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BREAKING PROTOCOL: THE FAILURE OF THE BUSH ADMINISTRATION TO RATIFY THE KYOTO PROTOCOL AS A STATE CRIME

by

Jacquelynn A. Doyon

A Thesis
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Master of Arts
Department of Sociology

Western Michigan University Kalamazoo, Michigan December 2008 Copyright by Jacquelynn A. Doyon 2008

ACKNOWLEDGMENTS

For my parents. All four of them.

No words can express my gratitude for their unending support and encouragement in all that I do. I would not be where I am today without them, and no matter where I go, I carry them with me.

Jacquelynn A. Doyon

BREAKING PROTOCOL: THE FAILURE OF THE BUSH ADMINISTRATION TO RATIFY THE KYOTO PROTOCOL AS A STATE CRIME

Jacquelynn A. Doyon, M.A.

Western Michigan University, 2008

Using the Kyoto Protocol as a centrifugal focus point, this research conceptualizes the failure of the United States to act on global warming as a state crime. The decision of the United States not to ratify the protocol was largely based on economic justifications. However, the actions taken following the Kyoto Protocol indicate that the US government was instead dedicated more to their own economical interests, rather than those of the state as a whole. Through the exploration of possible economic and political motivations, the research identifies ulterior motives of the Bush administration that have proved to be detrimental to the environment. Through the application of a theoretical model of state crime developed by Michalowski and Kramer (2006), the opportunity and motivation for a state crime emerges and is identified.

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GLOSSARY

API American Petroleum Institute

CCAP Climate Change Action Plan

CCC Convention on Climate Change

CCSP U.S. Climate Change Science Program

CDM Clean Development Mechanism

CEQ Council on Environmental Quality

EPA Environmental Protection Agency

ERU emissions reduction unit

FCCC Framework Convention on Climate Change

GISS Goddard Institute for Space Studies

GOP Grand Old Party (or, the Republican Party)

INC Intergovernmental Negotiating Committee

IPCC Intergovernmental Panel on Climate change

JI joint implementation

NAS National Academy of Sciences

NASA National Aeronautics and Space Administration

OIRA Office of Information and Regulatory Affairs

POP persistent organic pollutant

SOP standard operating procedures

UCS Union of Concerned Scientists

UNEP United Nations Environmental Program

UNFCCC United Nations Framework Convention on Climate Change

USGCRP US Global Change Research Program

VOC volatile organic compound

WMO World Meteorological Organization

CHAPTER I

INTRODUCTION

In December of 1997, the United Nations Framework Convention on Climate Change (UNFCCC) held an international conference in Kyoto, Japan. The purpose of this conference was to develop a new treaty, or "protocol" that would be an international agreement to begin worldwide reductions of carbon emissions. It was here that the well known "Kyoto Protocol" came into being. As the top emitter of carbon emissions, the United States was on board with the Kyoto Protocol, as it was supported by the Clinton administration and signed by President Bill Clinton in 1998 (Sands 2003). The protocol, however, needed not signatory power but the ratification of at least 55 nations to enter into effect. Even though President Clinton had signed the protocol, this indicated only agreement with the document and the intention to ratify—the document was not a valid contract until the United States (along with 54 other nations) had ratified it. When the time came for ratification, new presidential elect George W. Bush shocked the world by not only failing to pass the document along for ratification by the Senate, but he

even "unsigned" the document itself by declaring the retraction of the United States from the document (Sands 2005). Needless to say, this was a very bold and unanticipated act given the fact that much effort had been made to alter the protocol to meet the demands of the United States. It was chiefly unexpected given that that Bush's campaign for presidency was largely on board with progressive environmental policies. Frankly stated, the current Bush administration put to a halt what the previous administration had attempted to mobilize.

The impending threat of global warming (also known as climate change) has been an environmental concern for the past five decades.

National governments, including the United States, have been aware of the problem for this span of time at a minimum. While other nations have banded together to stop—and hopefully even reverse—the effects of global warming, the United States has not taken any decisive action. The failure of the United States government to deal with or act in regard to climate change (as to be demonstrated by the research) has been largely politically and economically driven, and may end up costing humanity greatly. Through the conceptualization of the failure to act on global warming/climate change as a state crime of omission, this paper will analyze the failure of the United States

to take action in the fight against global warming through the decision not to ratify the Kyoto Protocol.

State crime is not a recent phenomenon. It has existed as long as states themselves have been in existence, and no state is exempt from crime. It is, however, within this century that we have begun to identify and acknowledge these crimes. For the purpose of the research, state crime is defined as "harmful activities carried out by the state on behalf of some state agency" (Freidrichs 1996: 122). The "harmful activities" reviewed here are those pertaining to environmental protection and regulation and will be elaborated on throughout. The "state agency" will be identified using the integrated theoretical model of state crime developed by Raymond Michalowski and Ron Kramer (Michalowski and Kramer 2006). The model identifies three levels of state crime along with motivations that help to encourage and catalyze the actions. More specifically, this research examines the influence of the Bush administration on three separate levels of analysis (structural, organizational and interactional).

At this critical point in history, is it crucial to take notice and act upon the events that are occurring around the globe. Climate change is one of the most imperative issues facing the world; other nations have taken action on this problem, but the United States has done very little. Accordingly, this research will analyze the 'how' and the 'why' of this failure.

The purpose of this study is to investigate past actions taken (or not taken) in relation to global warming surrounding the Kyoto Protocol. Such actions include (but are not limited to): the failure to enforce (or even establish) environmental regulations; the failure to act upon scientific knowledge regarding global warming; and the attempt to withhold or alter scientific documents regarding global warming from the public. By analyzing legislative evidence from a wide variety of sources regarding the Bush administration's actions concerning climate change, it is possible to uncover knowledge of the issue not currently publicized by the media, leaving US citizens uninformed. Such data can also help to reveal the extent to which the United States government was aware of the impending threat of global warming prior to recent events, like the Kyoto Protocol. These actions, which culminate at the failure of the United States government to ratify the Kyoto Protocol, will allow for insight to be made about prior awareness of global warming. The significance of this lies not only in public ignorance about the current administration (and the issue of global warming), but also in that the US failed to act in spite of its knowledge on the issue. The data uncovered will more fully reveal how the Bush administration had knowledge about the dangers of global warming but failed to ratify the Kyoto Protocol, which is argued here to be a state crime.

For several decades, the United States government has been aware of the impending threat of global warming. This awareness has often led to action wherein bills and laws were passed to help minimize the effects of human pollution on the environment. Specific governmental organizations (such as the Environmental Protection Agency [EPA]) were developed in an effort to regulate and enforce the newly developed policies. On a global level, the United States has participated in several international protocols aimed at regulating pollutants on a broader scale. Traditionally, the US has been very much in concert with other nations regarding such policies, often being the strongest proponent to signing, passing and ratifying the various protocols. In fact it was often stated that the United States should take a leadership role in the fight against global warming (Kennedy Jr. 2004; Sands 2003; Sands 2005; and White 1996). It was only recently that the United States failed to participate in the largest decision (culminating in the Kyoto Protocol) and decided not to ratify the protocol. It was this act of omission that is pivotal to this research, and will be explored in great detail.

In order to advance that this act is a state crime of omission, a review of past policies and protocols is in order. While prior efforts in the fight to protect the environment are irrefutably valuable, the penultimate acts surrounding the US and the Kyoto Protocol are the most surprising and detrimental, not only in regard to the fight against climate change, but also in regard to international relations regarding environmental policies. This act of omission does not come unaccompanied; both economic and political motivations lie beneath the surface. This research will thus address the congruence of the vested interests of those (not) acting on behalf of the state. By once again utilizing the theoretical framework developed by Michalowski and Kramer (2006), state crime theory will be applied to explain the actions and events surrounding the Kyoto protocol.

A brief historical background and abbreviated timeline of global warming will be included as well as a review of the environmental policies participated in by the United States. The literature research will also include background information pertaining to past actions involving environmental policies, especially those regarding the regulation of fossil fuels. This review will be of particular interest in order to discern a pattern of US participation

in pro-environmental acts. They will also help to show if and how the pattern is broken by the failure to ratify the Kyoto Protocol.

The specific actions of the Bush administration will be under particular scrutiny. What might be the explanations for the decision regarding the ratification of the Kyoto Protocol? And more importantly, what were the underlying vested interests and possible motivations for these actions? The preliminary exploration into this matter has revealed that there may have been a concomitant attempt to conceal and diminish the severity of global warming by the Bush administration. Did the administration deliberately censor information that was to be revealed to the public regarding environmental issues? The application of the theoretical model in concert with the culminating failure to ratify the Kyoto Protocol (when the danger of global warming had been demonstrated) can inductively be argued to be a state crime of omission.

CHAPTER II

ENVIRONMENTAL LITERATURE REVIEW

Environmental Overview

Early Signs of Global Warming

When discussing a controversial issue, it is important to clarify the issue in question. Therefore the myths and truths of global warming must be explored in order to prove a state crime regarding global warming. A comprehensive explanation of what is known (and widely accepted by scientists) of global warming is included for this purpose.

Global warming, essentially, is the observed increase in the earth's temperature. Contributing factors to global warming include greenhouse gases (i.e. water vapor, carbon dioxide (CO₂), methane (CH₄), nitrous oxide (NOx), and ozone). As these gases are emitted into the atmosphere, they create a layer that blocks the suns rays (and heat) from exiting the earth's atmosphere, thus warming the earth (see Figure 1).

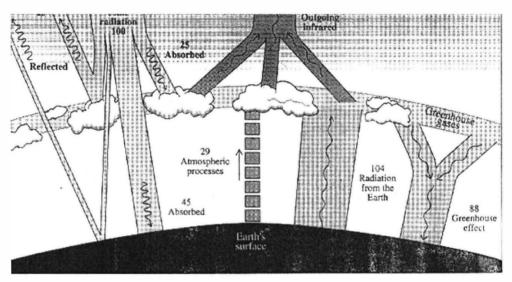


Figure 1: Diagram of Global Warming

g. 2.10 Diagrammatic representation of important components of Earth's physical energy budget, bout 30% of the incoming solar radiation is reflected by atmospheric clouds and particulates or by arth's surface. The remaining 70% is absorbed and must be dissipated in various ways. Much of the worbed energy serves to heat up the atmosphere and surfaces and is then mostly reradiated as longave infrared radiation. Atmospheric moisture and radiatively active gases interfere with this dissipate process. This so-called "greenhouse effect" keeps Earth's surface about 33°C warmer than it build otherwise be. Numbers refer to percentage of incoming solar radiation. See text for further iscussion. Modified from Schneider. Copyright © 1989 by Scientific American, Inc.

*Figure taken from www.umd.com

Scientist Roger Revelle of Harvard University noted that following WWII, economic expansion combined with a rapidly increasing population (that relied almost completely on coal and oil) would likely produce an excessive and potentially harmful increase in the amount of CO₂ in the earth's atmosphere (Gore 2006). Revelle began to record the levels of CO₂ in the atmosphere and soon confirmed his predictions. In 1979, Revelle testified at a Senate hearing to the potential consequences of his findings. The Senate

Committee not only did not act upon Revelle's testimony, but even seemed to pass it off as inconsequential, according to observers (Gore 2006). Revelle was not the first scientist to consider the effects of human influence on the environment. As far back as 1870, scientists have commented on the potential effects of carbon dioxide on the atmosphere (Read 1994). Within the past twenty years, scientists have uncovered an astronomical amount of data pertaining to global warming and climate change.

Recent Signs of Global Warming

By 1988, enough scientists had made sufficient amounts of noise across the globe to lead to the Intergovernmental Panel on Climate Change (IPCC). The panel was first developed by the World Meteorological Organization (WMO) as well as the United Nations Environment Program (Global 2001). The first IPCC report was published in 1990. In 1995, the IPCC published its second report which staked several controversial claims. At this time, the IPCC predicted that global warming would cause average temperatures to increase by 1-3.5 degrees Celsius by the year 2100 (Global 2001). They also predicted that sea-level would rise by 0.13 -0.94 meters (Global 2001). At this time, the IPCC made the claim that "[t]he balance of evidence suggests a

discernable human influence on global climate" (Global 2001: 203). The evidence that the IPCC and other environmental organizations rely on comes from several different measuring techniques. The three major methods of measuring climate change are: increase in temperature (measured by simply recording data all over the world); measuring the rise in both sea level and temperature (once again, recorded daily all over the world); and measuring levels of carbon dioxide (CO₂) which are measured by retrieving

...Atlantic icecap ice-core samples...taken of compressed snow that has been piling up for 160,000 years, covering four ice ages and intervening periods, of which the latest warm epoch has featured recorded history. Contemporaneous temperatures can be measured by the proportion of isotope deuterium (resulting in 'heavy water') in the ice and cross-checked by studies of the widths of annual tree rings in ancient logs recovered from peat bogs etc. (Read 1994: 39).

