of state environmental agencies.

3.4 Political Factors and their Role in Environmental Agency Budgeting

As the new millennium arrived, so did a search for ways to better understand the relationships and interdependencies of socioeconomic and sociopolitical dynamics on state environmental agency capability and funding. Researchers began using more comprehensive and accessible data sets, combined with emerging quantitative and empirically based models, to calculate the effectiveness of environmental agencies, many of which had been functioning for 20 years or more. Central to these studies was the need

to longitudinally incorporate evaluative criteria (independent variables) and performance outcomes (dependent variables) that included measures of state economic and political character, population attributes, and environmental agency vigor.

Over an eight-year period List & McHone (2000) used numerous indicators, including economic variables in combination with two environmental media, to grade state environmental agency performance according to environmental outputs. The findings of the fixed and random effects models and panel data they used implied that environmental outputs correlated positively with state income levels, but only after a threshold level of income was reached. This also confirmed that states are not passive actors in environmental policy and suggests that a direct commitment of state funds to environmental protection can lead to a relatively higher level of favorable environmental outcomes.

Levinson (2001) combined industrial composition along with state population and various spending characteristics to propose a 17-year long industry-adjusted index of environmental compliance costs by state, using this to rank states with environmental policies most favorable to manufacturing. He found that state environmental expenditures, what he called compliance costs, were dependent more on industry composition (type, age, etc.) rather than per capita income, employment, and other factors. Levinson emphasized that this relationship needs to be considered in the evaluation of a state's commitment to environmental policy and funding.

Polzin (2001) and Koven & Mausloff (2002) found that political culture and other social and economic factors (poverty, education, infrastructure investment, etc.) were determinative or partly determinative of state environmental agency budget allocations. Polzin explored the relationship between stricter environmental regulations and better environmental conditions and found them to be closely associated with faster state economic growth as measured by several variables including poverty rate, public expenditures, and gross state product per worker. Collectively, these factors affect environmental conditions but individually they are not reliable change indicators. Koven & Mausolff studied the political culture-public expenditure relationship based on panel data for 49 states between 1992 to 1996. As states changed from a moralistic culture – one that values government as a legitimate instrument for promoting public welfare – to traditionalistic – a philosophy that emphasizes the dominance of private property rights – a statistically significant decrease in per capita spending occurred.

In a widely-cited paper, Potoski & Woods (2002) define state environmental agency priorities with regard to air quality management and their related budgets, as comprised of at least three dimensions, each of which are interrelated, but driven by distinct sets of causative factors. These are: political context as measured by the strength of relevant interest groups; capacity or the financial and political ability to respond to pollution problems; and matching where states alter the stringency of their environmental policies to fit the scope of their pollution problems. They find that environmental and industry groups have the most influence over clean air policy followed by bureaucratic capacity and then pollution complexity. Potoski & Woods urge researchers to include

multidimensionality in evaluating state environmental funding and policy trends as the dynamics of these programs are two complex to be captured by one or a few data sets.

Carnoye & Lopes (2015) add public participation as a key factor in the organization of environmental agency resources and budgets. Their approach evaluates the need to develop constituency and stakeholder involvement in environmental valuation of resources and policies, including funding, enforcement and compliance mechanisms, based on a shared institutionalist perspective. That is, choices made about the environment should consider stakeholder's collective and individual norms. These then would be incorporated into socially constructed rules, conventions and institutions. They find that to be effective, participatory and deliberative environmental valuation methods must include designing processes involving both citizens and stakeholders, including representatives of the political authorities in charge. These mechanisms need to include ways to accommodate the empowerment of citizens as well as the necessity of developing technical/administrative tools and processes aimed at fostering the engagement of policy makers and institutional structures in environmental decision-making. Discussing in detail four examples or case studies, Carnoye and Lopes' research show that when such methodologies are integrated into environmental valuation discussions, the outcomes will be more consistent with stakeholder's expectations and local political realities.

Throughout the 2000s, several cross-sectional papers were published which utilized a variety of data sets to compare the relative regulatory strength or capability of state agencies. Ulph (2000) and Fredriksson & Millimet (2002) look at the "race to the

bottom" phenomenon that policy makers feared was taking place as states competed for industrial and economic growth, given the weakening of the leveling effect on agency budgets that should have occurred under federal environmental mandates. Ulph's analysis indicates that the imposition of harmonized (nationwide) federal environmental regulations imposes significant compliance costs on states that are counter to more optimal, state-by-state polices. This encourages state environmental dumping (lax enforcement or sidestepping of federal rules) and erodes the benefits of coordinating environmental policy at the federal level. Fredrissson & Millimet use a different approach to reach a similar conclusion. Their analysis finds that state environmental policies are influenced by their contiguous and regional neighbors but that the effect is asymmetric. States with more stringent environmental policies and systems, including agency funding levels, "pull" their neighbors towards more aggressive programs. However, in those states or regions with more relaxed environmental program attitudes, neighboring states have no incentive to enhance environmental policymaking.

State environmental agency budgets are selected as the dependent variable by Newmark & Witco (2007) who concluded that the financial resources a state is willing to commit to monitor and maintain the integrity of its environment is a much clearer statement of its priorities than other, perhaps more confounding signals such as per capita income or average educational level. Their analysis regressed total state environmental and natural resource spending on political and non-political variables such as amount of pollution released, total state spending, and advocacy group memberships. Newmark & Witko found that political factors, specifically the strength of the state's environmental movement, are important in determining environmental spending.

Ryu et al. (2007) also point to agency budgets as strongly influenced by political principal's policy priorities. State survey data from agency heads, governor's offices, and legislative bodies were correlated to agency budget requests and other exogenous variables such as per capita gross state product, overall state spending, and per capita federal aid. As expected, they find that while fiscal, legal, and administrative factors influence state agency budget requests and outcomes, the predominant role in explaining final appropriations are governors and legislative bodies. Agencies are not directly influential in determining budget outcomes, rather gubernatorial recommendations and legislative endorsements are the ultimate deciding factors.

The above cited papers look at the effects of pollution severity, political culture, agency administrative characteristics, and overall state fiscal capacity (e.g., wealth or per capita income and total spending) and other factors on agency budget status. Underlying these relationships are several common themes: their longitudinal nature, interdependency and multidimensionality, and the role socio and economic factors play in establishing and influencing spending. In a particularly rich paper, Fullerton & Kim (2008) present a strong model balancing the dynamic interactions between agency spending and environmental protection (independent variables) with tax or welfare policy and economic growth (dependent variables). They concluded that increased public spending on pollution abatement expands economic activity, but that effect becomes less apparent near an outcome or welfare maximum, beyond which more such spending may result in either greater or reduced economic growth.

Research ongoing throughout the 2000s continued to better identify and quantify those forces that motivated and helped to shape agency and legislative environmental priorities. Breunig & Koski (2006) examined the effects of budgetary incrementalism (periods of funding stability interspaced by punctuations or funding decreases) combined with dramatic or outlier spending as it related to issue attention shifts by policy makers. They examined policy outcomes over 18 years in all 50 states across 10 budget categories, including environmental agency funding. The degree to which state budgets are characterized by incremental changes with occasional, sometimes dramatic shifts in appropriations varies. Agencies within those states where these punctuated budget events occur less frequently enjoy relative stability and predictability, but also may not be as innovative or dynamic in addressing new constituent concerns.

This theme is expanded by Haibara (2009) who presents an optimization method to more efficiently manage pollution tax rates and tariff revenues in government financing of environmental abatement activities. He points out that public funding for environmental abatement activity decreases as industries are encouraged by tax policy to emit less and less pollutants. Rather, pollution abatement is better funded by a combination of tax and business tariff (product) revenues. Haibara's economic model indicates that when both are configured optimally, overall financial burdens to business and public funding sources are reduced.

It is in the papers cited above, and others, where the independent variable sets that may influence or be connected to state regulatory agency budgets begin to be defined and evaluated. The prior research explores a wide-range of possible associations from

structural/organization to economic to cultural, and political. This ground work serves as the primary basis for the selection and evaluation of this dissertation's independent variables described in Section 4.

3.5 Research into Multiple Factors and Their Influence on Environmental Agency Budgeting

Since 2010, research related to environmental agency performance, outcomes, or policy implementation have become focused on the pursuit of an integrated, unifying understanding of how internal and external determinants could be combined into a cohesive model or data set that would predict or at least explain how and why environmental agencies did or will act or, in some cases, fail to act. While not exclusively the product of the 2010s and beyond, several key papers surfaced in the early part of the decade that began to signal this trend. Konisky & Schario (2010) and Wiener & Koontz (2010) both examine public preferences and citizen ideology as drivers to state environmental agency capability and budgets. These studies expanded on the independent variables used in earlier work to include such data sets as confidence in government, citizen (political) ideology, and partisan identification (Republican or Democratic) in state environmental agency financial capability. Olive et al. (2012) continues to develop this theme in their analysis of the role that normative beliefs, particularly the precautionary principal, play in combination with regulatory diffusion among states and political ideology within states in air quality policy development, enforcement, and implementation, all of which are indirect measures of budgetary capability.

The role of new, non-traditional metrics is combined with more typical measures of state agency performance as the search for a unifying cognizance in state agency behavior

continues. Clark & Whitford (2011) examined the influence of federal funding on environmental agency budgets associated with state political institutions, ideology, and socioeconomic and demographic characteristics. Although their findings may not be applicable directly to current regulatory settings due to the age of the data sets (1988 through 1994), Clark & Whitford confirm a "flypaper effect", where state environmental agencies tend to commit and expend more resources in areas being funded by federal agencies.

Along these lines, the effectiveness of a state environmental agency and its relationship with environmental quality is assessed by Heckman (2012) whose discussion of government capacity (as measured by Government Performance Project data) and its relationship to citizen ideology and air pollution emphasizes the importance of functional metrics, including agency funding, and affirms that numerous factors interact in characterizing governmental agency efficacy in environmental matters. Similarly, relying on data from the American National Election Studies (1952 through 2008) Chamberlain (2013) finds that political culture appreciably affects state environmental agency spending. Stafford (2008) and Toffel & Short (2011) contend that the real influence state environmental agency policy has is not measurable by enforcement or inspection activity but rather is related to constituent outreach and education to achieve, maintain, or enhance compliance. Supporting research by Giles (2013) and Mintz (2013) points out that fines and enforcement actions, while important and often used in agency funding and as a gauge of environmental agency performance, may not be strong measures of state agency effectiveness. No governmental agency, environmental or not, wants to waste

precious resources chasing the approximately ten percent of bad actors that are responsible for 90 percent of the non-compliance issues.

More direct environmental quality measures such as air pollution (Heckman, 2012), extent of impaired waters (Reimer et al., 2013), and pollutant emissions reported under the Toxic Release Inventory (Gerde & Logsdon, 2001; Delmas & Blass, 2010) also have been used as integrative measures of "problem severity" in combination with other, sociopolitical factors. The underlying hypothesis being that those businesses or states with environmental quality problems will, under pressure from stakeholders, tend to be more assertive in funding state environmental agency programs that address those issues (Ellison & Newmark 2010; Reimer et al., 2013). Some studies, older and more recent, support this correlation (e.g., Patten, 1998; Bae, 2012), while data from others suggest different results (Freedman & Patten, 2004; Woods, 2014).

As part of the PhD program, I was required to publish three papers related to the dissertation topic. The first (Blauvelt 2014a) provides an overview on the make-up and limitations of environmental and sustainability indicator sets based on the driver, pressure, state, impact, response (DPSIR) framework. It goes on to suggest a technique to categorize environmental and sustainability indicators based on their alignment with DPSIR. Environmental or sustainability indicators and their associated indexes can be arranged into categories that are distinct, well defined and transferrable, regardless of the degree or intensity of aggregation. By so doing, the underlying preferences inherent in the index or data set are revealed and the user/decision maker/policy advocate can evaluate the full context of the information being presented.

The second paper (Blauvelt 2014b) was an initial evaluation of economic factors and how they might influence the amount of spending states direct towards environmental programs. Seven data sets were selected as independent variables; those possibly explaining or accounting for a state's environmental spending choices. These include: population, total state expenditures, Gross State Product or GSP, the manufacturing and mining sectors of Gross State Product (M&M GSP), unemployment rates, total amounts (in pounds) of chemicals regulated by the Toxic Report Inventory (TRI) for releases to air (fugitive and point source) and surface water, and health ranking score by state.

A Pearson's product moment correlation coefficient was used to compare environmental expenditures for each state with seven data sets. Population (in 15 states), GSP (in 21 states), M&M GSP (in 12 states) and total state expenditures (in 17 states) were the independent variable data sets that seem to have the most connection with state environmental agency expenditures. Each of these ties directly to the overall financial capacity of a state and they were roughly split in defining positive and negative relationships between the variables.

The third paper (Blauvelt, 2015) analyzed possible political and cultural influences on budgetary outcomes in an attempt to identify those common, underlying, non-econometric factors that may drive or significantly contribute to state environmental agency funding. Between 2000 and 2009, total state expenditures, per capita income, educational attainment, agency staffing, environmental quality as measured through impaired waters, citizen ideology, and state agency performance were selected as the independent variable. A Pearson's product moment correlation coefficient was used to

compare state environmental expenditures to these six data sets. Those states showing the biggest change (positive or negative) in annual environmental agency budgets also have the strongest correlation (positive or negative) with the total number of independent variables. This relationship implies that changes to sociopolitical factors may sway or have an influence on state environmental agency funding. Where appropriate, findings and calculations from these papers have been incorporated into this dissertation.

3.6 Research Question: Local and Regional Drivers of State Environmental Agency Budgets

The research of the past 25-years on environmental and sociopolitical metrics and their possible influence on state environmental agency funding has followed a progression that is essential to the central question of this dissertation. All state agencies, including environmental ones, are subject to the macroscale revenue dynamics of Boom & Bust cycles that have been operative in the U.S. economy since the late 1980s. And while there may be some insulating effects on environmental agency budgets given the regulatory minimums established by federal mandates, states enjoy considerable flexibility in establishing policy, enforcement, and spending priorities. It is the search for that subset of factors, operating within this larger budgetary dynamic, and which ultimately may be determinative of state environmental agency spending that is the subject of this dissertation.

Environmental indices developed in the 1970s served to focus the attention of policy makers and researchers on those metrics considered most relevant to evaluating environmental quality. As federal environmental programs devolved to the states

throughout the 1980s and 1990s, these indices also served as the first lists of independent variables that researcher could begin to use to assess the effectiveness of state environmental agency performance. This performance, often described as capability or capacity, has been related, either directly or indirectly, to agency funding. In the 2000s, as the data sets became comprehensive and analytical tools sophisticated, the nuanced nature of the relationships among potential state environmental agency budget drivers grew more apparent.

The research cited and described above illustrates an evolving awareness of those factors that may be influencing funding for state environmental agencies. Prior research has compiled and analyzed survey data from agency staff, policy makers, and other stakeholders and typically combined it with economic, political, and social metrics to try and forge an understanding of the appropriation or environmental policy process. This dissertation, however, looks to examine those relationships in a way not previously investigated, assessing those that may be operating across all geographies while considering those local or regional factors within states or groups of states that may be driving environmental agency funding. It is distinguished from prior work on this topic by the methodologies described below.

Environmental agency funding has been used as the dependent variable. Prior research selected other factors such as environmental quality outcomes (e.g., pounds of air pollutants emitted), monetary fines levied or inspections/enforcement actions completed, environmental legislation enacted, or even changes in state economic activity as measures of environmental agency performance, Environmental agency funding usually was included as one of the independent variables in the analyses or in some cases as a less

significant dependent variable (Williams & Matheny, 1984; Lester & Lombard, 1990; Newmark & Witko, 2007). This downplays the operative fact that state environmental agencies are long-established, bureaucratic organizations that are functioning within well-defined regulatory and legal frameworks developed at the federal and state level and that largely have been in place since the late 1970s and early 1980s. No new major federal environmental programs have been promulgated since the Clean Air Act Amendments of the late 1990s and major modifications to existing programs proposed by EPA or presidential order (e.g., Clean Power Program, Clean Waters Rule) are hotly contested by the states in court and delayed for years or implemented (if ever) in greatly diluted versions. With occasional exceptions for usually peripheral and short-lived gubernatorial or legislative programs or initiatives, and excluding recent interest in climate change and sustainability (neither of which are central to the core missions of most state environmental agencies), the work state environmental agencies perform is well-defined and routine. Within this newly considered context, funding becomes a much more direct measure of environmental agency robustness and capability. By focusing on this transparent, universal, and easily measurable variable, short and near-term patterns and trends in agency status become discernible without the need to rely on difficult to obtain and interpret survey or hard to quantify "policy outcome" data.

Another important distinguishing feature of this dissertation is its geographic reach. Not many of the studies cited examined data from across all 50 U.S. geographies. Lester, 1980; Agethe et al., 1996; Hahn, 2000; and Breunig, 2006 gathered data on state specific economic or social conditions and processed them as either dependent or independent variables in relation to state environmental quality or outcomes. However, findings in

these and other studies are presented as nationwide summaries or, in a few cases such as Meyer, 1993 and Cutter et al., 2003, regional assessments of those forces possibly influencing state environmental policy or agency enforcement. In this dissertation, 50 state specific independent variables are correlated with their respective 50 state specific dependent variables to identify possible relationships particular to each state in effect during the study period. This has allowed for funding patterns or tendencies to be evaluated or compared across such factors as state size, economy, or political ideology.

This dissertation also is distinctive in that it incorporates data from two major economic downturns: the 2002 "Dot Com" stock market crash and the 2007-2008 Great Recession. While several prior studies compiled data from periods that contained economic slumps (Elliott et al., 1997; Dell 2009; and McCright, et al. 2014) nothing has stressed state finances and budgets as significantly as the 2002 and 2007-2008 economic slumps, both occurring within a few years of each other and for very different reasons. The incorporation of spending data between 2000 and 2010 as independent variables permits a consideration of individual state commitment to its environmental programs.

Most of the studies cited selected a limited number of variables and processed them, often with very sophisticated statistical tools, to quantify potentially associative relationships (Bacot & Dawes, 1997; Woods et al., 2008, and Konisky & Woods, 2012). This dissertation is noteworthy from a methodological perspective in how it has chosen and processed its independent variable data sets. Over 20 different measures of social, economic, and cultural status were compiled for each state. These were correlated to each other and the dependent variable (state environmental agency funding) and those metrics showing the most promising (influential) relationships were singled out for further

evaluation and testing. This screening level type assessment was not common in the published literature and has helped to support the reliability of the data sets. For example, within many but not all states, there are strong correlations between environmental agency spending and educational attainment, per capita income, population, gross state product, and environmental agency staffing levels.

The environmental agency survey and follow-up staff interviews also differentiates this dissertation from other research. The survey and interviews offer perspectives from staff directly responsible for the implementation of programs and services most affected by budgetary changes. While limited in scope, the respondents are not policy makers or outside stakeholders, but those individuals directly managing and implementing environmental programs and related budgets on a day-to-day basis. The survey and interview responses provide an on-the-ground perspective not given by senior policy making staff that often are the target audience of similar outreach efforts (Johnson et al., 2005; Erwin et al., 2011, and Woods, 2014).

4.0 Selection of Data Sets

What factors are associated with allocating funding for state environmental agencies? The methodology used in this dissertation to answer this important research question includes a series of statistical tests supplemented by a follow-on survey of mid to senior level management staff working for state environmental agencies. The results are especially significant considering the ongoing and soon to be accelerating decreasing federal commitment to environmental protections unabashedly proposed by the Trump administration. Soon to be more and more a state responsibility, expenditures for clean air, clean water, and waste management have long been recognized as a valid (but not the only) proxy representing a state's commitment or level of dedication to the environment (Patten, 1998; Newmark and Witko, 2007; Konisky & Woods, 2012). As described in Section 3.0, an extensive body of research has been developed that attempts to identify, measure, and integrate the influence social, economic, cultural, and political factors have on state environmental agency funding. Table 6 summarizes those commonly cited in the literature and their expected influence on state agency expenditures.

Table 6 - Independent Variables and their Anticipated Association with State Environmental Agency Funding

No.	Factor	Anticipated Correlation	Cited by
1	Population	Positive	Young, 1999; Newmark & Witko, 2007
2	Per capita income	Positive	Koven & Mausolff, 2002; Feiock & Stream, 2001
3	Total state expenditures (spending)	Positive	Williams & Matheny, 1984; Agthe et al., 1996; Konisky et al., 2012
4	Gross State Product (GSP)	Positive	

No.	Factor	Anticipated Correlation	Cited by
5	Manufacturing & Mining components of GSP	Positive or Negative depending on effectiveness of interest groups	Williams & Matheny, 1984; Rinquist, 1994; Levinson, 2001; Wang et al., 2014
6	Unemployment rate	Negative	Meyer, 1993; Hahn, 2000
7	Federal (environmental) grants and aid	Positive	Clarke & Whitford, 2011; Larcinese et al., 2013; Woods, 2014
8	State environmental agency staff	Positive	Nouri & Parker, 1998; Bacot et al., 1996
9	Toxic Release Inventory (air & water) discharges	Positive	Patten, 1998; Downey, 1998
10	Impaired Waters designations	Positive	Young, 1999; Potoski & Woods, 2002
11	Health Ranking	Negative (the higher or healthier the ranking, the less influence on funding levels)	English et al., 2009; Erwin et al., 2011
12	Educational Attainment	Positive	Daley & Garrand, 2005; Ricci, 2007; Ness & Tandberg, 2013
13	Citizen/Government Ideology	Positive (the more liberal the greater influence of funding levels)	Koven & Mausolff, 1999; Tanger et al., 2011; Olive et al., 2012
14	State Management Capability	Positive	Hayes et al., 1996; Potoski & Woods, 2002; Ryu et al., 2007
15	Diversity (economic, cultural, religious)	Positive	Randolph et al., 2012; Chamberlain, 2013; Highfill & O'Brien, 2015

After an initial data compilation and bivariate correlation process, seven of the above listed 15 factors: population, per capita income, total state expenditures, gross state product, educational attainment, and government ideology were selected for more in-depth analysis of their potential influence on environmental agency funding levels. The selection of the population (23), per capita income (25), total state expenditures (18), gross state product (19), educational attainment (27), agency staffing levels (33), and government ideology (21) data sets was based on the number of bivariate correlations for the 50 states (the number shown in parenthesis after each data set) with the environmental expenditures dependent variable. Additional information on each of these variables is

provided in Section 4.2. The inclusion of more than one data set provides for redundancy or overlap in the possible identification of critical components or functions of individual or combinations of these factors. This has been done with the intent of increasing overall correlation reliability.

4.1 Dependent Variables

For the purposes of this analysis, total state environmental expenditures by state between 2009 and 2014, adjusted to 2014 dollars, were chosen as the dependent variable. These expenditures include services and costs related to the regulation of natural resources, air quality, water quality, sanitary engineering, and other environmental activities. They also include capital or "one-off" environmental projects such as wastewater treatment plant construction or water supply/management projects. To better illustrate longer-term trends independent variable data sets include the years 2000 through 2014.

Information on environmental spending is readily accessible and easily comparable across jurisdictions and is reactive or sensitive over the short term to the budgetary preferences of legislative bodies which, presumably, are not insulated from the people they purport to serve. Data sets for the 50 U.S. states were obtained from U.S. Census Bureau and are available at www.census.gov/govs/state. They are included in Appendix A**.** Using spending from across the country over six-years lessens the chance that the associations observed have been caused by a short-term set of circumstance or a political singularity (e.g., environmental calamity or upset election). Also, the financial resources a state is willing to commit to monitor and maintain the integrity of its environment is a much clearer statement of its priorities than other, perhaps more confounding signals

such as inspection frequency or regulatory penalties (Bacot and Dawes, 1997; Newmark and Witco, 2007; Konisky and Woods, 2012).

State environmental agency spending averaged $460 million per year per state between 2009 and 2014. Thus, environmental agency budgets are significant enough so that changes in spending spending patterns should be related to other factors of a state's economic performance. Health care, education, and public safety command more meaningful places in state budgets and oscillations in these spending categories over similar periods have been analyzed regularly as predictors of policy performance and constituent service ability (Mohapatra & Mishra, 2011; James et al., 2012). The same should hold true for environmental expenditures.

Finally, other environmental metrics may be too narrowly focused to connect or easily discern their possible relationship with a state's policy objectives. For example, fines and enforcement actions, while important and regularly used to gauge environmental agency performance, may not be strong measures of effectiveness. Giles, 2013 and Mintz, 2013 cite "Next Generation" enforcement initiatives – those that deter noncompliance – as more suitable measures of regulatory effectiveness. These include the use of advanced monitoring technologies, regulations that achieve desired outcomes without the need for enforcement actions, and those that rely on independent, third party compliance validations/certifications.

The state environmental agency expenditures discussed in this dissertation include funding dedicated to capital improvement projects such as construction of waste water

treatment plants or modernizing a state building's energy systems. Capital expenditures, as categorized by the U.S. Census Bureau, is that spending by state agencies or governmental bodies for direct construction of buildings, roads, and other improvements undertaken either on a contractual basis or through their own staff. These have been included as part of state environmental agency budgets and are made up of purchases of equipment, land, and existing structures as well as payments on capital leases (i.e., rent to own). It does not include expenditures for maintenance and repairs to existing public facilities or assets. Funding for capital improvement projects at the state and local (county or municipal) level can be done through a variety of mechanisms such as applying for and obtaining federal grants, traditional (set-aside) budgeting, project-specific bonding, or pay-as-you-go user fees such as roadway tolls, or combinations of all four.

The potential influence or biasing of these one-off funding windfalls for environmental projects on the statistical analyses needs to be considered. While state-level capital expenditure data are compiled by the Census Bureau, U.S. Department of Transportation, and many business-related groups (e.g., U.S. Chamber of Commerce, National Education Association, American Society of Civil Engineers) for certain specific programmatic areas such as transportation, health care, or education, there is no repository or compilation of state environmental agency capital expenditure spending.

To evaluate possible influences from capital (environmental) project funding, capital expenditure data for environmental projects were segregated from the budgets of ten states for three discrete years (2009, 2011, and 2014 – Table 7). These states were

selected to provide a range of geographies and budget sizes as well as for ease of data compilation from state agency web-sites.

Table 7. Capital Expenditure Funding in Selected State Environmental Agency Budgets

No.	State	State Environmental Expenditure Budget (x$1,000)	State Environmental Agency Capital Expenditure Funding (x$1,000)	Capital Expenditures as a Percent of Agency Budget
1	Alabama	2009 – 326,180	3,426	1.1%
		2011 – 284,498	8,009	2.8%
		2014 – 262,297	7,211	2.7%
2	Colorado	2009 – 509,927	11,218	2.2%
		2011 – 353,332	7,773	2.2%
		2014 – 342,944	8,231	2.4%
3	Indiana	2009 – 340,891	8,309	2.4%
		2011 – 318,701	6,791	2.1%
		2014 – 335,365	7,043	2.1%
4	Kansas	2009 – 253,094	7,600	3.0%
		2011 – 226,896	6,400	2.8%
		2014 – 223,527	4,000	1.8%
5	Maryland	2009 – 710,562	50,339	7.1%
		2011 – 491,106	15,400	3.1%
		2014 – 469,547	12,900	2.7%
6	Massachusetts	2009 – 442,122	16,781	3.8%
		2011 – 366,813	8,764	2.4%
		2014 – 415,175	9,423	2.3%
7	Missouri	2009 – 421,806	1,266	0.3%
		2011 – 322,456	2,612	0.8%
		2014 – 253,393	2,583	1.0%
8	New Hampshire	2009 – 72,295	8,758	12.1%
		2011 – 71,073	4,335	6.1%
		2014 – 72,645	2,496	3.4%
9	Tennessee	2009 – 419,549	19,449	4.6%
		2011 – 328,411	7,231	2.2%
		2014 – 294,152	6,400	2.2%
10	West Virginia	2009 – 205,773	8,129	4.0%
		2011 – 239,230	9,569	4.0%
		2014 – 228,036	2,510	1.1%
Average				3.0%

Capital spending values were determined by review of individual state budgets, which are complicated and often not easily interpreted documents. Roughly, capital spending was taken to be the difference between environmental agency operating budgets allocated from general or other recurring state resources versus those apportioned from grants, non-

recurring revenues, or special funds. On average, capital spending on environmental projects made up approximately three percent of overall state environmental agency expenditures for the ten states evaluated. These amounts are not considered significant enough to have a meaningful influence on the direction or trend of overall agency budgets.

There are approximately 3,100 counties (called parishes in Louisiana and boroughs in Alaska) in the United States as well as over 90,000 other types of political subdivisions such as water districts, conservation districts, school districts, etc.). Environmental agency spending by non-state level entities (counties, districts, cities, townships, etc.) has not been considered in this dissertation. This is for two reasons: U.S. Census Bureau data on environmental spending at the county level is inclusive of federal and state pass-through appropriations. It would require extensive analysis of individual county budgets to determine funding not related to federal or state allocations. Furthermore, county governments traditionally operate as state administrative arms and provide services such as welfare, health, judicial, and public safety (Choi et al., 2010). Though counties in some states have become more urbanized and begun to act as municipal service providers (Benton 2006), they still must comport to federal and state regulatory paradigms and counties tend to shy away from activities that compromise their local economic base (Farmer, 2011). Thus, most counties lack the resources or incentives to promulgate and enforce significant environmental policy initiatives independent from those enacted at the federal or state level.

4.2 Independent Variables

Seven data sets were selected as independent variables; those possibly influencing or associated with a state's environmental spending choices. These include, for the years 2000 through 2014, the following:

- Population. These data are developed by the U.S. Census Bureau Population Estimation Program which publishes total population estimates and demographic components for the United States. The reference (cutoff) dates are July 1 for each year between 2009 and 2014.

- Total state expenditures. These are payments (total state spending normalized to 2014 dollars) compiled by the U.S. Census Bureau for a state government and its agencies net of correcting transactions and recoveries or refunds, and excluding government-operated enterprises (e.g., lotteries), utilities, and public trust (pension) funds.

- Gross State Product or GSP. This is an inflation adjusted measure (in 2014 dollars) of each state's production (all goods and services), as reported to the U.S. Census Bureau, based on a weighted average of national prices for those products and services produced within each state. Aa part of the GSP data set, the manufacturing and mining sectors of Gross State Product (M&M GSP) adjusted to 2014 dollars also are considered. The U.S. Census Bureau allocates these values to manufacturing sector establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. The

mining sector comprises establishments that extract naturally occurring mineral solids (e.g., coal and ores), liquid minerals (crude oil), and gases.

- Per Capita Income. This data set represents the average (monetary) income received annually as computed by the U.S. Census Bureau for every man, woman, and child residing in each state, adjusted to 2014 dollars. It is calculated by dividing the total income of all people 15 years old and over in the state by the total population of that state. Income is not considered for people under 15 years old. Income does include amounts reported separately for wages or salaries; net self-employment income; interest, dividends, or net rental or royalty income, or income from estates and trusts. Income from government pension and welfare programs also is excluded.