These samples are then used for carbon dating, which can provide the levels of carbon dioxide in the atmosphere in each earth year (Read 1994).

In 2001, the IPCC released its third report. At this time, they projected that the temperature would increase from 1.4-5.8 degrees Celsius (2.5-10.4 degrees F). They revised their statement to read: [t]here is new and stronger evidence that most of the [atmospheric] warming observed over the last 50 years is attributable to human activities" (Global 2001: 204). The IPCC asserted that even if greenhouse gases were to be stabilized today, there

could potentially still be affects beyond the 21st century. Possible explanations for this would be the "weakening of ocean thermohaline circulation" (Global 2001: 204). Thermohaline circulation is imperative to global stability in that it assists in the regulation of temperature in such regions as the arctic north and Europe (Global 2001). Any disruption to the current of circulation could result in less than temperate climates for these areas, and subsequently others.

Current Global Warming

The most recent report by the IPCC was released on February 5th, 2007.

This time, the report was much more extensive.

Long-term trends from 1900 to 2005 have been observed in precipitation amounts over many large regions. Significantly increased precipitation has been observed in eastern parts of North and South America, northern Europe and northern and central Asia. Drying has been observed in the Sahel, the Mediterranean, southern Africa and part of southern Asia. Precipitation is highly variable spatially and temporally, and data are limited in some regions (IPCC 2007: 8).

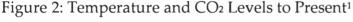
Widespread changes in extreme temperatures have been observed over the last 50 years. Cold days, cold nights and frost have become less frequent, while hot days, hot nights and heat waves have become more frequent (IPCC 2007: 8).

At this point in time, it is predicted that roughly a 0.2 degrees Celsius is expected for every decade if emissions continue at the current rate. Even if these emissions were to be kept constant, it is projected that warming would

continue at roughly 0.1 degree Celsius per decade (IPCC 2007). What is even more alarming than the current increases are the predictions for the future. In the past two decades, we have experienced a warming of 0.15 – 0.30 degrees Celsius per decade (IPCC 2007). The IPCC contends that

[c]ontinued greenhouse gas emissions at or above current rates would cause further warming and induce many changes in the global climate system during the 21st century that would very likely be larger than those observed during the 20th century.

For a visual example, see Figure 2 below.



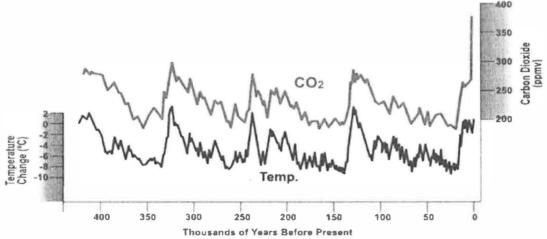


Figure 2 represents the drastic increase in temperature and CO₂ levels in recent history. As demonstrated, we have reached record highs for CO₂, and have also experienced severely increased temperatures. Those who dispute global warming argue that the warming of the earth is a natural cycle, and

there is no need for concern (McRight and Dunlap 2003). While Figure 2 represents these earlier periods of warming, it also represents that the temperature spiked and then rapidly decreased in those instances. In the most recent period of warming, the temperature has remained consistently high, and judging from data, will not decrease anytime soon (IPCC 2007). Furthermore, we have not only experienced warming, but also the concurrent melting of the polar ice caps. In past warming periods, the data demonstrate that the warming period only affected selected areas, not the entire planet (Read 1994).

The rising sea level is an additional concern associated with global warming.

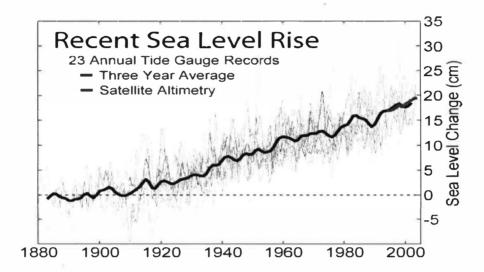
Anthropogenic warming and sea level rise would continue for centuries due to the timescales associated with climate processes and feedbacks, even if greenhouse gas concentrations were to be stabilized (IPCC 2007: 17).

Figure 3 (see below) is very clear: sea levels have only increased since the 19th century. An increase in sea level is detrimental for a few reasons. The first, and perhaps most obvious, is that as sea levels rise, more of the coastline will subsequently be under water. Several have speculated that the coastlines of

¹ Figure taken from the IPCC.

New York, Florida, Japan and Europe will be underwater, displacing millions of people (Gore 2006).

Figure 3: Recent Sea Level Rise²



As for the current sea level, it is now projected to rise by 0.1 to 0.2 meters by the year 2100 (IPCC 2007). There are predictions that the Arctic and Antarctic ice will continue to decrease (melt) at alarming rates. It is very likely that the recent 'heat-waves' will continue, and even become more frequent (IPCC 2007). And to what can all of these changes be attributed to?

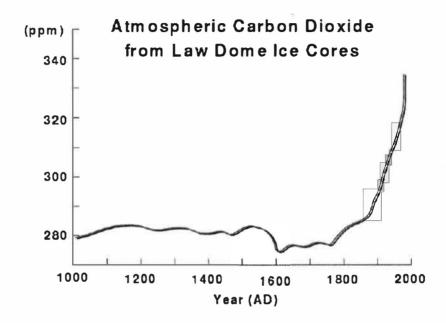
Global atmospheric concentrations of carbon dioxide, methane and nitrous oxide have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values determined from ice cores spanning many thousands of years. The global increases in

.

² Figure taken from the IPCC.

carbon dioxide concentration are due primarily to fossil fuel use³... (IPCC 2007: 2).

Figure 4: Carbon Dioxide Levels (ppm - parts per million⁴)



In Figure 4, the drastic spike in CO₂ levels is verified. This is potentially the largest contributor to global warming and it is a direct result of human activity (Read 1994). Clearly, there is a human element of causation when contemplating the dramatic climate changes that are currently occurring. As fossil fuels are pointedly the most violent offender of climate change, and the United States is the largest consumer of these fuels (Gore 2006), it is important

³ Italics added.

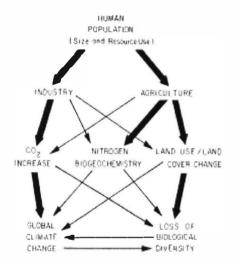
⁴ Figure taken from the IPCC.

to consider what the United States is doing to regulate or even reverse the pollution of the atmosphere.

Human Contribution to Global Warming

While current changes in the environment can be attributed in part to natural earth cycles, a majority of them cannot. The IPCC in its most recent report stated that it was "very likely" that humans are the cause of global warming (2007: 14). See Figure 5 for further demonstration.

Figure 5: Components of Global Environmental Change⁵



⁵ Figure demonstrates the relationships among human population and activity, the components of change, and changes in climate and biological diversity. The wide arrows represent the dominant effects (Vitousek 1994).

As no science can ever be 100 percent certain, the phrase "very likely" is as close as scientists can come to asserting certainty, which constitutes a 90 percent probability (Roach 2007). This is a marked increase from prior reports in 2001, stating that humans were "likely" the cause of global warming, which is only equaled to 66 percent probability in the scientific field (Roach 2007). As human contribution to global warming has been accepted by a majority of the scientific community, these contributions themselves must also be reviewed.

The recent increases in global temperatures are most often attributed to the use of fossil fuels, and the then resulting emissions of carbon dioxide into the atmosphere. Large increases in CO₂ emissions came with the start of the Industrial Age. New agricultural and industrial practices were developed continuously, and all became mass producers of CO₂ (see Figure 5). Coupled with the industrial and agricultural changes was population growth, deforestation, factory farming and eventually the widespread use of fossil fuels. Achim Steiner, the executive director of the United Nations Environment Program (UNEP) stated that "[f]ossil fuel use, agriculture and land-use change are fundamentally affecting the systems of our planet" (Roach 2007). Obviously, anthropocentrism has been a major contributor to environmental deterioration.

CHAPTER III

METHODS

One objective of this research is to ascertain to what extent the US government was aware of the potential harms surrounding global warming, and to understand whether their actions (or lack thereof) in response to this knowledge were appropriate. In order to ascertain this, data were collected from several different sources, including environmental protocols stemming from various conventions specifically concerning air pollution. Air pollution protocols were specifically reviewed based on the factor that it s a major cause of global warming. Participation in conventions and protocols are largely voluntary; however, they have the potential to be more or less beneficial to varying states.

A convention, simply put, is the gathering of various governments for discussion on a specific topic that serves as a framework to address that topic, sometimes highlighting goals and possible resolutions. For the purposes of this research, only environmental conventions were focused upon. Protocols are the agreements (or contracts) developed by those states at the different

conventions. A protocol is also a form of treaty, and typically can supplement, clarify, or amend an existing international agreement (Sands 2003). Depending upon the specific convention, there can be many, one, or no protocols developed at all. The following conventions, and subsequent protocols were reviewed: The 1979 Geneva Convention on Long-Range Transboundary Air Pollution (which yielded the 1985 Sulphur Protocol, the 1988 Nitrous Oxide Protocol, the 1998 Aarhus Protocol on Heavy Metals and the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-Level Ozone); the 1985 Vienna Convention (1987 Montreal Protocol); and the 1992 Climate Change Convention (1997 Kyoto Protocol). These specific protocols were selected because of their relevance to the topic. As global warming is a direct result of atmospheric pollution, conventions and protocols regarding atmospheric conditions over the last 30 years were chosen for review. They were then used to cross-check US participation in said protocols. The various protocols help to offer precedence to actions taken by the United States government prior to the Kyoto Protocol, and illuminate the need for governmental action.

Governmental documents, including Senate hearing documents from the Committee on Environment and Public Works, and the Committee on

Science, Engineering and Public Policy; press releases, letters of resignation, and documents relating to US action surrounding the Kyoto Protocol, were reviewed in order to asses governmental action, and potential political and economic motivations. The Senate hearing documents were valuable in that they demonstrated national action related to environmental issues, as opposed to conventions and protocols (which demonstrate international action). Through extensive research stemming essentially from a convenience sample, these documents were selected through a paper-trail, as the researcher simply selected a document relevant to the Kyoto Protocol, and then followed the sources used and identified in those documents. For example, the examination of a convention might identify a protocol pertaining to air pollution; the subsequent examination of that document would then illuminate US participation; that participation (or nonparticipation) would offer precedence to US environmental action, and possibly even identify key players. This process of successive document review was sustained until the same or similar sources began to reappear continuously, reaching saturation. For example, continued research regarding the alteration of scientific documents repeatedly led back to the same individuals (Philip Cooney, James Hansen and Rick Piltz). After continued

searches turned up the same findings and led to the same outcomes, it was decided that that area of research had been saturated.

As this is an international issue, intergovernmental documents, such as reports from the Intergovernmental Panel on Climate Change, the United Nations Economic Commission for Europe (UNECE), the United Nations Environmental Program (UNEP) and the United Nations Framework Committee on Climate Change (UNFCCC) were also considered. These were retrieved through the same process aforementioned, and once again were able to illuminate environmental action on the behalf of the US as well as other nations. Because of the attention gathered by this issue in the news and media sector, articles and reports from the BBC, The Washington Post, Time, MSNBC, PBS Frontline News, the New York Times, CBS 60 Minutes and National Geographic provided a well rounded look at circulating stories regarding the issue, and helped the researcher to ascertain the information that was reaching (or not reaching) the public. Once again, these documents were selected in the paper-trail fashion previous stated.

Last, various research articles and texts pertaining to global warming and state crime were also reviewed and incorporated, for even further comprehensiveness of the data collection effort. The culmination of the

on with world environmental activism epitomized in the ratification of the Kyoto Protocol.

As global warming has been stated to be the greatest challenge facing governments in this century (Sands 2005), it came as a great shock to the international community when the United States did not jump on the international bandwagon towards its control and prevention. President Bush stated several reasons for not signing, some of which were related to fact that it would greatly affect the national economy, namely increasing energy costs. While economic concerns are certainly legitimate, Bush's economic concerns seem to be linked to the oil industry. Indeed, research uncovered data pertaining to this and will be discussed in the findings. These economic motivations were specifically addressed through governmental documents, press releases and cabinet appointments submitted by the Bush administration.

On an international level, this decision severed many political ties on

⁶ All documents discussed up to this point (excluding protocols/conventions) were not limited to a time-specific search. The researcher followed the data where it led, without chronological constraint. Documents were reviewed until saturation of the data was reached.

the part of the United States, therefore political motivations were also considered. Obviously, there was something more important than maintaining international political ties, which suggests intranational political motivation. These motivations, by necessity, must also be explored. Once again, governmental documents and press releases (coupled with documents kept and/or altered from the press and public) were reviewed. All of the governmental documents used were between 2001 and 2008, as so they were current with the Bush administration. Both political and economic motivations may help to explain the shift in actions of the United States in the fight against global warming.