- Full-Time Equivalent Environmental Agency Staff (FTEs). Data are shown at the functional categories for employment statistics, as defined by the Government Finance and Employment Classification Manual. The data are based on public records and contain no confidential or individual identifying information. The FTE number is determined by calculating the number of hours worked per period for full-time workers (i.e., multiplying the number of full-time employees by 40 hours by the number of weeks per period). The number of hours worked by part-time employees then is multiplied by the number of hours worked per week by the number of weeks worked. Full time and part time hours are summed and then divided by the number of hours a full-time employee would work for that period. Full-time employees are those who worked on average 30 hours or more a week for more than 120 days in a year.

Part-time employees are those who worked on average less than 30 hours per week, but more than 120 days per year.

- Educational Attainment. Reported by the U.S. Census Bureau in 2009 through 2014 as a percent of the state's population age 25 and older that have attained at least a Bachelor's degree. The principal sources of data are the decennial census of the population as well as ongoing Current Population Surveys conducted by the U.S. Census Bureau. Data are supplemented with information taken from reports by administrators of educational institutions and through state and local agencies having jurisdiction over education.

- Government Ideology. Annual measures of state government ideology (liberal vs. conservative) as published by the National Association of Governors between 2000 and 2014. Based on political party identifiers (Democrat, Republican, or Independent), it includes party dominance in upper and lower legislative houses (NCSL, 2016).

These data sets, included in Appendix D, have been used to evaluate whether a single variable or combination of variables may be connected to a state's environmental spending proclivities. Establishing a causative relationship between the independent variables and state environmental agency funding is not a realistic or achievable study objective; especially given the linear nature of the statistical analysis employed and the multi-dimensional nature of the governmental budgeting process. However, confirming possible associations or relationships with individual or sets of state sociopolitical factors

and environmental agency funding may allow heuristic or even simple predictive patterns to be identified.

4.3 Statistical Treatment

Four dependent variables were selected for Pearson correlation. This statistic is a dimensionless index that ranges from -1 to 1 and reflects the extent of a linear relationship between two data sets. Like many commonly used statistics, the Pearson's product moment correlation is not particularly robust (Wilcox, 2005), so its value can be misleading if outliers are present. However, inspection of scatterplots between *X's* (state environmental expenditures) and Y's (independent variable data sets) did not indicate a situation where lack of robustness might be an issue. That is, outliers were not commonly observed or present in the independent or dependent variable data sets. Also, when the sample size is moderate or large and the population is normal, as is the case for the data sets considered in this analysis, then the Pearson's product moment is the maximum likelihood of the population correlation coefficient, and is asymptotically unbiased and efficient. This means (roughly) that it is unlikely other techniques will yield more accurate estimates of the sample correlation coefficient.

Table 7 presents the findings of correlation analysis for four dependent variables: environmental expenditures; per capita environmental expenditures, average annual environmental agency expenditures, and environmental expenditures as a percent of total state expenditures. Note that each of these four are related. Total state expenditures should be associated with state population and economic activity. Average annual percent change eliminates the direct size factor and per capita expenditures divides by size. The fourth indicator (environmental expenditures as a percentage of total state spending) may

provide an indication of the relative importance of environmental expenditures in each state.

Between 2009 and 2014 average annual environmental agency expenditures correlate (r = >0.6) with average per capita environmental expenditures and environmental expenditures when expressed as a percentage of total state expenditures. Average annual environmental agency expenditures also correlate moderately well (r = 0.52) with average annual percent changes in those expenditures. The somewhat weaker relationship between these two dependent variables point to the wide variations in funding levels, especially for those states where double-digit increases or decreases in agency funding occurred during this period (Table 3).

Table 8 – Dependent Variable Correlation Analysis

Indicator	**Average Annual Environmental Agency Expenditures (2009-14)**	**Average Annual Percent Change in Environmental Expenditures (2009-14)**	**Per Capita Environmental Expenditures (2009-14)**	**Environmental Expenditures as a Percent of Total State Expenditures (2009-14)**
Average Annual Environmental Agency Expenditures (2009-14)	1.00	---	---	---
Average Annual Percent Change in Environmental Expenditures (2009-14)	0.52 (ρ = 0.29)	1.00	---	---
Per Capita Environmental Expenditures (2009-14)	0.86 (ρ = 0.03)	0.17 (ρ = 0.75)	1.00	---
Environmental Expenditures as a	0.62	0.50	0.44	1.00

Indicator	**Average Annual Environmental Agency Expenditures (2009-14)**	**Average Annual Percent Change in Environmental Expenditures (2009-14)**	**Per Capita Environmental Expenditures (2009-14)**	**Environmental Expenditures as a Percent of Total State Expenditures (2009-14)**
Percent of Total State Expenditures (2009-14)	($\rho = 0.19$)	($\rho = 0.31$)	($\rho = 0.39$)	

Table 8 illustrates the results of the four dependent variables correlated to the seven independent variable data sets. Correlation calculations are summarized in Appendix E. The dependent variables that, based on partial correlations, most frequently associated with the independent variable data sets (four out of the seven studied) are environmental expenditures (EE) and average per capita environmental expenditures (PC-EE). The implications of these correlations are discussed below. The other dependent variables will not be evaluated further. The time-frame for these correlations is 2003 through 2014. This allowed economic adjustments related to the 2001-2002 Dot Com financial crisis to work through state budgetary systems and to establish a baseline prior to the 2008 economic collapse.

Table 9 – Independent Variables Correlated to the Dependent Variables

Indicator	Environmental Expenditures (EE) $ (2003-2014)		EE Percent Change (2003-2014)		Average Per Capita EE ($) (2003-2014)		EE as a Percent of Total State Expenditures (2003-2014)	
	Pearson r	Partial r	Pearson r	Partial r	Pearson r	Partial r	Pearson r	Partial r
Population	-0.54	-0.14	-0.46	-0.54	-0.81	-0.43	-0.92	-0.10
GSP	-056	-0.69	-0.27	-0.43	-0.76	-0.67	-0.80	-0.38
GSP – M&M	-0.53	0.40	-0.16	-0.08	-0.68	0.42	-0.64	0.47
Ideology	-0.78	-0.78	-0.33	0.00	-0.64	-0.78	-0.31	-0.32

Indicator	Environmental Expenditures (EE) $ (2003-2014)		EE Percent Change (2003-2014)		Average Per Capita EE ($) (2003-2014)		EE as a Percent of Total State Expenditures (2003-2014)	
	Pearson r	Partial r	Pearson r	Partial r	Pearson r	Partial r	Pearson r	Partial r
Per Capita FTEs	0.58	-0.56	0.42	-0.52	0.82	-0.53	0.92	0.01
Ed Attainment	-0.53	-0.65	-0.54	-0.43	-0.62	-0.58	-0.70	-0.29
Per Capita Income	-0.49	0.21	-0.29	-0.39	-0.73	0.21	-0.83	0.04
Adjusted r^2 values	0.79		0.24		0.88		0.42	
Total Partial Correlations	---	4	---	1	---	4	---	1

Table 9 shows that overall total environmental expenditures during 2003-2014 and average per capita environmental expenditures are strongly associated with the seven correlates. Environmental expenditures percent change and environmental expenditures as a percent of total state expenditures variables are weakly correlated with the set of seven correlates. The following discussion highlights some of the empirical findings beginning with the national perspective and then scaling back to the states.

Gross State Product – On a national basis, average per capita state environmental agency funding (PC-EE) correlated negatively with gross state product suggesting that there is little impetus for states to increase environmental agency funding even as economic activity rises. This may be due, as described below in the gross state product – mining & manufacturing (GSP-M&M) discussion, to the larger shift within the U.S. away from pollution intensive manufacturing and mining towards a service driven economy.

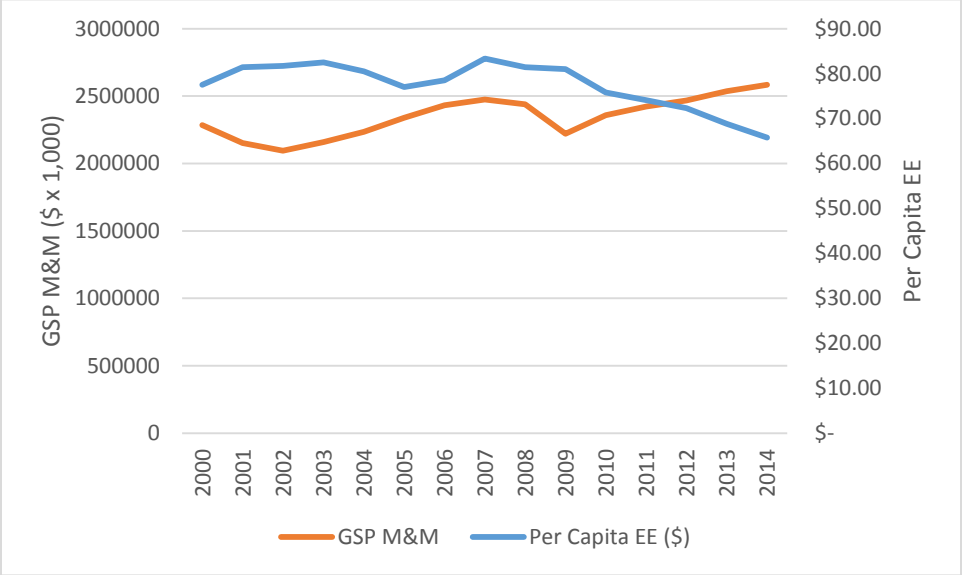
At the state scale, between 2009 and 2014 within individual states, GSP correlated with environmental expenditures (EE) in 32 states or just over 64 percent of those studied. In other words, GSPs for the 50 states for the six years between 2009 and 2014 (adjusted to 2014 dollars) were run as the independent variable against the dependent variable of each state's environmental agency expenditure for these same six years. Seven states have GSP's that positively correlated with environmental expenditures: Idaho, Louisiana, Nebraska, North Dakota, South Dakota, Texas, and West Virginia. Four of these states had some of the highest average annual percent GSP growth between 2009 and 2014: Nebraska at three percent, North Dakota at 13 percent, South Dakota at three percent, and Texas at five percent compared to the United States annual average GSP growth of just under two percent. This positive correlation is not unexpected as increasing economic activity in four energy producing states likely caused more pressure on local environmental quality and greater performance pressure on regulatory agencies. Of the 25 states that have no or a negative correlation between environmental expenditures and GSP, 15 have average annual GSP percentage increase between 2009 and 2014 of less than the United States average of just under two percent.

Gross State Product – Mining & Manufacturing (GSP M&M) – GSP-M&M growth rates have varied over the study period and include:

Time	Percent Change	Years	Percent Change per Year
2000-14	12	14	0.83
2003-07	12	4	3.19
2009-14	14	5	2.81

Over the last 14 years GSP-M&M growth has been relatively anemic at less than one percent per year, with periods of stronger performance occurring after the two economic downturns. However, this uptick in manufacturing and mining simply returned this metric to pre-recession levels. Therefore, a weak, positive correlation between GSP M&M and per capita environmental expenditures is not unexpected. Figure 4 illustrates GSP M&M growth trends and demonstrates that essentially it has remained unchanged (on average) between 2000 and 2014.

Figure 4 – GSP M&M Compared to Per Capita EE: 2000-2014



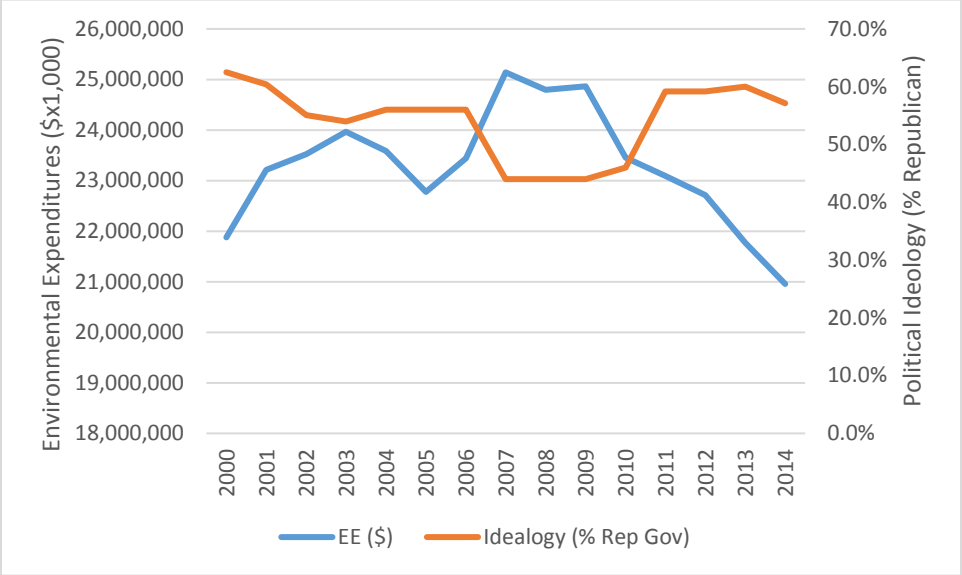
The weak correlation between EE-PC and GSP-M&M holds reasonably well with PC-EE tracking GSP M&M until about 2009. But after 2009, as the economy begins to recover from the financial crisis, PC-EE continues to decline even as GSP-M&M recovers to post-recession levels.

GSP M&M correlated with EE in 26 states (52 percent) between 2009 and 2014. Five of the correlations were positive (Louisiana, New Jersey, North Dakota, New York, and

Texas). Three of these states exhibited positive (average) GSP M&M growth (Louisiana 1.6 percent; North Dakota 11.3 percent; and Texas 5.7 percent). New Jersey and New York had negative (average) GSP M&M for this same period. State legislative control in New Jersey shifted to Democratic Party control just before or during 2009-2014. At the same time, New York was evaluating whether to expand shale gas production using hydraulic fracturing or fracking, which placed enormous political and advocacy group pressure on its Department of Environmental Conservation. Fracking was banned in New York in December 2014.

Ideology – Nationally, there is a negative relationship ($r = -0.78$) between EE and PC-EE and state ideology (Figure 5). The state ideology data set (party dominance in upper and lower state legislative houses, data from the National Conferences of State Legislatures (2016) was operationalized by calculating party control (by percent) in state legislative houses and assigning a positive whole number (+1) to legislators from the Republican Party and a negative whole number (-1) to Democrats. Thus, on a national basis the correlation indicates that as state legislatures became more Republican in character (more positive), PC-EE and EE decreased.

Figure 5 – Environmental expenditures compared to political ideology



On a statewide level, the data set is less demonstrative. There was no correlation between political party and environmental expenditures in 40 states (80 percent)[2]. However, the dominance of a single political party with the legislative houses did not change during the study period (2009-2014) within 34 of these states. Ten states correlated political party with environmental expenditures with three being positive (Maine, New Hampshire, and New York), illustrating an increasing funding trend associated with Republican majorities. Seven legislative houses mirrored national findings and correlated negatively with Republican majorities and environmental expenditures: Alabama, Kentucky, Michigan, Ohio, North Carolina, Oregon, and Pennsylvania.

Per Capita, Full-Time Equivalent Environmental Agency Employees – The relationship between PC-EE (column 3 of Table 8) and this independent variable is negative. It

[2] Nebraska's unicameral legislators are elected on a non-partisan basis (i.e., they do not run in primaries as Republicans or Democrats).

implies that, on average, state agencies that receive budget increases are not hiring, but likely investing in technology or exploring other ways to improve productivity and efficiency. Counterbalancing forces that may be in play are collective bargaining agreements or related constituency pressure that restricts, or at least slows, a state's ability to reduce staffing levels.

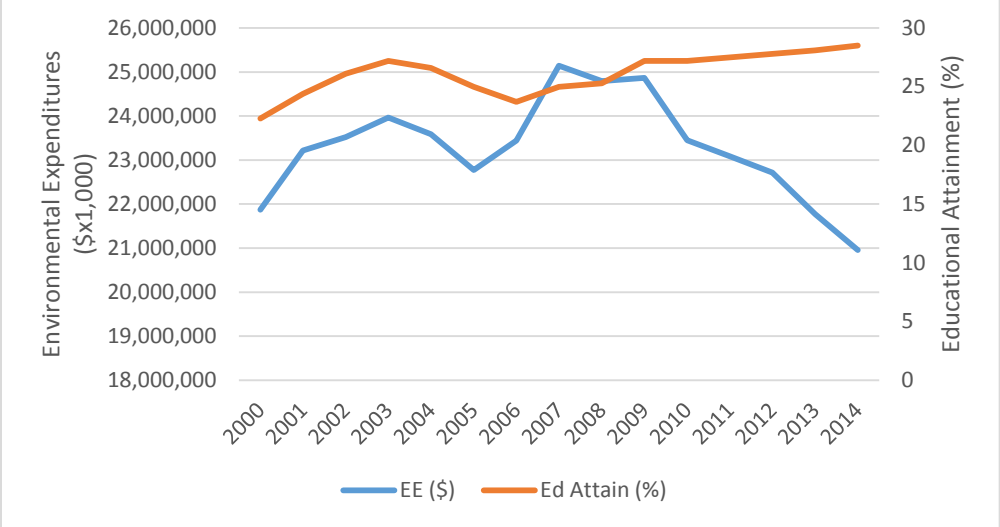
At the state level, between 2009 and 2014, 24 states had positive correlations with EE and FTE (i.e., agency staffing levels). As these states funding levels increased, so did the number of personnel. This is intrinsically consistent in that the cost of labor typically is the most significant factor driving service organization budgets. However, seven states correlated FTE staffing levels negatively with EE: Alaska, Connecticut, Georgia, New Hampshire, Rhode Island, Texas, and West Virginia. As the number of FTE's (and associated labor costs) decreased, state agency EE increased. While an immediate explanation for this counter-intuitive relationship is not apparent, three of these states (Alaska, Georgia, and Texas) had some of the highest number of average FTE's on staff during the 2009-2014 study period, with the environmental agencies in three others (Connecticut, New Hampshire, and Rhode Island) all employing some of the fewest average number of FTE's.

No correlation was evident between EE and FTE staffing levels in the remaining 19 states. Sixteen of these states were either in the top ten (most FTEs) or bottom ten (least FTEs) in total agency staffing. A further discussion regarding potential influences on environmental agency staffing levels is provided in the next section and is based on results of the state agency survey.

Education Attainment – A negative correlation between PC-EE and the Educational Attainment independent variable is unexpected, the assumption being that well-educated people would spend more to protect the environment. Prior research has shown that as educational level improves, as it did (about one percent a year, on average) during the study period, willingness to engage on environmental issues also increases (Lester, 1980; Ryu et al., 2007). Figure 6 illustrates a positive relationship through about 2008. Post 2008 EE begins to decrease as educational attainment continued to increase.

On an individual state basis, EE correlated with state educational attainment in 34 states. Seven states – Nebraska, North Dakota, Oregon, South Dakota, Rhode Island, Texas, and Vermont had a positive relationship between these two variables. These states, excepting Oregon, were in the top ten for those showing the greatest percentage average annual increases in educational attainment: greater than 1.2 percent per year versus a United States average of just under one percent per year.

Figure 6 – Environmental expenditures compared to educational attainment



Although Oregon's average annual percent increases in education attainment were among the lowest in the country, it is in the top five states with 30 percent of the population already holding at least a Bachelor's degree. The remaining states either had no or a negative correlation between environmental expenditures and educational attainment. This implies drivers in effect post 2009-10 that overcame the usually positive association between PC-EE and increasing levels of education.

4.4 Per Capita versus Total Spending

Trying to find a simple or a few patterns with state scale data is both challenging and perhaps not possible. This may be because so much budget pressure has been placed on state expenditures at a time of polarizing national policies and ideology. However, the use of per capita environmental agency expenditures as the dependent variable could serve as a possible leveling effect on differences in state size, population, and economic activity. Correlations were run between per capita environmental expenditures and those previously established independent variables (population, educational attainment, gross state product, etc.). In addition, another independent variable – per capita total state spending – was considered to see if an association between per capita environmental agency spending and per capita total state spending was present or not. A state-by-state summary of all correlations is in Appendix E.

Findings using per capita environmental expenditures rather that total environmental expenditures as the dependent variable did not change the strength or number of correlations to independent variables within 43 states or 86 percent of the study group. This is likely due to the lack of change over the study period (2009-2014) for most of the independent variables (e.g., educational attainment, government ideology). Another

reason might be the relatively steady or consistent rate of change that is present in such independent variables as population, gross state product, and per capita income. Large swings in these types of metrics are difficult to induce, especially over only a six-year span.

Four of the seven outlier states (Florida, New Jersey, Missouri, and Nevada) did not exhibit any correlation between total environmental expenditures and total state spending. But a positive correlation is established within these four states between environmental expenditures and state spending when these two factors are considered on a per capita basis. A positive correlation between total environmental expenditures and total state spending is observed in Maryland, but this correlation is absent when calculated on a per capita basis. For California and Iowa, a negative correlation between total environmental expenditures and total state spending is present, however this association vanishes when calculated on a per capita basis. No other changes in correlation status between the dependent variable and independent variable data sets occurred within these seven states.

Why the seven outlier states exhibited different responses to correlation tests than the other 43 in the study group is not apparent. These seven states had some of the lowest average rates of percent change in environmental agency expenditures between 2009 and 2014. In addition, except for Nevada, they also tended to have more robust per capita environmental agency spending than about two-thirds of the other U.S. states. The legislatures in five of these seven states (Florida, Iowa, Maryland, Missouri, and Nevada) are or lean Republican and all, except for Iowa and Nevada, had per capita income within the top half of the range for the United States. Some set of political, economic, or cultural

factors were operating that influenced the noted correlations between per capita environmental agency spending and the independent variables.

4.5 Survey of State Environmental Agencies

To supplement the results of the statistical analysis, representatives from state environmental agencies were surveyed to obtain information regarding those factors which they perceive exert a direct, real-time influence on budgets and staffing levels. State environmental agencies usually are led by a director or commissioner appointed by the governor and who may need to be confirmed by a chamber of the state legislative body. The commissioner or director then hires outside, or promotes from within, the agency division or program supervisors. This second layer of management also may be political appointees or may work within the civil service system; it varies from state to state. It is the commissioner and the division or program leaders that are responsible for implementing the governor's environmental priorities. The division or programmatic areas (e.g., waste management, air pollution control, land use regulation) are further subdivided and managed, depending upon the size and services offered by the agency, by career civil service employees: section or bureau chiefs. It is these section and bureau chiefs that conduct the day-to-day operations (inspections, permit reviews, emergency response, etc.) of the agency. The section and bureau chiefs, and the staff level personnel that work for them, also are the principal points of contact between the agency and the regulated community.

In some states, especially geographically large ones such as Texas, California, and New York, the agency may be subdivided in regions, with staffing and services organized along specific geographic lines and reporting up through a central command structure in

the state capital. For example, the New York State Department of Environmental Conservation (NYDEC) is divided into nine regions, with downstate Regions 1 and 2 (Long Island and New York City) having extensive Brownfield redevelopment capabilities while upstate Regions 6 and 7 supporting Great Lakes monitoring and cleanup initiatives.

The survey process conducted for this dissertation involved two steps, both performed in full compliance with specific Institutional Review Board (IRB) guidelines and requirements. As required by the IRB approval, to maintain confidentiality of the respondents, no individual and only general geographic (i.e., regional) identifiers are provided. In addition, records or notes relating to survey respondents and the information they provided are not in electronic form, are being kept in a secure location, and will be destroyed six months after this dissertation is completed.

The first step in the survey process was the preparation of a questionnaire (described below) that was emailed to the public information officer of each state agency. These are individuals, usually within the environmental agency commissioner's or director's office, that are charged with responding to inquiries from the public, press, legislators, and other interested parties. After review, the public information officer forwarded the email survey to the division or programmatic leader who, in turn, forwarded it to the bureau or section chief they thought most appropriate to provide the information being sought.

Initial response to the emailed survey was poor and I began the second step of the survey process which was a series of about 200 follow-up phone calls to encourage the public information officers or division/programmatic leaders to respond. On average, it took about three to four phone calls to either cajole, persuade, or sweet-talk someone into

speaking with me or to be told authoritatively that the agency will not be responding, or to realize that no response will be forthcoming from the agency. In some cases, I could obtain an introduction to the appropriate individuals through a personal relationship within the agency that I had developed though my consulting practice.

After an individual agreed to be interviewed, I ensured that informed consent was obtained as described in the IRB process. No rewards or enticements for participating were offered, although three interviewees did request a copy of the final dissertation, which I agreed to provide. These telephone calls lasted between 22 to 51 minutes and in one case, over an hour. No agency directors or commissioners agreed to be interviewed, but I was successful in talking to senior staff (bureau/section chief or higher) at the capital district level. I did not conduct interviews with regional leaders (for those states that were so organized) as I felt the perspectives that would be offered would not be broadly representative of state-wide agency conditions. A summary of interview logistics is provided in Table 10. Nine state representatives were willing to participate on the condition that they be identified only by (Census Bureau) geographic region. These included two states from the Northeast; three states from the Midwest; two states from the South, and two states from the West.

Table 10: Summary of Telephone Interview Logistics

Geographic Region	**Managerial Level**	**Program Responsibility**	**Length of Call (minutes)**	**Conversational Basis**
Northeast 1	Division Leader	Waste Management	48	Introduction through a personal relationship. Cordial and forthcoming. Enthusiastic discussion of agency priorities and trends.
Northeast 2	Bureau Manager	Budgeting & Staffing	50	Professional and thoughtful. In-depth discussion of statistical analysis and dissertation objectives.

Geographic Region	Managerial Level	Program Responsibility	Length of Call (minutes)	Conversational Basis
				Provided very detailed answers specific to agency programs.
Midwest 1	Bureau Manager	Compliance & Enforcement	43	Cordial and forthcoming. Strong knowledge and opinions regarding staffing and budgets as well as interaction with the regulated community.
Midwest 2	Bureau Manager	Personnel Administration	34	Introduction through a personal relationship. Cordial and forthcoming. Not familiar with environmental issues, but very knowledgeable regarding staffing and budgeting trends.
Midwest 3	Division Leader	Stakeholder and community relations	22	Professional and terse. Short, one-word answers. Obviously uncomfortable discussing these questions.
South 1	Division Leader	Water resources and pollution control	72	Cordial and willing to discuss issues influencing state-wide programs, but done within a highly political context. Animosity towards federal government environmental regulations.
South 2	Bureau Manager	Air pollution monitoring and permitting	51	Cordial and friendly, but rambling over many topics. Difficult to keep focused on survey questions.
West 1	Bureau Manager	Sustainability	44	Introduction through a personal relationship. Cordial and forthcoming. New in position and knowledge limited to this programmatic area.
West 2	Division Leader	Coastal Resources and Land Use	40	Cordial and forthcoming. Highly focused on climate change and carbon management issues.

The five-question email survey which was sent to agency public information officers is summarized on Table 11 and subsequent follow-up telephone calls, as described above, were made to each individual (or their designated representative) to solicit their input.

Table 11 – State Environmental Agency Email Survey

No.	Question	Possible Response
1	Over the past three years of budget cycles, has funding for your agency:	Increased substantially (>10 percent) Increased somewhat (between 6 and 10 percent) Remained essentially the same (between -5 and +5 percent) Decreased somewhat (between -6 and -10 percent) Decreased substantially (>10 percent)
2	Over the past three years of budget cycles, have staffing levels within your agency:	Increased substantially (>10 percent) Increased somewhat (between 6 and 10 percent) Remained essentially the same (between -5 and +5 percent) Decreased somewhat (between -6 and -10 percent) Decreased substantially (>10 percent)
3	Over the past three years or budget cycles, are the services your agency is being asked to perform,	Increased substantially Increased somewhat Remained essentially the same Decreased somewhat Decreased substantially
4	Rank, in order of importance (1 being the most important) those factors most influential in establishing agency budgets or program requirements	____ Federal (EPA) mandates ____ State economic conditions ____ State environmental quality conditions ____ Concerns over public health ____ Political considerations
5	Are there other factors not listed in Question 4 which influence agency budgets or programs? If yes, please describe.	

The discussion in Section 5 summarizes the information provided by those agencies which, although only representing 18 percent of states, does provide insights about "on the ground" view of the status of funding and programmatic requirements during a stressful period for environmental agencies.

5.0 Initial Appraisal of Survey Information

The statistical analysis aside why, except in handful of states, is funding for environmental programs decreasing? Blaming the 2007-2008 financial crisis is not credible as funding levels recovered within a few years after a similar, although not as catastrophic, economic meltdown in 2002-2003 (Figure 2). State environmental agency expenditures operate across programmatic lines (air, water, waste management, etc.) and can serve as a multi-dimensional representation of the budget preferences of legislators and governors. Do these reduced or flat funding levels truly signify a reduced political commitment to the environment?

5.1 Survey of State Environmental Agencies

Responses by state agency representatives to the on-line questionnaire are summarized below. They are reflective of the issues and stakeholder concerns that staff attempt to address and work through on a day-to-day basis. This is not a quantitative or determinative analysis of state agency policy or principles. It is intended to provide an initial, qualitative consideration of the perspectives on budgets and funding from a few mid-level and senior level state environmental agency program managers.

Question 1 – Agency budgets over the past three years

Eight of the nine states indicated that state environmental agency budgets had decreased either somewhat (between -6 and -10 percent) or substantially (greater than -10 percent) over the past three years. Only one state agency had experienced a substantial increase (greater than 10 percent) in funding and this was in due to a rise in local environmental concerns related to a recent and widespread expansion in oil and gas extraction.

Question 2 – Changes in staffing levels over the past three years

Survey responses to this question from seven of the nine states indicated that staffing levels had either stayed the same (between -5 and +5 percent) or decreased only somewhat (between -6 and -10 percent). Not surprisingly, the same state that enjoyed a substantial budget increase also reported a significant increase in staffing levels (greater than 10 percent). The remaining respondent state reported a substantial decrease (greater than 10 percent) in staffing levels. A reason for this decrease was not provided by the survey respondent; however, the 2013 through 2015 voting records of this state's Congressional delegation ranked in the bottom half of the Congress (League of Conservation Voters, 2013-2015) implying that state-wide elected officials did not consider environmental issues as a high priority.

Question 3 – Services being provided over the past three years

Each of the states answering this question indicated that the services they are being tasked to provide has increased somewhat or substantially over the past three years. However, the type of services varied widely and given the limited sample size, it is difficult to infer much beyond the opinions or statements of those agency personnel interviewed.

States in the Northeast reported service increases related to flood and coastal resiliency planning. These initiatives included expanded geographic information system mapping and enhanced flood modeling and predictive analysis. One Northeast agency also saw an increase in requests for technical support related to valuation in property buy-out negotiations in flood prone areas. Interactions with municipalities to address issues

related to flooding and treatment plant bypasses in combined sewer overflow systems also were consuming significant resources as wells as providing general guidance to towns, villages, and cities on environmental planning for flood and storm recovery efforts.