The research uncovered the actions taken by individuals in the Bush administration in response to knowledge pertaining to global warming. It is here that the political and economic motivations can be connected to the actors, thus connecting the acts of omission⁷ that led to the failure to ratify the Kyoto Protocol. This final act classifies as state crime of omission on many levels, which will be explained through the application of a theoretical model of state crime developed by Michalowski and Kramer (2006).

⁷ A crime of omission is defined by Kauzlarich, Mullins and Matthews (2003) as the failure to act, thus allowing harmful activities to continue.

Organization of Data

In order to organize the data, a systematic approach utilizing note cards was employed. There were three different colors of note cards used initially (blue, pink and yellow) with the later addition of white note cards. Blue note cards denote collected evidence regarding US governmental actions and policies (such as participation or nonparticipation in protocols or development of national environmental policies); pink notes cards were specifically for intergovernmental environmental policies and protocols (such as global participation in protocols, and importance of international policies and protocols); yellow note cards were reserved for theoretical issues (which were used to determine the culpability of a state crime); and white note cards were added to incorporate scientific issues, as the category presented itself in the middle of the research process. Data were easily categorized based on the specificity of each category.

These issues were selected because of their direct relevance to the topic. The documents selected were reviewed an average of three times each in order to ensure proper categorizing, which was considered and

reconsidered upon each review. If there was a discrepancy in the organization of the data, it was reviewed yet again to secure proper placement. The cards contain the source of the data, along with the year in which the data were published in the left hand corner. The right hand corner is reserved for a coding system, and the date of collection for the data. Through theoretical analysis on both national and international levels, it is hoped that a more direct interpretation of actions taken by the US government can be developed. The methodological coding system is detailed below.

Methodological Coding System

EH = Environmental History (blue)

EP = Environmental Protocols prior to the Kyoto Protocol (pink)

KP = Information pertaining specifically to the Kyoto Protocol (pink)

EL = Environmental Law Issues (pink)

EM= Economic Issues / Motivations (blue)

PM = Political Motivations (blue)

SI = Scientific Issues (white)

BA = Issues concerning the Bush administration (blue)

DA = Document Alteration of Governmental Documents (blue)

SC = State Crime Theory (yellow)

The categories EH, EM, PM, BA and DA were all coded on blue cards because of their relevance to US governmental policy and actions. Categories EP, KP, and EL were coded on pink cards because of their international and intergovernmental ties. State crime theory issues were coded yellow because of their theoretical connection, and scientific issues were coded on white note cards as because of their scientific relevance. Both the color and the coding systems assist with the organization and placement of the data retrieved. Topics were categorized based on the grouping with which they were most relevant. In the situation that a topic was relevant to more than one category, it was double-coded will all relevant categories, but placed with the one to which it was most relevant. In the case that specific information fit into more than once category (i.e. Environmental History and Environmental Protocols) separate cards were made for each category. This occurred most often between the BA and DA categories, as the actors identified in these categories were relevant to both categories. However, even in this instance, the methods used here still allowed appropriate categorization of the data. Because of the candid titles of the categories, their content is self explanatory.

The categorizing process was at first overwhelming, but with continued work, it became almost mechanical. The EP, KP and EH categories

are an excellent illustration of the coding system at work. These categories were clear-cut and easily separated. For example, all environmental protocols reviewed (EP category) were international agreements (thus placed on pink cards) and could be listed and located easily in chronological order of enactment, publication by the author, or the date in which the data were recorded. This allowed for easy retrieval of the data when it came time for writing. While not the most intricate of coding systems, the one applied here was functional and efficient for this study.

During the course of this study, I was bombarded with new research sent to me from colleagues as well online news and media sources. The sheer volume of research pertaining to global warming itself and human contribution to it was difficult to harness. This study, while complete for its purpose, is far from exhaustive in its data. Because of continuous unearthing of evidence, it is impossible to include all related material. Therefore, trimming of the data was necessary.

For purposes of organization, I put forth a chronological timeline of the discovery and documentation of global warming in the literature review. I then continued this same chronological method in the findings section pertaining to the conventions and protocols. This method of organization, I

feel, allows the reader to ascertain the pattern of participation in environmental policies by the United States government.

Throughout the course of my research, I used first a convenience sample, and then followed the paper trail throughout. The paper trail—going from individual to individual and industry to industry—was the most difficult to narrow down. In order to channel the findings, I decided to focus on one main individual responsible for document alteration (Cooney) and a few of the scientists he was censoring (namely Hansen and Piltz). A subsequent search into the backgrounds of the individuals (namely government appointed officials) revealed possible motivations of the state actors. This allows the reader to grasp on a small scale what was occurring on a much larger scale behind the scenes.

As for the methodological coding system, using the codes and note cards proved to be very beneficial. It allowed for the organization and inclusion/exclusion of data as it was deemed necessary. Originally, I started with only five categories (EL-Environmental History, KP-Kyoto Protocol, EM-Economic Motivations, PM- Political Motivations and SC- State Crime theory). Through the research and discovery process, I developed the remaining five categories (EP- Environmental Protocols prior to the Kyoto

Protocol, EL- Environmental Law, SI- Scientific Issues, BA- Actions of the Bush Administration and DA- Document Alteration). These five were emergent categories discovered at various points during the research process.

The only category in which I did not draw much evidence from was that of environmental law. I was hoping to incorporate more evidence of legal sanctions imposed on countries failing to meet the requirements of protocols (such as fines) but found no place for it in this paper. In sum, this paper is small in its scope, but perilous in its message: the environment cannot tolerate another state crime, nor should the American people.

Qualitative Analysis: The Constant Comparison Method

The technique used here was adopted from a similar method first employed by Barney Glaser (1965). The constant comparative method, developed mid-study during research by Glaser on terminal hospital care, involves "(1) comparing incidents applicable to each category (2) integrating categories and their properties (3) delimiting the theory and (4) writing the theory" (Glaser 1965: 439). The first and second portions of this method are very beneficial to the research, as they help with the organization of topics into categories. The first step was addressed by acquiring and comparing the

data sources, and the subsequent dissection of them into categories. The second was achieved by intermeshing first the data of one category, and then linking that data with that of another category in order to create a fluid interpretation. As a theory (state crime) has already been secured as sufficient, there is no need for steps three and four. Thus, we turn to both Glaser and Strauss (1967) for the furthering of the constant comparison method, and other qualitative research techniques.

The authors suggest coding and sorting the data into categories, and then saturating the categories in an effort to recover as much as possible on the topic of interest (i.e. once all possible data has been collected, so that the data then becomes repetitive). This was achieved through the process described earlier of following the "paper trail" through the convenience sample. The goal is the elimination of selective observation on the part of the researcher, and the preservation of objectivity throughout the research process (Glaser and Strauss 1967). The point of this is to minimize the chance of misconstruing the research (Glaser and Strauss 1967).

Summarily, the research will show how and why the actors on the behalf of the United States (i.e. the Bush administration) went against international compromise and commitment in order to serve their own vested

interests (political and economical) in failing to ratify the Kyoto Protocol in a state crime of omission.

CHAPTER IV

INTERNATIONAL ENVIRONMENTAL LAW: PAST, PRESENT AND FUTURE

Introduction to Findings

Findings regarding the pattern of US involvement in both protocols prior to and then the Kyoto Protocol itself are discussed in this section. The data discussed here were taken from pink note cards delineating general environmental protocols, the Kyoto Protocol and environmental law. More specifically, data reported here are from the following categories: EP, KP and EL. Because of the categorical makeup (data pertaining to intergovernmental laws, policies and protocols) all data were recorded on pink note cards, thus easily grouped for chronological assessment. There were ten note cards recorded for environmental law (EL), fourteen for environmental protocols (EP) and twelve for the Kyoto Protocol (KP). The findings are as follows.

Introduction to International Environmental Law

International environmental law has been around for centuries, dating back even to the Middle Ages. While these laws have persisted over time, their focus has begun to shift dramatically over the past few decades. From

property disagreements, to the preservation of wildlife and now, most recently, the pollution of the atmosphere, international environmental law has adapted to the changing governmental climate. According to Nanda (1983) most international environmental law has abided by the Roman legal maxim sic 'utero tuo ut alienum non laedas,' which essentially means "use your property in such a manner as not to injure that of another" (Nanda 1983: 229). This statement seems an adequate description of the premise of international environmental law. Sands (2003) asserts that

"[i]nternational environmental law comprises those substantive, procedural and institutional rules of international law which have as their primary objective the protection of the environment" (15).

It is within the last two centuries that the United States has had interaction with international environmental law, and the intentions of the nation regarding the environment have changed, as have the laws.

Perhaps the first example of an international disagreement pertaining to the United States was a dispute over the preservation of fur seals between Britain and the United States in the late 1800's (Sands 2005). Because of an increasing interest in the global market for the seals skins, the population of

the animal was decreasing drastically. The United States fought a territorial battle in order to protect the seals, and ultimately lost in a high court to the British (Sands 2005). While international environmental law has certainly progressed since this example, this was the first demonstration by the United States that they were more interested in the environment over potential economic gain (Sands 2005). This was a tradition that would continue for the country until the turn of the 21st century.

Over the next century, the US participated in several environmental protection policies and was even considered a leader by many in the fight to preserve the ecosystem and everything in it (Sands 2003). Nearing the close of the twentieth century, the United States participated (on various levels) in every environmental protocol put forth following the Geneva Convention on Long-Range Transboundary Air Pollution of 1979 (UNECE 12 Feb 2008). From this Convention stemmed eight protocols that entered into force between 1984 and 2003, were put forth by UNEP over the course of five years and open to all states for participation (Sands 2003). The United States either

participated in, signed, accepted and/or ratified8 each of these protocols

(UNECE 12 Feb 2008) which were designed to "protect human health and the activities which modify or are likely to modify the ozone layer" (Sands 2003: 344).

Save for a few limited exceptions, no treaty prior to 1979 was developed for the main purpose of placing limits on the right of states to unregulated atmospheric emissions which led to environmental destruction (Sands 2003). Transboundary air pollution is the process in which pollutants from one state cross the boundary into another, thus allowing cross contamination and increased levels of pollution perpetrated by another state.

Under the principles of international law, no state has the right to use or permit the use of territory in such a manor as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence (Sands 2003: 318).

In an effort to exploit their own natural resources, states have the right to use said resources pursuant to their own environmental policies. However, this right ends where the rights of others begin, at the boundary line from one

⁸ There are four possible positions for a state to take on any given protocol or convention: ratification, acceptance, approval or accession. While ratification is the most powerful of these, all positions

state to the next. Article 10 of the 1987 Resolution on Transboundary Air Pollution delineates the following:

...states shall be under duty to take all appropriate and effective measures to ensure that their activities or those conducted within their jurisdiction or under their control cause no transboundary air pollution (Article 10 from the 1987 Resolution on Transboundary Air Pollution, as quoted by Sands 2003: 322).

It was under this premise that the following environmental protocols were established⁹.

Protocols of the Geneva Convention on Long-Range Transboundary Air Pollution (1979)

The first protocol from the Geneva Convention on Long-Range

Transboundary Air Pollution (which began on November 13 1979 in Geneva)

was the 1985 Sulphur Protocol. This protocol (which was developed in

Helsinki, Finland on July 8, 1985 with 22 states as parties) was adopted due to

evidence of destruction to natural resources, historical monuments and

human health across both Europe and North America (Sands 2003). The

damage was due to the acidification of the environment from sulphur dioxide

indicate agreement from the state with the document at hand.

An excellent example of transboundary air pollution is the 1931 Trail Smelter Case in which a Canadian smelter plant was polluting air that then traveled into US territory. The US was subsequently awarded \$350,000 in damages. See Sands (2003) for further information.

and nitrogen dioxide (among other pollutants) that stems from use of fossil fuels (Sands 2003). The objective of the protocol was to reduce annual sulphur emissions by 30 percent by 1993 (Sands 2003). In 1994, the Protocol for Further Reductions of Sulphur Emissions was introduced. This time, only 27 parties participated in the protocol, as opposed to 42 the first time around. And while the United States had not ratified either protocol, its leaders were still in support of the actions taken by the ratifying parties (UNECE 12 Feb 2008).

The next protocol of interest from the Geneva Convention of 1979 is the 1988 Nitrous Oxide (NO $_X$) Protocol 10 , concerning the emissions of nitrogen oxides and their transboundaries. This protocol (developed in Sofia, Bulgaria on October 31, 1988 with 28 states as parties) calls for the reduction of emissions of nitrogen oxides and encourages an "exchange of technology" among the participating parties (Sands 2003: 329). Within six months of the protocol entering into force, states must begin their negotiations to reduce emissions. The exchange of technology is an important element of this protocol, as it encouraged global participation instead of competition.