In the Midwest, expanded or new services spotlighting ground water and air quality impacts from mineral extraction were a high priority. This has included development of a mobile app for use by agency field staff when conducting inspections at well-heads and mines. Investments in telemetry based, real-time, air monitoring systems that connect point source emitters with the agency now allow permitting staff to evaluate remotely facility operational compliance. During the recent down-turn in shale gas fracking production and drilling, agency inspection activities increased at inactive or out-of-service production wells to ensure decommissioning requirements remained in place and functioning.

Western state agencies reported significant resources being dedicated to drought mitigation and improved water supply management. These have been focused on such programs as extensive evaluation, re-design, and construction or water system distribution infrastructure systems and support to pilot scale desalination demonstration projects. Citizen (volunteer) surface water monitoring programs have been revamped and community education related to invasive species control and fertilizer (phosphorous) stepped up.

Southern state environmental agency respondents indicated the need to allocate staff and budget resources due to (unspecified) increased federal mandates. However, when pressed for details they indicated that state-specific service areas such as recycling and

litter control and participation in EPA's Brownfield and derelict building grant programs required significant staff attention. Southern state agency staff were enthusiastic about re-organizing enforcement and inspection priorities in advance of the anticipated roll-back of EPA's Clean Power Plan.

Question 4 – Ranking of factors most influencing agency budgets or programs

Responses to this question varied amongst the responding agencies with the largest differences seen between the Northeast respondents, who ranked environmental quality and public health as important factors and responding to federal mandates as least important, and the Southern state respondents who ranked Federal mandates as most influential. In general, political considerations were described as least influential (ranking 4 or 5 out of 5) by each responding state agency with economic and federal mandates placing in the middle and environmental quality and health designated near the top of the list.

Question 5 – Other factors not listed in Question 4 that also have an influence of agency budgets or program priorities

No other influential factors were described by state agency representatives either in the on-line survey or in follow-up telephone conversations. However, survey responses are indicative of several troubling trends. Agency budgets and staffing, as described in Section 2, continue to decrease while services they are being asked to provide, due either to state-specific concerns or Federal regulations are expanding. Respondents were not senior policy level managers or agency decision makers and the information provided is from a narrow day-to-day, year-over-year operational requirement perspective. It is

apparent that in the Northeast and West, increased services are directly or indirectly related to climate change management while in the Midwest oil and gas extraction appears to be the dominant driver.

5.2 State Agency Interviews

As a follow-up to questionnaire responses, telephone interviews were conducted with the nine state agency representatives. These discussions suggest a more nuanced view of environmental agency status within the hierarchy of state government.

Agency representatives from coastal states describe regulatory and funding enthusiasm now being directed towards infrastructure resiliency related to climate change. The research and development dollars for these programs often comes at the expense of more traditional clean air, clean water, and waste management activities. The implication being that additional funding is being allocated, and some existing funding diverted, to climate change management programs such as a Governor's Office of Sustainability that may not be under the budgetary or programmatic purview of the environmental agency.

A common sentiment expressed by all nine representatives is that, to some extent, state environmental agencies are victims of their own success. Over the past 30 years' local environmental quality has improved, within many states quiet significantly. Rivers do not catch fire, skylines are not regularly obscured by intense smog, and people do not get sick from the drinking water. An agency representative of a Gulf Coast state credited a recent, short-term rise in environmental funding to the 2010 BP oil spill and the renewed attention in brought to cleanup and prevention strategies. Similar funding increases have been attributed to the shale gas fracking boom by Upper Midwest agency representatives and the environmental damage caused by improper drilling and development of those

resources. One agency representative likened it to the decreasing participation in childhood vaccination programs. Parents who never suffered childhood illnesses (or the consequences of such illnesses) do not realize how bad they can be and therefore discount the value of vaccinations. Likewise, people who have never experienced thick smog, undrinkable water, or exposure to hazardous waste do not place the same value on programs designed to prevent these types of events.

Finally, most of those interviewed cite a lack of trust as to environmental agency motives by constituents. This feeling is often exacerbated among stakeholders when the environmental agency also is considered as a revenue source for the state, with fees and fines going to a general fund as opposed to remaining with the agency. Even in those states where dedicated environmental funding exists, state legislatures regularly raid those reserves to balance general revenue shortfalls.

The representative from Northeast 2 described how a very modest deed transfer fee was expected to generate almost $6 million per year for land conservation, but for the last three years (2014 through 2017) this amount instead was transferred to the general fund. During the interview with the Midwest 3 representative, she described how revenues from a real estate transfer tax were supposedly dedicated to four pollution prevention projects, but over 90 percent of the funding was siphoned off for other, non-environmental purposes. The South 2 representative complained that a percentage of its sales tax is theoretically dedicated to support non-profit based environmental enhancement projects, but only a fraction of the money is actually allocated by the legislature for those purposes. In West 1, a tax on gas well production should be funding

energy conservation and innovation projects, but typically is more often used to make up budget shortfalls in prison and law enforcement programs.

The move towards more and more agency self-funding via filing fees, review fees, registration fees, enforcement actions, and other revenue generating mechanisms is causing regulated communities and other stakeholders to believe enforcement and policy decisions are being made based on the best interests of the agency, not the protection of public health and the environment.

6.0 Summary of Findings and Future Research

This dissertation had its roots in my professional consulting experience which is largely related to the environmental investigation and cleanup of Brownfield sites. Few things demonstrate a client's or redeveloper's economic belief in a property more than spending significant amounts of money to return it to productive use. Why not, I thought, couldn't I use this same yardstick to measure the federal or state governments commitment to its environmental protection programs? Although there is no single way to measure a state's commitment to environmental protection, money probably is more reliable than others. And it has been the intent of this analysis to evaluate the relationship between environmental agency expenditures (money) and the influence of external factors or drivers on those expenditures. In so doing, attention is drawn to the socioeconomic and sociopolitical factors that influence state spending on this important public health and quality of life related service area. The relationships defined by these correlations are not purely technical or administrative, rather they may echo state constituencies political or social priorities. Such a basic understanding of the forces that could be influencing state environmental spending, even at this broadest of views, might provide state officials an increased awareness of the breadth of drivers within their borders and offer some insight into the values of their electorates.

6.1 Policy Implications

The four basic conclusions of my research are:

- That funding for environmental protection programs, on both a federal and state level has decreased significantly since 2008 and continues to do so despite steady economic growth;
- That prior to the 2008 economic downturn, there was a reasonably positive association between gross state product, particularly mining and manufacturing, and educational attainment and funding for state environmental agencies;
- That environmental agency expenditures on a state and national basis correlate negatively with political ideology when that ideology leans Republican and positively when it leans Democratic; and
- That state agency representatives are concerned that environmental quality will begin to suffer because they do not have the resources to adequately carry out their regulatory oversight mission

These findings may have significant policy implications for federal and state decision-makers. For example, at some point funding for federal and/or state environmental agencies will reach a point where the basic functions of either EPA or its state equivalents will not be implementable. What that funding tipping point is and when it will occur is not known, but it is likely we are approaching it rapidly given the actual and proposed, long-term double-digit budget reductions taking place at the federal level and in many southeastern and midwestern (non-energy producing) states. It likely will take an environmental catastrophe of some kind, à la Flint Michigan, to trigger a return to rationality in environmental protection program funding.

Also, within state agencies, if budget trends identified here continue, hard choices will have to be made regarding program priorities. Routine, yet important, pollution

prevention efforts (e.g., permit review, compliance inspections, enforcement actions) may have to compete with those environmental initiatives perceived as less threatening to and more supportive of business and jobs such as resiliency planning, sustainability, extreme weather, and sea level rise.

Politically, the correlations described here indicate that, absent another economic downturn, there is continued constituency support for adequate state environmental agency funding. While this support may have been masked because of the 2008 housing crisis and the subsequent shift to Republican dominance in state government, the trends in the preceding years do indicate that decision makers responded to (among other socioeconomic drivers) increasing levels of mining and manufacturing (two pollution intensive industries) and rising educational levels within their electorates. It is likely that as the pending mid-term (2018) elections approach, as well as the posturing for the upcoming 2020 presidential campaign, there will be an increase awareness of need to restore or at least reconsider environmental program funding, which elected official ignore at their peril.

6.2 National versus State-by-State Considerations

Correlations that were found to be present on a national basis were not observable in every state. Similarly, correlations among independent and dependent variable data sets within individual states were not present nationwide. Examples include the lack of a nationwide correlation between U.S. population and total environmental agency spending versus 23 states where there was a positive correlation between population and state environmental agency expenditures. A similar phenomenon is observed between nationwide per capita income and state environmental agency spending (25 positive

correlations for individual states) but no statistically significant association noted between these two variables on a national basis. Correlations between the independent and dependent variables also are not present in all states and some states show stronger relationships than others.

This suggests a complicated, multifaceted relationship among states and between states and the federal government. While there may be missing factors that could raise the values of the correlation coefficients or increase the number of correlations per state, it is more probable that the independent variable data sets have captured the effective driving forces in these relationships and could be representative of a more complex picture of how state environmental agencies funding levels are established.

Low correlation values and lack of statistical associations in several of the dependent-independent variable associations suggest these types of data sets may not be sufficiently powerful as potential drivers of environmental agency spending. Other unknown or undiscovered factors, not identified here, may be better measures of forces affecting expenditure patterns between states and nationally. However, the reason for these inconsistent findings also may be due to features unrelated to the choice of measurement strategy. Distinctive driving forces may be at play in different environmental policy areas at the federal and state levels which are not captured by this analysis of spending.

The inclusion of additional years would not likely alter the basic pressure-response relationships described here. But as cultural, economic, political, or other social characteristics of the geographies change over time, then the relative importance of potential driving forces also would need to be re-considered. This effect may not be immediate and would occur over years or in some undefined lagged time that would need

to be determined. In addition, this analysis does not answer the all-important question of what level of environmental expenditure is appropriate for any individual state. Nor does it consider, at least not directly, the political or environmental opinions of agency personnel, politicians, or other relevant stakeholders that can have compelling sway on budgets and spending. As such, it could be distracting from the more consequential consideration of how and why state environmental agencies develop technically difficult and often controversial responses to pollution control and management. The relationships and associations interpolated by the correlations listed in this analysis are intended to identify and test national and state level factors that may result in upward or downward pressure on environmental agency expenditures. But they are far from conclusive or comprehensive and call for a better understanding of the possible casual links between apparent national drivers and those factors influencing state spending.

6.3 Summary and Plans for Future Research

Funding for state environmental agencies is driven, on a national basis, by a combination of economic activity (primarily mining and manufacturing), political ideology, and educational attainment. On a state-by-state basis, per capita income, changes in population, and the size of the environmental bureau (as measured by agency FTEs) tend to affect agency spending in a meaningful way. Future research opportunities should be focused on identifying and quantifying the influence of these and other factors on the state and national budgeting process.

Other public service agencies, such as policing, health care, and education must vie for scarce tax dollars and studies have been conducted to try and evaluate factors influencing those agency budgets. For example, Hollis & Wilson (2015) examine the role that the

Uniform Crime Report has on police staffing/funding levels in over 15,000 communities. Thompson et al., (2016) examine the interrelationship between the recent easing of federal mandates related to long-term care under Medicaid and resource allocations of individual states. Cooley (2015) found that three issues are strongly connected to public funding of U.S. higher education institutions: accountability, affordability, and access.

These and other analyses illustrate that the budgeting process at the state level is not compartmentalized and that legislative decision-makers seek to balance the competing demands of numerous constituency groups. A relationship may exist between key metrics that drive spending for other (non-environmental) agencies such as those dealing with affordable housing or health care and those related to the environment. Identifying and examining the possible connections between the drivers of funding for other state agencies and then comparing those to the forces influencing environmental agency funding could provide a more holistic or comprehensive view of how critical budgeting decisions are made. Such a consideration also may result in the identification of new metrics that may relate more directly to environmental agency funding that have not been considered previously.

There is another aspect that could be explored in association with the possible inter-agency dynamics described above. In this dissertation state-by-state and regional differences have been noted when it comes to what apparently effects environmental agency funding; with regional or even individual differences among states, whether political, cultural, or economic, playing a role in setting budget priorities. While studies by Puig-Jaume (2001), Chintrakam (2008), and Halkos et al., (2015) have examined the links between geography, public capital, and environmental performance on a state-by-

state basis, these are focused more on governance and policy rather than a determinative look at funding commitments. Environmental and public health impacts (real or imagined) associated with invasive species, lead in drinking water, fracking, climate change, and hazardous waste disposal are perceived and prioritized differently by legislators and advocacy groups in California versus those in West Virginia. Identifying, understanding, and quantifying these current and legacy specific local or regional environmental concerns may provide more insight when attempting to contextualize agency funding decisions.

How much emphasis or importance should be given to the interactions between or among state agencies as part of the budgeting process as well as the local or regional environmental concerns that may be motivating or de-motivating disbursement decisions at the legislative level is another area where further research would be useful. Work by Mettier & Hofstetter (2004); Himmelber et. al (2013); and Ahlroth (2014) attempt to rank or weight factors associated with environmental damages, quality of life, and impact assessment and their role in policy or decision making. However, little to no current research is available which ties state environmental agency expenditures to quantifiable weighting metrics. Surveys and interviews with key budget players, supplemented by statistical and historical analysis of financial planning trends, could result in a better integrated appreciation of how a state determines its environmental agency funding levels.

This dissertation has considered a relatively few number of data sets and evaluated their influence over a limited time-frame. Further temporal examination of other independent variables may provide a better understanding of the sources of correlation variability as

well as the impacts on agency spending of the flexibility afforded to states in implementing minimum federal environmental standards. Likewise, the effects of organization or management structure of state environmental agencies and how those structures further influence budgeting/spending may prove to be fertile ground for evaluating relationships over time and across geographies.

More direct information is needed on the motivations of public officials and state agencies that underlie environmental funding decisions. These will be smaller scale, state specific factors and would need to be identified and measured on a local or sub-regional basis. Finally, testing these funding relationships and drivers within other, non-U.S. settings, such as the European Union, may offer the ability to assess more universally the causal factors in environmental expenditures and suggest insights into how funding levels reflect the cultural values and political effectiveness of governmental and non-governmental stakeholders.

Given the variety of state patterns, the logical next step is to engage in detailed case studies with the objective of characterizing several key states because of the size of their environmental agency budgets (e.g., California, Texas, Florida), role of energy expansion (e.g., Montana, Louisiana, North Dakota) or change in status of states that once were environmental leaders (e.g., Illinois, Michigan, New Jersey) and now no longer are.

Environmental expenditures remain a widely used financial metric as they are readily comparable across jurisdictions thanks to the regulatory "floor" set by federal mandates and standards. Examining state environmental agency expenditures over time lessens the likelihood that findings are due to some catastrophic political or environmental condition

but rather may be related to consistently held and/or developing internal and external policy elements reflective of, in some measure, constituent viewpoints.

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Appendix A
States Environmental Expenditures: 2000-2014
(2014 adjusted dollars x 1,000)

Location	2000	2001	2002	2003	2004
ALABAMA	266,351	275,764	304,285	290,647	297,019
ALASKA	342,953	341,574	317,364	330,248	308,750
ARIZONA	220,574	235,422	268,736	298,231	297,871
ARKANSAS	280,277	288,101	309,296	245,923	281,415
CALIFORNIA	3,140,541	3,621,393	4,203,527	4,498,473	4,813,380
COLORADO	259,770	313,458	255,070	256,248	258,781
CONNECTICUT	139,091	156,728	256,021	178,453	117,743
DELAWARE	90,193	108,603	92,041	81,311	103,175
FLORIDA	1,970,219	2,078,667	1,844,480	2,190,214	1,840,254
GEORGIA	692,029	661,393	711,547	642,910	647,706
HAWAII	109,018	122,359	129,460	140,963	136,893
IDAHO	185,514	199,535	217,166	210,052	223,515
ILLINOIS	552,684	591,914	599,807	545,298	493,869
INDIANA	305,644	306,277	376,979	357,827	336,528
IOWA	350,367	390,477	353,026	313,763	280,519
KANSAS	234,992	211,933	236,766	238,143	232,073
KENTUCKY	370,447	421,429	410,128	407,855	431,399
LOUISIANA	512,487	473,185	439,235	507,363	495,731
MAINE	193,681	191,301	197,475	201,542	233,611
MARYLAND	600,955	537,465	631,056	554,580	605,169
MASSACHUSETTS	293,829	396,980	378,874	343,290	340,173
MICHIGAN	559,067	644,464	670,551	632,003	566,290
MINNESOTA	694,463	712,140	715,653	686,168	572,439
MISSISSIPPI	318,470	286,751	261,855	277,155	294,363
MISSOURI	389,535	418,118	387,588	374,327	406,660
MONTANA	212,284	292,558	240,928	242,212	349,865

Appendix A
States Environmental Expenditures: 2000-2014
(2014 adjusted dollars x 1,000)

Location	2005	2006	2007	2008
ALABAMA	284,903	327,161	316,472	340,306
ALASKA	373,554	320,559	312,262	312,972
ARIZONA	336,570	328,658	383,164	353,290
ARKANSAS	259,890	260,281	252,593	274,516
CALIFORNIA	4,200,127	5,000,729	5,545,204	5,373,596
COLORADO	310,020	330,898	310,979	355,549
CONNECTICUT	106,008	109,806	117,655	136,226
DELAWARE	112,987	98,522	128,380	103,762
FLORIDA	2,033,047	2,146,132	2,525,191	2,016,344
GEORGIA	576,520	518,743	528,067	570,037
HAWAII	138,060	139,514	162,217	124,916
IDAHO	240,673	224,000	216,316	234,957
ILLINOIS	426,802	321,933	342,131	299,321
INDIANA	321,069	343,608	328,591	323,324
IOWA	283,686	290,185	291,585	317,679
KANSAS	222,536	223,097	228,400	225,933
KENTUCKY	456,090	443,780	411,767	410,838
LOUISIANA	541,684	506,445	551,184	637,044
MAINE	195,265	205,225	201,343	183,938
MARYLAND	472,490	475,594	592,578	618,308
MASSACHUSETTS	326,084	341,801	383,400	371,841
MICHIGAN	424,541	418,955	341,736	400,209
MINNESOTA	554,411	520,522	549,961	563,077
MISSISSIPPI	280,889	262,574	316,599	313,814
MISSOURI	384,004	406,741	387,081	382,762
MONTANA	242,701	239,261	266,830	307,668

Appendix A
States Environmental Expenditures: 2000-2014
(2014 adjusted dollars x 1,000)

Location	2009	2010	2011	2012
ALABAMA	326,180	357,855	284,498	270,234
ALASKA	339,800	458,416	411,035	327,795
ARIZONA	301,199	298,633	269,348	276,285
ARKANSAS	254,233	298,495	356,039	265,850
CALIFORNIA	5,049,651	4,519,920	4,016,213	4,247,640
COLORADO	509,927	359,053	353,332	341,787
CONNECTICUT	138,747	165,281	150,718	179,358
DELAWARE	97,518	87,611	104,759	97,548
FLORIDA	1,747,809	1,377,865	1,190,662	1,155,153
GEORGIA	516,165	504,819	587,403	477,470
HAWAII	130,214	114,303	101,975	98,445
IDAHO	207,778	207,568	204,482	201,232
ILLINOIS	279,694	301,696	265,898	282,537
INDIANA	340,891	337,267	318,701	333,719
IOWA	355,494	329,431	329,807	351,049
KANSAS	253,094	229,087	226,896	242,782
KENTUCKY	354,919	375,161	375,013	335,201
LOUISIANA	703,868	825,664	920,327	726,316
MAINE	213,072	182,140	177,371	169,880
MARYLAND	710,562	533,774	491,106	522,281
MASSACHUSETTS	442,122	433,955	366,813	330,866
MICHIGAN	374,658	330,083	296,931	301,339
MINNESOTA	609,583	610,684	725,114	576,493
MISSISSIPPI	282,042	267,365	322,462	299,658
MISSOURI	421,806	400,219	322,456	358,838
MONTANA	252,190	256,695	272,701	265,593

Appendix A
States Environmental Expenditures: 2000-2014
(2014 adjusted dollars x 1,000)

Location	2013	2014	2009-14 % Change	2009-14 Average
ALABAMA	281,555	262,297	-3.9%	297,103
ALASKA	338,375	353,554	0.8%	371,496
ARIZONA	268,354	263,324	-2.5%	279,524
ARKANSAS	253,481	256,092	0.1%	280,699
CALIFORNIA	4,184,550	3,719,571	-5.3%	4,289,591
COLORADO	327,690	342,944	-6.5%	372,456
CONNECTICUT	167,314	159,594	3.0%	160,169
DELAWARE	74,804	87,912	-2.0%	91,692
FLORIDA	1,122,121	1,115,770	-7.2%	1,284,897
GEORGIA	463,927	452,303	-2.5%	500,348
HAWAII	115,398	112,112	-2.8%	112,074
IDAHO	222,274	207,169	-0.1%	208,417
ILLINOIS	242,192	281,133	0.1%	275,525
INDIANA	341,754	335,365	-0.3%	334,616
IOWA	301,242	301,160	-3.1%	328,030
KANSAS	236,312	223,527	-2.3%	235,283
KENTUCKY	340,473	319,719	-2.0%	350,081
LOUISIANA	817,043	719,794	0.5%	785,502
MAINE	175,362	161,656	-4.8%	179,914
MARYLAND	456,079	469,547	-6.8%	530,558
MASSACHUSETTS	350,625	415,175	-1.2%	389,926
MICHIGAN	325,296	302,488	-3.9%	321,799
MINNESOTA	620,120	702,009	3.0%	640,667
MISSISSIPPI	297,186	263,772	-1.3%	288,748
MISSOURI	346,072	325,393	-4.6%	362,464
MONTANA	329,263	233,466	-1.5%	268,318

Appendix A
States Environmental Expenditures: 2000-2014
(2014 adjusted dollars x 1,000)

Location	2000	2001	2002	2003	2004
NEBRASKA	214,154	228,595	218,207	211,899	183,711
NEVADA	113,407	111,779	122,402	141,783	147,813
NEW HAMPSHIRE	61,236	56,129	56,194	91,128	76,706
NEW JERSEY	441,155	472,460	570,018	478,909	414,025
NEW MEXICO	186,991	175,072	182,644	231,969	216,715
NEW YORK	505,527	573,252	464,475	503,848	445,871
NORTH CAROLINA	778,397	834,823	864,104	727,323	646,199
NORTH DAKOTA	115,361	135,993	146,818	167,402	167,360
OHIO	520,975	486,900	513,766	495,357	520,226
OKLAHOMA	281,967	339,689	266,882	273,587	256,440
OREGON	434,420	452,360	435,542	549,901	475,309
PENNSYLVANIA	858,778	930,799	732,234	746,914	789,184
RHODE ISLAND	56,515	56,733	61,829	54,691	46,736
SOUTH CAROLINA	342,651	370,405	306,070	245,105	251,309
SOUTH DAKOTA	103,365	129,804	129,398	147,108	126,148
TENNESSEE	313,551	304,039	310,069	272,585	280,804
TEXAS	984,437	925,219	906,858	1,019,099	1,116,998
UTAH	193,132	205,204	236,206	244,062	215,959
VERMONT	128,127	110,270	89,895	119,964	105,561
VIRGINIA	250,532	290,571	245,350	226,848	226,706
WASHINGTON	804,935	853,989	858,305	898,629	760,778
WEST VIRGINIA	206,971	219,042	232,201	238,142	231,281
WISCONSIN	513,903	494,841	554,789	581,795	694,714
WYOMING	178,707	178,089	210,705	250,816	223,609
Average	437,493	464,281	470,477	479,281	471,707
UNITED STATES TOTAL	21,874,630	23,214,043	23,523,874	23,964,063	23,585,348

Appendix A
States Environmental Expenditures: 2000-2014
(2014 adjusted dollars x 1,000)

Location	2005	2006	2007	2008
NEBRASKA	224,294	185,107	212,254	199,065
NEVADA	160,863	167,483	159,655	151,109
NEW HAMPSHIRE	74,384	74,565	71,960	75,506
NEW JERSEY	439,097	675,322	613,041	675,016
NEW MEXICO	221,056	260,153	243,344	243,991
NEW YORK	440,837	492,497	569,359	602,686
NORTH CAROLINA	577,632	604,375	762,462	747,138
NORTH DAKOTA	195,836	176,633	173,953	182,742
OHIO	484,898	449,955	434,519	398,449
OKLAHOMA	260,634	256,047	233,060	236,598
OREGON	503,581	471,070	447,374	466,912
PENNSYLVANIA	638,738	676,569	726,855	749,939
RHODE ISLAND	55,268	51,335	49,660	45,628
SOUTH CAROLINA	257,359	240,784	295,819	329,952
SOUTH DAKOTA	134,314	140,127	140,188	135,702
TENNESSEE	260,010	286,583	322,231	503,977
TEXAS	1,245,332	992,513	1,069,181	923,480
UTAH	210,297	203,485	201,508	204,174
VERMONT	94,266	87,153	80,184	80,630
VIRGINIA	223,741	245,468	241,121	235,770
WASHINGTON	809,132	773,514	911,233	812,372
WEST VIRGINIA	198,111	186,603	203,959	187,546
WISCONSIN	721,361	688,494	678,563	711,082
WYOMING	239,521	252,098	307,642	341,041
Average	455,503	468,853	502,816	495,855
UNITED STATES TOTAL	22,775,172	23,442,658	25,140,811	24,792,725

Appendix A
States Environmental Expenditures: 2000-2014
(2014 adjusted dollars x 1,000)

Location	2009	2010	2011	2012
NEBRASKA	226,024	280,276	263,104	252,796
NEVADA	147,319	128,162	136,424	127,710
NEW HAMPSHIRE	72,295	64,460	71,073	72,423
NEW JERSEY	710,736	711,311	646,598	670,031
NEW MEXICO	255,995	237,789	235,029	217,171
NEW YORK	601,013	542,114	531,490	533,251
NORTH CAROLINA	855,851	606,959	654,224	616,058
NORTH DAKOTA	194,329	265,123	274,925	430,563
OHIO	411,928	416,065	444,732	387,519
OKLAHOMA	267,334	269,818	232,515	231,530
OREGON	499,760	453,402	471,034	457,513
PENNSYLVANIA	723,319	754,531	696,341	667,265
RHODE ISLAND	44,458	45,282	45,875	64,388
SOUTH CAROLINA	263,453	244,783	210,172	202,320
SOUTH DAKOTA	142,853	171,123	172,762	165,090
TENNESSEE	419,549	288,316	328,411	357,163
TEXAS	950,318	968,601	971,066	1,191,579
UTAH	201,787	181,127	186,164	152,221
VERMONT	80,433	76,171	82,837	90,169
VIRGINIA	249,110	258,899	722,047	706,323
WASHINGTON	1,019,150	860,530	929,864	762,255
WEST VIRGINIA	205,773	258,221	239,230	268,309
WISCONSIN	691,008	743,220	729,626	652,589
WYOMING	418,981	461,774	371,787	401,041
Average	497,320	469,022	461,788	454,253
UNITED STATES TOTAL	24,865,990	23,451,096	23,089,390	22,712,626

Appendix A
States Environmental Expenditures: 2000-2014
(2014 adjusted dollars x 1,000)

Location	2013	2014	2009-14 % Change	2009-14 Average
NEBRASKA	256,086	277,899	4.6%	259,364
NEVADA	118,476	103,302	-6.0%	126,899
NEW HAMPSHIRE	78,397	72,645	0.1%	71,882
NEW JERSEY	592,868	441,991	-7.6%	628,923
NEW MEXICO	186,348	188,758	-5.3%	220,182
NEW YORK	432,456	389,639	-7.0%	504,994
NORTH CAROLINA	521,684	467,309	-9.1%	620,347
NORTH DAKOTA	336,090	327,196	13.7%	304,704
OHIO	398,134	371,865	-1.9%	405,040
OKLAHOMA	235,959	224,968	-3.2%	243,687
OREGON	458,710	516,795	0.7%	476,202
PENNSYLVANIA	654,892	633,077	-2.5%	688,238
RHODE ISLAND	60,389	49,149	2.1%	51,590
SOUTH CAROLINA	200,462	214,458	-3.7%	222,608
SOUTH DAKOTA	181,820	179,499	5.1%	168,858
TENNESSEE	297,047	294,152	-6.0%	330,773
TEXAS	1,061,551	1,072,559	2.6%	1,035,946
UTAH	176,022	176,731	-2.5%	179,009
VERMONT	83,521	101,284	5.2%	85,736
VIRGINIA	253,897	244,640	-0.4%	405,819
WASHINGTON	878,882	954,773	-1.3%	900,909
WEST VIRGINIA	230,350	228,036	2.2%	238,320
WISCONSIN	677,727	681,371	-0.3%	695,923
WYOMING	402,091	359,250	-2.9%	402,487
Average	435,454	418,308	-3.2%	456,024
UNITED STATES TOTAL	21,772,720	20,955,192	-3.1%	22,807,836

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2000			2001	
	Population	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $
ALABAMA	4,451,849	266,351	$ 59.83	4,464,034	275,764
ALASKA	627,499	342,953	$ 546.54	633,316	341,574
ARIZONA	5,166,697	220,574	$ 42.69	5,304,417	235,422
ARKANSAS	678,288	280,277	$ 413.21	2,691,068	288,101
CALIFORNIA	33,994,571	3,140,541	$ 92.38	34,485,623	3,621,393
COLORADO	4,328,070	259,770	$ 60.02	4,433,068	313,458
CONNECTICUT	3,411,726	139,091	$ 40.77	3,428,433	156,728
DELAWARE	786,411	90,193	$ 114.69	794,620	108,603
FLORIDA	16,047,118	1,970,219	$ 122.78	16,353,869	2,078,667
GEORGIA	8,230,161	692,029	$ 84.08	8,419,594	661,393
HAWAII	1,211,566	109,018	$ 89.98	1,218,305	122,359
IDAHO	1,299,551	185,514	$ 142.75	1,321,170	199,535
ILLINOIS	12,437,645	552,684	$ 44.44	12,507,833	591,914
INDIANA	6,091,649	305,644	$ 50.17	6,124,967	306,277
IOWA	2,928,184	350,367	$ 119.65	2,929,424	390,477
KANSAS	2,692,810	234,992	$ 87.27	2,701,456	211,933
KENTUCKY	4,048,903	370,447	$ 91.49	4,069,191	421,429
LOUISIANA	4,468,979	512,487	$ 114.68	4,460,816	473,185
MAINE	1,277,211	193,681	$ 151.64	1,284,791	191,301
MARYLAND	5,310,579	600,955	$ 113.16	5,375,033	537,465
MASSACHUSETTS	6,363,015	293,829	$ 46.18	6,411,730	396,980
MICHIGAN	9,955,308	559,067	$ 56.16	10,006,093	644,464
MINNESOTA	4,933,958	694,463	$ 140.75	4,982,813	712,140
MISSISSIPPI	2,848,310	318,470	$ 111.81	2,853,313	286,751
MISSOURI	5,606,065	389,535	$ 69.48	5,643,986	418,118
MONTANA	903,293	212,284	$ 235.01	905,873	292,558