¹⁰ It should be noted that while the United States did not ratify the protocols pertaining to sulphur and nitrous oxide emissions, they had committed to the 1991 Canada-US Air Quality Agreement which already provided for regulation and reduction of both of these pollutants (Sands 2003).

Unfortunately, common goals do not always win out over the competitive edge, which will be demonstrated in the Kyoto Protocol.

In 1991, the Volatile Organic Compounds Protocol was developed on November 18 in Geneva, Switzerland with 21 states as parties. This protocol allotted for three different ways the states could reach the goal of reducing emissions (which were mostly due to the incomplete combustion of fossil fuels in motor vehicles) by 30 percent, which was to be specified when the state signed the protocol (Sands 2003). Surprisingly, even with the flexible schedule and methods for reaching reduction rates, only 23 parties ratified this protocol (UNECE 12 Feb 2008).

The 1998 Aarhus Protocol on Heavy Metals was the next protocol participated in by the United States. This protocol targeted three "particularly harmful metals—lead, cadmium and mercury" (Sands 2003: 333) and was developed in Aarhus on June 24, 1998. The protocol never entered force as it failed to meet its requirements for ratification, only achieving 36 signatories and 13 ratifications (Sands 2003). Parties of this protocol were required to develop emissions standards based on the best technologies provided within the protocol (Sands 2003). Concurrent to the Protocol on Heavy Metals was the 1998 Aarhus Protocol on Persistent Organic Pollutants. With the intention

to eradicate "discharges, emission and losses of POPs (persistent organic pollutants) to the atmosphere" (Sands 2003: 334) the protocol also dealt with the disposal of wastes and hazardous wastes (Sands 2003).

The last protocol from the Geneva Convention (1979) is that of the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication¹¹ and Ground-Level Ozone, which was held in Gothenburg, Sweden on November 30, 1999. It also has never entered into force as it did not meet requirements, with only 31 signatories and four ratifications. In layman's terms, the document seeks to reduce the anthropogenic emissions of four pollutants: sulphur, nitrous oxide, ammonia and volatile organic compounds (VOCs), all of which can have detrimental effects on "human health, the natural ecosystem, materials and crops due to acidification, eutrophication, or ground level ozone" (Sands 2003: 335).

The Montreal Protocol

Following the 1979 Geneva Conventions was the 1985 Vienna

Convention, out of which came the 1987 Montreal Protocol, and of which 184

¹¹ Eutrophication is the process whereby lakes, streams and other bodies of water receive an excess of nutrients, stimulating excessive plant and algae growth which can subsequently lead to the death of organisms.

states were parties (Sands 2003). This protocol is the only one to develop out of the Vienna Convention to date, and was deemed

[a] landmark international environmental agreement, providing a precedent for new regulatory techniques and institutional arrangements, and the adoption and implementation of innovative financial mechanisms. With hindsight, the Montreal Protocol appears to be a relatively straightforward instrument, and the fact that its approach has subsequently been relied upon extensively in other international environmental negotiations belies the controversy and complexity surrounding it at the time of its negotiations (Sands 2003: 345-6).

According to Article 2(1), the objective of the Vienna Convention was to:

protect human health and the environment against adverse effects resulting or likely to result from human activities which modify or are likely to modify the ozone layer (Article 2(1), as quoted in Sands 2003: 344).

The Montreal Protocol establishes legal obligations that apply limitations and reductions to the consumption and production of specific ozone-depleting substances (Sands 2003). Article 4(2)a of the Montreal Protocol states that:

Each [Annex I Party¹²] shall adopt national policies and take corresponding measure on the mitigation of climate change, by

Annex I parties are deemed to be "developed" countries; the most recent list includes: Australia, Austria, Belarus, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, European Community, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russian Federation, Slovakia, Slovenia, Sweden, Switzerland, Turkey, Ukraine, United Kingdom of Great Britain and Northern Ireland and the United States (UNFCCCa 14 Apr 2008).

limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. These policies and measures will demonstrate that developed countries are taking the lead in modifying longerterm trends in anthropogenic emission consistent with the objective of this Convention, recognizing that the return by the end of the present decade to earlier levels of anthropogenic emissions of carbon dioxide and other greenhouse gases are not controlled by the Montreal Protocol would contribute to such modification; and taking into account the differences in these parties' starting points and approaches, and sustainable economic growth, available technologies and other individual circumstances, as well as the need for equitable and appropriate contributions by each of these parties to the global effort regarding that objective. These parties may implement such policies contributing to the achievement of the Convention.... (Article 4(2) as quoted in Sands 2003: 364).

As previously stated, the Montreal Protocol sought to limit and reduce the levels of consumption and production of ozone depleting substances. While this premise is nothing new to the community of environmental law, the

"negotiation and conclusion [of the protocol]....were prompted by new scientific evidence indicating that emissions of certain substances were significantly depleting and modifying the ozone layer that would have potential climatic effects" (Sands 2003: 346).

The Montreal Protocol is significant in that it is a precursor to the Kyoto Protocol. It was within the Montreal Protocol that developmental needs for developing countries were first recognized and accounted for (Sands 2003).

Special provisions were made for China and India, who were "otherwise unwilling to participate due to economic and developmental implications of the protocol" (Sands 2003: 354). In response, the protocol allowed longer grace periods in which to adjust to the new requirements and regulations of the protocol for the developing countries. Along with special provisions for developing countries were provisions set aside for developed countries. The United States, along with eleven other countries, were permitted to reduce their emissions to 35 percent of their 1991 levels, as opposed to 30 percent as originally required by the protocol (US Department of State 12 Feb 2008). This was the first of many special requirements formatted to fit the needs of the United States. The Montreal Protocol was also one of the first to recognize the environmental severity of current emissions rates, and perhaps this is what encouraged the compromises; participation at any level could only be beneficial to the final outcome.

The Kyoto Protocol

The 1992 Climate Change Convention (CCC) was the birthplace of the Kyoto Protocol, which (developed in Kyoto, Japan) was adopted and opened up for signing on December 11, 1997 (UNFCCC). Ambassador Raul Estrada-

Oyuela, chair of the Committee of the Whole which was established to facilitate the text of the protocol, stated that "[t]his agreement will have a real impact on the problem of greenhouse gas emissions. Today should be remembered as the Day of the Atmosphere" (UNEP 1997). Both the Convention and the development of the protocol were no small feat; in fact, they marked a significant moment in the history of international environmental law.

The [CCC] was the first international environmental agreement to be negotiated by virtually the whole of the international community with 143 states participating in the final session of the INC/UNFCCC, and is potentially unique in the scope of its direct and indirect consequences: it is difficult to identify any type of human activity which will, over time, fall outside of its scope (Sands 2003: 359-60).

This is a pertinent point made by Sands; the regulations that are imposed by the Convention and the protocol will govern emissions of participating countries on a continual basis. While this may seem drastic, the Convention and the protocol were developed so as to include as many nations as possible, thus reducing the economic burden for everyone (Sands 2003). This considered, the protocol took a comprehensive approach to

...implementing environmental considerations into economic

development and defined, in legal terms, rights and obligations of different members of the international community in the quest for 'sustainable development' and the protection of the global climate (Sands 2003: 360).

Considering the economic issues with the protocol, its major achievement would be the attainment of commitment of Annex I parties to meet their emissions reductions targets on a preapproved timetable (Sands 2003).

The ultimate goal of the climate treaty to which the Kyoto protocol is attached is stabilizing atmospheric concentrations of greenhouse gases at levels that will avoid "danger" to economies and ecosystems (Jacoby, Prinn and Schmalensee, 1998, p.59).

In order to enter into effect, the protocol required the ratification, acceptance, approval or accession¹³ of at least 55 of the 143 states from the Convention; this must include states that are responsible for at least 55 percent of carbon dioxide emissions from Annex I parties in 1990 (Sands 2003).

The United States is the largest producer of poisonous emissions in the atmosphere, contributing over 30 percent of global warming; Europe is second (27.7 percent) and Russia third (13.7 percent) (Gore 2006). The remaining populations (Canada, Japan, Southeast Asia, India, China, the

¹³ The signing of a protocol is an indication of general support for its objectives, and of an intention to later become a party to the Protocol; however it is not legally binding to the state. A state must deposit an "instrument of ratification, accession, acceptance or approval with the Depositary—the Secretary General of the United Nations"—that will then legally bind that state to the provisions provided by the Protocol ninety days after the instrument was deposited, provide that protocol has already entered into force at that time (Convention on Biological Diversity 2008).

Middle East, Australia, Africa, Central America and South America) combined do not even equal the United States in emissions (Gore 2006).

As for the failure of the United States to join the Kyoto Protocol, McCright and Dunlap (2003) find several places to lay blame.

...[O]n July 25, 1997, the United States Senate unanimously (95-0) passed Senate Resolution 98 (also referred to as the Hagel-Byrd Resolution) which notified the Clinton Administration that the Senate would not ratify any treaty that would: (a) impose mandatory greenhouse gas emission reductions for the United States without also imposing such reductions for developing nations, or (b) result in serious harm to our economy. Thus, at the end of the Clinton Administration, the Kyoto Protocol lay dormant with little likelihood of being ratified by the Senate. Then, in March 2001, President George W. Bush renounced any plans to establish carbon dioxide emissions reductions for U.S. power plants and subsequently announced that the U.S. had no intention of abiding by the Kyoto Protocol—an act which provoked international dismay and hostility (McCright and Dunlap, 2003: 349).

Because the United States chose not to ratify the protocol, the participation of other major emitters (such as the European Community, Russia and Japan) became imperative to the protocol. It was the ratification from these nations that finally allowed for the protocol to enter into force on February 16, 2005 (UNFCCCa). These actions demonstrated that the global community was prepared and ready to support the Kyoto Protocol, even without past environmental regulation leader, the United States.

Misconceptions of the Kyoto Protocol

A major misconception of the Kyoto Protocol is that it was designed to implement new environmental regulations and commitments; in actuality, its purpose is to reiterate existing commitments that were developed during the CCC, namely Articles 4.1 and 4.2 (Sands 2003; UNFCCC; Davies 1998). The general commitments of these articles respectively:

include the development of national inventories of anthropogenic emissions by sources and removals by sinks¹⁴ of all greenhouse gases not controlled by the Montreal Protocol and the formulation and implementation of national and, where appropriate, regional programs containing measures to mitigate climate change by addressing emissions and removals of these gases and by facilitation of adequate adaptation to climate change (Articles 4(1) and 4(2) of the protocol as described by Sands 2003: 362).

The protocol was developed at a meeting of the parties in Berlin following the CCC, and thus named 'The Berlin Mandate' denotes the underlying purpose of the protocol:

[a]im, as to the priority in the process of strengthening the commitments in Article 4.2.(a) and (b) of the Convention, for developed country/other Parties included in Annex I, both to elaborate policies and measures, as well as to set quantified limitation and reduction objectives within specified timeframes, such as 2005, 2010, and 2020, for their anthropogenic emissions

¹⁴ Sinks, also called carbon sinks, are the opposite of a carbon dioxide source; it is instead an absorber of carbon dioxide, such as forests or wetlands (Manguiat, Verheyen, Mackensen and Scholz 2005).

by sources and removal by sinks of greenhouse gases not controlled by the Montreal Protocol (Report from the Berlin Mandate as quoted by Sands 2003: 369).

The protocol specifically looked at policies pertaining to energy, transport, industry, agriculture, forestry, waste management, economic instruments, institutions and mechanisms (Sands 2003).

Emissions Trading

Perhaps the most ground-breaking aspect of the Kyoto Protocol is the development of emissions trading. 'Emissions trading' is the idea that if one country has kept emissions below their allotted amount, they may sell remaining emissions credits to another country that may have surpassed theirs. The idea of buying and selling emissions have led critics to remark that emissions are the new 'hot commodity' as they can be traded and tracked like any other article of commerce. This has led to the development of the 'carbon market,' as carbon dioxide is the primary culprit of fossil fuel emissions (UNFCCCb).

Though innovative, emissions trading is also a highly controversial aspect of the protocol (Davies 1998; Sands 2003). "The inclusion of emissions trading in the Protocol was strongly supported by the United States, which,"

asserts Sands (2003), "has domestic experience with similar schemes" (373). The United States argued that emissions trading would be a cost-effective method to assist nations to meet their emissions goals. Many other nations, however, strongly opposed this method (such as China and other developing nations) because it would present the disadvantage of trying to develop a surplus to trade emissions while simultaneously developing their industrial base. In a compromise, emissions trading was allowed on the basis that they were used only as a supplemental means to reach emissions goals, and were not the sole method used by any country (Davies 1998; Sands 2003).

Joint Implementation and ERUs

Another new addition in the Kyoto Protocol was the inclusion of joint implementation (JI). Article 6(1) regarding joint implementation provides that an Annex I party may trade to or from any other Annex I party

emission reduction credits resulting from projects aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy (Article 6(1) as quoted by Sands 2003: 373).