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location		2002		
	EE per Capita	Population	Environmental Expenditures 2014 $	EE per Capita
ALABAMA	$ 61.77	4,472,420	304,285	$ 68.04
ALASKA	$ 539.34	642,691	317,364	$ 493.80
ARIZONA	$ 44.38	5,452,108	268,736	$ 49.29
ARKANSAS	$ 107.06	2,704,732	309,296	$ 114.35
CALIFORNIA	$ 105.01	34,876,194	4,203,527	$ 120.53
COLORADO	$ 70.71	4,504,265	255,070	$ 56.63
CONNECTICUT	$ 45.71	3,448,382	256,021	$ 74.24
DELAWARE	$ 136.67	804,131	92,041	$ 114.46
FLORIDA	$ 127.11	16,680,309	1,844,480	$ 110.58
GEORGIA	$ 78.55	8,585,535	711,547	$ 82.88
HAWAII	$ 100.43	1,228,069	129,460	$ 105.42
IDAHO	$ 151.03	1,342,149	217,166	$ 161.80
ILLINOIS	$ 47.32	12,558,229	599,807	$ 47.76
INDIANA	$ 50.00	6,149,007	376,979	$ 61.31
IOWA	$ 133.29	2,929,264	353,026	$ 120.52
KANSAS	$ 78.45	2,712,598	236,766	$ 87.28
KENTUCKY	$ 103.57	4,091,330	410,128	$ 100.24
LOUISIANA	$ 106.08	4,466,068	439,235	$ 98.35
MAINE	$ 148.90	1,293,938	197,475	$ 152.62
MARYLAND	$ 99.99	5,439,913	631,056	$ 116.00
MASSACHUSETTS	$ 61.91	6,440,978	378,874	$ 58.82
MICHIGAN	$ 64.41	10,038,767	670,551	$ 66.80
MINNESOTA	$ 142.92	5,017,458	715,653	$ 142.63
MISSISSIPPI	$ 100.50	2,858,643	261,855	$ 91.60
MISSOURI	$ 74.08	5,680,852	387,588	$ 68.23
MONTANA	$ 322.96	909,868	240,928	$ 264.79

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2003			2004	
	Population	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $
ALABAMA	4,490,591	290,647	$ 64.72	4,512,190	297,019
ALASKA	650,884	330,248	$ 507.38	661,569	308,750
ARIZONA	5,591,206	298,231	$ 53.34	5,759,425	297,871
ARKANSAS	2,722,291	245,923	$ 90.34	2,746,161	281,415
CALIFORNIA	35,251,107	4,498,473	$ 127.61	35,558,419	4,813,380
COLORADO	4,548,775	256,248	$ 56.33	4,599,681	258,781
CONNECTICUT	3,467,673	178,453	$ 51.46	3,474,610	117,743
DELAWARE	814,905	81,311	$ 99.78	826,639	103,175
FLORIDA	16,981,183	2,190,214	$ 128.98	17,375,259	1,840,254
GEORGIA	8,735,259	642,910	$ 73.60	8,913,676	647,706
HAWAII	1,239,298	140,963	$ 113.74	1,252,782	136,893
IDAHO	1,364,109	210,052	$ 153.98	1,391,718	223,515
ILLINOIS	12,597,981	545,298	$ 43.28	12,645,295	493,869
INDIANA	6,181,789	357,827	$ 57.88	6,214,454	336,528
IOWA	2,932,799	313,763	$ 106.98	2,941,358	280,519
KANSAS	2,721,955	238,143	$ 87.49	2,730,765	232,073
KENTUCKY	4,118,627	407,855	$ 99.03	4,147,970	431,399
LOUISIANA	4,474,726	507,363	$ 113.38	4,489,327	495,731
MAINE	1,303,102	201,542	$ 154.66	1,308,253	233,611
MARYLAND	5,496,708	554,580	$ 100.89	5,542,659	605,169
MASSACHUSETTS	6,451,637	343,290	$ 53.21	6,451,279	340,173
MICHIGAN	10,066,351	632,003	$ 62.78	10,089,305	566,290
MINNESOTA	5,047,862	686,168	$ 135.93	5,079,344	572,439
MISSISSIPPI	2,867,678	277,155	$ 96.65	2,886,006	294,363
MISSOURI	5,714,847	374,327	$ 65.50	5,758,444	406,660
MONTANA	916,750	242,212	$ 264.21	925,887	349,865

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location		2005		
	EE per Capita	Population	Environmental Expenditures 2014 $	EE per Capita
ALABAMA	$ 65.83	4,545,049	284,903	$ 62.68
ALASKA	$ 466.69	669,488	373,554	$ 557.97
ARIZONA	$ 51.72	5,974,834	336,570	$ 56.33
ARKANSAS	$ 102.48	2,776,221	259,890	$ 93.61
CALIFORNIA	$ 135.37	35,795,255	4,200,127	$ 117.34
COLORADO	$ 56.26	4,660,780	310,020	$ 66.52
CONNECTICUT	$ 33.89	3,477,416	106,008	$ 30.48
DELAWARE	$ 124.81	839,906	112,987	$ 134.52
FLORIDA	$ 105.91	17,783,868	2,033,047	$ 114.32
GEORGIA	$ 72.66	9,097,428	576,520	$ 63.37
HAWAII	$ 109.27	1,266,117	138,060	$ 109.04
IDAHO	$ 160.60	1,425,862	240,673	$ 168.79
ILLINOIS	$ 39.06	12,674,452	426,802	$ 33.67
INDIANA	$ 54.15	6,253,120	321,069	$ 51.35
IOWA	$ 95.37	2,949,450	283,686	$ 96.18
KANSAS	$ 84.98	2,741,771	222,536	$ 81.17
KENTUCKY	$ 104.00	4,182,293	456,090	$ 109.05
LOUISIANA	$ 110.42	4,497,691	541,684	$ 120.44
MAINE	$ 178.57	1,311,631	195,265	$ 148.87
MARYLAND	$ 109.18	5,582,520	472,490	$ 84.64
MASSACHUSETTS	$ 52.73	6,453,031	326,084	$ 50.53
MICHIGAN	$ 56.13	10,090,554	424,541	$ 42.07
MINNESOTA	$ 112.70	5,106,560	554,411	$ 108.57
MISSISSIPPI	$ 102.00	2,900,116	280,889	$ 96.85
MISSOURI	$ 70.62	5,806,639	384,004	$ 66.13
MONTANA	$ 377.87	934,801	242,701	$ 259.63

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2006			2007	
	Population	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $
ALABAMA	4,597,688	327,161	$ 71.16	4,637,904	316,472
ALASKA	677,325	320,559	$ 473.27	682,297	312,262
ARIZONA	6,192,100	328,658	$ 53.08	6,362,241	383,164
ARKANSAS	2,815,097	260,281	$ 92.46	2,842,194	252,593
CALIFORNIA	35,979,208	5,000,729	$ 138.99	36,226,122	5,545,204
COLORADO	4,753,044	330,898	$ 69.62	4,842,259	310,979
CONNECTICUT	3,485,162	109,806	$ 31.51	3,488,633	117,655
DELAWARE	853,022	98,522	$ 115.50	864,896	128,380
FLORIDA	18,088,505	2,146,132	$ 118.65	18,277,888	2,525,191
GEORGIA	9,330,086	518,743	$ 55.60	9,533,761	528,067
HAWAII	1,275,599	139,514	$ 109.37	1,276,832	162,217
IDAHO	1,464,413	224,000	$ 152.96	1,499,245	216,316
ILLINOIS	12,718,011	321,933	$ 25.31	12,779,417	342,131
INDIANA	6,301,700	343,608	$ 54.53	6,346,113	328,591
IOWA	2,964,391	290,185	$ 97.89	2,978,719	291,585
KANSAS	2,755,700	223,097	$ 80.96	2,775,586	228,400
KENTUCKY	4,219,374	443,780	$ 105.18	4,256,278	411,767
LOUISIANA	4,240,327	506,445	$ 119.44	4,376,122	551,184
MAINE	1,314,963	205,225	$ 156.07	1,317,308	201,343
MARYLAND	5,612,196	475,594	$ 84.74	5,634,242	592,578
MASSACHUSETTS	6,466,399	341,801	$ 52.86	6,499,275	383,400
MICHIGAN	10,082,438	418,955	$ 41.55	10,050,847	341,736
MINNESOTA	5,148,346	520,522	$ 101.10	5,191,206	549,961
MISSISSIPPI	2,897,150	262,574	$ 90.63	2,921,723	316,599
MISSOURI	5,861,572	406,741	$ 69.39	5,909,824	387,081
MONTANA	946,230	239,261	$ 252.86	957,225	266,830

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location		2008			
	EE per Capita	Population	Environmental Expenditures 2014 $	EE per Capita	Population
ALABAMA	$ 68.24	4,677,464	340,306	$ 72.75	4,708,708
ALASKA	$ 457.66	688,125	312,972	$ 454.82	698,473
ARIZONA	$ 60.22	6,499,377	353,290	$ 54.36	6,595,778
ARKANSAS	$ 88.87	2,867,764	274,516	$ 95.72	2,889,450
CALIFORNIA	$ 153.07	36,580,371	5,373,596	$ 146.90	36,961,664
COLORADO	$ 64.22	4,935,213	355,549	$ 72.04	5,024,748
CONNECTICUT	$ 33.73	3,502,932	136,226	$ 38.89	3,518,288
DELAWARE	$ 148.43	876,211	103,762	$ 118.42	885,122
FLORIDA	$ 138.16	18,423,878	2,016,344	$ 109.44	18,537,969
GEORGIA	$ 55.39	9,697,838	570,037	$ 58.78	9,829,211
HAWAII	$ 127.05	1,287,481	124,916	$ 97.02	1,295,178
IDAHO	$ 144.28	1,527,506	234,957	$ 153.82	1,545,801
ILLINOIS	$ 26.77	12,842,954	299,321	$ 23.31	12,910,409
INDIANA	$ 51.78	6,388,309	323,324	$ 50.61	6,423,113
IOWA	$ 97.89	2,993,987	317,679	$ 106.11	3,007,856
KANSAS	$ 82.29	2,797,375	225,933	$ 80.77	2,818,747
KENTUCKY	$ 96.74	4,287,931	410,838	$ 95.81	4,314,113
LOUISIANA	$ 125.95	4,451,513	637,044	$ 143.11	4,492,076
MAINE	$ 152.84	1,319,691	183,938	$ 139.38	1,318,301
MARYLAND	$ 105.17	5,658,655	618,308	$ 109.27	5,699,478
MASSACHUSETTS	$ 58.99	6,543,595	371,841	$ 56.83	6,593,587
MICHIGAN	$ 34.00	10,002,486	400,209	$ 40.01	9,969,727
MINNESOTA	$ 105.94	5,230,567	563,077	$ 107.65	5,266,214
MISSISSIPPI	$ 108.36	2,940,212	313,814	$ 106.73	2,951,996
MISSOURI	$ 65.50	5,956,335	382,762	$ 64.26	5,987,580
MONTANA	$ 278.75	968,035	307,668	$ 317.83	974,989

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2009		2010		
	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $	EE per Capita
ALABAMA	326,180	$ 69.27	4,785,492	357,855	$ 74.78
ALASKA	339,800	$ 486.49	714,031	458,416	$ 642.01
ARIZONA	301,199	$ 45.67	6,408,312	298,633	$ 46.60
ARKANSAS	254,233	$ 87.99	2,921,995	298,495	$ 102.15
CALIFORNIA	5,049,651	$ 136.62	37,332,685	4,519,920	$ 121.07
COLORADO	509,927	$ 101.48	5,048,644	359,053	$ 71.12
CONNECTICUT	138,747	$ 39.44	3,579,899	165,281	$ 46.17
DELAWARE	97,518	$ 110.17	899,816	87,611	$ 97.37
FLORIDA	1,747,809	$ 94.28	18,849,098	1,377,865	$ 73.10
GEORGIA	516,165	$ 52.51	9,713,521	504,819	$ 51.97
HAWAII	130,214	$ 100.54	1,363,945	114,303	$ 83.80
IDAHO	207,778	$ 134.41	1,571,010	207,568	$ 132.12
ILLINOIS	279,694	$ 21.66	12,841,578	301,696	$ 23.49
INDIANA	340,891	$ 53.07	6,490,528	337,267	$ 51.96
IOWA	355,494	$ 118.19	3,050,738	329,431	$ 107.98
KANSAS	253,094	$ 89.79	2,858,850	229,087	$ 80.13
KENTUCKY	354,919	$ 82.27	4,348,662	375,161	$ 86.27
LOUISIANA	703,868	$ 156.69	4,544,996	825,664	$ 181.66
MAINE	213,072	$ 161.63	1,327,730	182,140	$ 137.18
MARYLAND	710,562	$ 124.67	5,788,584	533,774	$ 92.21
MASSACHUSETTS	442,122	$ 67.05	6,565,524	433,955	$ 66.10
MICHIGAN	374,658	$ 37.58	9,877,495	330,083	$ 33.42
MINNESOTA	609,583	$ 115.75	5,311,147	610,684	$ 114.98
MISSISSIPPI	282,042	$ 95.54	2,970,322	267,365	$ 90.01
MISSOURI	421,806	$ 70.45	5,996,118	400,219	$ 66.75
MONTANA	252,190	$ 258.66	990,641	256,695	$ 259.12

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2011			2012	
	Population	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $
ALABAMA	4,799,918	284,498	$ 59.27	4,815,960	270,234
ALASKA	722,713	411,035	$ 568.74	731,089	327,795
ARIZONA	6,467,163	269,348	$ 41.65	6,549,634	276,285
ARKANSAS	2,939,493	356,039	$ 121.12	2,950,685	265,850
CALIFORNIA	37,676,861	4,016,213	$ 106.60	38,011,074	4,247,640
COLORADO	5,118,360	353,332	$ 69.03	5,189,867	341,787
CONNECTICUT	3,589,893	150,718	$ 41.98	3,593,795	179,358
DELAWARE	907,924	104,759	$ 115.38	916,993	97,548
FLORIDA	19,096,952	1,190,662	$ 62.35	19,344,156	1,155,153
GEORGIA	9,811,610	587,403	$ 59.87	9,914,668	477,470
HAWAII	1,377,864	101,975	$ 74.01	1,391,820	98,445
IDAHO	1,584,143	204,482	$ 129.08	1,595,911	201,232
ILLINOIS	12,860,012	265,898	$ 20.68	12,870,798	282,537
INDIANA	6,516,480	318,701	$ 48.91	6,537,743	333,719
IOWA	3,065,223	329,807	$ 107.60	3,076,310	351,049
KANSAS	2,869,503	226,896	$ 79.07	2,885,262	242,782
KENTUCKY	4,369,354	375,013	$ 85.83	4,384,799	335,201
LOUISIANA	4,575,404	920,327	$ 201.15	4,603,429	726,316
MAINE	1,328,231	177,371	$ 133.54	1,328,895	169,880
MARYLAND	5,843,603	491,106	$ 84.04	5,889,651	522,281
MASSACHUSETTS	6,611,923	366,813	$ 55.48	6,658,008	330,866
MICHIGAN	9,876,213	296,931	$ 30.07	9,887,238	301,339
MINNESOTA	5,348,562	725,114	$ 135.57	5,380,285	576,493
MISSISSIPPI	2,978,162	322,462	$ 108.28	2,984,945	299,658
MISSOURI	6,010,717	322,456	$ 53.65	6,025,415	358,838
MONTANA	997,821	272,701	$ 273.30	1,005,196	265,593

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location		2013			
	EE per Capita	Population	Environmental Expenditures 2014 $	EE per Capita	Population
ALABAMA	$ 56.11	4,829,479	281,555	$ 58.30	4,843,214
ALASKA	$ 448.37	736,879	338,375	$ 459.20	736,705
ARIZONA	$ 42.18	6,624,617	268,354	$ 40.51	6,719,993
ARKANSAS	$ 90.10	2,958,663	253,481	$ 85.67	2,966,912
CALIFORNIA	$ 111.75	38,335,203	4,184,550	$ 109.16	38,680,810
COLORADO	$ 65.86	5,267,603	327,690	$ 62.21	5,349,648
CONNECTICUT	$ 49.91	3,596,003	167,314	$ 46.53	3,591,873
DELAWARE	$ 106.38	925,395	74,804	$ 80.83	934,948
FLORIDA	$ 59.72	19,582,022	1,122,121	$ 57.30	19,888,741
GEORGIA	$ 48.16	9,984,938	463,927	$ 46.46	10,087,231
HAWAII	$ 70.73	1,406,481	115,398	$ 82.05	1,416,349
IDAHO	$ 126.09	1,612,011	222,274	$ 137.89	1,633,532
ILLINOIS	$ 21.95	12,879,505	242,192	$ 18.80	12,867,544
INDIANA	$ 51.04	6,569,102	341,754	$ 52.02	6,595,233
IOWA	$ 114.11	3,091,930	301,242	$ 97.43	3,108,030
KANSAS	$ 84.15	2,892,821	236,312	$ 81.69	2,899,360
KENTUCKY	$ 76.45	4,400,477	340,473	$ 77.37	4,413,057
LOUISIANA	$ 157.78	4,626,402	817,043	$ 176.60	4,647,880
MAINE	$ 127.84	1,329,076	175,362	$ 131.94	1,330,719
MARYLAND	$ 88.68	5,931,129	456,079	$ 76.90	5,967,295
MASSACHUSETTS	$ 49.69	6,706,786	350,625	$ 52.28	6,749,911
MICHIGAN	$ 30.48	9,898,982	325,296	$ 32.86	9,915,767
MINNESOTA	$ 107.15	5,418,521	620,120	$ 114.44	5,453,109
MISSISSIPPI	$ 100.39	2,990,482	297,186	$ 99.38	2,992,400
MISSOURI	$ 59.55	6,042,711	346,072	$ 57.27	6,060,930
MONTANA	$ 264.22	1,014,314	329,263	$ 324.62	1,022,867

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2014	
	Environmental Expenditures 2014 $	EE per Capita
ALABAMA	262,297	$ 54.16
ALASKA	353,554	$ 479.91
ARIZONA	263,324	$ 39.19
ARKANSAS	256,092	$ 86.32
CALIFORNIA	3,719,571	$ 96.16
COLORADO	342,944	$ 64.11
CONNECTICUT	159,594	$ 44.43
DELAWARE	45,102	$ 48.24
FLORIDA	1,115,770	$ 56.10
GEORGIA	452,303	$ 44.84
HAWAII	112,112	$ 79.16
IDAHO	207,169	$ 126.82
ILLINOIS	281,133	$ 21.85
INDIANA	335,365	$ 50.85
IOWA	301,160	$ 96.90
KANSAS	223,527	$ 77.10
KENTUCKY	319,719	$ 72.45
LOUISIANA	719,794	$ 154.87
MAINE	161,656	$ 121.48
MARYLAND	469,547	$ 78.69
MASSACHUSETTS	415,175	$ 61.51
MICHIGAN	302,488	$ 30.51
MINNESOTA	702,009	$ 128.74
MISSISSIPPI	263,772	$ 88.15
MISSOURI	325,393	$ 53.69
MONTANA	233,466	$ 228.25

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2000			2001	
	Population	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $
NEBRASKA	1,713,345	214,154	$ 124.99	1,717,948	228,595
NEVADA	2,018,211	113,407	$ 56.19	2,094,509	111,779
NEW HAMPSHIRE	1,240,446	61,236	$ 49.37	1,256,879	56,129
NEW JERSEY	8,430,921	441,155	$ 52.33	8,489,469	472,460
NEW MEXICO	1,820,813	186,991	$ 102.70	1,828,809	175,072
NEW YORK	18,998,044	505,527	$ 26.61	19,088,978	573,252
NORTH CAROLINA	8,079,383	778,397	$ 96.34	8,203,451	834,823
NORTH DAKOTA	641,200	115,361	$ 179.91	636,267	135,993
OHIO	11,363,844	520,975	$ 45.84	11,396,874	486,900
OKLAHOMA	3,453,943	281,967	$ 81.64	3,464,729	339,689
OREGON	3,430,891	434,420	$ 126.62	3,470,382	452,360
PENNSYLVANIA	12,285,504	858,778	$ 69.90	12,299,533	930,799
RHODE ISLAND	1,050,736	56,515	$ 53.79	1,058,051	56,733
SOUTH CAROLINA	4,023,570	342,651	$ 85.16	4,062,701	370,405
SOUTH DAKOTA	755,694	103,365	$ 136.78	758,983	129,804
TENNESSEE	5,703,243	313,551	$ 54.98	5,755,443	304,039
TEXAS	20,945,963	984,437	$ 47.00	21,332,847	925,219
UTAH	2,244,314	193,132	$ 86.05	2,291,250	205,204
VERMONT	609,903	128,127	$ 210.08	612,153	110,270
VIRGINIA	7,104,533	250,532	$ 35.26	7,191,304	290,571
WASHINGTON	5,911,122	804,935	$ 136.17	5,987,785	853,989
WEST VIRGINIA	1,806,962	206,971	$ 114.54	1,798,582	219,042
WISCONSIN	5,374,254	513,903	$ 95.62	5,408,769	494,841
WYOMING	493,958	178,707	$ 361.79	492,982	178,089
UNITED STATES	279,600,213	21,874,630	$ 78.24	284,503,514	23,214,043
Average	10,964,714	857,829	$ 112.74	11,157,001	910,355

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location		2002		
	EE per Capita	Population	Environmental Expenditures 2014 $	EE per Capita
NEBRASKA	$ 133.06	1,725,083	218,207	$ 126.49
NEVADA	$ 53.37	2,166,214	122,402	$ 56.51
NEW HAMPSHIRE	$ 44.66	1,271,163	56,194	$ 44.21
NEW JERSEY	$ 55.65	8,544,115	570,018	$ 66.71
NEW MEXICO	$ 95.73	1,850,035	182,644	$ 98.72
NEW YORK	$ 30.03	19,161,873	464,475	$ 24.24
NORTH CAROLINA	$ 101.76	8,316,617	864,104	$ 103.90
NORTH DAKOTA	$ 213.74	633,617	146,818	$ 231.71
OHIO	$ 42.72	11,420,981	513,766	$ 44.98
OKLAHOMA	$ 98.04	3,484,754	266,882	$ 76.59
OREGON	$ 130.35	3,517,111	435,542	$ 123.84
PENNSYLVANIA	$ 75.68	12,326,302	732,234	$ 59.40
RHODE ISLAND	$ 53.62	1,066,034	61,829	$ 58.00
SOUTH CAROLINA	$ 91.17	4,103,934	306,070	$ 74.58
SOUTH DAKOTA	$ 171.02	762,107	129,398	$ 169.79
TENNESSEE	$ 52.83	5,803,306	310,069	$ 53.43
TEXAS	$ 43.37	21,710,788	906,858	$ 41.77
UTAH	$ 89.56	2,334,473	236,206	$ 101.18
VERMONT	$ 180.13	614,950	89,895	$ 146.18
VIRGINIA	$ 40.41	7,283,541	245,350	$ 33.69
WASHINGTON	$ 142.62	6,056,187	858,305	$ 141.72
WEST VIRGINIA	$ 121.79	1,799,411	232,201	$ 129.04
WISCONSIN	$ 91.49	5,446,766	554,789	$ 101.86
WYOMING	$ 361.25	497,069	210,705	$ 423.89
UNITED STATES	$ 81.59	287,224,329	23,523,874	$ 81.90
Average	$ 111.72	11,263,699	922,505	$ 110.65

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2003			2004	
	Population	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $
NEBRASKA	1,733,680	211,899	$ 122.23	1,742,184	183,711
NEVADA	2,236,949	141,783	$ 63.38	2,328,703	147,813
NEW HAMPSHIRE	1,281,871	91,128	$ 71.09	1,292,766	76,706
NEW JERSEY	8,583,481	478,909	$ 55.79	8,611,530	414,025
NEW MEXICO	1,869,683	231,969	$ 124.07	1,891,829	216,715
NEW YORK	19,231,101	503,848	$ 26.20	19,297,933	445,871
NORTH CAROLINA	8,416,451	727,323	$ 86.42	8,531,283	646,199
NORTH DAKOTA	632,809	167,402	$ 264.54	636,303	167,360
OHIO	11,445,180	495,357	$ 43.28	11,464,593	520,226
OKLAHOMA	3,498,687	273,587	$ 78.20	3,514,449	256,440
OREGON	3,550,180	549,901	$ 154.89	3,573,505	475,309
PENNSYLVANIA	12,357,524	746,914	$ 60.44	12,388,368	789,184
RHODE ISLAND	1,071,504	54,691	$ 51.04	1,071,414	46,736
SOUTH CAROLINA	4,146,474	245,105	$ 59.11	4,201,306	251,309
SOUTH DAKOTA	766,975	147,108	$ 191.80	774,283	126,148
TENNESSEE	5,856,522	272,585	$ 46.54	5,916,762	280,804
TEXAS	22,057,801	1,019,099	$ 46.20	22,418,319	1,116,998
UTAH	2,379,938	244,062	$ 102.55	2,438,915	215,959
VERMONT	616,559	119,964	$ 194.57	618,145	105,561
VIRGINIA	7,373,694	226,848	$ 30.76	7,468,914	226,706
WASHINGTON	6,113,262	898,629	$ 147.00	6,184,289	760,778
WEST VIRGINIA	1,802,238	238,142	$ 132.14	1,803,302	231,281
WISCONSIN	5,476,796	581,795	$ 106.23	5,511,385	694,714
WYOMING	499,189	250,816	$ 502.45	502,988	223,609
UNITED STATES	289,748,641	23,964,063	$ 82.71	292,465,943	23,585,348
Average	11,362,692	939,767	$ 113.86	11,469,253	924,916

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location		2005		
	EE per Capita	Population	Environmental Expenditures 2014 $	EE per Capita
NEBRASKA	$ 105.45	1,751,721	224,294	$ 128.04
NEVADA	$ 63.47	2,408,804	160,863	$ 66.78
NEW HAMPSHIRE	$ 59.33	1,301,415	74,384	$ 57.16
NEW JERSEY	$ 48.08	8,621,837	439,097	$ 50.93
NEW MEXICO	$ 114.55	1,916,538	221,056	$ 115.34
NEW YORK	$ 23.10	19,330,891	440,837	$ 22.80
NORTH CAROLINA	$ 75.74	8,669,452	577,632	$ 66.63
NORTH DAKOTA	$ 263.02	635,365	195,836	$ 308.23
OHIO	$ 45.38	11,475,262	484,898	$ 42.26
OKLAHOMA	$ 72.97	3,532,769	260,634	$ 73.78
OREGON	$ 133.01	3,617,869	503,581	$ 139.19
PENNSYLVANIA	$ 63.70	12,418,161	638,738	$ 51.44
RHODE ISLAND	$ 43.62	1,064,989	55,268	$ 51.90
SOUTH CAROLINA	$ 59.82	4,256,199	257,359	$ 60.47
SOUTH DAKOTA	$ 162.92	780,084	134,314	$ 172.18
TENNESSEE	$ 47.46	5,995,748	260,010	$ 43.37
TEXAS	$ 49.83	22,801,920	1,245,332	$ 54.62
UTAH	$ 88.55	2,499,637	210,297	$ 84.13
VERMONT	$ 170.77	618,814	94,266	$ 152.33
VIRGINIA	$ 30.35	7,563,887	223,741	$ 29.58
WASHINGTON	$ 123.02	6,261,282	809,132	$ 129.23
WEST VIRGINIA	$ 128.25	1,803,920	198,111	$ 109.82
WISCONSIN	$ 126.05	5,541,443	721,361	$ 130.18
WYOMING	$ 444.56	506,242	239,521	$ 473.13
UNITED STATES	$ 80.64	295,171,102	22,775,172	$ 77.16
Average	$ 110.92	11,575,337	893,144	$ 110.09

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Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2006			2007	
	Population	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $
NEBRASKA	1,760,435	185,107	$ 105.15	1,769,912	212,254
NEVADA	2,493,405	167,483	$ 67.17	2,567,752	159,655
NEW HAMPSHIRE	1,311,894	74,565	$ 56.84	1,317,343	71,960
NEW JERSEY	8,623,721	675,322	$ 78.31	8,636,043	613,041
NEW MEXICO	1,942,608	260,153	$ 133.92	1,968,731	243,344
NEW YORK	19,356,564	492,497	$ 25.44	19,422,777	569,359
NORTH CAROLINA	8,866,977	604,375	$ 68.16	9,064,074	762,462
NORTH DAKOTA	636,771	176,633	$ 277.39	638,202	173,953
OHIO	11,492,495	449,955	$ 39.15	11,520,815	434,519
OKLAHOMA	3,574,334	256,047	$ 71.64	3,612,186	233,060
OREGON	3,677,545	471,070	$ 128.09	3,732,957	447,374
PENNSYLVANIA	12,471,142	676,569	$ 54.25	12,522,531	726,855
RHODE ISLAND	1,060,196	51,335	$ 48.42	1,055,009	49,660
SOUTH CAROLINA	4,339,399	240,784	$ 55.49	4,424,232	295,819
SOUTH DAKOTA	788,519	140,127	$ 177.71	797,035	140,188
TENNESSEE	6,089,453	286,583	$ 47.06	6,172,862	322,231
TEXAS	23,369,024	992,513	$ 42.47	23,837,701	1,069,181
UTAH	2,583,724	203,485	$ 78.76	2,663,796	201,508
VERMONT	619,985	87,153	$ 140.57	620,460	80,184
VIRGINIA	7,646,996	245,468	$ 32.10	7,719,749	241,121
WASHINGTON	6,372,243	773,514	$ 121.39	6,464,979	911,233
WEST VIRGINIA	1,807,237	186,603	$ 103.25	1,811,198	203,959
WISCONSIN	5,571,680	688,494	$ 123.57	5,601,571	678,563
WYOMING	512,841	252,098	$ 491.57	523,414	307,642
UNITED STATES	298,009,234	23,442,658	$ 78.66	300,993,486	25,140,811
Average	11,686,637	919,320	$ 107.08	11,803,666	985,914