JI was designed as an economic incentive, and even authorized private legal entities to participate in the transfer of emission reduction credits (ERUs). As with emissions trading, any JI action must result in the reduction of emissions in one way or another, and must only be a supplementary method of achieving this (Sands 2003).

Clean Development Mechanism and Sinks

Another method to obtain ERU credits is by way of the Clean Development Mechanism (CDM). This encourages Annex I countries to participate and develop projects in Non-Annex I countries to assist in the reductions of emissions in developing countries. Annex I parties can obtain emissions credits to help with the attainment of their emissions goals (Davies 1998; Sands 2003). A portion of the proceeds from these projects is to be used to assist the developing country with the financial burden of adaptation.

The inclusion of sinks into the protocol was another controversial issue. Once again, the United States was a huge proponent of its inclusion, as it would allow for activities that "resulted in carbon sequestration" (Sands 2003: 374) such as afforestation, reafforestation, and land-use changes. These activities would then count towards the commitments of the nation that

participated in them, offering economic relief—something specifically sought after by the United States (Sands 2003). Opposite the United States, the European Community was strongly opposed to the incorporation of emissions credits in exchange for sinks, as it was seen as another way out of an actual reductions commitment (Sands 2003).

Opposition to the Kyoto Protocol

Foreign Opposition

Developing countries were first to vocalize opposition to the protocol. Regulations on their emissions would drastically slow their economic and industrial growth, a debate that has been at the forefront of the Kyoto Protocol since its birth (Davies 1998). The argument is that developed countries faced no restrictions on their emissions during their industrial expansion periods. Placing restrictions on developing countries now would not allow them these same opportunities. In this regard, these countries made it known that they would not participate in the protocol without the participation of the major Annex I parties. Upon the announcement from the US that it would not ratify the protocol, many thought it was the lid on the coffin for Kyoto. The ratifications from Japan, Russia and the UK helped to tip

the emissions scale that was disproportionately weighted by the United States (Bee 2007; Kluger 2006; Sands 2003; and Sands 2005). The Preamble to the CCC outlines this issue:

...the largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs (the CCC as quoted in Davies 1998: 450).

The countries most concerned with these developmental issues were India and China (Sands 2003), both of which have now accepted and approved the protocol respectively (UNFCCCb). Brazil and Malaysia had concerns about the deforestation regulations imposed by the protocol, and both countries since ratified the protocol in 2005 (UNFCCCb).

Aside from these countries, the only other major opposition to the Kyoto Protocol (excluding the United States) came from major oil producing countries, like Saudi Arabia. Countries on this bandwagon had high hopes that all negotiations surrounding the protocol would fail, and that it would never reach the 55 nations needed for ratification (Sands 2003). Restrictions enforced by the protocol would also mean significant economic concerns for

these countries. Saudi Arabia never signed the protocol, but has since accepted it in 2005 (UNFCCCb).

United States Opposition

Although the US had signed the protocol by the hand of President Clinton in March of 1998, commitment to the protocol would not go any further. Although the signing was meant to be an indication of intent to ratify, the change in presidential administration "altered the US position regarding the protocol" as the new administration took no steps toward the ratification process in order to implement the protocol (US Rejection 2001: 648). The United States and Kazakhstan were the only two nations to sign and then not ratify the protocol (Sands 2003; UNFCCCb).

The Bush administration maintained that they did not want to ratify the protocol because it fostered unequal regulations for developing countries, and it had the potential to harm the US economy (Sands 2005). Varying US government officials at the ninth Annual Energy Efficiency Forum (June 10 1998) stated that threats from the Kyoto Protocol to the economy came if the way of: drastic energy price increases, job losses in manufacturing industries, a decline in the standard of living, and a one-third increase in gas prices by

2010 (Schuler Jr. 1998). Ironically enough, gas prices have skyrocketed in the US even without the ratification of the Kyoto Protocol. In 1998, the average price of a gallon of gas was roughly \$1.20 (EIA 2008). If the predictions made by those who opposed the protocol had come true, the average price would now still be less than \$1.60/gallon. However, gas is already more than twice that amount. Supporters of the Kyoto Protocol at the Energy Efficiency Forum argued that those opposed to the Kyoto Protocol were "the same Chicken Little advocates who [had] made the same arguments for every environmental effort that [has been] made, going back to the initial Clean Air Act" (Schuler Jr. 1998). These advocates believed that the economic figures put forth by opposition widely overestimated the impacts of Kyoto, and failed to consider the economic relief from the inclusion of emissions trading and sinks into the protocol (Schuler Jr. 1998).

During the negotiations of the Berlin Mandate, the chief US negotiator stated to the conference:

...although the United States does not intend to ratify the agreement, we have not sought to stop others from moving ahead, so long as legitimate U.S. interests were protected...At the same time, the United States must emphasize that our not blocking consensus on the adoption of these Kyoto Protocol rules does not change our view that the Protocol is not sound

policy. ...given the...exclusion of developing countries from its emissions limitation requirements. The decisions made today with respect to the Protocol, in addition, reinforce our conclusion that the treaty is not workable for the United States...[additional elements] which we do not support include, for example: an institution to assess compliance with emissions targets that is dominated by developing country members without targets, more favorable treatment for Parties operating within a regional economic integration organization relative to other Parties and rules that purport to change treaty commitments through decisions of the Parties rather than through the proper amendment procedure.

The United States came to this Conference to engage with other governments on the pressing global climate change problem. We have benefited from the opportunities to explain the Bush Administration's approach, to listen to the views of others, and to better understand different perspectives. ..We look forward to continuing productive discussions...The Bush Administration takes the issue of climate change very seriously and we will not abdicate our responsibilities (Dobriansky 2005; Environmental Science and Health Affairs 2001: 647).

This action taken by the US came off as self-serving to not only United States citizens, but also to the global community, and severed many political ties to the United States (Sands 2005). In an even bolder move, the United States asserted the belief that the development of a country is "not a right" but instead a goal of every nation (Sands 2003: 265-66). Obviously, the United States government had goals of its own. International environmental agreements offer a backdrop to what was occurring globally concerning the

environment. The next chapter will explore the happenings within the United States during the Bush administration.

CHAPTER V

THE ACHILLES HEEL

Introduction to Findings

Findings pertaining to the economic and political motivations of the Bush administration are delineated here. Issues of document alteration and suppression, as well as the censorship of scientists are all discussed in this section. The data discussed here were taken from both blue and white note cards, which includes the following: economic issues and motivations, political motivations, scientific issues, actions of the Bush administration, and document alteration. More specifically, data reported here are from the following categories: EM, PM, BA, DA and SI. Because of the categorical makeup (data pertaining to US governmental actions and policies, and addition scientific issues) and all data were recorded on blue and white note cards. There were eight note cards recorded for economic motivations (EM); ten note cards for political motivations (PM); seventeen for document alteration (DA), sixteen for the Bush administration (BA), and six for scientific issues (SI). The findings are as follows.

How the Bush Administration Neutralized their Biggest Opponent: The Environment

It was the Republican party that first began using the phrase 'climate change' instead of 'global warming' when addressing current environmental concerns. They felt it was less threatening, and less likely to alert the public of looming environmental issues (Kennedy Jr. 2004) which discouraged any public opposition of their policies and actions. For a while now, the environment has been termed the 'Achilles heel' of the Republican party (Kennedy Jr. 2004), so it's no surprise they would find any issue pertaining to it to be threatening. The inauguration of President George W. Bush set in motion the start of what was and still is an eight year campaign of broken environmental promises. The Kyoto Protocol was at the forefront of this operation.

Before Bush even took office, the energy industry offered support to the 2000 election campaign by contributing more than \$48.3 million to George W. Bush and the Republican party. Another \$58 million has been donated since Bush's inauguration in January of 2001 (Kennedy Jr. 2004). After he entered the White House, Bush stacked his cabinet against the environment. Thirty-one of 48 appointees have ties to the energy industry (Kennedy Jr.

2004). To be more specific, "four cabinet secretaries, the six most powerful White House officials, and more than 20 high-level appointees are alumni of the [energy] industry and its allies" (Kennedy Jr. 2004: 96). The cabinet also has more past corporate CEO's than any other cabinet in history (Kennedy Jr. 2004). Condoleezza Rice, an integral part of the Bush administration, even had a Chevron oil tanker named after her because of her contributions to the company (Kennedy Jr. 2004). Obviously, the appointments were in the interests of the administration and the industries, not the environment.

Almost all the top positions at the agencies that protect our environment and oversee our resources have been filled by former lobbyists for the biggest polluters in the very businesses that these ministries oversee (Kennedy Jr. 2004: 5).

These appointments made by Bush allow the public to see where his political (and environmental) alliances truly lie.

While campaigning, President Bush made a speech in Michigan describing his "comprehensive energy policy" (US Rejection 2001: 648).

As we promote electricity and renewable energy, we will work to make our air cleaner. With the help of Congress, environmental groups and industry, we will require all power plants to meet clean air standards in order to reduce emissions of sulfur dioxide, nitrogen oxide, mercury and carbon dioxide within a reasonable period of time. And we will provide market-based incentives, such as emissions trading, to help

industry achieve the required reductions (Murphy 2002: 176).

This speech led many to believe that Bush was on board with the Kyoto Protocol, and many took it as a pledge that he would follow the protocols' objectives (US Rejection 2001). This, however, was not the case. When Bush took office, he stated that the Kyoto Protocol was "fatally flawed in fundamental ways," and his administration refused to support it (Singer and Avery 2007: 222). This was an immediate turnaround from what was anticipated from the administration. President Bush has since maintained his refusal to regulate CO₂ emissions. He recently stated

I told the world I thought the Kyoto deal was a lousy deal for America. It meant that we had to cut emissions below 1990 levels which would have meant I would have presided over massive lay offs and economic destruction (President George W. Bush, as quoted in BBC News 2007).

Ironically enough, the economy has not fared well under the Bush administration as it is, environmental regulation or not. An abbreviated history of Bush's environmental past provides answers to his questionable decisions regarding environmental policy.

During Bush's term as governor in Texas, the state "ranked number one in both air and water pollution" (Kennedy Jr. 2004: 5). In his first term of presidency, Bush shielded coal-burning power plants from prosecution when

environmental policies), and then went even further by excusing them from compliance with the Act (Kennedy Jr. 2004). Bush also advocates a "cleanup schedule written by polluters for polluters" that will take several generations to complete (Kennedy Jr. 2004: 7). A track record like this (from both Bush and his cabinet) is sure to produce a far from picture perfect finish.

Many have stated that an imperative role of the government, in any environmental plan, is to both promote new technologies and provide incentives for actions that lead to the reduction of emissions (White 1996; Sands 2003). The Bush administration has been less than inspirational.

Many environmentalists declared the Bush administration hopeless from the start, and while that may have been premature, it's undeniable that the White House's environmental record—from abandonment of Kyoto to the Presidents' broken campaign pledge to control carbon output, to the relaxation of emissions standards—has been dismal (Kluger 2006: 7).

Perhaps the environmentalists were the only ones paying attention from the start when Bush halted all environmental regulations on the very day he was inaugurated (Kennedy Jr. 2004). These actions from the Bush administration came at a time when a majority of the American public were in favor of more

strict environmental policies. Since then, support of environmental restrictions has only increased, while environmental protection has stood still, or decreased in some instances (Sands 2003). A recent poll conducted by Time, ABC News and Stanford University concluded that 87 percent of the general public was in favor of the government requiring, or at least encouraging, a drastic lowering in power plant emissions (Kluger 2006). Eighty-five percent stated that there should be greater pressure to increase fuel efficiency in motor vehicles (Kluger 2006). In spite of this, Bush appointed Energy Secretary Spencer Abraham (a former Michigan Senator who received \$700,000 from the automotive industry during his one-year term in office) whose specific desire was to do-away-with automotive fuel efficiency initiatives (Kennedy Jr. 2004).

Despite the wishes of environmental activists and even the general public, environmental concerns were not on the minds of those wandering the halls of the White House. Instead,

[o]ther, more immediate, concerns typically occupy the agenda—securing economic growth, protecting the energy supplies that fuel us and fighting a global war against terrorism (Bee 2007: 17).

While certainly these concerns are warranted in their own right, they do not justify ignorance towards remaining issues. However it seemed that the Bush administration was not willing to take on any endeavor that would not prove profitable to them. Indeed, "[o]ver the short term, laws adopted to protect the environment can impose potentially significant economic costs" (Sands 2003: 8). But in the long run, dealing with these issues now (or ideally, ten years ago) will help to diminish the potential costs if no action is taken. Though economic affairs are a common roadblock to environmental agreements, "[t]he progress of international environmental law reflects the close relationship between environmental protection and economic development" (Sands 2003: 8). In this way, lawmakers are careful to consider the economic implications of any new international environmental law. Sands (2003) argues that "...developed countries will be well placed to benefit from the adoption of stringent environmental standards including the advantages gained from the sale of environmentally sound technology..." to developing countries (8). Considering this, one might think the Bush administration would be jumping onto the bandwagon of environmental technology. But the rewards (both environmental and economic) will be not be recognized for several years, and

the Bush administration seems more focused on what is profitable today, instead of what will be beneficial in the future.