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location			2008			
	EE per Capita		Population	Environmental Expenditures 2014 $	EE per Capita	Population
NEBRASKA	$	119.92	1,781,949	199,065	$ 111.71	1,796,619
NEVADA	$	62.18	2,615,772	151,109	$ 57.77	2,643,085
NEW HAMPSHIRE	$	54.63	1,321,872	75,506	$ 57.12	1,324,575
NEW JERSEY	$	70.99	8,663,398	675,016	$ 77.92	8,707,739
NEW MEXICO	$	123.60	1,986,763	243,991	$ 122.81	2,009,671
NEW YORK	$	29.31	19,467,789	602,686	$ 30.96	19,541,453
NORTH CAROLINA	$	84.12	9,247,134	747,138	$ 80.80	9,380,884
NORTH DAKOTA	$	272.57	641,421	182,742	$ 284.90	646,844
OHIO	$	37.72	11,528,072	398,449	$ 34.56	11,542,645
OKLAHOMA	$	64.52	3,644,025	236,598	$ 64.93	3,687,050
OREGON	$	119.84	3,782,991	466,912	$ 123.42	3,825,657
PENNSYLVANIA	$	58.04	12,566,368	749,939	$ 59.68	12,604,767
RHODE ISLAND	$	47.07	1,053,502	45,628	$ 43.31	1,053,209
SOUTH CAROLINA	$	66.86	4,503,280	329,952	$ 73.27	4,561,242
SOUTH DAKOTA	$	175.89	804,532	135,702	$ 168.67	812,383
TENNESSEE	$	52.20	6,240,456	503,977	$ 80.76	6,296,254
TEXAS	$	44.85	24,304,290	923,480	$ 38.00	24,782,302
UTAH	$	75.65	2,727,343	204,174	$ 74.86	2,784,572
VERMONT	$	129.23	621,049	80,630	$ 129.83	621,760
VIRGINIA	$	31.23	7,795,424	235,770	$ 30.24	7,882,590
WASHINGTON	$	140.95	6,566,073	812,372	$ 123.72	6,664,195
WEST VIRGINIA	$	112.61	1,814,873	187,546	$ 103.34	1,819,777
WISCONSIN	$	121.14	5,627,610	711,082	$ 126.36	5,654,774
WYOMING	$	587.76	532,981	341,041	$ 639.87	544,270
UNITED STATES	$	83.53	303,784,772	24,792,725	$ 81.61	306,406,893
Average	$	111.70	11,913,128	972,264	$ 112.45	12,015,957

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2009		2010		
	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $	EE per Capita
NEBRASKA	226,024	$ 125.80	1,830,051	280,276	$ 153.15
NEVADA	147,319	$ 55.74	2,703,284	128,162	$ 47.41
NEW HAMPSHIRE	72,295	$ 54.58	1,316,872	64,460	$ 48.95
NEW JERSEY	710,736	$ 81.62	8,803,729	711,311	$ 80.80
NEW MEXICO	255,995	$ 127.38	2,064,756	237,789	$ 115.17
NEW YORK	601,013	$ 30.76	19,402,640	542,114	$ 27.94
NORTH CAROLINA	855,851	$ 91.23	9,558,915	606,959	$ 63.50
NORTH DAKOTA	194,329	$ 300.43	674,526	265,123	$ 393.05
OHIO	411,928	$ 35.69	11,540,983	416,065	$ 36.05
OKLAHOMA	267,334	$ 72.51	3,759,603	269,818	$ 71.77
OREGON	499,760	$ 130.63	3,838,048	453,402	$ 118.13
PENNSYLVANIA	723,319	$ 57.38	12,712,343	754,531	$ 59.35
RHODE ISLAND	44,458	$ 42.21	1,053,337	45,282	$ 42.99
SOUTH CAROLINA	263,453	$ 57.76	4,635,943	244,783	$ 52.80
SOUTH DAKOTA	142,853	$ 175.84	816,325	171,123	$ 209.63
TENNESSEE	419,549	$ 66.63	6,356,671	288,316	$ 45.36
TEXAS	950,318	$ 38.35	25,244,310	968,601	$ 38.37
UTAH	201,787	$ 72.47	2,775,326	181,127	$ 65.26
VERMONT	80,433	$ 129.36	625,982	76,171	$ 121.68
VIRGINIA	249,110	$ 31.60	8,025,773	258,899	$ 32.26
WASHINGTON	1,019,150	$ 152.93	6,743,226	860,530	$ 127.61
WEST VIRGINIA	205,773	$ 113.08	1,854,230	258,221	$ 139.26
WISCONSIN	691,008	$ 122.20	5,690,263	743,220	$ 130.61
WYOMING	418,981	$ 769.80	564,513	461,774	$ 818.00
UNITED STATES	24,865,990	$ 81.15	308,743,010	23,451,096	$ 75.96
Average	975,137	$ 116.26	12,107,569	919,651	$ 118.60

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2011			2012	
	Population	Environmental Expenditures 2014 $	EE per Capita	Population	Environmental Expenditures 2014 $
NEBRASKA	1,842,283	263,104	$ 142.81	1,855,725	252,796
NEVADA	2,718,379	136,424	$ 50.19	2,752,565	127,710
NEW HAMPSHIRE	1,318,473	71,073	$ 53.91	1,321,182	72,423
NEW JERSEY	8,841,243	646,598	$ 73.13	8,873,211	670,031
NEW MEXICO	2,077,756	235,029	$ 113.12	2,083,784	217,171
NEW YORK	19,519,529	531,490	$ 27.23	19,602,769	533,251
NORTH CAROLINA	9,650,963	654,224	$ 67.79	9,746,175	616,058
NORTH DAKOTA	685,476	274,925	$ 401.07	702,087	430,563
OHIO	11,544,824	444,732	$ 38.52	11,550,839	387,519
OKLAHOMA	3,786,274	232,515	$ 61.41	3,817,054	231,530
OREGON	3,868,031	471,034	$ 121.78	3,899,116	457,513
PENNSYLVANIA	12,744,293	696,341	$ 54.64	12,771,854	667,265
RHODE ISLAND	1,052,451	45,875	$ 43.59	1,052,901	64,388
SOUTH CAROLINA	4,672,637	210,172	$ 44.98	4,720,760	202,320
SOUTH DAKOTA	824,398	172,762	$ 209.56	834,441	165,090
TENNESSEE	6,397,634	328,411	$ 51.33	6,454,306	357,163
TEXAS	25,646,389	971,066	$ 37.86	26,071,655	1,191,579
UTAH	2,816,124	186,164	$ 66.11	2,855,782	152,221
VERMONT	626,730	82,837	$ 132.17	626,444	90,169
VIRGINIA	8,110,035	722,047	$ 89.03	8,192,048	706,323
WASHINGTON	6,822,520	929,864	$ 136.29	6,895,226	762,255
WEST VIRGINIA	1,854,972	239,230	$ 128.97	1,856,560	268,309
WISCONSIN	5,709,640	729,626	$ 127.79	5,726,177	652,589
WYOMING	567,725	371,787	$ 654.87	576,765	401,041
UNITED STATES	311,042,881	23,089,390	$ 74.23	313,998,379	22,712,626
Average	12,197,760	905,466	$ 115.07	12,301,205	890,691

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location		2013			
	EE per Capita	Population	Environmental Expenditures 2014 $	EE per Capita	Population
NEBRASKA	$ 136.22	1,868,559	256,086	$ 137.05	1,881,145
NEVADA	$ 46.40	2,786,464	118,476	$ 42.52	2,833,013
NEW HAMPSHIRE	$ 54.82	1,322,687	78,397	$ 59.27	1,328,743
NEW JERSEY	$ 75.51	8,899,162	592,868	$ 66.62	8,925,001
NEW MEXICO	$ 104.22	2,085,193	186,348	$ 89.37	2,083,024
NEW YORK	$ 27.20	19,673,546	432,456	$ 21.98	19,718,515
NORTH CAROLINA	$ 63.21	9,841,590	521,684	$ 53.01	9,934,399
NORTH DAKOTA	$ 613.26	724,019	336,090	$ 464.20	739,904
OHIO	$ 33.55	11,570,022	398,134	$ 34.41	11,594,408
OKLAHOMA	$ 60.66	3,852,415	235,959	$ 61.25	3,877,499
OREGON	$ 117.34	3,925,751	458,710	$ 116.85	3,968,371
PENNSYLVANIA	$ 52.24	12,781,338	654,892	$ 51.24	12,790,565
RHODE ISLAND	$ 61.15	1,053,033	60,389	$ 57.35	1,054,480
SOUTH CAROLINA	$ 42.86	4,767,894	200,462	$ 42.04	4,828,430
SOUTH DAKOTA	$ 197.85	844,922	181,820	$ 215.19	852,561
TENNESSEE	$ 55.34	6,494,821	297,047	$ 45.74	6,544,663
TEXAS	$ 45.70	26,473,525	1,061,551	$ 40.10	26,944,751
UTAH	$ 53.30	2,902,663	176,022	$ 60.64	2,941,836
VERMONT	$ 143.94	627,140	83,521	$ 133.18	626,984
VIRGINIA	$ 86.22	8,262,692	253,897	$ 30.73	8,317,372
WASHINGTON	$ 110.55	6,968,006	878,882	$ 126.13	7,054,196
WEST VIRGINIA	$ 144.52	1,853,231	230,350	$ 124.30	1,848,514
WISCONSIN	$ 113.97	5,742,854	677,727	$ 118.01	5,758,377
WYOMING	$ 695.33	582,684	402,091	$ 690.07	583,642
UNITED STATES	$ 72.33	315,555,743	21,772,720	$ 69.00	317,904,451
Average	$ 114.05	12,374,735	853,832	$ 110.00	12,466,841

Appendix B
Per Capita Environmental Agency Expenditures: 2000-2014
(2014 Adjusted dollars)

Location	2014	
	Environmental Expenditures 2014 $	EE per Capita
NEBRASKA	277,899	$ 147.73
NEVADA	103,302	$ 36.46
NEW HAMPSHIRE	72,645	$ 54.67
NEW JERSEY	441,991	$ 49.52
NEW MEXICO	188,758	$ 90.62
NEW YORK	389,639	$ 19.76
NORTH CAROLINA	467,309	$ 47.04
NORTH DAKOTA	327,196	$ 442.21
OHIO	371,865	$ 32.07
OKLAHOMA	224,968	$ 58.02
OREGON	516,795	$ 130.23
PENNSYLVANIA	633,077	$ 49.50
RHODE ISLAND	49,149	$ 46.61
SOUTH CAROLINA	214,458	$ 44.42
SOUTH DAKOTA	179,499	$ 210.54
TENNESSEE	294,152	$ 44.95
TEXAS	1,072,559	$ 39.81
UTAH	176,731	$ 60.08
VERMONT	101,284	$ 161.54
VIRGINIA	244,640	$ 29.41
WASHINGTON	954,773	$ 135.35
WEST VIRGINIA	228,036	$ 123.36
WISCONSIN	681,371	$ 118.33
WYOMING	359,250	$ 615.53
UNITED STATES	20,915,382	$ 65.79
Average	820,211	$ 104.67

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2000	2001	2002
ALABAMA	21,745,447	22,402,322	29,571,065
ALASKA	9,057,281	9,476,480	12,508,954
ARIZONA	22,352,804	22,971,818	30,322,800
ARKANSAS	13,137,166	14,200,110	18,744,145
CALIFORNIA	205,188,065	228,430,147	301,527,794
COLORADO	19,083,797	21,019,141	27,745,266
CONNECTICUT	22,910,785	24,385,969	32,189,478
DELAWARE	5,768,599	5,777,478	7,626,271
FLORIDA	61,934,864	67,354,788	88,908,320
GEORGIA	33,993,670	37,332,608	49,279,042
HAWAII	9,048,314	9,101,358	12,013,792
IDAHO	6,154,796	6,635,223	8,758,494
ILLINOIS	56,420,578	60,528,144	79,897,151
INDIANA	27,796,426	28,922,111	38,177,187
IOWA	15,690,759	16,443,758	21,705,760
KANSAS	12,499,685	13,663,859	18,036,294
KENTUCKY	21,484,840	23,234,201	30,669,145
LOUISIANA	22,678,536	21,989,752	29,026,473
MAINE	7,463,844	7,688,801	10,149,217
MARYLAND	26,536,979	28,775,929	37,984,226
MASSACHUSETTS	40,385,086	43,463,009	57,371,171
MICHIGAN	58,565,986	62,360,081	82,315,307
MINNESOTA	31,956,627	32,980,343	43,534,052
MISSISSIPPI	15,031,878	15,714,745	20,743,464
MISSOURI	23,691,562	25,310,071	33,409,294
MONTANA	5,093,890	5,424,386	7,160,189
NEBRASKA	7,908,213	8,189,031	10,809,521
NEVADA	8,284,756	9,041,027	11,934,156
NEW HAMPSHIRE	5,981,519	5,911,066	7,802,607
NEW JERSEY	47,652,944	50,463,802	66,612,219
NEW MEXICO	11,919,793	12,292,833	16,226,540
NEW YORK	132,786,984	142,842,128	188,551,609
NORTH CAROLINA	40,572,731	42,379,980	55,941,574
NORTH DAKOTA	3,912,258	3,883,253	5,125,894
OHIO	61,143,877	64,159,323	84,690,307
OKLAHOMA	14,562,497	18,047,096	23,822,167

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2000	2001	2002
OREGON	21,613,189	21,870,535	28,869,107
PENNSYLVANIA	65,323,996	68,994,459	91,072,685
RHODE ISLAND	6,367,771	7,050,244	9,306,322
SOUTH CAROLINA	22,244,317	24,225,481	31,977,635
SOUTH DAKOTA	3,292,251	3,604,821	4,758,364
TENNESSEE	23,089,210	24,636,006	32,519,528
TEXAS	82,782,756	86,679,050	114,416,346
UTAH	11,770,722	12,399,648	16,367,536
VERMONT	4,410,562	4,517,045	5,962,499
VIRGINIA	33,310,129	35,894,035	47,380,126
WASHINGTON	35,485,452	37,284,168	49,215,102
WEST VIRGINIA	10,346,013	11,443,738	15,105,734
WISCONSIN	31,281,844	33,308,699	43,967,483
WYOMING	3,497,048	3,544,603	4,678,876
UNITED STATES	1,485,213,098	1,588,248,703	2,096,488,288

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2003	2004	2005
ALABAMA	23,827,732	24,430,700	24,619,050
ALASKA	10,476,787	10,111,550	9,747,597
ARIZONA	25,291,762	27,207,255	29,178,445
ARKANSAS	15,589,415	15,851,381	15,823,441
CALIFORNIA	263,725,615	253,611,663	254,592,632
COLORADO	22,821,293	22,552,569	22,667,558
CONNECTICUT	26,730,340	24,410,711	24,110,576
DELAWARE	6,266,692	6,734,950	7,216,457
FLORIDA	72,649,357	73,013,338	86,097,127
GEORGIA	41,959,603	42,786,896	43,147,259
HAWAII	9,818,559	9,844,153	10,170,587
IDAHO	6,985,528	7,203,280	7,434,136
ILLINOIS	66,165,506	68,577,263	67,001,292
INDIANA	29,786,023	31,859,568	31,899,119
IOWA	16,883,520	16,780,438	16,816,534
KANSAS	14,130,674	14,203,444	14,235,902
KENTUCKY	24,660,693	25,154,716	24,726,285
LOUISIANA	24,098,895	25,602,876	25,907,704
MAINE	8,650,890	9,132,164	9,038,514
MARYLAND	31,723,845	31,502,788	32,383,518
MASSACHUSETTS	42,196,461	46,227,441	45,525,983
MICHIGAN	65,811,001	65,611,964	62,391,771
MINNESOTA	37,279,083	35,282,939	35,767,575
MISSISSIPPI	17,418,722	17,829,110	17,792,763
MISSOURI	27,820,394	27,548,706	28,012,520
MONTANA	5,723,588	5,864,148	5,819,035
NEBRASKA	8,802,765	8,717,919	8,760,153
NEVADA	10,083,260	10,719,285	11,081,510
NEW HAMPSHIRE	6,806,641	6,923,186	6,995,454
NEW JERSEY	57,982,401	61,219,500	61,666,724
NEW MEXICO	13,767,658	14,041,771	15,080,476
NEW YORK	164,443,051	166,121,470	164,331,356
NORTH CAROLINA	44,325,660	46,368,560	48,131,140
NORTH DAKOTA	4,026,566	4,068,729	4,223,994
OHIO	72,745,969	73,349,310	73,270,413
OKLAHOMA	19,511,366	18,698,979	19,011,088

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2003	2004	2005
OREGON	23,227,447	23,234,035	23,252,030
PENNSYLVANIA	74,082,721	71,211,434	77,295,740
RHODE ISLAND	7,709,698	7,966,894	7,985,629
SOUTH CAROLINA	27,141,280	26,938,644	27,478,804
SOUTH DAKOTA	3,738,477	3,784,734	3,951,664
TENNESSEE	27,118,273	27,812,583	28,983,750
TEXAS	98,537,995	96,454,631	98,345,232
UTAH	13,225,146	13,492,830	13,462,857
VERMONT	4,978,055	4,892,020	5,358,865
VIRGINIA	37,576,585	37,940,516	39,577,551
WASHINGTON	42,054,433	40,599,636	39,987,729
WEST VIRGINIA	12,904,810	12,349,021	11,698,726
WISCONSIN	35,679,046	35,721,550	34,882,258
WYOMING	4,211,126	4,495,315	4,839,788
UNITED STATES	1,753,172,409	1,756,058,559	1,781,776,309

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2006	2007	2008	2009
ALABAMA	25,214,435	26,781,458	24,892,739	29,064,492
ALASKA	10,071,148	10,478,588	10,115,914	12,091,012
ARIZONA	30,828,419	32,864,458	30,857,509	34,668,500
ARKANSAS	16,320,030	17,041,365	15,658,192	17,780,954
CALIFORNIA	263,621,407	264,993,371	246,659,361	279,339,003
COLORADO	23,576,578	23,856,476	22,547,367	26,888,239
CONNECTICUT	24,510,901	24,589,091	23,491,372	28,213,600
DELAWARE	7,636,661	7,679,022	7,151,941	8,097,048
FLORIDA	89,382,816	83,524,061	77,543,853	83,218,703
GEORGIA	42,408,198	47,703,142	41,166,551	45,597,670
HAWAII	10,429,025	11,285,424	10,702,719	12,369,404
IDAHO	7,432,865	7,914,591	7,717,823	9,086,526
ILLINOIS	65,222,901	68,114,714	63,373,639	75,267,267
INDIANA	31,363,431	32,627,633	30,511,583	35,004,009
IOWA	17,482,094	17,626,413	16,558,941	20,134,385
KANSAS	14,607,593	15,759,895	14,968,812	17,415,444
KENTUCKY	26,263,108	27,061,619	25,662,244	29,538,444
LOUISIANA	28,338,180	32,608,261	33,946,744	36,747,055
MAINE	9,189,984	9,042,544	8,171,059	9,652,774
MARYLAND	33,890,193	36,131,916	34,029,826	39,625,612
MASSACHUSETTS	45,771,266	51,234,513	46,443,177	53,512,253
MICHIGAN	62,228,368	62,223,312	56,653,904	64,897,627
MINNESOTA	35,932,487	36,343,745	34,283,510	39,939,778
MISSISSIPPI	19,062,921	21,238,087	18,642,936	21,170,684
MISSOURI	28,472,035	28,720,506	26,865,659	31,474,325
MONTANA	6,077,636	6,330,510	6,137,669	6,895,468
NEBRASKA	9,019,180	8,931,403	8,460,595	10,021,312
NEVADA	12,033,767	12,261,072	10,845,375	13,261,829
NEW HAMPSHIRE	7,005,904	7,097,778	6,601,654	7,651,791
NEW JERSEY	65,403,472	63,304,429	58,536,128	68,241,745
NEW MEXICO	15,494,179	17,226,174	16,101,771	19,115,466
NEW YORK	167,189,709	172,688,975	156,202,016	181,610,935
NORTH CAROLINA	47,403,876	49,078,337	45,932,844	53,445,016
NORTH DAKOTA	4,251,018	4,306,390	4,125,958	4,935,274
OHIO	76,219,645	75,803,684	68,071,276	79,049,219
OKLAHOMA	19,816,868	20,579,138	19,517,639	23,502,489

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2006	2007	2008	2009
OREGON	23,482,636	23,490,381	22,387,184	26,819,168
PENNSYLVANIA	75,952,917	79,636,646	73,354,637	87,794,226
RHODE ISLAND	8,045,738	8,061,393	7,495,870	8,184,701
SOUTH CAROLINA	27,413,969	28,650,320	27,590,685	31,425,969
SOUTH DAKOTA	4,054,368	4,070,295	3,698,335	4,523,823
TENNESSEE	28,042,301	28,299,866	26,370,615	31,124,162
TEXAS	101,392,385	103,572,035	101,920,390	122,098,325
UTAH	14,077,992	14,562,583	14,293,669	17,125,308
VERMONT	5,416,549	5,708,343	5,069,432	6,013,787
VIRGINIA	40,688,187	42,092,255	39,989,854	46,424,489
WASHINGTON	39,680,253	41,977,950	39,689,815	47,798,812
WEST VIRGINIA	11,444,116	11,588,669	10,561,575	12,651,672
WISCONSIN	35,246,303	35,344,573	32,649,254	39,210,899
WYOMING	4,693,450	5,171,465	5,081,586	6,135,789
UNITED STATES	1,818,803,463	1,867,278,867	1,739,303,201	2,015,856,481

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2010	2011	2012	2013
ALABAMA	30,192,659	29,464,336	28,517,582	28,767,833
ALASKA	12,002,209	11,886,133	12,081,344	12,458,890
ARIZONA	35,986,994	34,519,183	32,844,641	32,607,443
ARKANSAS	19,629,429	19,804,582	20,206,833	19,912,697
CALIFORNIA	280,388,240	296,650,898	277,126,344	289,243,941
COLORADO	29,426,485	29,767,961	29,085,313	29,318,791
CONNECTICUT	29,927,777	29,498,811	29,221,204	29,888,769
DELAWARE	8,531,240	8,333,290	8,565,151	8,821,215
FLORIDA	89,196,550	88,864,718	81,866,641	82,044,757
GEORGIA	48,485,606	47,529,714	46,093,638	46,393,455
HAWAII	12,302,101	12,049,560	11,912,521	11,707,265
IDAHO	9,280,342	9,170,159	8,550,300	8,701,475
ILLINOIS	81,185,974	77,491,084	74,800,907	76,831,214
INDIANA	38,666,871	37,024,598	36,909,802	37,529,512
IOWA	20,828,697	20,926,102	21,019,750	20,928,293
KANSAS	18,076,504	17,520,975	17,249,777	16,765,440
KENTUCKY	31,716,309	30,838,437	30,229,567	29,465,539
LOUISIANA	36,640,880	35,051,285	32,629,552	32,678,330
MAINE	9,836,511	9,554,039	9,401,929	9,129,415
MARYLAND	40,898,026	39,520,469	42,373,255	40,348,133
MASSACHUSETTS	57,168,417	57,986,948	58,385,217	57,908,229
MICHIGAN	69,659,339	66,263,933	63,578,791	64,204,404
MINNESOTA	41,315,794	40,412,768	39,770,959	40,742,362
MISSISSIPPI	21,824,691	21,165,288	20,652,837	20,503,965
MISSOURI	33,552,319	32,179,224	32,035,948	31,060,406
MONTANA	7,687,094	7,460,634	7,274,783	7,216,925
NEBRASKA	10,307,861	9,824,297	9,811,284	10,078,454
NEVADA	14,098,615	13,863,428	13,881,436	13,539,283
NEW HAMPSHIRE	8,399,308	8,020,074	7,646,459	7,568,828
NEW JERSEY	73,875,893	70,541,522	70,165,396	68,709,862
NEW MEXICO	19,615,684	18,758,430	17,571,192	17,544,483
NEW YORK	190,481,949	193,209,705	186,662,965	187,721,004
NORTH CAROLINA	56,886,981	55,743,182	55,233,134	54,698,379
NORTH DAKOTA	5,596,202	5,791,511	6,504,899	6,538,364
OHIO	83,592,702	82,443,373	78,820,187	77,817,504
OKLAHOMA	24,814,989	23,649,666	23,276,831	23,378,781

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2010	2011	2012	2013
OREGON	29,406,188	28,694,037	27,668,325	27,387,086
PENNSYLVANIA	95,140,962	95,331,101	89,959,796	89,283,307
RHODE ISLAND	8,951,416	8,685,561	8,575,556	8,352,795
SOUTH CAROLINA	31,649,982	30,627,651	28,498,494	28,810,618
SOUTH DAKOTA	4,827,824	4,723,369	4,556,879	4,566,260
TENNESSEE	32,346,155	32,383,287	32,442,898	31,198,046
TEXAS	130,660,025	132,305,637	129,731,313	127,428,129
UTAH	17,731,501	17,516,710	17,622,297	17,158,952
VERMONT	6,263,078	6,146,534	6,138,028	6,138,612
VIRGINIA	47,194,277	47,826,814	48,162,749	48,566,346
WASHINGTON	50,399,137	48,299,736	46,866,515	46,640,380
WEST VIRGINIA	13,453,926	13,650,035	13,619,599	13,498,838
WISCONSIN	42,062,898	41,317,324	38,886,096	38,275,300
WYOMING	6,275,061	5,957,239	5,946,780	5,951,590
UNITED STATES	2,118,439,669	2,106,245,354	2,040,633,694	2,046,029,900

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2014	Average Percent Change 2009-14
ALABAMA	28,127,686	-0.64%
ALASKA	12,920,065	1.37%
ARIZONA	33,231,219	-0.83%
ARKANSAS	20,410,432	2.96%
CALIFORNIA	284,555,886	0.37%
COLORADO	30,648,903	2.80%
CONNECTICUT	29,308,254	0.78%
DELAWARE	8,786,763	1.70%
FLORIDA	83,274,449	0.01%
GEORGIA	45,452,071	-0.06%
HAWAII	12,378,789	0.02%
IDAHO	8,449,255	-1.40%
ILLINOIS	77,319,107	0.55%
INDIANA	35,990,274	0.56%
IOWA	21,214,460	1.07%
KANSAS	16,920,498	-0.57%
KENTUCKY	29,938,181	0.27%
LOUISIANA	31,803,632	-2.69%
MAINE	9,258,232	-0.82%
MARYLAND	41,308,885	0.85%
MASSACHUSETTS	58,304,754	1.79%
MICHIGAN	63,861,993	-0.32%
MINNESOTA	41,845,094	0.95%
MISSISSIPPI	20,613,073	-0.53%
MISSOURI	30,454,270	-0.65%
MONTANA	7,218,707	0.94%
NEBRASKA	10,046,378	0.05%
NEVADA	13,217,485	-0.07%
NEW HAMPSHIRE	7,344,811	-0.80%
NEW JERSEY	69,081,342	0.25%
NEW MEXICO	17,720,552	-1.46%
NEW YORK	178,324,895	-0.36%
NORTH CAROLINA	54,443,382	0.37%
NORTH DAKOTA	7,486,329	10.34%
OHIO	79,239,198	0.05%
OKLAHOMA	23,377,996	-0.11%

Appendix C
Total State Expenditures
(2014 adjusted dollars x 1000)

STATE	2014	Average Percent Change 2009-14
OREGON	29,413,524	1.93%
PENNSYLVANIA	86,985,760	-0.18%
RHODE ISLAND	8,334,471	0.37%
SOUTH CAROLINA	28,903,767	-1.61%
SOUTH DAKOTA	4,520,937	-0.01%
TENNESSEE	30,518,934	-0.39%
TEXAS	130,573,820	1.39%
UTAH	17,039,808	-0.10%
VERMONT	6,302,744	0.96%
VIRGINIA	48,187,730	0.76%
WASHINGTON	47,971,432	0.07%
WEST VIRGINIA	13,240,704	0.93%
WISCONSIN	38,583,376	-0.32%
WYOMING	5,894,585	-0.79%
UNITED STATES	2,036,419,293	0.20%

Appendix D
Full Time Equivalent (FTE) Employment
State Environmental Agencies

STATE	2000	2001	2002	2003	2004	2005	2006	2007
Alabama	2,278	2,309	2,387	2,241	2,184	2,175	2,189	2,227
Alaska	1,992	2,104	2,215	2,298	2,297	2,301	2,330	2,394
Arizona	2,359	2,303	2,303	2,288	2,888	2,884	2,921	2,985
Arkansas	2,373	1,977	1,932	1,947	1,957	1,825	2,041	1,944
California	14,477	15,130	15,477	14,916	14,176	14,016	13,822	14,419
Colorado	1,376	1,383	1,435	1,405	1,400	1,407	1,408	1,462
Connecticut	874	659	619	597	729	864	872	925
Delaware	480	548	561	568	586	631	668	695
Florida	8,562	11,080	10,615	10,421	10,379	10,663	10,358	9,876
Georgia	4,783	4,747	4,717	4,617	4,405	3,759	4,249	4,432
Hawaii	1,240	1,172	1,185	1,125	1,091	1,071	1,127	1,145
Idaho	1,947	2,125	2,034	2,010	1,946	2,010	1,985	2,076
Illinois	4,176	4,176	4,173	3,965	3,835	3,662	3,640	3,562
Indiana	2,698	2,840	2,954	2,709	2,616	2,718	2,783	2,773
Iowa	3,016	3,057	2,083	1,896	1,607	1,720	1,732	1,925
Kansas	881	875	873	866	864	864	841	846
Kentucky	3,742	3,846	3,816	3,859	3,819	3,913	3,997	3,965
Louisiana	4,966	5,184	4,813	4,959	5,016	4,958	4,746	4,521
Maine	1,258	1,285	1,293	1,272	1,249	1,033	1,121	1,140
Maryland	2,185	2,170	2,184	2,137	2,064	2,052	2,054	1,780
Massachusetts	3,191	2,453	1,289	2,100	2,037	2,095	2,265	2,305
Michigan	4,950	5,074	5,048	4,783	4,613	4,554	4,578	4,553
Minnesota	3,153	3,458	3,350	4,012	3,797	3,890	3,678	3,693
Mississippi	3,549	3,468	3,389	3,242	3,315	3,272	3,101	3,226
Missouri	2,629	2,749	2,676	2,737	2,785	2,732	2,607	2,549
Montana	1,331	1,389	1,365	1,366	1,370	1,399	1,494	1,489
Nebraska	1,696	1,994	1,994	2,145	2,170	2,172	2,181	2,173
Nevada	1,009	1,180	1,186	1,212	1,207	1,183	1,235	986
New Hampshire	573	577	599	604	576	569	404	406
New Jersey	3,430	3,478	3,030	3,209	3,295	3,115	3,079	2,421
New Mexico	1,776	1,756	1,779	1,789	1,784	1,812	1,843	1,128
New York	3,277	3,477	3,444	3,560	3,594	3,382	3,429	3,537
North Carolina	4,240	4,163	4,130	4,142	4,140	4,212	4,462	4,584
North Dakota	1,413	1,426	1,485	1,549	1,639	1,644	1,652	1,670
Ohio	3,814	3,879	3,887	3,644	3,457	3,548	3,507	2,968
Oklahoma	2,217	2,237	2,221	2,174	2,057	2,083	1,979	2,024
Oregon	2,919	2,859	2,783	2,760	2,875	2,759	2,749	2,694
Pennsylvania	6,643	7,096	7,035	6,963	6,685	6,368	6,295	6,278
Rhode Island	873	909	548	885	871	864	860	858
South Carolina	2,515	2,274	2,208	2,095	1,954	1,956	2,046	2,111
South Dakota	819	814	829	853	850	888	884	862
Tennessee	3,378	3,397	3,374	3,518	3,596	3,652	3,556	4,040

Appendix D
Full Time Equivalent (FTE) Employment
State Environmental Agencies

STATE	2000	2001	2002	2003	2004	2005	2006	2007
Texas	11,765	11,763	11,680	11,438	11,043	11,408	11,510	10,460
Utah	1,095	1,122	1,134	1,130	1,147	1,191	1,240	1,279
Vermont	566	575	575	550	577	605	635	635
Virginia	3,103	3,136	3,678	3,204	3,162	3,177	3,185	2,890
Washington	5,597	5,204	5,258	5,248	5,124	5,069	5,185	5,484
West Virginia	1,997	1,949	2,311	2,314	2,283	2,283	2,314	2,349
Wisconsin	2,832	2,822	2,680	2,400	2,422	2,515	2,386	2,472
Wyoming	680	684	655	802	828	823	986	974
United States	152,693	156,332	153,289	152,524	150,361	149,746	150,209	148,190

Appendix D
Full Time Equivalent (FTE) Employment
State Environmental Agencies

STATE	2008	2009	2010	2011	2012	2013	2014
Alabama	2,322	2,303	2,220	2,113	1,999	1,919	2,002
Alaska	2,388	2,413	2,387	2,376	2,429	2,447	2,409
Arizona	2,901	2,074	2,032	2,061	1,538	1,544	1,526
Arkansas	1,943	2,007	2,032	1,955	2,043	2,080	1,953
California	14,767	15,679	15,784	15,524	15,585	15,377	16,269
Colorado	1,497	1,459	1,718	1,698	1,053	1,053	1,094
Connecticut	1,168	1,193	793	877	752	708	757
Delaware	719	721	673	662	668	662	647
Florida	9,746	9,823	9,767	9,625	8,291	8,101	8,137
Georgia	4,584	4,391	4,211	4,043	5,090	4,870	4,845
Hawaii	1,220	1,246	1,094	1,047	765	798	812
Idaho	2,080	2,050	1,830	1,850	1,848	1,819	1,851
Illinois	3,824	3,695	3,501	3,470	3,342	3,383	3,043
Indiana	2,562	3,158	2,309	2,224	2,231	2,156	2,272
Iowa	1,724	1,748	1,647	1,574	1,571	1,599	1,594
Kansas	847	860	808	823	809	803	798
Kentucky	3,403	3,268	2,970	2,950	3,040	2,787	2,772
Louisiana	4,702	4,675	4,445	4,260	4,154	4,172	4,088
Maine	1,147	1,015	966	921	1,017	1,026	1,138
Maryland	2,125	2,151	2,090	2,039	2,019	2,013	2,025
Massachusetts	2,160	1,981	2,098	2,037	1,972	1,934	1,976
Michigan	4,003	4,075	3,959	3,586	3,503	3,465	3,343
Minnesota	3,735	3,763	3,096	3,675	3,673	3,622	3,096
Mississippi	3,369	3,180	3,150	3,028	3,050	3,094	3,033
Missouri	2,769	2,888	2,500	2,406	2,217	2,211	2,195
Montana	1,502	1,525	1,517	1,528	1,507	1,570	1,540
Nebraska	2,188	2,170	2,143	2,146	2,143	2,142	2,161
Nevada	925	958	979	979	852	854	894
New Hampshire	413	370	388	381	379	352	354
New Jersey	3,024	2,762	2,582	2,523	2,446	2,434	2,381
New Mexico	1,155	1,216	1,099	982	945	966	1,049
New York	3,519	3,498	3,346	3,076	2,999	2,912	2,938
North Carolina	4,473	4,787	4,987	4,960	4,973	4,360	4,312
North Dakota	1,666	586	793	789	593	576	1,086
Ohio	2,859	2,817	2,775	2,669	2,461	2,470	2,476
Oklahoma	2,029	2,085	2,053	2,029	1,949	1,911	1,890
Oregon	2,698	2,497	2,574	2,526	2,493	2,546	2,520
Pennsylvania	6,570	7,030	6,651	6,333	6,131	5,767	5,726
Rhode Island	861	780	771	763	719	478	726
South Carolina	2,163	2,132	2,144	1,983	1,996	2,060	2,138
South Dakota	870	953	1,070	1,104	1,084	973	948
Tennessee	4,067	3,905	3,911	3,841	3,851	3,819	3,752

Appendix D
Full Time Equivalent (FTE) Employment
State Environmental Agencies

STATE	2008	2009	2010	2011	2012	2013	2014
Texas	10,672	10,922	11,059	11,111	10,614	10,525	10,687
Utah	1,379	1,315	1,328	1,336	1,316	1,297	1,267
Vermont	629	597	558	556	564	572	610
Virginia	2,905	3,325	2,199	2,757	2,694	2,662	2,659
Washington	5,480	5,556	5,223	5,186	5,061	5,309	5,347
West Virginia	2,321	2,337	1,969	1,953	662	1,924	1,903
Wisconsin	2,516	2,575	2,277	2,126	2,118	2,045	2,321
Wyoming	942	968	1,009	1,005	980	826	953
United States	149,531	149,482	143,485	141,466	136,189	134,993	136,313

Alabama	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	326180	29064492	$ 36,406	22.0%	4,708,708
2010	357855	30192659	$ 37,000	21.7%	4,785,492
2011	284498	29464336	$ 36,383	22.0%	4,799,918
2012	270234	28517582	$ 36,694	22.3%	4,815,960
2013	281555	28767833	$ 37,231	22.7%	4,829,479
2014	262297	28127686	$ 37,493	23.1%	4,843,214

Alabama	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.8	1.0			
Per Capita Income	-0.3	-0.4	1.0		
Educational Attainment	-0.8	-0.9	0.7	1.0	
Population	-0.7	-0.4	0.7	0.7	1.0
GSP	-0.6	-0.4	0.8	0.7	1.0
GSP M&M	-0.8	-0.5	0.6	0.7	1.0
Government Ideology	-0.8	-0.8	0.7	0.8	0.7
Environmental Agency FTEs	0.8	0.6	-0.6	-0.8	-0.9
Per Cap EE	1.0	0.8	-0.3	-0.8	-0.7
Per Cap Total State Expenditures	0.9	1.0	-0.5	-0.9	-0.7

Arkansas	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	254233	17780954	$ 35,141	18.9%	2889450
2010	298495	19629429	$ 36,134	21.1%	2921995
2011	356039	19804582	$ 35,715	19.6%	2939493
2012	265850	20206833	$ 35,765	19.8%	2950685
2013	253481	19912697	$ 36,808	20.1%	2958663
2014	256092	20410432	$ 37,751	20.6%	2966912

Arkansas	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.1	1.0			
Per Capita Income	-0.3	0.7	1.0		
Educational Attainment	0.0	0.6	0.7	1.0	
Population	-0.1	0.9	0.8	0.5	1.0
GSP	-0.2	0.8	0.9	0.6	0.9
GSP M&M	0.1	0.8	0.9	0.6	0.8
Government Ideology	-0.3	0.4	0.8	0.4	0.5
Environmental Agency FTEs	-0.5	0.0	-0.1	0.1	0.0
Per Cap EE	1.0	0.1	-0.4	0.0	-0.1
Per Cap Total State Expenditures	0.2	1.0	0.6	0.7	0.9

Alabama	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	185147	31250	-1	2,303	$ 69.27	$ 6.17
2010	190434	33882	-1	2,220	$ 74.78	$ 6.31
2011	189698	36292	-1	2,113	$ 59.27	$ 6.14
2012	191454	37161	1	1,999	$ 56.11	$ 5.92
2013	193897	38421	1	1,919	$ 58.30	$ 5.96
2014	194421	37485	1	2,002	$ 54.16	$ 5.81

Alabama	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	0.8	0.8	1.0			
Environmental Agency FTEs	-0.9	-1.0	-0.9	1.0		
Per Cap EE	-0.6	-0.8	-0.8	0.8	1.0	
Per Cap Total State Expenditures	-0.7	-0.7	-0.9	0.8	0.9	1.0

Arkansas	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	107822	18140	-1	2,007	$ 87.99	$ 6.15
2010	112217	19804	-1	2,032	$ 102.15	$ 6.72
2011	112651	20535	-1	1,955	$ 121.12	$ 6.74
2012	112503	19226	-1	2,043	$ 90.10	$ 6.85
2013	116667	20780	-1	2,080	$ 85.67	$ 6.73
2014	117854	21643	1	1,953	$ 86.32	$ 6.88

Arkansas	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	0.6	0.6	1.0			
Environmental Agency FTEs	0.0	-0.3	-0.6	1.0		
Per Cap EE	-0.2	0.1	-0.3	-0.5	1.0	
Per Cap Total State Expenditures	0.8	0.8	0.4	0.0	0.1	1.0

Alaska	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	339800	12091012	$ 46,863	26.6%	698473	
2010	458416	12002209	$ 48,150	27.0%	714031	
2011	411035	11886133	$ 47,805	27.2%	722713	
2012	327795	12081344	$ 48,181	27.5%	731089	
2013	338375	12458890	$ 51,033	27.5%	736879	
2014	353554	12920065	$ 52,901	27.7%	736705	

Alaska	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.4	1.0				
Per Capita Income	-0.3	0.9	1.0			
Educational Attainment	-0.3	0.6	0.8	1.0		
Population	-0.3	0.6	0.8	1.0	1.0	
GSP	0.0	-0.2	0.1	0.6	0.7	
GSP M&M	0.0	-0.5	-0.3	0.3	0.3	
Government Ideology	-0.2	0.9	0.8	0.5	0.4	
Environmental Agency FTEs	-0.8	0.4	0.4	0.4	0.4	
Per Cap EE	1.0	-0.5	-0.4	-0.4	-0.4	
Per Cap Total State Expenditures	-0.3	0.7	0.5	0.0	-0.1	

California	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	5049651	279339003	$ 46,558	29.9%	36961664	
2010	4519920	280388240	$ 46,983	30.0%	37332685	
2011	4016213	296650898	$ 46,705	30.3%	37676861	
2012	4247640	277126344	$ 46,329	30.5%	38011074	
2013	4184550	289243941	$ 48,349	30.6%	38335203	
2014	3719571	284555886	$ 50,109	31.0%	38680810	

California	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.5	1.0				
Per Capita Income	-0.6	0.2	1.0			
Educational Attainment	-0.9	0.2	0.8	1.0		
Population	-0.9	0.2	0.8	1.0	1.0	
GSP	-0.8	0.1	0.9	0.9	0.9	
GSP M&M	-0.2	-0.4	0.8	0.6	0.6	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	-0.3	-0.3	0.6	0.4	0.3	
Per Cap EE	1.0	-0.5	-0.7	-0.9	-0.9	
Per Cap Total State Expenditures	0.1	0.8	-0.3	-0.4	-0.4	

Alaska	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	55509	18552	0	2,413	$ 486.49	$ 17.31	
2010	59006	20025	0	2,387	$ 642.01	$ 16.81	
2011	61697	22798	0	2,376	$ 568.74	$ 16.45	
2012	62717	23164	0	2,429	$ 448.37	$ 16.53	
2013	60957	21239	0	2,447	$ 459.20	$ 16.91	
2014	58253	18315	1	2,409	$ 479.91	$ 17.54	

Alaska	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	0.9	1.0					
Government Ideology	-0.3	-0.6	1.0				
Environmental Agency FTEs	0.1	0.0	0.0	1.0			
Per Cap EE	-0.1	0.0	-0.2	-0.8	1.0		
Per Cap Total State Expenditures	-0.8	-0.9	0.7	0.2	-0.3	1.0	

California	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	2103327	273941	-1	15,679	$ 136.62	$ 7.56	
2010	2142816	264850	-1	15,784	$ 121.07	$ 7.51	
2011	2138112	254713	-1	15,524	$ 106.60	$ 7.87	
2012	2195135	270367	-1	15,585	$ 111.75	$ 7.29	
2013	2268437	278501	-1	15,377	$ 109.16	$ 7.55	
2014	2350807	287001	-1	16,269	$ 96.16	$ 7.36	

California	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	0.8	1.0					
Government Ideology	---	---	1.0				
Environmental Agency FTEs	0.5	0.5	---	1.0			
Per Cap EE	-0.8	-0.2	---	-0.3	1.0		
Per Cap Total State Expenditures	-0.5	-0.7	---	-0.4	0.1	1.0	

Arizona	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	301199	34668500	$ 36,229	25.6%	6,595,778	
2010	298633	35986994	$ 38,149	26.3%	6,408,312	
2011	269348	34519183	$ 37,669	26.4%	6,467,163	
2012	276285	32844641	$ 37,058	26.6%	6,549,634	
2013	268354	32607443	$ 37,559	26.9%	6,624,617	
2014	263324	33231219	$ 37,895	27.1%	6,719,993	

Arizona	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.7	1.0				
Per Capita Income	-0.4	0.1	1.0			
Educational Attainment	-0.9	-0.6	0.7	1.0		
Population	-0.5	-0.7	-0.2	0.4	1.0	
GSP	-0.7	-0.8	0.3	0.9	0.8	
GSP M&M	-0.5	-0.2	0.4	0.4	-0.3	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.7	0.9	-0.2	-0.8	-0.7	
Per Cap EE	1.0	0.8	-0.3	-0.8	-0.7	
Per Cap Total State Expenditures	0.7	1.0	0.2	-0.6	-0.9	

Colorado	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	509927	26888239	$ 45,478	35.9%	5024748	
2010	359053	29426485	$ 46,654	35.9%	5048644	
2011	353332	29767961	$ 46,292	36.3%	5118360	
2012	341787	29085313	$ 46,489	36.6%	5189867	
2013	327690	29318791	$ 47,542	37.0%	5267603	
2014	342944	30648903	$ 48,730	37.4%	5349648	

Colorado	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.9	1.0				
Per Capita Income	-0.7	0.8	1.0			
Educational Attainment	-0.6	0.7	0.9	1.0		
Population	-0.6	0.7	0.9	1.0	1.0	
GSP	-0.5	0.7	1.0	1.0	1.0	
GSP M&M	-0.6	0.8	1.0	0.9	0.9	
Government Ideology	-0.4	0.0	0.1	0.4	0.4	
Environmental Agency FTEs	0.3	-0.2	-0.6	-0.8	-0.8	
Per Cap EE	1.0	-0.9	-0.7	-0.7	-0.7	
Per Cap Total State Expenditures	-0.7	0.8	0.4	0.1	0.2	

Arizona	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	266760	27590	1	2,074	$ 45.67	$ 5.26
2010	267778	29913	1	2,032	$ 46.60	$ 5.62
2011	266902	31172	1	2,061	$ 41.65	$ 5.34
2012	272634	32209	1	1,538	$ 42.18	$ 5.01
2013	276055	28986	1	1,544	$ 40.51	$ 4.92
2014	280166	29954	1	1,526	$ 39.19	$ 4.95

Arizona	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.1	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.9	-0.3	---	1.0		
Per Cap EE	-0.8	-0.3	---	0.7	1.0	
Per Cap Total State Expenditures	-0.8	-0.1	---	0.9	0.8	1.0

Colorado	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	271997	34035	-1	1,459	$ 101.48	$ 5.35
2010	276178	35566	-1	1,718	$ 71.12	$ 5.83
2011	275855	36969	-1	1,698	$ 69.03	$ 5.82
2012	280983	35953	0	1,053	$ 65.86	$ 5.60
2013	292486	37786	0	1,053	$ 62.21	$ 5.57
2014	304943	41389	-1	1,094	$ 64.11	$ 5.73

Colorado	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	0.2	0.0	1.0			
Environmental Agency FTEs	-0.7	-0.5	-0.7	1.0		
Per Cap EE	-0.6	-0.7	-0.4	0.4	1.0	
Per Cap Total State Expenditures	0.2	0.4	-0.3	0.4	-0.7	1.0

Connecticut	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	138747	28213600	$ 59,837	35.6%	3518288
2010	165281	29927777	$ 61,041	35.2%	3579899
2011	150718	29498811	$ 59,733	35.7%	3589893
2012	179358	29221204	$ 60,675	36.1%	3593795
2013	167314	29888769	$ 62,064	36.5%	3596003
2014	159594	29308254	$ 62,467	37.0%	3591873

Connecticut	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.6	1.0			
Per Capita Income	0.5	0.5	1.0		
Educational Attainment	0.3	0.1	0.8	1.0	
Population	0.8	0.8	0.5	0.4	1.0
GSP	-0.5	-0.4	-0.4	-0.8	-0.8
GSP M&M	-0.2	-0.1	-0.3	-0.7	-0.6
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	-0.9	-0.9	-0.7	-0.5	-1.0
Per Cap EE	1.0	0.6	0.5	0.2	0.7
Per Cap Total State Expenditures	0.5	1.0	0.4	-0.1	0.6

Georgia	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	516165	45597670	$ 41,558	27.5%	9829211
2010	504819	48485606	$ 42,806	27.2%	9713521
2011	587403	47529714	$ 41,541	27.5%	9811610
2012	477470	46093638	$ 41,554	27.8%	9914668
2013	463927	46393455	$ 42,526	27.9%	9984938
2014	452303	45452071	$ 42,645	28.3%	10087231

Georgia	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.5	1.0			
Per Capita Income	-0.6	0.3	1.0		
Educational Attainment	-0.6	-0.7	0.2	1.0	
Population	-0.7	-0.8	0.2	1.0	1.0
GSP	-0.8	-0.5	0.6	0.9	0.9
GSP M&M	-0.6	-0.5	0.6	0.9	0.9
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	-0.8	-0.7	0.1	0.7	0.8
Per Cap EE	1.0	0.6	-0.5	-0.7	-0.7
Per Cap Total State Expenditures	0.6	1.0	0.1	-0.9	-0.9

Connecticut	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	256918	30583	-1	1,193	$ 39.44	$ 8.02
2010	255636	30779	-1	793	$ 46.17	$ 8.36
2011	245945	28218	-1	877	$ 41.98	$ 8.22
2012	246646	28656	-1	752	$ 49.91	$ 8.13
2013	245565	29404	-1	708	$ 46.53	$ 8.31
2014	245160	27540	-1	757	$ 44.43	$ 8.16

Connecticut	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	0.7	0.5	---	1.0		
Per Cap EE	-0.4	-0.2	---	-0.8	1.0	
Per Cap Total State Expenditures	-0.1	0.1	---	-0.7	0.4	1.0

Georgia	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	445033	50899	1	4,391	$ 52.51	$ 4.64
2010	449609	51275	1	4,211	$ 51.97	$ 4.99
2011	445332	51357	1	4,043	$ 59.87	$ 4.84
2012	452230	51543	1	5,090	$ 48.16	$ 4.65
2013	461750	52446	1	4,870	$ 46.46	$ 4.65
2014	473562	54262	1	4,845	$ 44.84	$ 4.51

Georgia	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	1.0	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	0.6	0.5	---	1.0		
Per Cap EE	-0.8	-0.7	---	-0.9	1.0	
Per Cap Total State Expenditures	-0.6	-0.6	---	-0.7	0.7	1.0

Delaware	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	97518	8097048	$ 43,799	28.7%	885122	
2010	87611	8531240	$ 43,559	27.7%	899816	
2011	104759	8333290	$ 43,717	28.0%	907924	
2012	97548	8565151	$ 43,198	28.5%	916993	
2013	74804	8821215	$ 45,994	28.9%	925395	
2014	45102	8786763	$ 45,942	29.4%	934948	

Delaware	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.7	1.0				
Per Capita Income	-0.8	0.7	1.0			
Educational Attainment	-0.7	0.4	0.8	1.0		
Population	-0.7	0.9	0.7	0.6	1.0	
GSP	-0.7	0.2	0.5	0.6	0.4	
GSP M&M	0.3	-0.8	-0.4	-0.3	-0.9	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.5	-0.8	-0.5	-0.2	-0.9	
Per Cap EE	1.0	-0.8	-0.8	-0.7	-0.8	
Per Cap Total State Expenditures	-0.6	0.9	0.5	0.1	0.6	

Hawaii	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	130214	12369404	$ 37,165	29.6%	1295178	
2010	114303	12302101	$ 38,684	29.5%	1363945	
2011	101975	12049560	$ 37,909	29.5%	1377864	
2012	98445	11912521	$ 37,975	29.6%	1391820	
2013	115398	11707265	$ 38,943	30.1%	1406481	
2014	112112	12378789	$ 39,097	30.5%	1416349	

Hawaii	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.5	1.0				
Per Capita Income	-0.2	-0.2	1.0			
Educational Attainment	0.1	0.0	0.7	1.0		
Population	-0.7	-0.5	0.8	0.6	1.0	
GSP	-0.4	-0.3	0.9	0.8	0.9	
GSP M&M	0.4	0.3	0.4	0.9	0.3	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.6	0.6	-0.6	-0.6	-0.9	
Per Cap EE	1.0	0.5	-0.4	-0.1	-0.8	
Per Cap Total State Expenditures	0.7	0.8	-0.7	-0.4	-0.9	

Delaware	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	63085	5122	-1	721	$ 110.17	$ 9.15	
2010	62643	4725	-1	673	$ 97.37	$ 9.48	
2011	62934	4456	-1	662	$ 115.38	$ 9.18	
2012	62447	4041	-1	668	$ 106.38	$ 9.34	
2013	62162	3977	-1	662	$ 80.83	$ 9.53	
2014	65419	4304	-1	647	$ 48.24	$ 9.40	

Delaware	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	0.1	1.0					
Government Ideology	---	---	1.0				
Environmental Agency FTEs	-0.3	0.8	---	1.0			
Per Cap EE	-0.7	0.4	---	0.6	1.0		
Per Cap Total State Expenditures	-0.1	-0.6	---	-0.6	-0.6	1.0	

Hawaii	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	71920	1588	-1	1,246	$ 100.54	$ 9.55	
2010	74365	1500	-1	1,094	$ 83.80	$ 9.02	
2011	73518	1431	-1	1,047	$ 74.01	$ 8.75	
2012	74708	1524	-1	765	$ 70.73	$ 8.56	
2013	76146	1600	-1	798	$ 82.05	$ 8.32	
2014	76588	1729	-1	812	$ 79.16	$ 8.74	

Hawaii	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	0.5	1.0					
Government Ideology	---	---	1.0				
Environmental Agency FTEs	-0.9	-0.4	---	1.0			
Per Cap EE	-0.5	0.3	---	0.7	1.0		
Per Cap Total State Expenditures	-0.8	0.0	---	0.9	0.8	1.0	

Florida	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	1747809	83218703	$ 72,600	25.3%	18537969	
2010	1377865	89196550	$ 77,438	25.9%	18849098	
2011	1190662	88864718	$ 76,760	26.0%	19096952	
2012	1155153	81866641	$ 76,951	26.2%	19344156	
2013	1122121	82044757	$ 76,003	26.4%	19582022	
2014	1115770	83274449	$ 76,532	26.7%	19888741	

Florida	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.1	1.0				
Per Capita Income	-0.8	0.4	1.0			
Educational Attainment	-0.9	-0.3	0.7	1.0		
Population	-0.9	-0.4	0.5	1.0	1.0	
GSP	-0.3	-0.3	0.1	0.6	0.6	
GSP M&M	0.0	-0.6	-0.4	0.3	0.4	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.7	0.7	-0.3	-0.8	-0.9	
Per Cap EE	1.0	0.1	-0.8	-0.9	-0.9	
Per Cap Total State Expenditures	0.5	0.9	0.0	-0.6	-0.8	

Idaho	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	207778	9086526	$ 46,210	23.9%	1545801	
2010	207568	9280342	$ 44,713	24.3%	1571010	
2011	204482	9170159	$ 45,206	24.5%	1584143	
2012	201232	8550300	$ 45,345	24.8%	1595911	
2013	222274	8701475	$ 46,565	25.0%	1612011	
2014	207169	8449255	$ 46,396	25.4%	1633532	

Idaho	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.1	1.0				
Per Capita Income	0.6	-0.6	1.0			
Educational Attainment	0.2	-0.8	0.4	1.0		
Population	0.2	-0.8	0.4	1.0	1.0	
GSP	0.5	-0.7	0.6	0.9	0.9	
GSP M&M	0.2	-0.6	0.1	0.9	0.9	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	-0.2	0.3	0.3	-0.7	-0.7	
Per Cap EE	0.8	0.3	0.4	-0.3	-0.3	
Per Cap Total State Expenditures	-0.2	1.0	-0.5	-0.9	-0.9	

Florida	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	793931	42878	1	9,823	$ 94.28	$ 4.49
2010	801257	41207	1	9,767	$ 73.10	$ 4.73
2011	778528	40235	1	9,625	$ 62.35	$ 4.65
2012	787060	40541	1	8,291	$ 59.72	$ 4.23
2013	808951	43912	1	8,101	$ 57.30	$ 4.19
2014	833369	43829	1	8,137	$ 56.10	$ 4.19

Florida	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.8	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.5	-0.5	---	1.0		
Per Cap EE	-0.3	0.0	---	0.8	1.0	
Per Cap Total State Expenditures	-0.5	-0.6	---	0.9	0.5	1.0

Idaho	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	59270	7621	1	2,050	$ 134.41	$ 5.88
2010	60231	8224	1	1,830	$ 132.12	$ 5.91
2011	59581	8273	1	1,850	$ 129.08	$ 5.79
2012	59848	8238	1	1,848	$ 126.09	$ 5.36
2013	62188	8482	1	1,819	$ 137.89	$ 5.40
2014	63050	8654	1	1,851	$ 126.82	$ 5.17

Idaho	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.8	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.5	-0.9	---	1.0		
Per Cap EE	0.0	-0.3	---	0.2	1.0	
Per Cap Total State Expenditures	-0.8	-0.7	---	0.4	0.4	1.0

Illinois	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	279694	75267267	$ 34,795	30.6%	12910409
2010	301696	81185974	$ 35,160	30.3%	12841578
2011	265898	77491084	$ 34,992	30.7%	12860012
2012	282537	74800907	$ 34,761	31.1%	12870798
2013	242192	76831214	$ 36,090	31.5%	12879505
2014	281133	77319107	$ 37,533	31.9%	12867544

Illinois	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.4	1.0			
Per Capita Income	-0.2	0.1	1.0		
Educational Attainment	-0.5	-0.4	0.8	1.0	
Population	-0.4	-0.8	-0.1	0.1	1.0
GSP	-0.3	-0.2	0.8	0.9	-0.2
GSP M&M	-0.2	-0.5	0.1	0.5	-0.2
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	0.1	0.0	-0.8	-0.8	0.4
Per Cap EE	1.0	0.4	-0.2	-0.5	-0.4
Per Cap Total State Expenditures	0.4	1.0	0.1	-0.3	-0.8

Kansas	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	253094	17415444	$ 40,426	29.5%	2818747
2010	229087	18076504	$ 41,726	29.4%	2858850
2011	226896	17520975	$ 42,494	29.7%	2869503
2012	242782	17249777	$ 43,390	30.0%	2885262
2013	236312	16765440	$ 46,016	30.2%	2892821
2014	223527	16920498	$ 45,115	30.7%	2899360

Kansas	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.0	1.0			
Per Capita Income	-0.4	-0.8	1.0		
Educational Attainment	-0.4	-0.8	0.9	1.0	
Population	-0.6	-0.6	0.9	0.8	1.0
GSP	-0.6	-0.7	0.9	0.9	1.0
GSP M&M	-0.5	0.1	0.2	0.2	0.5
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	0.7	0.3	-0.8	-0.6	-0.9
Per Cap EE	1.0	0.1	-0.6	-0.5	-0.7
Per Cap Total State Expenditures	0.2	1.0	-0.9	-0.9	-0.8

Illinois	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	701835	93211	-1	3,695	$ 21.66	$ 5.83
2010	712289	95034	-1	3,501	$ 23.49	$ 6.32
2011	713765	100973	-1	3,470	$ 20.68	$ 6.03
2012	732711	110060	-1	3,342	$ 21.95	$ 5.81
2013	737191	101399	-1	3,383	$ 18.80	$ 5.97
2014	745810	102240	-1	3,043	$ 21.85	$ 6.01

Illinois	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.7	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.9	-0.6	---	1.0		
Per Cap EE	-0.3	-0.2	---	0.1	1.0	
Per Cap Total State Expenditures	-0.1	-0.4	---	0.0	0.4	1.0

Kansas	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	136385	21412	1	860	$ 89.79	$ 6.18
2010	140111	23784	1	808	$ 80.13	$ 6.32
2011	143728	26011	1	823	$ 79.07	$ 6.11
2012	145193	26639	1	809	$ 84.15	$ 5.98
2013	146328	22656	1	803	$ 81.69	$ 5.80
2014	147493	24599	1	798	$ 77.10	$ 5.84

Kansas	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.6	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.8	-0.5	---	1.0		
Per Cap EE	-0.7	-0.5	---	0.8	1.0	
Per Cap Total State Expenditures	-0.8	-0.1	---	0.5	0.3	1.0

Indiana	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	340891	35004009	$ 45,552	22.5%	6423113	
2010	337267	38666871	$ 47,043	22.4%	6490528	
2011	318701	37024598	$ 46,347	22.7%	6516480	
2012	333719	36909802	$ 46,159	22.9%	6537743	
2013	341754	37529512	$ 47,716	23.2%	6569102	
2014	335365	35990274	$ 48,120	23.6%	6595233	

Indiana	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.1	1.0				
Per Capita Income	0.2	0.3	1.0			
Educational Attainment	0.1	-0.2	0.8	1.0		
Population	-0.1	0.2	0.8	0.9	1.0	
GSP	0.0	0.4	0.9	0.8	1.0	
GSP M&M	-0.2	0.5	0.9	0.7	0.9	
Government Ideology	0.3	0.0	0.6	0.8	0.8	
Environmental Agency FTEs	0.4	-0.7	-0.6	-0.4	-0.8	
Per Cap EE	0.9	-0.2	-0.1	-0.2	-0.4	
Per Cap Total State Expenditures	-0.1	1.0	0.1	-0.5	0.0	

Kentucky	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	354919	29538444	$ 41,708	21.0%	4314113	
2010	375161	31716309	$ 43,313	20.3%	4348662	
2011	375013	30838437	$ 42,505	20.7%	4369354	
2012	335201	30229567	$ 43,090	21.0%	4384799	
2013	340473	29465539	$ 44,794	21.6%	4400477	
2014	319719	29938181	$ 45,546	21.8%	4413057	