The Bush Approach

When George W. Bush first assumed presidency, he asked the UNFCCC for a delay in the negotiations concerning the Kyoto Protocol so that the United States could re-examine its position. After he announced that there would be no ratification on the part of the US (in March of 2001), he soon made public his plans for "voluntary actions, increased scientific research and market mechanisms" in June of 2001 (Bee 2007: 23). On February 14, 2002, President Bush declared his new approach to reducing greenhouse gases by ten percent over ten years, from 2002 to 2012 (Bee 2007). This new approach involved intensity targets instead of the absolute emissions targets¹⁵ specified in the Kyoto Protocol. This goal, Bush announced, was to be met entirely by voluntary action, not regulation (Bee 2007). If it was found that the plan was not "on track" in 2012, the US would then take additional measures and include a "broad market program..." only if "...sound science justifi[ed]

¹⁵ The United States ranks fiftieth in the world for carbon intensity emissions, which are essentially the physical quantity of emissions divided by GDP. Obviously, this level rises and falls, and reducing emissions based off of a projected GDP can sometimes actually lead to an increase in emissions. As for *absolute* carbon emissions, the US ranks first (Bee 2007).

further policy action" (Bee 2007: 24). Naturally, the Bush administration would be well out of office by 2012 and would have no further obligations to this project.

In his first term, President Bush not only failed to participate in environmental programs on the international level, but even proposed a budget that included "double digit cuts in research at the EPA, the U.S. Geological Survey, the Department of Agriculture, and the Energy Department's Office of Science, among others" in his own nation (Kennedy 2004: 77). These cuts included the following: \$270 million from EPA programs designed to clean up lakes, rivers and streams nationally; \$31 million from programs designed to specifically deal with air pollution programs; the entire elimination of a \$10 million program to restore air quality in the most polluted communities in California; \$5 million in EPA programs to restore the San Francisco Bay; and the elimination of all funding that was supposed to be used to track global warming pollution (Environmental News Service 2008).

Alongside these cuts, Bush was praising alternative fuel sources while still giving "rhetorical nods to America's oil addiction" (Kluger 2006: 7). In 2001, the Bush administration removed Dr. Robert Watson (a NASA atmospheric chemist) from his position as head of the IPCC (Kennedy Jr.

2004). Watson, who was disliked (to put it kindly) by the oil and coal industries, was removed at the behest of ExxonMobil, and replaced by a mediocre scientist from New Delhi, India, "who would be generally unavailable for congressional hearings" and subsequently unable to explain, uphold and defend environmental policies (Kennedy Jr. 2004: 88). These actions may be based on the premise that President Bush still believes that global warming is a natural phenomenon uninfluenced by human activity. Or perhaps it is his concern for economics over the environment.

...Mr. Bush has clearly been unwilling to commit the United States to the cost of building...a new energy system...Also, [he] has been equally unwilling to reject man-made global warming as a myth, when many voters believed it was a real danger to the country and the planet (Singer and Avery 2007: 223).

All things considered, the Bush administration does not appear to be placing the environment as a priority. In fact, environmental concerns appear to take a back seat to most everything. One could say that the administration has successfully beaten its biggest enemy, and conquered its Achilles' heel.

Document Alteration and Censorship

It can be expected that any document generated by the government will undergo a review process that may include alterations and/or editing before the document is released to the press and public. However, one should be able to trust that the integrity of the document would be maintained and protected throughout this process, or at the very least, its general message. In this instance, however, it "appears climate science is edited with a heavy hand" (Rewriting the Science 2006).

Since the Bush administration has taken office, accusations of severe document alteration have been circling the White House. Environmentalists and politicians alike have been outraged by the constant censorship of climate research and findings.

...[O]f all the debates in the scientific arena, however, there is none in which the White House has cooked the books more than that of global warming (Kennedy 2004: 83).

Kennedy also asserts that since 2001, the White House has "altered, suppressed or attempted to discredit over a dozen major reports on the subject" (Kennedy 2004: 83). Included in these reports are peer-reviewed documents from the IPCC that were originally commissioned by the former President Bush in 1993. The document failed to provide satisfactory results to

the Bush administration, as it confirmed that industrial emissions were responsible for global warming (Kennedy 2004). The attempts of this administration to twist scientific fact in a mechanism of trickery in an effort to consolidate its power and justify its economic agenda have been likened to the Inquisition (Kennedy 2004). In an interview in 2003, Roger G. Kennedy, former director of the National Park Service, stated that:

...this administration routinely mismanages scientific information through distortion and omission whenever scientific truth is inconvenient to its industrial allies. It's hard to decide what is more demoralizing about the administration's politicization of the scientific process—its disdain for professional scientists working for out government or its willingness to deceive the American public (Kennedy 2004: 87).

This "mismanagement" is so routine that when the EPA released its annual report on air pollution in September of 2002, it was missing its usual update on global warming. The update was "missing" because it had been intentionally deleted by Bush appointees serving in the White House (Kennedy 2004). In June of 2003, the State of the Environment report (which had been commissioned by the EPA in 2001) was released only after information pertaining to global warming had been expunged by individuals in the Bush administration (Kennedy 2004). In place of the missing data was a propaganda article developed and funded by the American Petroleum

Institute (Kennedy 2004), which only further demonstrates the inside ties to the energy, or more specific, the oil industry.

In fact, dozens of federal agencies report on climate science, but these reports are heavily edited at the White House before being sent on to Congress, and finally the public (Rewriting the Science 2006). In 2003, the EPA successfully leaked a document that had been censored and withheld by the higher-ups of the agency. The document was a Senate plan that could reduce the main pollutants responsible for global warming for a relatively low cost (Kennedy Jr. 2004). When this document was released, President Bush retaliated by enacting at 10-year, \$100 million research endeavor in an effort to prove that global warming is a natural (not man-made) process (Kennedy Jr. 2004). It seems Bush was committed to spending any amount necessary to disprove what scientists across the world had already found to be true.

An anonymous senior EPA scientist (who hides his identity due to the fact that he is forbidden to speak to reporters without special clearance) said that the constant alteration of documents by Bush appointees had "damaged morale," adding that many scientists are becoming discouraged and frustrated (Revkin 2005).

Silencing of Scientists

Perhaps the most well known of these scientists is James Hansen, director of the NASA Goddard Institute for Space Studies (GISS), specializing in climate research. Hansen is one of the most well known researchers on climatology this century. When asked about the reliability of Hansen's work, Ralph Cicerone (the President of the National Academy of Sciences, the nation's leading science institute) said the following:

I can't think of anybody who I would say is better than Hansen. You might argue that there are two or three others as good, but nobody better (Rewriting the Science 2006).

Hansen has been in the media over the past few years because of accusations aimed at the Bush administration. He has, on several occasions, pointed the finger at the White House for censoring his reports and his interviews with the press (Eilperin 2005; Revkin 2005; Revkin 2006; Rewriting the Science 2006). In an interview with 60 Minutes, Hansen reiterated his feelings.

I object to the fact that I'm not able to freely communicate via the media. National Public Radio (NPR) wanted to interview me and they were told they would need to interview someone at NASA headquarters...I think we should be able to communicate the science (Rewriting the Science 2006).

When 60 Minutes asked Hansen if he believes the administration is censoring what he can say to the public, he said he did.

Or they're censoring whether or not I can say it. I mean, I say what I believe if I'm allowed¹⁶ to say it (Rewriting the Science 2006).

It seems many other scientists feel the same way Hansen does:

Lawmakers received survey results of federal scientists that showed 46 percent felt pressure to eliminate the words "climate change," "global warming" or similar terms from communications about their work. The scientists also reported 435 instances of political interference in their work over the past five years (MSNBC 2007).

Obviously, censorship was reaching new levels in the field of environmental research and protection.

In 2004, the GISS received an email regarding a "new review process" that was to be implemented immediately. The email explained that the White House would now be "reviewing all climate related press releases" (Rewriting the Science 2006). These new policies likely stemmed from actions taken in 2003 by John Graham (the Administrator of the Office of Information and Regulatory Affairs [OIRA], Office of Management and Budget) who orchestrated an overhaul in policy and procedure in the generation and release of scientific information (Kennedy Jr. 2004). Instead of employing outside experts to 'peer review' proposed plans and regulations—as had been done in the past—Graham advocated a strictly internal review process

¹⁶ Italics added.

centralized in his office (Kennedy Jr. 2004). This would allow for the findings of scientific uncertainty, the shielding industries from regulation, and the freeing of their polluting possibilities. In opposition to Graham's new policies are: the National Academy of Scientists, the American Association for the Advancement of Science, the Federation of American Scientists, and the Association of American Medical Colleges (Kennedy Jr. 2004).

In response to this, along with the action of altering of documents, Hansen was appalled:

[i]n my more than three decades in the government I've never witnessed such restrictions on the ability of scientists to communicate with the public (Rewriting the Science 2006).

Government officials and cabinet members reacting to statements by Hansen have only denied them, and continue to defend the integrity of their offices (Eilperin 2005). They also assert that Hansen is not one to be making policy judgments, especially ones that would involve the economy (Eilperin 2005). While that assessment may be fair, it certainly does not absolve the government of making decisions regarding the environment when necessary. According to Kluger (2006), Bush appointees are trying to "deny the science" (8). In fact, it seems many environmental groups are so discouraged by White

House actions that they have resolved to "wait out this administration and hope for something better in 2009" (Kluger 2006: 8).

Rick Piltz, former senior associate for the U.S. Climate Change Science Program (CCSP), also spoke out against the censorship of climate change to the public, stating that his documents were edited to appear less threatening (Rewriting the Science 2006).

Each administration has a policy position on climate change, but I have not seen a situation like the one that has developed under this administration during the past four years, in which politicization by the White House has fed back directly into the science program in such a way as to undermine the credibility and integrity of the program (Rick Piltz, as quoted in Revkin 2005).

Piltz eventually resigned from his position in March of 2005 after 14 years of service for the government. In his resignation letter, Piltz stated the following as a major reason for his resignation:

I believe the overarching problem is that the administration—acting primarily through key positions in the Executive Office of the President, and to some extent the State Department, and aligning itself with some of its key allies—does not want and has acted to impede forthright communication of the state of climate science and its implications for society. I know I am not alone in believing that the administration's political and policy commitments have had a deleterious effect on some essential aspects of the USGCRP/CCSP (Piltz 2005: 1).

Philip Cooney, then Chief of Staff at the White House Council on Environmental Quality (CEQ), is accused of altering documents put forth by Piltz. Cooney made several alterations to Piltz's reports in order to make them less threatening (Rewriting the Science 2006). For example, in a report by the CCSP, Cooney altered the sentence "the earth is undergoing rapid change" to read "the earth may be undergoing rapid change" (Rewriting the Science 2006), thus changing scientific certainty to scientific speculation. The sentence "energy production contributes to warming" was simply taken out of the document (Rewriting the Science 2006). The blatant removal of information pertaining to "energy production" may indicate a direct link to the energy industry. When asked about his opinion of the alterations, Piltz stated that

[Cooney] was obviously passing it through a political screen. He would put in the words "potential" or "may weaken" or delete text that had to do with the likely consequence of climate change, and pump up uncertainty language throughout (Rewriting the Science 2006).

In addition to all this, any statements in the document regarding human health were simply cut out.

Cooney, before being appointed by President Bush, was a lawyer and lobbyist for the American Petroleum Institute (Rewriting the Science 2006).

Many disagreed with Bush's decision to appoint Cooney for several reasons, the most obvious being the fact that he has no scientific background. In fact, Cooney only has a bachelor's degree in economics, which seemed far from adequate to many in the field (Revkin 2005). Another issue with Cooney is that, for several years, he lobbied against environmental policies and restrictions on behalf of the American Petroleum Institute. Many argued that this clearly presented a conflict of interest (Revkin 2005).

Cooney resigned in 2005 after it became public that he had altered climate documents in order to downplay the scientific consensus of global warming, namely documents from Piltz. Soon after his resignation, Cooney went to work for ExxonMobil, although they would not comment as to his specific employment responsibilities (Revkin 2005). When asked why he altered the documents, Cooney states that his "sole loyalty was to the president and to advance the policies of his administration" (Revkin 2005). In a sworn statement before the House panel, Cooney stated that it was his duty to "align executive branch reports with Bush administration policy" (Morello 2007). From this statement alone one can deduce that the policies that the Bush administration wanted to advance did not pertain to the environment.

Cooney, however, could was not the only one censoring scientific information from the public.

Forty three percent of [government employed scientists] reported edits during review of their work that changed the meaning of their findings. Forty six percent felt administrative requirements that impaired climate-related work. Sixty seven percent said the environment for federal government climate research is worse now than five years ago (MSNBC 2007).

In rebuttal to statements made by scientists like Piltz and Hansen, the current administration likes to flaunt its expenditures in climate research. Indeed, the Bush administration has spent more than any other prior administration in this field. The administration has also been the most hesitant to take any action regarding environmental issues (Rewriting the Science 2006). Many believe the administration is using said research as an excuse to stall any action regarding climate change. According to Piltz,

[t]he strategy of people with a political agenda to avoid this issue is to say there is so much to study way up stream here that we can't even begin to discuss impact and response strategies. There's too much uncertainty. It's not the climate scientists that are saying this, it's lawyers and politicians (Rewriting the Science 2006).

In this way, the administration continually emphasizes what we don't know, while downplaying what we do know (Kennedy Jr. 2004). This reluctance to act, according to Hansen, is a bad idea. Even though the administration wants

to wait ten years in order to evaluate climate change, the "delay of another decade, [Hansen argues], is a colossal risk" (Revkin 2006).

When the administration cannot silence scientists who want to speak out about global warming, they turn the ones they can, and then hire and appoint those who are more willing to play along. In a passionate statement, Robert F. Kennedy Jr. states the following:

[c]rooked scientists on industry payroll, housed in fancy think tanks that publish junk science—to persuade the public that there are no environmental crises and to undo the laws challenging their pollution based profits. They argue that pesticides are harmless; that global warming is a myth; that Mount Pinatubo, not chlorofluorocarbons, caused the ozone hole; that clear cutting is good forest management; and that Alaska's caribou love the pipeline (Kennedy 2004: 78).

It seems the administration is willing to play games in order to find means to their ends, even if that involves deception. In a 2003 memo to his fellow Republicans, GOP Strategist Frank Luntz said the following:

You need to continue to make the lack of scientific certainty a primary issue by becoming even more active in recruiting experts sympathetic to your view (Luntz, as quoted in Kennedy 2004: 77)

This quote speaks to the repeated attempts to produce the desired results and outcomes that would specifically (and solely) serve the needs of the Bush administration and its industry cronies. In fact, controversy once again clouded over the administration when 24 year old George Deutsch, a Bush

appointee in the NASA public relations department, unexpectedly resigned (Johnson Jr. 2006). Deutsch, a former employee of Bush's reelection campaign in 2004, left NASA after it was made public that he had lied about graduating from Texas A&M with a degree in journalism (Johnson Jr. 2006). The young appointee had already made headlines for demanding that any scientific document developed by NASA regarding the "big bang" must be rewritten to read "big bang theory" (Peterson 2006). Actions, such as the appointment of Deutsch (with no valid educational degree) and his subsequent behavior of altering and censoring documents are indicative of the values exhibited by the Bush administration.

Michael Oppenheimer, Princeton University geo-scientist, has more to say on the subject:

[a]t the shallowest level it's cheap deception of the general public. At its worst, this approach represents a serious erosion in the way a democracy deals with science. You create high-sounding credentials and talk in tones that seem scientifically sensible, while all the time you are just fronting for a political agenda (Michael Oppenheimer, as quoted in Kennedy 2004: 78)

Scientists and politicians alike are recognizing the illusory techniques being put forth by the Bush administration to confuse and convince the public that

there is no need for concern over global warming. Ironically enough, these actions only stimulate the need for more concern.

In 2004, the Union of Concerned Scientists (a nonprofit organization in support of accurate scientific reporting and policy) released an investigatory report entitled "Scientific Integrity in Policymaking: An Investigation of the Bush Administration's Misuse of Science" (Kennedy Jr. 2004). The report, which unfortunately received minimal publicity, stated the following:

There is strong documentation of a wide-ranging effort to manipulate the government's scientific advisory system to prevent the appearance of advice that might run counter to the administration's political agenda. There is significant evidence that the scope and scale of the manipulation, suppression, and misrepresentation of science by the Bush administration is unprecedented (Union of Concerned Scientists, as quoted in Kennedy Jr. 2004: 95).

Among the 60 distinguished scientists that signed the report were 20 Nobel laureates (Kennedy Jr. 2004). It seems obvious that if these individuals were concerned about the actions of the Bush administration, the general public should also be.

CHAPTER VI

APPLICATION OF THEORY

Introduction to Findings and Application of Theory

Findings regarding state crime, related theories and the application of the state crime theoretical model are discussed in this section. The data discussed here were taken from blue note cards delineating theoretical issues, namely state crime theory. More specifically, data reported here are from the state crime category (SC). Because of the categorical makeup (data pertaining specifically to theoretical issues) all data were recorded on blue note cards, thus easily grouped for assessment. This category held the highest number of note cards, with thirty-seven total for review. The findings are as follows.

In the attempt to organize the actions of the Bush administration regarding the Kyoto Protocol in order to reach a conclusion, a theoretical model must be applied. Differential association theory, first developed by Edward Sutherland (1940) has been used for decades to explain on an individual level the process by which one becomes deviant (Laub and

Sampson 1991; Michalowski and Kramer 2006). One tier of analysis that differential association cannot account for is the institutional level.

Table 1: An Integrated Theoretical Model of State-Corporate Crime

TABLE 2.1.

An Integrated Theoretical Model of State-Corporate Crime

Levels of Analysis		Catalysts for Action	
	Motivation	Opportunity	Control
Institutional environment	Culture of competition Economic pressure Organizational goals Performance emphasis	Availability of legal means Obstacles and constraints Blocked goals/strain Availability of illegal means Access to resources	International reactions Political pressure Legal sanctions Media scrutiny Public opinion
		1 2	Social movements
Organizational	Corporate culture Operative goals Subunit goals Managerial pressure	Instrumental rationality Internal constraints Defective SOPs Creation of illegal means Role specialization Task segregation Computer, telecommunication, and networking technologies Normalization of deviance	Culture of compliance Subcultures of resistance Codes of conduct Reward structure Safety and quality control Communication processes
Interactional	Socialization Social meaning Individual goals Competitive individualism Material success emphasis	Definitions of situations Perceptions of availability and attractiveness of illegal means	Personal morality Rationalizations and techniques o neutralization Diffusion of responsibility Separation from consequences Obedience to authority Groupthink

Source: Extracted from Michalowski, R.J. & Kramer, R.C. 2006. "State-Corporate Crime: Wrongdoing at the Intersection of Business and Government." New Brunswick, NJ: Rutgers University Press.

In this case, there are several separate planes of behavior that need to be analyzed. Therefore, a model that can accommodate the institutional level of analysis must be applied.

The integrated theoretical model developed by Michalowski and Kramer (2006) is a perfect fit for the data (see Figure 6). The theoretical model identifies three levels of analysis—Institutional, Organizational and Interactional (Michalowski and Kramer 2006)—which are used to separate and classify the actions of different players in a multi-level organization. Each of these levels is then again broken into an additional three categories for further analysis: Motivation, Opportunity and Control. These three categories allow for the breakdown of potential catalysts for deviance. Motivation is linked to "goal attainment, availability and perceived attractiveness of illegitimate means, and an absence of effective social control" (Michalowski and Kramer 2006: 24). Opportunity identifies the likelihood of deviance when legal means are either scarce or unattractive, and Control identifies social controls within in a society that may or may not prove to be a successful deterrent from crime (Michalowski and Kramer 2006). With careful consideration, the actions taken by the United States government (and individual actors within the government) can be applied to the model in order to provide an explanation of state crime. The three levels are broken down and categorized throughout the rest of the chapter.

Institutional Environment

The Institutional level is the broadest level of analysis and is also referred to as the structural level (Taylor, Walton and Young 1973). The institutional level is significant because it is often overlooked, as many focus on the individual level, ignoring the pressures that can be imposed on a large, organizational scale (Michalowski and Kramer 2006). Gross (as quoted in Michalowski and Kramer 2006) believes that any large organization is inherently predisposed to criminal behavior, and there seems to be no exception in this case. For the purposes of this paper, the Institutional level includes the United States government as a whole, including all three branches of government. As the original intention of the three branches was to develop a 'checks and balances' system, no one branch can completely detach itself from the actions taken by another. The motivations for a state crime suggested by Michalowski and Kramer (2006) include first and foremost the culture of competition and economic pressures.

As a capitalist society, the United States is very susceptible to not only the culture of, but also the pressures of both international and national competition. This competition on a global scale is perhaps most evident in the oil industry. It is no secret that the energy industries have ties within the

government (i.e. Philip Cooney and API, Condoleezza Rice and the Chevron Tanker). As these industries also have a stronghold on the economy, it is no surprise that they would play a role in governmental policy actions. Competitively protecting these economic interests was certainly a motivation in the dismissal of the Kyoto Protocol as it could be perceived as a threat to both competitive and economic ascendency. We've seen pressure from the industries to the administration in the form of campaign contributions (\$48.3) million to the Bush campaign from the energy industry, and then another \$58 million after his inauguration; \$700,000 to Spencer Abraham from the automotive industry). And we've also seen, on a continual basis, the censorship, alteration or avoidance of global warming and hence environmental regulation to the benefit of these industries (as seen, most evidently, in the failure to sign the Kyoto Protocol).

Several opportunities existed for the government when it came to environmental protection, most notably, the Kyoto Protocol. While this would have been a readily available and legal method of action, it was not ideal for the US. The ratification of the protocol would have held the government to obligations it did not want to commit to. The chief negotiator of the protocol on the behalf of the US found the document to be "unsound,"

even though almost the entire global community was on board with Kyoto (Dobriansky 2005). Those who denounce the Kyoto Protocol for the US state their principle interests to be on the behalf of the country, but Coleman (1989) suggests ulterior motives:

Government agents work behind the scenes and out of the public view, often times violating the laws they claim to be protecting. This seeming paradox is a reflection of the fact that while the ruling elites in contemporary industrial societies have enormous power, it is not unlimited power (Coleman 1989: 55).

We can see evidence of this in the different additions to the Kyoto Protocol that the US negotiators pushed for. Emissions trading was a major issue supported by the United States: it allowed the US to continue with current rates of pollution as long as enough ERUs could be purchased from other nations. In this way, the US did not have to make many adjustments at all.

The US pushed emissions trading against the will of other countries (specifically European countries) and played a major role in securing its place in the final protocol (Sands 2003). However, the clause was added that ERUs could not be the sole method used to reach emissions goals, much to the dismay of the United States (Sands 2003). These legal means offered by the protocol were no long advantageous to the US.

The United States continued to search for alternative methods to reaching emissions goals without actually reducing emissions. Joint implementation (II) was another mechanism pushed that would have allowed the US to create programs that would lower emissions in other Annex B countries¹⁷ and receive credit for it, rather than having to lower emissions within the US (Sands 2003). This would have been another economically savvy option for United States legislators and business owners. Yet again, it could only be used as an alternative method for lowering emissions, it could not be used to replace the actual reductions of emissions. United States negotiators then moved on to the inclusion of carbon sinks in the protocol, which are natural removers of carbon dioxide from the atmosphere (such as the oceans and forests). US negotiators hoped that by planting and protecting plant life, they could reach their emissions goals through an alternative method rather than having to scale down corporate pollution. Both JI and carbon sinks were widely supported by the US, and discouraged by European countries. While the United States wanted to do everything to lower

¹⁷ Annex B countries originally included the US, Canada, Hungary, Japan, Poland, Croatia, New Zealand, Norway, Australia, Iceland, Bulgaria, the Czech Republic, Estonia, Latvia, Liechtenstein, Lithuania, Monaco, Romania, Slovakia, Slovenia, and Switzerland in the first draft of the Protocol. The idea of Annex B countries is to reach 1990 levels of emissions by 2012 by redistributing "their targets among themselves, taking advantage of a scheme under the Protocol known as a "bubble" whereby countries have different individual targets, but which combined make an overall target for that group of countries (UNFCCCa 2008).

emissions except actually reduce US emissions, other countries were in support of only using these alternative methods as supplementary (if they supported them at all). These actions demonstrate the attempts made by the US to mold the protocol into a non-restrictive contract that bore little regulation. When these goals could not be achieved, the US simply backed out of the agreement, and refused to ratify the Kyoto Protocol—even after these adjustments had been made to accommodate them and meet their demands.

In actuality, the legal means (i.e. the Kyoto Protocol) that were available were not conducive to the culture of competition, and the failure of the US government to comply with these regulations would have led to legal sanctions from the global community. Thus, these legal sanctions were obstacles and constraints on the goals of the US government. Also, the sanctions would have produced obstacles and constraints for the energy industries, which likely would not have made the contributing industrialists happy. By not signing the protocol, the government found alternative means that carried with them no constraints. Alternative means, such as the reductions in carbon intensity emissions, as opposed to absolute emissions reductions (as discussed in chapter five). Actions such as these give the

illusion that the government is taking great environmental action, and protecting environmental laws, when it is actually doing the opposite.