Kentucky	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.7	1.0				
Per Capita Income	-0.7	-0.2	1.0			
Educational Attainment	-0.9	-0.8	0.7	1.0		
Population	-0.7	-0.2	0.9	0.7	1.0	
GSP	-0.5	0.0	0.9	0.5	1.0	
GSP M&M	-0.5	0.1	0.8	0.4	0.9	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.4	0.0	-0.9	-0.5	-0.9	
Per Cap EE	1.0	0.6	-0.7	-0.9	-0.7	
Per Cap Total State Expenditures	0.8	1.0	-0.4	-0.9	-0.4	

Indiana	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	288275	78592	0	3,158	$ 53.07	$ 5.45	
2010	307662	92905	0	2,309	$ 51.96	$ 5.96	
2011	306149	91715	0	2,224	$ 48.91	$ 5.68	
2012	308996	90169	1	2,231	$ 51.04	$ 5.65	
2013	317559	94715	1	2,156	$ 52.02	$ 5.71	
2014	324901	98669	1	2,272	$ 50.85	$ 5.46	

Indiana	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	1.0	1.0					
Government Ideology	0.7	0.5	1.0				
Environmental Agency FTEs	-0.8	-0.9	-0.5	1.0			
Per Cap EE	-0.4	-0.5	0.0	0.6	1.0		
Per Cap Total State Expenditures	0.1	0.3	-0.3	-0.5	-0.1	1.0	

Kentucky	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	171951	33409	0	3,268	$ 82.27	$ 6.85	
2010	180912	38303	0	2,970	$ 86.27	$ 7.29	
2011	180427	38732	0	2,950	$ 85.83	$ 7.06	
2012	182357	40176	0	3,040	$ 76.45	$ 6.89	
2013	185069	40483	0	2,787	$ 77.37	$ 6.70	
2014	186344	40911	0	2,772	$ 72.45	$ 6.78	

Kentucky	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	1.0	1.0					
Government Ideology	---	---	1.0				
Environmental Agency FTEs	-0.9	-0.9	---	1.0			
Per Cap EE	-0.6	-0.5	---	0.5	1.0		
Per Cap Total State Expenditures	-0.2	-0.2	---	0.2	0.8	1.0	

Iowa	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	355494	20134385	$ 37,098	25.1%	3007856	
2010	329431	20828697	$ 38,088	24.5%	3050738	
2011	329807	20926102	$ 37,328	24.9%	3065223	
2012	351049	21019750	$ 38,009	25.3%	3076310	
2013	301242	20928293	$ 39,588	25.7%	3091930	
2014	301160	21214460	$ 39,433	26.4%	3108030	

Iowa	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.6	1.0				
Per Capita Income	-0.9	0.6	1.0			
Educational Attainment	-0.6	0.5	0.7	1.0		
Population	-0.8	0.9	0.8	0.7	1.0	
GSP	-0.7	0.8	0.9	0.9	0.9	
GSP M&M	-0.5	0.6	0.8	0.7	0.7	
Government Ideology	-0.5	0.6	0.8	0.8	0.8	
Environmental Agency FTEs	0.5	-0.9	-0.4	-0.3	-0.8	
Per Cap EE	1.0	-0.7	-0.9	-0.6	-0.8	
Per Cap Total State Expenditures	-0.3	0.9	0.3	0.0	0.7	

Louisiana	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	703868	36747055	$ 35,071	21.4%	4492076	
2010	825664	36640880	$ 36,349	20.9%	4544996	
2011	920327	35051285	$ 35,350	21.2%	4575404	
2012	726316	32629552	$ 36,092	21.4%	4603429	
2013	817043	32678330	$ 36,964	21.9%	4626402	
2014	719794	31803632	$ 37,654	22.1%	4647880	

Louisiana	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.2	1.0				
Per Capita Income	-0.2	-0.7	1.0			
Educational Attainment	-0.4	-0.8	0.7	1.0		
Population	0.0	-0.9	0.8	0.7	1.0	
GSP	0.5	0.0	0.2	-0.5	0.3	
GSP M&M	0.5	0.0	-0.1	-0.6	0.2	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	-0.1	0.9	-0.7	-0.6	-1.0	
Per Cap EE	1.0	0.3	-0.3	-0.5	-0.1	
Per Cap Total State Expenditures	0.2	1.0	-0.8	-0.8	-1.0	

Iowa	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	150776	28272	-1	1,748	$ 118.19	$ 6.69
2010	154450	29474	-1	1,647	$ 107.98	$ 6.83
2011	156285	27597	-1	1,574	$ 107.60	$ 6.83
2012	162993	30954	0	1,571	$ 114.11	$ 6.83
2013	166070	30609	0	1,599	$ 97.43	$ 6.77
2014	169661	31704	0	1,594	$ 96.90	$ 6.83

Iowa	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	0.9	0.9	1.0			
Environmental Agency FTEs	-0.7	-0.4	-0.6	1.0		
Per Cap EE	-0.8	-0.5	-0.5	0.5	1.0	
Per Cap Total State Expenditures	0.4	0.3	0.3	-0.8	-0.4	1.0

Louisiana	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	231967	65151	1	4,675	$ 156.69	$ 8.18
2010	253530	81065	1	4,445	$ 181.66	$ 8.06
2011	248060	81656	1	4,260	$ 201.15	$ 7.66
2012	248619	81692	1	4,154	$ 157.78	$ 7.09
2013	240668	70721	1	4,172	$ 176.60	$ 7.06
2014	242785	71869	1	4,088	$ 154.87	$ 6.84

Louisiana	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.4	-0.4	---	1.0		
Per Cap EE	0.5	0.5	---	0.0	1.0	
Per Cap Total State Expenditures	-0.1	-0.1	---	0.9	0.3	1.0

Maine	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	213072	9652774	$ 39,058	26.9%	1318301
2010	182140	9836511	$ 41,906	26.6%	1327730
2011	177371	9554039	$ 40,507	27.1%	1328231
2012	169880	9401929	$ 40,595	27.4%	1328895
2013	175362	9129415	$ 41,503	27.9%	1329076
2014	161656	9258232	$ 42,287	28.4%	1330719

Maine	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.6	1.0			
Per Capita Income	-0.8	-0.3	1.0		
Educational Attainment	-0.6	-0.9	0.5	1.0	
Population	-1.0	-0.5	0.8	0.5	1.0
GSP	0.4	0.6	0.2	-0.3	-0.3
GSP M&M	0.7	0.9	-0.4	-0.8	-0.7
Government Ideology	0.5	0.4	-0.5	-0.7	-0.4
Environmental Agency FTEs	-0.3	-0.6	0.4	0.8	0.2
Per Cap EE	1.0	0.6	-0.8	-0.6	-1.0
Per Cap Total State Expenditures	0.6	1.0	-0.4	-0.9	-0.6

Michigan	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	374658	64897627	$ 54,863	24.6%	9969727
2010	330083	69659339	$ 56,192	25.1%	9877495
2011	296931	66263933	$ 56,302	25.3%	9876213
2012	301339	63578791	$ 56,328	25.5%	9887238
2013	325296	64204404	$ 58,061	25.9%	9898982
2014	302488	63861993	$ 59,182	26.4%	9915767

Michigan	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.1	1.0			
Per Capita Income	-0.6	-0.4	1.0		
Educational Attainment	-0.7	-0.5	1.0	1.0	
Population	0.8	-0.4	-0.2	-0.3	1.0
GSP	-0.7	-0.4	1.0	1.0	-0.4
GSP M&M	-0.8	-0.3	0.9	0.9	-0.6
Government Ideology	-0.5	-0.7	0.7	0.8	-0.1
Environmental Agency FTEs	0.8	0.6	-0.8	-0.9	0.4
Per Cap EE	1.0	0.2	-0.6	-0.7	0.8
Per Cap Total State Expenditures	0.1	1.0	-0.3	-0.4	-0.5

Maine	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	55446	6001	1	1,015	$ 161.63	$ 7.32
2010	56087	6046	1	966	$ 137.18	$ 7.41
2011	54065	5572	1	921	$ 133.54	$ 7.19
2012	54157	5645	1	1,017	$ 127.84	$ 7.07
2013	54283	5490	1	1,026	$ 131.94	$ 6.87
2014	55250	5507	-1	1,138	$ 121.48	$ 6.96

Maine	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.8	1.0				
Government Ideology	-0.2	0.4	1.0			
Environmental Agency FTEs	0.2	-0.3	-0.8	1.0		
Per Cap EE	0.4	0.7	0.5	-0.3	1.0	
Per Cap Total State Expenditures	0.6	0.9	0.4	-0.6	0.6	1.0

Michigan	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	399461	60404	0	4,075	$ 37.58	$ 6.51
2010	419673	75561	0	3,959	$ 33.42	$ 7.05
2011	419409	79113	0	3,586	$ 30.07	$ 6.71
2012	429202	84516	1	3,503	$ 30.48	$ 6.43
2013	439149	87802	1	3,465	$ 32.86	$ 6.49
2014	447961	88888	1	3,343	$ 30.51	$ 6.44

Michigan	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	1.0	1.0				
Government Ideology	0.8	0.8	1.0			
Environmental Agency FTEs	-0.9	-0.9	-0.8	1.0		
Per Cap EE	-0.7	-0.8	-0.5	0.8	1.0	
Per Cap Total State Expenditures	-0.3	-0.3	-0.7	0.5	0.1	1.0

Maryland	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	710562	39625612	$ 40,420	35.7%	5699478	
2010	533774	40898026	$ 40,657	35.8%	5788584	
2011	491106	39520469	$ 39,872	36.0%	5843603	
2012	522281	42373255	$ 40,665	36.4%	5889651	
2013	456079	40348133	$ 41,834	36.8%	5931129	
2014	469547	41308885	$ 42,071	37.3%	5967295	

Maryland	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.3	1.0				
Per Capita Income	-0.5	0.4	1.0			
Educational Attainment	-0.7	0.4	0.9	1.0		
Population	-0.9	0.5	0.7	0.9	1.0	
GSP	-0.9	0.5	0.7	0.8	0.9	
GSP M&M	0.4	-0.5	-0.5	-0.8	-0.7	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.9	-0.5	-0.5	-0.7	-0.9	
Per Cap EE	1.0	-0.4	-0.5	-0.7	-0.9	
Per Cap Total State Expenditures	0.3	0.8	-0.1	-0.2	-0.1	

Minnesota	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	609583	39939778	$ 37,428	31.5%	5266214	
2010	610684	41315794	$ 38,801	31.4%	5311147	
2011	725114	40412768	$ 38,360	31.8%	5348562	
2012	576493	39770959	$ 38,622	32.3%	5380285	
2013	620120	40742362	$ 39,999	32.6%	5418521	
2014	702009	41845094	$ 40,556	33.2%	5453109	

Minnesota	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.5	1.0				
Per Capita Income	0.3	0.8	1.0			
Educational Attainment	0.3	0.4	0.9	1.0		
Population	0.3	0.5	0.9	1.0	1.0	
GSP	0.3	0.6	1.0	0.9	1.0	
GSP M&M	0.4	0.4	0.9	0.9	1.0	
Government Ideology	-0.1	0.2	0.7	0.9	0.9	
Environmental Agency FTEs	-0.2	-0.9	-0.6	-0.3	-0.3	
Per Cap EE	1.0	0.4	0.2	0.2	0.2	
Per Cap Total State Expenditures	0.3	0.8	0.2	-0.2	-0.2	

Maryland	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	331022	21055	1	2,151	$ 124.67	$ 6.95	
2010	342208	21966	1	2,090	$ 92.21	$ 7.07	
2011	341072	20962	1	2,039	$ 84.04	$ 6.76	
2012	342475	19734	1	2,019	$ 88.68	$ 7.19	
2013	345582	20442	1	2,013	$ 76.90	$ 6.80	
2014	349605	19815	1	2,025	$ 78.69	$ 6.92	

Maryland	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	-0.5	1.0					
Government Ideology	---	---	1.0				
Environmental Agency FTEs	-0.9	0.6	---	1.0			
Per Cap EE	-0.9	0.4	---	0.9	1.0		
Per Cap Total State Expenditures	-0.1	-0.1	---	0.1	0.2	1.0	

Minnesota	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	283983	40213	-1	3,763	$ 115.75	$ 7.58	
2010	294231	43165	-1	3,096	$ 114.98	$ 7.78	
2011	296517	45738	-1	3,675	$ 135.57	$ 7.56	
2012	301708	46659	1	3,673	$ 107.15	$ 7.39	
2013	310445	47399	1	3,622	$ 114.44	$ 7.52	
2014	316578	49152	1	3,096	$ 128.74	$ 7.67	

Minnesota	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	1.0	1.0					
Government Ideology	0.8	0.8	1.0				
Environmental Agency FTEs	-0.4	-0.3	-0.1	1.0			
Per Cap EE	0.2	0.3	-0.3	-0.2	1.0		
Per Cap Total State Expenditures	-0.1	-0.2	-0.5	-0.8	0.3	1.0	

Massachusetts	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	442122	53512253	$ 53,114	38.2%	6593587	
2010	433955	57168417	$ 53,437	38.3%	6565524	
2011	366813	57986948	$ 53,590	38.7%	6611923	
2012	330866	58385217	$ 53,530	39.0%	6658008	
2013	350625	57908229	$ 55,344	39.4%	6706786	
2014	415175	58304754	$ 55,143	40.0%	6749911	

Massachusetts	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.6	1.0				
Per Capita Income	-0.3	0.5	1.0			
Educational Attainment	-0.4	0.6	0.9	1.0		
Population	-0.4	0.5	0.9	1.0	1.0	
GSP	-0.5	0.9	0.8	0.9	0.8	
GSP M&M	-0.2	0.7	0.2	0.3	0.1	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.4	0.0	-0.6	-0.6	-0.7	
Per Cap EE	1.0	-0.7	-0.3	-0.4	-0.4	
Per Cap Total State Expenditures	-0.6	0.9	0.3	0.4	0.2	

Mississippi	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	282042	21170684	$ 45,707	19.6%	2951996	
2010	267365	21824691	$ 46,699	19.4%	2970322	
2011	322462	21165288	$ 46,906	19.6%	2978162	
2012	299658	20652837	$ 47,614	20.0%	2984945	
2013	297186	20503965	$ 48,813	20.1%	2990482	
2014	263772	20613073	$ 48,711	20.4%	2992400	

Mississippi	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.2	1.0				
Per Capita Income	-0.1	-0.7	1.0			
Educational Attainment	-0.2	-0.9	0.9	1.0		
Population	0.1	-0.7	1.0	0.8	1.0	
GSP	-0.5	-0.2	0.5	0.4	0.4	
GSP M&M	0.3	-0.5	0.5	0.4	0.6	
Government Ideology	-0.1	-0.9	0.9	0.9	0.8	
Environmental Agency FTEs	-0.4	0.6	-0.6	-0.6	-0.8	
Per Cap EE	1.0	-0.2	-0.1	-0.2	0.0	
Per Cap Total State Expenditures	-0.2	1.0	-0.8	-0.9	-0.8	

Massachusetts	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	424268	44222	1	1,981	$ 67.05	$ 8.12
2010	438891	47550	1	2,098	$ 66.10	$ 8.71
2011	438147	45221	1	2,037	$ 55.48	$ 8.77
2012	447121	46693	1	1,972	$ 49.69	$ 8.77
2013	449863	46215	1	1,934	$ 52.28	$ 8.63
2014	455979	46346	1	1,976	$ 61.51	$ 8.64

Massachusetts	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.6	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.3	0.3	---	1.0		
Per Cap EE	-0.5	-0.2	---	0.5	1.0	
Per Cap Total State Expenditures	0.7	0.7	---	0.3	-0.6	1.0

Mississippi	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	103036	16798	-1	3,180	$ 95.54	$ 7.17
2010	104433	17533	-1	3,150	$ 90.01	$ 7.35
2011	101816	17834	-1	3,028	$ 108.28	$ 7.11
2012	104392	19695	1	3,050	$ 100.39	$ 6.92
2013	104781	18153	1	3,094	$ 99.38	$ 6.86
2014	103828	17815	1	3,033	$ 88.15	$ 6.89

Mississippi	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.4	1.0				
Government Ideology	0.6	0.7	1.0			
Environmental Agency FTEs	0.2	-0.6	-0.5	1.0		
Per Cap EE	-0.5	0.3	-0.1	-0.4	1.0	
Per Cap Total State Expenditures	-0.3	-0.6	-0.9	0.6	-0.2	1.0

Missouri	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	421806	31474325	$ 33,113	25.2%	5987580
2010	400219	33552319	$ 33,993	25.0%	5996118
2011	322456	32179224	$ 33,785	25.4%	6010717
2012	358838	32035948	$ 34,065	25.8%	6025415
2013	346072	31060406	$ 35,168	26.2%	6042711
2014	325393	30454270	$ 34,333	26.7%	6060930

Missouri	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.4	1.0			
Per Capita Income	-0.6	-0.3	1.0		
Educational Attainment	-0.7	-0.8	0.7	1.0	
Population	-0.8	-0.7	0.8	1.0	1.0
GSP	0.0	-0.4	0.6	0.6	0.6
GSP M&M	-0.3	-0.4	0.7	0.8	0.8
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	0.8	0.3	-0.8	-0.7	-0.9
Per Cap EE	1.0	0.4	-0.6	-0.7	-0.8
Per Cap Total State Expenditures	0.5	1.0	-0.4	-0.9	-0.8

Nevada	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	147319	13261829	$ 41,889	21.8%	2643085
2010	128162	14098615	$ 43,117	21.8%	2703284
2011	136424	13863428	$ 43,663	22.2%	2718379
2012	127710	13881436	$ 44,437	22.2%	2752565
2013	118476	13539283	$ 46,954	22.4%	2786464
2014	103302	13217485	$ 47,073	22.6%	2833013

Nevada	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.2	1.0			
Per Capita Income	-0.9	-0.3	1.0		
Educational Attainment	-0.8	-0.4	0.9	1.0	
Population	-1.0	-0.2	1.0	0.9	1.0
GSP	-0.3	-0.5	0.1	0.0	0.1
GSP M&M	0.2	0.7	-0.1	0.0	0.0
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	0.6	0.3	-0.7	-0.6	-0.7
Per Cap EE	1.0	0.2	-0.9	-0.8	-1.0
Per Cap Total State Expenditures	0.7	0.8	-0.8	-0.8	-0.8

Missouri	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	275480	34770	1	2,888	$ 70.45	$ 5.26
2010	278893	36344	1	2,500	$ 66.75	$ 5.60
2011	270086	34235	1	2,406	$ 53.65	$ 5.35
2012	274232	37770	1	2,217	$ 59.55	$ 5.32
2013	282178	37703	1	2,211	$ 57.27	$ 5.14
2014	282874	38181	1	2,195	$ 53.69	$ 5.02

Missouri	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.7	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.3	-0.7	---	1.0		
Per Cap EE	-0.1	-0.3	---	0.8	1.0	
Per Cap Total State Expenditures	-0.5	-0.4	---	0.4	0.5	1.0

Nevada	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	132222	10558	0	958	$ 55.74	$ 5.02
2010	132667	11283	0	979	$ 47.41	$ 5.22
2011	130667	12492	0	979	$ 50.19	$ 5.10
2012	129203	12998	0	852	$ 46.40	$ 5.04
2013	130887	11436	0	854	$ 42.52	$ 4.86
2014	133784	10333	0	894	$ 36.46	$ 4.67

Nevada	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	-0.9	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	0.4	-0.2	---	1.0		
Per Cap EE	-0.3	0.2	---	0.6	1.0	
Per Cap Total State Expenditures	-0.4	0.5	---	0.6	0.7	1.0

Montana	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	252190	6895468	$ 39,244	27.4%	974989	
2010	256695	7687094	$ 40,307	27.8%	990641	
2011	272701	7460634	$ 40,160	28.2%	997821	
2012	265593	7274783	$ 40,220	28.5%	1005196	
2013	329263	7216925	$ 40,695	28.6%	1014314	
2014	233466	7218707	$ 41,613	29.0%	1022867	

Montana	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.0	1.0				
Per Capita Income	0.0	0.3	1.0			
Educational Attainment	0.1	0.1	0.9	1.0		
Population	0.2	0.1	0.9	1.0	1.0	
GSP	0.3	0.3	0.8	1.0	1.0	
GSP M&M	0.3	0.3	0.7	0.9	0.9	
Government Ideology	0.3	-0.2	0.7	0.9	0.8	
Environmental Agency FTEs	0.7	-0.2	0.4	0.4	0.5	
Per Cap EE	1.0	0.0	-0.2	0.0	0.1	
Per Cap Total State Expenditures	-0.1	0.9	-0.1	-0.4	-0.3	

New Hampshire	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	72295	7651791	$ 42,436	32.0%	1324575	
2010	64460	8399308	$ 40,327	32.9%	1316872	
2011	71073	8020074	$ 40,082	33.1%	1318473	
2012	72423	7646459	$ 38,482	33.5%	1321182	
2013	78397	7568828	$ 39,698	33.7%	1322687	
2014	72645	7344811	$ 40,077	34.3%	1328743	

New Hampshire	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.8	1.0				
Per Capita Income	-0.1	0.1	1.0			
Educational Attainment	0.3	-0.5	-0.7	1.0		
Population	0.5	-0.9	0.2	0.4	1.0	
GSP	0.0	-0.3	-0.3	0.8	0.5	
GSP M&M	0.2	0.3	0.2	0.1	-0.2	
Government Ideology	0.7	-0.6	-0.7	0.6	0.3	
Environmental Agency FTEs	-0.8	0.8	0.0	-0.5	-0.8	
Per Cap EE	1.0	-0.8	-0.2	0.3	0.5	
Per Cap Total State Expenditures	-0.8	1.0	0.0	-0.5	-0.9	

Montana	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	39687	4074	0	1,525	$ 258.66	$ 7.07	
2010	41829	4905	0	1,517	$ 259.12	$ 7.76	
2011	43246	6049	0	1,528	$ 273.30	$ 7.48	
2012	43619	6077	1	1,507	$ 264.22	$ 7.24	
2013	44095	5959	1	1,570	$ 324.62	$ 7.12	
2014	44448	6008	1	1,540	$ 228.25	$ 7.06	

Montana	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	1.0	1.0					
Government Ideology	0.8	0.7	1.0				
Environmental Agency FTEs	0.4	0.3	0.4	1.0			
Per Cap EE	0.2	0.2	0.2	0.6	1.0		
Per Cap Total State Expenditures	-0.1	-0.1	-0.6	-0.4	0.0	1.0	

New Hampshire	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	68426	7769	-1	370	$ 54.58	$ 5.78	
2010	69933	7973	-1	388	$ 48.95	$ 6.38	
2011	68475	7848	-1	381	$ 53.91	$ 6.08	
2012	68956	7567	1	379	$ 54.82	$ 5.79	
2013	69904	8127	1	352	$ 59.27	$ 5.72	
2014	71153	7780	0	354	$ 54.67	$ 5.53	

New Hampshire	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	0.3	1.0					
Government Ideology	0.3	-0.1	1.0				
Environmental Agency FTEs	-0.5	-0.3	-0.5	1.0			
Per Cap EE	0.0	0.2	0.7	-0.8	1.0		
Per Cap Total State Expenditures	-0.3	0.3	-0.6	0.8	-0.8	1.0	

Nebraska	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	226024	10021312	$ 37,404	27.4%	1796619	
2010	280276	10307861	$ 38,496	27.7%	1830051	
2011	263104	9824297	$ 38,402	27.8%	1842283	
2012	252796	9811284	$ 38,491	28.1%	1855725	
2013	256086	10078454	$ 39,983	28.5%	1868559	
2014	277899	10046378	$ 40,601	29.0%	1881145	

	Environmental Expenditures	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.4	1.0				
Per Capita Income	0.6	0.2	1.0			
Educational Attainment	0.5	0.0	1.0	1.0		
Population	0.6	-0.1	0.9	0.9	1.0	
GSP	0.6	-0.2	0.9	0.9	1.0	
GSP M&M	0.4	-0.4	0.7	0.8	0.9	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	-0.5	0.0	-0.2	-0.1	-0.4	
Per Cap EE	1.0	0.5	0.5	0.3	0.4	
Per Cap Total State Expenditures	-0.1	0.8	-0.5	-0.6	-0.7	

New Jersey	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	710736	68241745	$ 47,114	34.5%	8707739	
2010	711311	73875893	$ 48,052	34.6%	8803729	
2011	646598	70541522	$ 48,076	34.9%	8841243	
2012	670031	70165396	$ 48,470	35.4%	8873211	
2013	592868	68709862	$ 51,159	35.8%	8899162	
2014	441991	69081342	$ 53,149	36.3%	8925001	

New Jersey	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.4	1.0				
Per Capita Income	-1.0	-0.3	1.0			
Educational Attainment	-0.9	-0.4	0.9	1.0		
Population	-0.8	-0.1	0.8	0.9	1.0	
GSP	-0.6	-0.3	0.8	0.7	0.5	
GSP M&M	0.5	0.3	-0.5	-0.7	-0.9	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.7	0.0	-0.8	-0.9	-1.0	
Per Cap EE	1.0	0.4	-1.0	-0.9	-0.8	
Per Cap Total State Expenditures	0.6	1.0	-0.5	-0.6	-0.3	

Nebraska	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	95657	11733	0	2,170	$ 125.80	$ 5.58
2010	100532	12411	0	2,143	$ 153.15	$ 5.63
2011	104932	13307	0	2,146	$ 142.81	$ 5.33
2012	105032	13963	0	2,143	$ 136.22	$ 5.29
2013	108870	14119	0	2,142	$ 137.05	$ 5.39
2014	111297	13817	0	2,161	$ 147.73	$ 5.34

	GSP	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.3	-0.5	---	1.0		
Per Cap EE	0.4	0.2	---	-0.4	1.0	
Per Cap Total State Expenditures	-0.7	-0.9	---	0.3	0.0	1.0

New Jersey	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	530357	51447	-1	2,762	$ 81.62	$ 7.84
2010	533152	50605	-1	2,582	$ 80.80	$ 8.39
2011	518010	46991	-1	2,523	$ 73.13	$ 7.98
2012	530102	44800	-1	2,446	$ 75.51	$ 7.91
2013	542299	44978	-1	2,434	$ 66.62	$ 7.72
2014	543787	46696	-1	2,381	$ 49.52	$ 7.74

New Jersey	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	-0.2	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.4	0.9	---	1.0		
Per Cap EE	-0.6	0.5	---	0.8	1.0	
Per Cap Total State Expenditures	-0.4	0.5	---	0.3	0.6	1.0

New Mexico	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	255995	19,115,466	$ 55,344	25.3%	2009671
2010	237789	19,615,684	$ 55,351	25.4%	2064756
2011	235029	18,758,430	$ 55,840	25.5%	2077756
2012	217171	17,571,192	$ 55,237	25.6%	2083784
2013	186348	17,544,483	$ 57,113	25.8%	2085193
2014	188758	17,720,552	$ 56,807	26.1%	2083024

New Mexico	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.8	1.0			
Per Capita Income	-0.9	-0.6	1.0		
Educational Attainment	-0.9	-0.8	0.8	1.0	
Population	-0.8	-0.6	0.5	0.7	1.0
GSP	-0.6	-0.2	0.4	0.7	0.8
GSP M&M	-0.9	-0.7	0.8	0.9	0.9
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	0.6	0.7	-0.3	-0.5	-0.9
Per Cap EE	1.0	0.8	-0.8	-0.9	-0.8
Per Cap Total State Expenditures	0.9	1.0	-0.6	-0.8	-0.8

North Dakota	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	194329	4935274	$ 37,898	25.8%	646844
2010	265123	5596202	$ 38,845	26.3%	674526
2011	274925	5791511	$ 37,972	26.5%	685476
2012	430563	6504899	$ 38,160	27.0%	702087
2013	336090	6538364	$ 39,226	27.2%	724019
2014	327196	7486329	$ 39,646	27.3%	739904

North Dakota	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.7	1.0			
Per Capita Income	0.3	0.8	1.0		
Educational Attainment	0.8	1.0	0.7	1.0	
Population	0.7	1.0	0.8	1.0	1.0
GSP	0.8	1.0	0.7	1.0	1.0
GSP M&M	0.8	1.0	0.7	1.0	1.0
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	0.0	0.5	0.6	0.3	0.5
Per Cap EE	1.0	0.6	0.1	0.7	0.6
Per Cap Total State Expenditures	0.7	1.0	0.7	0.9	0.9

New Mexico	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	91122	13495	-1	1,216	$ 127.38	$ 9.51
2010	93826	14784	-1	1,099	$ 115.17	$ 9.50
2011	93724	16101	-1	982	$ 113.12	$ 9.03
2012	92850	15843	-1	945	$ 104.22	$ 8.43
2013	93059	16690	-1	966	$ 89.37	$ 8.41
2014	94731	17431	-1	1,049	$ 90.62	$ 8.51

New Mexico	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.8	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.5	-0.7	---	1.0		
Per Cap EE	-0.6	-0.9	---	0.7	1.0	
Per Cap Total State Expenditures	-0.4	-0.8	---	0.8	0.9	1.0

North Dakota	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	35738	4771	1	586	$ 300.43	$ 7.63
2010	39460	6103	1	793	$ 393.05	$ 8.30
2011	44272	8519	1	789	$ 401.07	$ 8.45
2012	54068	12250	1	593	$ 613.26	$ 9.27
2013	56082	13581	1	576	$ 464.20	$ 9.03
2014	59308	14935	1	1,086	$ 442.21	$ 10.12

North Dakota	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	1.0	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	0.3	0.3	---	1.0		
Per Cap EE	0.7	0.7	---	-0.1	1.0	
Per Cap Total State Expenditures	0.9	0.9	---	0.6	0.6	1.0

New York	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	601013	181610935	$ 36,291	32.4%	19541453	
2010	542114	190481949	$ 36,882	32.1%	19402640	
2011	531490	193209705	$ 36,304	32.5%	19519529	
2012	533251	186662965	$ 36,131	32.7%	19602769	
2013	432456	187721004	$ 37,010	33.2%	19673546	
2014	389639	178324895	$ 37,605	33.7%	19718515	

New York	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.3	1.0				
Per Capita Income	-0.8	-0.5	1.0			
Educational Attainment	-0.9	-0.6	0.7	1.0		
Population	-0.8	-0.6	0.5	0.9	1.0	
GSP	-0.9	-0.3	0.7	0.8	0.7	
GSP M&M	0.6	-0.1	0.0	-0.6	-0.6	
Government Ideology	0.9	0.6	-0.7	-0.9	-0.9	
Environmental Agency FTEs	0.8	0.0	-0.4	-0.8	-0.7	
Per Cap EE	1.0	0.3	-0.8	-0.9	-0.8	
Per Cap Total State Expenditures	0.4	1.0	-0.5	-0.7	-0.7	

Ohio	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	411928	79049219	$ 43,483	24.1%	11542645	
2010	416065	83592702	$ 44,250	24.1%	11540983	
2011	444732	82443373	$ 48,034	24.5%	11544824	
2012	387519	78820187	$ 53,450	24.7%	11550839	
2013	398134	77817504	$ 58,226	25.1%	11570022	
2014	371865	79239198	$ 54,951	25.6%	11594408	

Ohio	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.7	1.0				
Per Capita Income	-0.6	-0.7	1.0			
Educational Attainment	-0.7	-0.5	0.9	1.0		
Population	-0.7	-0.5	0.8	1.0	1.0	
GSP	-0.6	-0.4	0.9	1.0	0.9	
GSP M&M	-0.5	-0.2	0.8	0.9	0.9	
Government Ideology	-0.8	-0.7	0.9	0.8	0.8	
Environmental Agency FTEs	0.7	0.6	-1.0	-0.9	-0.7	
Per Cap EE	1.0	0.7	-0.6	-0.7	-0.8	
Per Cap Total State Expenditures	0.7	1.0	-0.7	-0.6	-0.6	

New York	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	1263248	79736	1	3,498	$ 30.76	$ 9.29	
2010	1313110	78881	1	3,346	$ 27.94	$ 9.82	
2011	1291230	70361	1	3,076	$ 27.23	$ 9.90	
2012	1340072	69406	0	2,999	$ 27.20	$ 9.52	
2013	1361629	71642	0	2,912	$ 21.98	$ 9.54	
2014	1382933	71268	-1	2,938	$ 19.76	$ 9.04	

New York	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	-0.6	1.0					
Government Ideology	-0.9	0.6	1.0				
Environmental Agency FTEs	-0.8	0.9	0.7	1.0			
Per Cap EE	-0.9	0.6	0.9	0.8	1.0		
Per Cap Total State Expenditures	-0.4	0.0	0.7	0.1	0.4	1.0	

Ohio	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	527479	87243	0	2,817	$ 35.69	$ 6.85	
2010	543898	93039	0	2,775	$ 36.05	$ 7.24	
2011	554995	101525	0	2,669	$ 38.52	$ 7.14	
2012	566808	100292	1	2,461	$ 33.55	$ 6.82	
2013	576561	102635	1	2,470	$ 34.41	$ 6.73	
2014	591333	113287	1	2,476	$ 32.07	$ 6.83	

Ohio	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	1.0	1.0					
Government Ideology	0.9	0.7	1.0				
Environmental Agency FTEs	-0.9	-0.8	-1.0	1.0			
Per Cap EE	-0.7	-0.5	-0.8	0.7	1.0		
Per Cap Total State Expenditures	-0.4	-0.3	-0.8	0.6	0.7	1.0	

North Carolina	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	855851	53445016	$ 51,653	26.5%	9380884	
2010	606959	56886981	$ 53,215	26.1%	9558915	
2011	654224	55743182		26.6%	9650963	
2012	616058	55233134	$ 53,658	26.8%	9746175	
2013	521684	54698379	$ 55,144	27.3%	9841590	
2014	467309	54443382	$ 56,231	27.7%	9934399	

North Carolina	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.3	1.0				
Per Capita Income	-0.9	0.1	1.0			
Educational Attainment	-0.7	-0.5	0.9	1.0		
Population	-0.9	0.0	1.0	0.8	1.0	
GSP	-0.8	-0.2	0.9	0.9	0.8	
GSP M&M	0.3	-0.3	-0.2	-0.1	-0.4	
Government Ideology	-0.7	-0.3	0.8	0.8	0.9	
Environmental Agency FTEs	0.6	0.5	-0.8	-0.9	-0.7	
Per Cap EE	1.0	-0.3	-0.9	-0.7	-0.9	
Per Cap Total State Expenditures	0.4	0.7	-0.7	-1.0	-0.7	

Oklahoma	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	267334	23502489	$ 38,919	22.7%	3687050	
2010	269818	24814989	$ 39,671	22.6%	3759603	
2011	232515	23649666	$ 39,681	23.1%	3786274	
2012	231530	23276831	$ 40,468	23.3%	3817054	
2013	235959	23378781	$ 41,682	23.4%	3852415	
2014	224968	23377996	$ 42,571	23.8%	3877499	

Oklahoma	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.7	1.0				
Per Capita Income	-0.7	-0.4	1.0			
Educational Attainment	-0.9	-0.7	0.9	1.0		
Population	-0.8	-0.4	0.9	0.9	1.0	
GSP	-0.9	-0.5	1.0	1.0	1.0	
GSP M&M	-0.9	-0.6	0.9	1.0	1.0	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.8	0.5	-1.0	-0.9	-1.0	
Per Cap EE	1.0	0.6	-0.8	-0.9	-0.9	
Per Cap Total State Expenditures	0.9	0.9	-0.8	-0.9	-0.8	

North Carolina	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	448631	98486	-1	4,787	$ 91.23	$ 5.70
2010	453449	96516	-1	4,987	$ 63.50	$ 5.95
2011	449373	95385	-1	4,960	$ 67.79	$ 5.78
2012	451501	90541	1	4,973	$ 63.21	$ 5.67
2013	463144	97015	1	4,360	$ 53.01	$ 5.56
2014	473471	95656	1	4,312	$ 47.04	$ 5.48

North Carolina	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.1	1.0				
Government Ideology	0.7	-0.5	1.0			
Environmental Agency FTEs	-0.9	-0.3	-0.6	1.0		
Per Cap EE	-0.8	0.3	-0.7	0.6	1.0	
Per Cap Total State Expenditures	-0.7	0.1	-0.8	0.8	0.4	1.0

Oklahoma	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	158013	35504	1	2,085	$ 72.51	$ 6.37
2010	163405	37012	1	2,053	$ 71.77	$ 6.60
2011	172061	44358	1	2,029	$ 61.41	$ 6.25
2012	179534	44809	1	1,949	$ 60.66	$ 6.10
2013	188805	50990	1	1,911	$ 61.25	$ 6.07
2014	194466	53768	1	1,890	$ 58.02	$ 6.03

Oklahoma	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	1.0	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-1.0	-1.0	---	1.0		
Per Cap EE	-0.9	-0.9	---	0.9	1.0	
Per Cap Total State Expenditures	-0.9	-0.9	---	0.9	0.9	1.0

Oregon	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	499760	26819168	$ 38,795	29.2%	3825657
2010	453402	29406188	$ 39,699	28.7%	3838048
2011	471034	28694037	$ 39,141	29.0%	3868031
2012	457513	27668325	$ 40,176	29.3%	3899116
2013	458710	27387086	$ 42,418	29.7%	3925751
2014	516795	29413524	$ 43,138	30.1%	3968371

Oregon	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.1	1.0			
Per Capita Income	0.3	0.3	1.0		
Educational Attainment	0.6	0.0	0.9	1.0	
Population	0.3	0.3	0.9	0.9	1.0
GSP	-0.4	0.8	-0.2	-0.5	-0.2
GSP M&M	-0.5	0.3	-0.7	-0.9	-0.7
Government Ideology	-0.8	-0.5	-0.7	-0.8	-0.7
Environmental Agency FTEs	-0.4	0.5	0.2	-0.3	-0.1
Per Cap EE	1.0	0.0	0.0	0.4	0.0
Per Cap Total State Expenditures	0.0	0.9	-0.1	-0.4	-0.1

South Carolina	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	263453	31425969	$ 45,103	24.3%	4561242
2010	244783	31649982	$ 46,411	23.9%	4635943
2011	210172	30627651	$ 46,192	24.2%	4672637
2012	202320	28498494	$ 46,340	24.5%	4720760
2013	200462	28810618	$ 47,952	25.1%	4767894
2014	214458	28903767	$ 48,838	25.4%	4828430

South Carolina	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.8	1.0			
Per Capita Income	-0.6	-0.7	1.0		
Educational Attainment	-0.5	-0.8	0.9	1.0	
Population	-0.8	-0.8	0.9	0.8	1.0
GSP	-0.5	-0.7	1.0	0.9	0.9
GSP M&M	-0.8	-0.8	0.9	0.8	1.0
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	0.7	0.4	0.2	0.1	-0.1
Per Cap EE	1.0	0.9	-0.7	-0.6	-0.8
Per Cap Total State Expenditures	0.9	1.0	-0.8	-0.8	-0.9

Oregon	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	199124	52619	0	2,497	$ 130.63	$ 7.01
2010	208321	61668	0	2,574	$ 118.13	$ 7.66
2011	209925	64366	0	2,526	$ 121.78	$ 7.42
2012	202882	53429	0	2,493	$ 117.34	$ 7.10
2013	201419	49077	0	2,546	$ 116.85	$ 6.98
2014	203606	46673	-1	2,520	$ 130.23	$ 7.41

Oregon	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.8	1.0				
Government Ideology	0.1	0.6	1.0			
Environmental Agency FTEs	0.5	0.3	0.1	1.0		
Per Cap EE	-0.3	-0.3	-0.6	-0.4	1.0	
Per Cap Total State Expenditures	0.8	0.6	-0.3	0.6	0.0	1.0

South Carolina	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	176483	28059	1	2,132	$ 57.76	$ 6.89
2010	178876	29364	1	2,144	$ 52.80	$ 6.83
2011	178703	30264	1	1,983	$ 44.98	$ 6.55
2012	179804	30647	1	1,996	$ 42.86	$ 6.04
2013	185001	30850	1	2,060	$ 42.04	$ 6.04
2014	190773	32314	1	2,138	$ 44.42	$ 5.99

South Carolina	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	0.2	-0.2	---	1.0		
Per Cap EE	-0.6	-0.8	---	0.6	1.0	
Per Cap Total State Expenditures	-0.8	-0.9	---	0.3	0.9	1.0

Pennsylvania	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	723319	87794226	$ 39,234	26.4%	12604767	
2010	754531	95140962	$ 40,434	26.4%	12712343	
2011	696341	95331101	$ 39,804	26.7%	12744293	
2012	667265	89959796	$ 39,950	27.0%	12771854	
2013	654892	89283307	$ 41,038	27.6%	12781338	
2014	633077	86985760	$ 41,681	28.1%	12790565	

Pennsylvania	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.6	1.0				
Per Capita Income	-0.6	-0.3	1.0			
Educational Attainment	-0.9	-0.6	0.9	1.0		
Population	-0.7	0.0	0.7	0.7	1.0	
GSP	-0.8	-0.4	1.0	0.9	0.8	
GSP M&M	-0.8	-0.5	0.9	1.0	0.7	
Government Ideology	-0.9	-0.6	0.7	0.8	0.7	
Environmental Agency FTEs	0.9	0.3	-0.8	-0.9	-0.9	
Per Cap EE	1.0	0.6	-0.6	-0.9	-0.8	
Per Cap Total State Expenditures	0.7	1.0	-0.4	-0.7	-0.1	

South Dakota	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	142853	4523823	$ 34,979	25.1%	812383	
2010	171123	4827824	$ 36,148	25.3%	816325	
2011	172762	4723369	$ 35,357	25.8%	824398	
2012	165090	4556879	$ 35,294	26.1%	834441	
2013	181820	4566260	$ 36,162	26.2%	844922	
2014	179499	4520937	$ 36,934	26.7%	852561	

South Dakota	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.2	1.0				
Per Capita Income	0.8	0.0	1.0			
Educational Attainment	0.7	-0.4	0.6	1.0		
Population	0.7	-0.5	0.7	1.0	1.0	
GSP	0.8	-0.3	0.5	0.9	0.9	
GSP M&M	0.8	-0.1	0.6	0.9	0.9	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.1	0.7	-0.4	-0.2	-0.4	
Per Cap EE	1.0	0.4	0.7	0.6	0.6	
Per Cap Total State Expenditures	-0.2	0.9	-0.3	-0.8	-0.8	

Pennsylvania	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	631360	88583	0	7,030	$ 57.38	$ 6.97	
2010	650362	90383	0	6,651	$ 59.35	$ 7.48	
2011	646182	90353	0	6,333	$ 54.64	$ 7.48	
2012	657033	91461	1	6,131	$ 52.24	$ 7.04	
2013	674575	98204	1	5,767	$ 51.24	$ 6.99	
2014	685420	104796	1	5,726	$ 49.50	$ 6.80	

Pennsylvania	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	0.9	1.0					
Government Ideology	0.8	0.7	1.0				
Environmental Agency FTEs	-0.9	-0.8	-0.9	1.0			
Per Cap EE	-0.8	-0.8	-0.9	0.9	1.0		
Per Cap Total State Expenditures	-0.5	-0.6	-0.7	0.4	0.7	1.0	

South Dakota	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	40356	3612	1	953	$ 175.84	$ 5.57	
2010	41612	3875	1	1,070	$ 209.63	$ 5.91	
2011	44366	4203	1	1,104	$ 209.56	$ 5.73	
2012	44348	4147	1	1,084	$ 197.85	$ 5.46	
2013	45561	4176	1	973	$ 215.19	$ 5.40	
2014	45588	4354	1	948	$ 210.54	$ 5.30	

South Dakota	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	1.0	1.0					
Government Ideology	---	---	1.0				
Environmental Agency FTEs	0.0	0.1	---	1.0			
Per Cap EE	0.7	0.8	---	0.2	1.0		
Per Cap Total State Expenditures	-0.6	-0.5	---	0.6	0.0	1.0	

Rhode Island	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	44458	8184701	$ 43,536	30.5%	1053209	
2010	45282	8951416	$ 44,856	30.4%	1053337	
2011	45875	8685561	$ 44,602	30.6%	1052451	
2012	64388	8575556	$ 44,924	30.8%	1052901	
2013	60389	8352795	$ 46,845	31.4%	1053033	
2014	49149	8334471	$ 47,727	31.4%	1054480	

Rhode Island	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.1	1.0				
Per Capita Income	0.3	-0.2	1.0			
Educational Attainment	0.5	-0.5	0.9	1.0		
Population	-0.2	-0.3	0.6	0.5	1.0	
GSP	-0.1	0.1	0.7	0.4	0.8	
GSP M&M	-0.1	0.0	0.7	0.6	0.7	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	-0.6	0.3	-0.6	-0.7	0.1	
Per Cap EE	1.0	-0.1	0.3	0.5	-0.2	
Per Cap Total State Expenditures	-0.1	1.0	-0.2	-0.5	-0.3	

Tennessee	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	419549	31124162	$ 40,629	23.0%	6296254	
2010	288316	32346155	$ 42,363	22.7%	6356671	
2011	328411	32383287	$ 43,670	23.0%	6397634	
2012	357163	32442898	$ 44,969	23.5%	6454306	
2013	297047	31198046	$ 46,469	23.8%	6494821	
2014	294152	30518934	$ 46,345	24.4%	6544663	

Tennessee	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.0	1.0				
Per Capita Income	-0.6	-0.3	1.0			
Educational Attainment	-0.3	-0.7	0.8	1.0		
Population	-0.6	-0.4	1.0	0.9	1.0	
GSP	-0.5	-0.5	0.9	1.0	1.0	
GSP M&M	-0.5	-0.6	0.9	1.0	1.0	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.5	0.5	-0.9	-0.9	-0.9	
Per Cap EE	1.0	0.0	-0.7	-0.4	-0.7	
Per Cap Total State Expenditures	0.3	0.9	-0.6	-0.9	-0.7	

Rhode Island	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	52480	4122	-1	780	$ 42.21	$ 7.77
2010	53793	4404	-1	771	$ 42.99	$ 8.50
2011	52202	4092	-1	763	$ 43.59	$ 8.25
2012	52527	4046	-1	719	$ 61.15	$ 8.14
2013	53319	4432	-1	478	$ 57.35	$ 7.93
2014	53898	4450	-1	726	$ 46.61	$ 7.90

Rhode Island	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.2	-0.4	---	1.0		
Per Cap EE	-0.1	-0.1	---	-0.6	1.0	
Per Cap Total State Expenditures	0.1	0.0	---	0.3	-0.1	1.0

Tennessee	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	271195	43573	-1	3,905	$ 66.63	$ 4.94
2010	275201	44065	-1	3,911	$ 45.36	$ 5.09
2011	276334	44187	-1	3,841	$ 51.33	$ 5.06
2012	286647	47591	-1	3,851	$ 55.34	$ 5.03
2013	293876	49662	-1	3,819	$ 45.74	$ 4.80
2014	299158	51027	-1	3,752	$ 44.95	$ 4.66

Tennessee	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	1.0	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.9	-0.9	---	1.0		
Per Cap EE	-0.6	-0.5	---	0.5	1.0	
Per Cap Total State Expenditures	-0.8	-0.8	---	0.8	0.3	1.0

Texas	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	950318	122098325	$ 37,498	25.5%	24782302
2010	968601	130660025	$ 38,485	25.8%	25244310
2011	971066	132305637	$ 38,360	26.0%	25646389
2012	1191579	129731313	$ 38,808	26.2%	26071655
2013	1061551	127428129	$ 40,110	26.6%	26473525
2014	1072559	130573820	$ 40,654	27.0%	26944751

Texas	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.2	1.0			
Per Capita Income	0.5	0.4	1.0		
Educational Attainment	0.6	0.4	1.0	1.0	
Population	0.6	0.5	1.0	1.0	1.0
GSP	0.6	0.4	1.0	1.0	1.0
GSP M&M	0.6	0.5	0.9	1.0	1.0
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	-0.8	0.2	-0.7	-0.7	-0.7
Per Cap EE	0.9	0.1	0.2	0.3	0.4
Per Cap Total State Expenditures	-0.4	0.5	-0.6	-0.6	-0.6

Virginia	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	249,110	46424489	$ 48,261	34.0%	7,882,590
2010	258,899	47194277	$ 48,791	33.8%	8,025,773
2011	722,047	47826814	$ 48,216	34.4%	8,110,035
2012	706,323	48162749	$ 48,494	34.7%	8,192,048
2013	253,897	48566346	$ 49,748	35.2%	8,262,692
2014	244,640	48,187,730	$ 49,710	35.7%	8,317,372

Virginia	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.3	1.0			
Per Capita Income	-0.6	0.6	1.0		
Educational Attainment	-0.1	0.8	0.8	1.0	
Population	0.1	1.0	0.8	0.9	1.0
GSP	-0.4	0.6	0.8	0.5	0.7
GSP M&M	-0.1	-0.4	-0.3	-0.7	-0.5
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	0.0	-0.4	-0.4	0.0	-0.4
Per Cap EE	1.0	0.2	-0.6	-0.1	0.1
Per Cap Total State Expenditures	0.4	-0.4	-0.7	-0.8	-0.6

Texas	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	1283168	302367	1	10,922	$ 38.35	$ 4.93
2010	1355304	341278	1	11,059	$ 38.37	$ 5.18
2011	1411970	391166	1	11,111	$ 37.86	$ 5.16
2012	1481030	410023	1	10,614	$ 45.70	$ 4.98
2013	1563512	456879	1	10,525	$ 40.10	$ 4.81
2014	1627865	459033	1	10,687	$ 39.81	$ 4.85

Texas	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	1.0	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.7	-0.7	---	1.0		
Per Cap EE	0.4	0.4	---	-0.7	1.0	
Per Cap Total State Expenditures	-0.6	-0.5	---	0.9	-0.3	1.0

Virginia	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	448032	45323	0	3,325	$ 31.60	$ 5.89
2010	458740	47770	0	2,199	$ 32.26	$ 5.88
2011	450633	45467	0	2,757	$ 89.03	$ 5.90
2012	454378	45392	0	2,694	$ 86.22	$ 5.88
2013	458492	45261	0	2,662	$ 30.73	$ 5.88
2014	460151	44590	0	2,659	$ 29.41	$ 5.79

Virginia	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.2	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.8	-0.6	---	1.0		
Per Cap EE	-0.4	-0.1	---	0.0	1.0	
Per Cap Total State Expenditures	-0.6	0.4	---	0.2	0.4	1.0

Utah	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	201787	17125308	$ 33,963	28.5%	2784572	
2010	181127	17731501	$ 35,529	29.4%	2775326	
2011	186164	17516710	$ 35,480	29.6%	2816124	
2012	152221	17622297	$ 35,639	29.8%	2855782	
2013	176022	17158952	$ 36,999	30.2%	2902663	
2014	176731	17039808	$ 37,766	30.7%	2941836	

Utah	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	-0.4	1.0				
Per Capita Income	-0.5	-0.3	1.0			
Educational Attainment	-0.6	-0.2	1.0	1.0		
Population	-0.4	-0.6	0.9	0.9	1.0	
GSP	-0.5	-0.4	1.0	1.0	1.0	
GSP M&M	0.3	0.6	-0.3	-0.2	-0.6	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.2	0.8	-0.7	-0.7	-0.9	
Per Cap EE	1.0	-0.2	-0.6	-0.7	-0.6	
Per Cap Total State Expenditures	0.1	0.8	-0.7	-0.7	-0.9	

Washington	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	1019150	47798812	$ 45,926	31.0%	6664195	
2010	860530	50399137	$ 47,485	31.0%	6743226	
2011	929864	48299736	$ 46,509	31.4%	6822520	
2012	762255	46866515	$ 46,775	31.6%	6895226	
2013	878882	46640380	$ 47,972	31.9%	6968006	
2014	954773	47971432	$ 49,583	32.3%	7054196	

Washington	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.1	1.0				
Per Capita Income	0.0	0.0	1.0			
Educational Attainment	-0.1	-0.5	0.8	1.0		
Population	-0.3	-0.5	0.8	1.0	1.0	
GSP	-0.2	-0.4	0.9	0.9	1.0	
GSP M&M	-0.3	-0.2	0.9	0.9	0.9	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.9	0.0	0.0	-0.1	-0.3	
Per Cap EE	1.0	0.2	-0.2	-0.3	-0.4	
Per Cap Total State Expenditures	0.2	0.9	-0.4	-0.8	-0.8	

Utah	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	124513	21754	1	1,315	$ 72.47	$ 6.15	
2010	128308	23770	1	1,328	$ 65.26	$ 6.39	
2011	130233	24632	1	1,336	$ 66.11	$ 6.22	
2012	131859	21497	1	1,316	$ 53.30	$ 6.17	
2013	135929	21529	1	1,297	$ 60.64	$ 5.91	
2014	140296	21540	1	1,267	$ 60.08	$ 5.79	

Utah	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	-0.4	1.0					
Government Ideology	---	---	1.0				
Environmental Agency FTEs	-0.8	0.7	---	1.0			
Per Cap EE	-0.6	0.4	---	0.3	1.0		
Per Cap Total State Expenditures	-0.8	0.7	---	0.9	0.3	1.0	

Washington	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	383312	52986	-1	5,556	$ 152.93	$ 7.17	
2010	392066	55144	-1	5,223	$ 127.61	$ 7.47	
2011	388656	53914	-1	5,186	$ 136.29	$ 7.08	
2012	400590	55573	-1	5,061	$ 110.55	$ 6.80	
2013	412631	56714	-1	5,309	$ 126.13	$ 6.69	
2014	423795	57794	-1	5,347	$ 135.35	$ 6.80	

Washington	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	1.0	1.0					
Government Ideology	---	---	1.0				
Environmental Agency FTEs	-0.1	-0.2	---	1.0			
Per Cap EE	-0.3	-0.5	---	0.9	1.0		
Per Cap Total State Expenditures	-0.7	-0.6	---	0.1	0.4	1.0	

Vermont	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	80433	6013787	$ 42,353	33.1%	621760	
2010	76171	6263078	$ 43,908	33.3%	625982	
2011	82837	6146534	$ 43,924	33.8%	626730	
2012	90169	6138028	$ 44,284	34.2%	626444	
2013	83521	6138612	$ 46,699	34.8%	627140	
2014	101284	6302744	$ 47,330	35.2%	626984	

Vermont	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.4	1.0				
Per Capita Income	0.7	0.6	1.0			
Educational Attainment	0.8	0.5	1.0	1.0		
Population	0.4	0.7	0.7	0.7	1.0	
GSP	0.4	0.8	0.8	0.7	1.0	
GSP M&M	-0.6	0.0	-0.6	-0.7	0.1	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.6	0.0	0.3	0.4	-0.4	
Per Cap EE	1.0	0.4	0.7	0.8	0.4	
Per Cap Total State Expenditures	0.4	1.0	0.6	0.4	0.6	

West Virginia	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	205773	12651672	$ 35,441	17.3%	1819777	
2010	258221	13453926	$ 35,579	17.3%	1854230	
2011	239230	13650035		17.7%	1854972	
2012	268309	13619599	$ 35,511	17.9%	1856560	
2013	230350	13498838	$ 36,325	18.4%	1853231	
2014	228036	13240704	$ 36,644	18.8%	1848514	

West Virginia	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	0.8	1.0				
Per Capita Income	-0.3	0.2	1.0			
Educational Attainment	-0.1	0.2	0.9	1.0		
Population	0.8	1.0	0.3	0.4	1.0	
GSP	0.5	0.8	0.7	0.5	0.9	
GSP M&M	0.2	0.7	0.8	0.3	0.6	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	-0.8	-0.6	0.2	-0.2	-0.5	
Per Cap EE	1.0	0.8	-0.3	-0.1	0.8	
Per Cap Total State Expenditures	0.8	1.0	0.2	0.2	1.0	

Vermont	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	28080	3149	-1	597	$ 129.36	$ 9.67
2010	29030	3577	-1	558	$ 121.68	$ 10.01
2011	29060	3501	-1	556	$ 132.17	$ 9.81
2012	29041	3380	-1	564	$ 143.94	$ 9.80
2013	29171	3026	-1	572	$ 133.18	$ 9.79
2014	29259	2960	-1	610	$ 161.54	$ 10.05

Vermont	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.0	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.3	-0.8	---	1.0		
Per Cap EE	0.4	-0.6	---	0.6	1.0	
Per Cap Total State Expenditures	0.7	0.0	---	0.1	0.4	1.0

West Virginia	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures
2009	70253	16215	-1	2,337	$ 113.08	$ 6.95
2010	73308	17806	-1	1,969	$ 139.26	$ 7.26
2011	74492	19716	-1	1,953	$ 128.97	$ 7.36
2012	73098	17134	-1	662	$ 144.52	$ 7.34
2013	73562	17958	-1	1,924	$ 124.30	$ 7.28
2014	74148	18460	-1	1,903	$ 123.36	$ 7.16

West Virginia	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*
Environmental Expenditures						
State Expenditures						
Per Capita Income						
Educational Attainment						
Population						
GSP	1.0					
GSP M&M	0.9	1.0				
Government Ideology	---	---	1.0			
Environmental Agency FTEs	-0.3	0.1	---	1.0		
Per Cap EE	0.5	0.2	---	-0.8	1.0	
Per Cap Total State Expenditures	0.8	0.7	---	-0.6	0.8	1.0

Wisconsin	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population
2009	691008	39210899	$ 40,504	25.7%	5654774
2010	743220	42062898	$ 41,891	25.7%	5690263
2011	729626	41317324		26.1%	5709640
2012	652589	38886096	$ 41,753	26.4%	5726177
2013	677727	38275300	$ 44,012	26.8%	5742854
2014	681371	38583376	$ 44,585	27.4%	5758377

Wisconsin	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*
Environmental Expenditures	1.0				
State Expenditures	0.9	1.0			
Per Capita Income	-0.2	-0.4	1.0		
Educational Attainment	-0.5	-0.7	0.9	1.0	
Population	-0.4	-0.5	0.9	0.9	1.0
GSP	-0.4	-0.5	1.0	1.0	1.0
GSP M&M	-0.5	-0.6	0.9	0.9	1.0
Government Ideology	---	---	---	---	---
Environmental Agency FTEs	0.1	0.0	-0.5	-0.3	-0.7
Per Cap EE	1.0	0.9	-0.3	-0.6	-0.5
Per Cap Total State Expenditures	0.9	1.0	-0.5	-0.8	-0.6

	Wisconsin	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
	2009	269495	50090	1	2,575	$ 122.20	$ 6.93	
	2010	275634	52824	1	2,277	$ 130.61	$ 7.39	
	2011	275586	52650	1	2,126	$ 127.79	$ 7.24	
	2012	280593	55819	1	2,118	$ 113.97	$ 6.79	
	2013	285596	57054	1	2,045	$ 118.01	$ 6.66	
	2014	291754	57515	1	2,321	$ 118.33	$ 6.70	

	Wisconsin	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
	Environmental Expenditures							
	State Expenditures							
	Per Capita Income							
	Educational Attainment							
	Population							
	GSP	1.0						
	GSP M&M	1.0	1.0					
	Government Ideology	---	---	1.0				
	Environmental Agency FTEs	-0.4	-0.6	---	1.0			
	Per Cap EE	-0.5	-0.6	---	0.2	1.0		
	Per Cap Total State Expenditures	-0.6	-0.7	---	0.1	0.9	1.0	

Wyoming	Environmental Expenditures	State Expenditures	Per Capita Income	Educational Attainment	Population	
2009	418981	418981	$ 50,276	23.8%	544270	
2010	461774	461774	$ 52,158	23.5%	564513	
2011	371787	371787	$ 49,666	24.2%	567725	
2012	401041	401041	$ 50,130	24.3%	576765	
2013	402091	402091	$ 51,942	24.7%	582684	
2014	359250	359250	$ 54,810	25.1%	583642	

Wyoming	*Environmental Expenditures*	*State Expenditures*	*Per Capita Income*	*Educational Attainment*	*Population*	
Environmental Expenditures	1.0					
State Expenditures	1.0	1.0				
Per Capita Income	-0.2	-0.2	1.0			
Educational Attainment	-0.8	-0.8	0.6	1.0		
Population	-0.5	-0.5	0.5	0.8	1.0	
GSP	-0.2	-0.2	0.0	0.0	0.2	
GSP M&M	0.3	0.3	-0.6	-0.7	-0.5	
Government Ideology	---	---	---	---	---	
Environmental Agency FTEs	0.2	0.2	-0.3	-0.5	-0.4	
Per Cap EE	1.0	1.0	-0.3	-0.9	-0.7	
Per Cap Total State Expenditures	0.8	0.8	-0.4	-0.9	-0.9	

Wyoming	GSP	GSP M&M	Government Ideology	Environmental Agency FTEs	Per Cap EE	Per Cap Total State Expenditures	
2009	40842	15524	1	968	$ 769.80	$ 11.27	
2010	42622	16732	1	1,009	$ 818.00	$ 11.12	
2011	43574	17661	1	1,005	$ 654.87	$ 10.49	
2012	41407	14455	1	980	$ 695.33	$ 10.31	
2013	41799	14172	1	826	$ 690.07	$ 10.21	
2014	42021	13607	1	953	$ 615.53	$ 10.10	

Wyoming	*GSP*	*GSP M&M*	*Government Ideology*	*Environmental Agency FTEs*	*Per Cap EE*	*Per Cap Total State Expenditures*	
Environmental Expenditures							
State Expenditures							
Per Capita Income							
Educational Attainment							
Population							
GSP	1.0						
GSP M&M	0.7	1.0					
Government Ideology	---	---	1.0				
Environmental Agency FTEs	0.3	0.6	---	1.0			
Per Cap EE	-0.2	0.4	---	0.2	1.0		
Per Cap Total State Expenditures	-0.2	0.6	---	0.5	0.9	1.0	