The ability of the government to control this specific scenario was almost effortless. While there was political pressure from both sides, the decision of the Senate in 1998 against the protocol (95-0) was a huge persuasion against signing. Although its government was in agreement, the decision of the US to not ratify the protocol certainly sparked an international uproar. However, the global community was all but powerless to do anything about it. As discussed throughout, it was expected that the US would be a leader in the fight to protect the environment, and the actions to the contrary were surprising. But the fact that the government had not ratified the document held them to no obligations, and thus no legal sanctions. Aside from a 'wagging of a finger' from international media, the US faced few repercussions. What is even more startling is the lack of coverage by the media of the issue when it occurred. Most media exposure regarding the Kyoto Protocol came well after the fact, thus suggesting that a majority of US citizens were uniformed or oblivious. On top of this, the government was at this point in time downplaying the severity of global warming (BBC 2007; Bee 2007; Eilperin 2005; Gore 2006; MSNBC 2001; Piltz 2005; Rewriting the Science

2006; Kennedy Jr. 2004; and Sands 2005), which may also have contributed to the lack of outcry from the American public. All things considered, the US government was very much in control of the circumstances surrounding the Kyoto Protocol.

Organizational

The organizational level is perhaps the most offensive in this particular case, although it is certainly difficult to measure harm that is yet to be realized. The Bush administration plays the organizational role in this fiasco in that a majority of the administration is made up of players strategically appointed by Bush (refer back to chapter five). The Bush administration engaged in corporate culture in strategic hiring as well as the thinning out of government programs and funding, as demonstrated by the cutting of funds to various environmental agencies (namely NASA and the EPA). In the same way, operative goals can be said to be found in the neo-conservative actions that have recently been taking place through the newly enforced internal regulation, as experienced by both EPA and NASA employees, among others (Eilperin 2005; Kennedy Jr. 2004; MSNBC 2007; PBS Frontline 2006; Piltz 2005;

Revkin 2006 and Rewriting the Science 2006). Political pressure is experienced by the administration from both sides—from the public (to act on environmental policy) and from the businesses that have successfully lobbied the administration (to restrict environmental policy)—to uphold their end of the respective bargains.

As for opportunity, the Bush administration has created its own. Any internal constraints that may have existed were removed during the weakening of governmental programs and the strategic placement of fellow cronies in positions of power. As for defective standard operating procedures (SOPs), these were most evident in organizations such as the EPA, which lost efficiency as it lost funding (Kennedy Jr. 2004). To reiterate, the EPA lost over \$31 million in budget cuts specifically dealing with pollution programs in Bush's most recent budget, as well as over \$285 million in other environmental programs (Environmental News Service 2008). NASA is also an example, as SOPs were modified in order to fit the needs of the administration. This is evident from the altered release procedures for scientific data as discussed by Piltz and Hansen (Rewriting the Science 2006). Last, because of the cutting of programs and the appointing of unqualified candidates to government positions, there was lack of role specialization and

task segregation. Simply put, no one really knew who was responsible for what; therefore it was much more difficult to hold any individual or organization responsible. The scrambling of responsibilities allowed continued ignorance to the issue, as well as continued ignorance towards environmental regulation. Thus, lax regulation (or increased regulation, in the case of NASA scientists) created illegal means in which the government could operate. There were no restrictions from an international agreement, there was little leaking to the press about the severity of the situation, and there was confusion within the regulatory committees as to who needed to take what action. In this way, the Bush administration set the stage for the normalization of deviance. This is the manner in which the administration entered the presidency, and it appears that it will also be the way in which it will leave.

When addressing the issue of control, the subculture of resistance is exhibited by the Bush administration. Essentially, the administration resisted the preexisting conditions left by the Clinton administration, and thus reset the stage to comply with their needs; needs, which can only be described as self serving. This prohibited the ratification of the Kyoto Protocol, which would have been detrimental to the energy industries and subsequently

detrimental to those of the administration who had vested interests in these industries. Therefore, the administration constructed its own rewards through their illegal means and/or methods, in which they failed to place effective environmental regulations in the United States. Regulations that were put in place (such as carbon intensity targets discussed in chapter five) were less than effective.

Safety and quality control was eliminated by the administration during the elimination of the differential environmental organization positions, and the restructuring of the functioning of the organizations (Kennedy Jr. 2004; Rewriting the Science 2006) leaving the administration in complete control.

This is witnessed most specifically in the changes made to processes of scientific information released to the public, as well as the censorship and alteration of documents by Philip Cooney. Furthermore, communication regarding the impending environmental crisis was thus limited not only within the different organizations (i.e. restricting what NASA scientists could say) but was also limited to the media, and thus the general public. Clearly, the administration had taken control of the environmental and scientific agencies and thus limited their power.

Interactional

The interactional level narrows the scope to focus solely on President George W. Bush. As an individual actor, Bush made the decision almost immediately after entering the White House not to ratify the Kyoto Protocol. Perhaps the most important motivation for the President's actions was his own socialization. Prior to entering the White House, Bush was very involved in the oil industry in Texas (Kennedy Jr. 2004) and he did not cut ties when he took up his new position. Maintaining all of these social and economic connections, it is no surprise that the president would also be expected to protect the interests of those who had helped him to obtain that position. Environmental policies such as the Kyoto Protocol would be very detrimental to the process and profits of the oil industry. This specific socialization can be said to be a motivation which led Bush away from a Kyoto commitment. Individual goals would also tie directly into the socialization process. The success of the oil companies would then lead to profits for those who laid stake in said companies. By keeping his social connections close, Bush was keeping his profits closer.

We see evidence in this directly through the decision not to ratify Kyoto. Rather than sign on to a global commitment, Bush made his own

'commitments' through such programs as the reduction in intensity targets, as discussed earlier. Actions such as these held Bush to very little—if any at all—regulation of the energy industry. We also see evidence of this in Bush's continued assertion that global warming is not directly caused by human activity. The international community agrees that it is, but Bush, apparently, is still on the fence at best. In order to backup his claims, Bush manipulated the science sector of the government. Through strategic appointments (Cooney, Deutsch etc.), and the silencing of others (Hansen, Piltz etc.) he was able to keep his viewpoints in the reports, and valid science out.

As for opportunity, there was plenty available, and Bush became more aware of the availability of illegal means. By eliminating the obligations imposed by the Kyoto Protocol, Bush was allowed to implement his own environmental policies which left him and his associates often free of regulation (this is evident in the continued research on global warming and lack of regulatory restrictions set in place by the Bush administration—it seems as though the president is just stalling until his term is up). The president now had the power and the opportunity to mold environmental policies and programs to fit his specific needs, as opposed to the needs of the environment itself. Bush was also able to redefine the situation, and focus

more on what he deemed as important. Rather than protecting the environment, Bush protected his assets. The spin from the Bush administration that was projected in the media was that environmental protection was and is a threat to the national economy, as opposed to the imperative issue that it is (Sands 2005). This new face discouraged many from fighting for the environment, and instead redirected their focus to protecting their pocketbooks.

After all of the actions taken at the institutional and organizational levels, Bush was able to control the situation fairly easily. Diffusion of responsibility, as discussed earlier, led to confusion and no place to lay blame. Because of the restructuring (of procedures and censorship) that occurred within government environmental agencies, there was a separation from the consequences so much so that many were hesitant to accuse Bush of inappropriate action (or inaction). When it was deemed necessary to begin censoring scientific data pertaining to global warming, Bush exercised his authority and those involved were obedient to him. Anyone who challenged his authority, or disagreed with the censorship, was either fired, or, in the instance of Rick Piltz, left the organization on his or her own (Rewriting the

Science 2006). All of these actions were contributing or consequential factors of the decision not to ratify the Kyoto Protocol.

On all three levels (Institutional, Organization and Interactional) there has been both motivation and opportunity for criminal behavior. The catalysts identified by Michalowski and Kramer (2006) were indeed indicative of state crime. And, as seen here, social controls were not strong enough to discourage the participants from deviant activity. Therefore, the actions of the US government regarding the Kyoto Protocol can be said to be a state crime, as defined by the model.

CHAPTER VII

CLOSING REMARKS

The Protocol

The purpose of this research has been to demonstrate how the failure of the US to ratify the Kyoto Protocol could productively be seen as a state crime. The Kyoto Protocol, perhaps one of the most pivotal environmental agreements ever enacted, was seen as "not workable" for the United States (Dobriansky 2005). Even though special care had been taken to accommodate the demands of the US (emissions trading, the inclusion of sinks etc.), the administration failed to climb aboard. Although all other major opponents of the protocol (Malaysia, Brazil and Saudi Arabia) eventually ended up signing the document, the United States made no attempt to do so, even though participation in the protocol at any level was seen as beneficial globally. The protocol, which was designed to be broad in order to lighten the economic burden for everyone, was losing one of the top emitters of greenhouse gases. Instead, the US joined Kazakhstan as one of only two nations who signed, but did not ratify the protocol.

The justifications from the Bush administration for not ratifying the protocol were largely based on the economy, as they thought they could lower emissions on their own without the economic burden imposed by the Kyoto Protocol. In spite of this, little action to preserve the state of the economy or the environment has been witnessed over the past eight years. In their attempts to maintain their ties and financing from the energy industry, the Bush administration participated in many harmful activities regarding both environmental protection and regulation. Their failure to enforce, or even establish environmental regulation, in light of the scientific evidence, is apparent throughout the presidency. The attempts to both alter and withhold this scientific evidence is perhaps even more upsetting. But what can not be excused is the blatant act to go against international compromise and commitment in order to serve their own vested interests by both failing to ratify the Kyoto Protocol, and then failing to maintain current environmental regulation already imposed in the US.

Perhaps these actions stem from the fact that President Bush, ignoring an entire united world of scientists, does not himself believe in global warming. Perhaps it should have been evident when during his first term, President Bush halted environmental regulation, and proposed budget cuts

for environmental agencies (over \$316 million altogether) and appointed individuals (i.e. Cooney and Deutsch) — with no environmental background — to environmental positions. And perhaps it should have been evident from the start when environmental groups declared the Bush administration "hopeless" (Kluger 2006: 7). At any rate, the actions taken by the administration break the trend set prior by US environmental action. For decades, the United States had been a leader in environmental protection, supporting (if not ratifying) every convention and protocol put forth by the global community, and even entering into a Quality Air agreement with Canada. During the last eight years, however, the Bush administration has pushed the need for further environmental research to cover up their lack of action, and declared the Kyoto Protocol to be "not sound policy" even though the rest of the world agreed that it was (Dobriansky 2005).

Motivations Behind the Actions

A second focus of this study has been to identify both political and economic motivations for these actions by governmental actors through documents and press releases. The findings here most definitely suggest intranational political and economic motivation. Perhaps the first method to

sway public attention from the severity of global warming was the word alteration to "climate change." This seemingly innocent tactic is a persuasive and unassuming method of manipulation. Perhaps the general public should have expected actions such as these after the first wave of broken environmental promises by the president, as Bush did indeed lead the American people to believe that he was on board with the Kyoto Protocol. Instead, Bush and his administration were more concerned with supporting economic growth, as opposed to environmental stability.

Financial persuasion from the American Petroleum Institute (API) may have been hard for the president to ignore. Considering he appointed a former lobbyist from the API (Philip Cooney) to an important environmental position, and allowed propaganda for the API to appear in a status report from the EPA, it is easy to see how he could lose sight of environmental goals. This politicization has single-handedly undermined the scientific program, and as Oppenhiemer asserted, is indeed deception of the public for a political agenda.

This mismanagement of scientific information was not without purpose for the Bush administration. Through distortion and omission, the administration molded the data when it was beneficial to their industrial

allies. This can be seen through Bush's praising of alternative fuel sources while at the same time encouraging America's oil addiction. Granted, environmental regulations have a tendency to be costly at first. The Kyoto Protocol would have indeed required economic adjustments. But the end result, as with any environmental action, would have borne much fruit. The Bush administration, however, could not see that far into the future. Because ratifying the protocol held no economic benefit for them (at least not within their term of office), they had no interest in pursuing the matter. Unwilling to compromise with other developing countries, and the global community, the United States let down more than just its citizens; it let down the entire planet.

President Bush asserted that the development of a country is not a right, but instead a goal of every nation (Sands 2003). Well, I disagree, and I call that, breaking protocol.

Limitations

This study, while complete for its own purposes, is vastly incomplete in its scope. New data pertaining to the environmental actions of the Bush administration are being released on a daily basis, as well as information

regarding global warming. Every effort was made to include a variety of examples of the actions taken by the Bush administration against the environment. I would like to conclude by pointing out that this study reveals only the tip of the iceberg, perhaps the only iceberg that is growing (rather than shrinking) in size.

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