

MILITARY BASE CLOSURE AND
ENVIRONMENTAL CLEANUP

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by
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ABSTRACT

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This thesis examines the relationship between military base closure and environmental cleanup. The case study includes a review of three base closures in Northern California that are presented according to the date of closure in order to evaluate the differences in the political context of base closure and environmental policy. The analysis begins with Mather Air Force Base—a setup for additional base closures in this study. The next closure under review, Moffett Naval Air Station, provides the dynamic of community activity in the continuum of the analysis. The culmination for base closure analysis is exemplified in the heightened political resistance to the inevitable closure of McClellan Air Force Base. Any inconsistencies of the base closure process are made prominent by narrowing the focus to a geographical area of one state. In every possible way, the archival research from news publications was chronologically reviewed in order to provide dimension to the role of environmental policy in base closure and

cleanup. In addition, this approach offers insights into the development of environmental policy in response to changes in the way that base closures have been implemented.

Analysis of the findings will look at how environmental hazards present in military bases that are slated for closure shape public opinion in military bases that are slated for closure shape public opinion and the ensuing political response.

CHAPTER I

INTRODUCTION TO THE DIMENSIONS OF ENVIRONMENTAL PROTECTION

In this thesis, I will discuss the political context of environmental law and policy from three case studies of military base closures in California. Among the topics under review include the ideological frameworks for environmental protection and the purpose for environmental law and policy. Analysis of previous scholarly research will include theories of how environmental justice has been framed and the basis for changing approaches to the evolving problem of environmental hazards. California, as a basis for analysis, was chosen because of its numerous military installations, which makes it a prime target for base closure, but also for the environmental impacts that a prolific number of federal facilities would reasonably generate. The study of military base closure within a single state also functions as a representative control and confining the focus to one geographical area makes the link between environmental hazards and base closure more fully operational.

In this chapter, I will provide a background for environmental law that includes the ideological frameworks that predicate environmental policy. This will serve to better understand the purpose for having environmental policy, and the reasons that policy changes that include the political and social dimensions. Ideology has been a critical angle to understanding social phenomenon from disciplines such as economics,

philosophy, and politics. These angles inform the myriad ways in which environmental policy and law have both served different communities as needed over numerous environmental developments. Ideologies about the environment, such as distributive justice, provide a context behind the creation of legislation that guides more socially equitable policy outcomes for every member of society.

The need for a more lucid account of various actors involved with environmental policy, I review environmental law as a political development and make references to environmental justice as a movement and ideology in itself. This chapter also serves as a background for understanding the trajectory of environmental law. It introduces the issues surrounding environmental protection and provides historical points that lead to the statutory authority over environmental issues. I will introduce some of the arguments concerning environmental politics and any other relevant theories from various disciplines that are presented in the literature.

Ideology: The Basis of Environmental Policy

Environmental law had its inception because of economic necessity that led to the passage of the Rivers and Harbors Act of 1899 (Eames 1970, 1447). History shows the free flow of commerce in navigable waters as the primary reason to enact a law that prevented unobstructed waterways (Ferrey 2007, 244). In modern times, economic ideology has prefaced judicial decisions on environmental problems—a challenge to the primacy of social equity through environmental protection given the political nature of regulating the market. Further complicating the role of environmental enforcement through laws is the

fact that environmentalism situated alongside economic necessity must be more open to competing ideologies in order to gain the moniker of “necessity” (Paehlke 1989, 5).

In his book *Environmentalism and the Future of Progressive Politics*, Dr. Robert C. Paehlke, Professor Emeritus of Environmental and Resource Studies and Political Science at Trent University, Ontario, Canada, defines an ideology as “a set of political ideals, a worldview both value laden and comprehensive” (Paehlke 1989, 5). Environmentalism is ideologically appealing to all except the extreme liberal left of whom Paehlke describes as stalwart in support of the environment, and the extreme conservative right whom Paehlke claims focuses its power along free market policies and for the benefit of the status quo (Paehlke 1989, 196). Environmentalism as an ideology finds its strongest support when conceptualized as a “commons.”

Garrett Hardin was a microbiologist best known for his 1968 essay “Tragedy of the Commons,” which has been published in over 100 anthologies. Hardin states that there are at least two conservative ideologies in conflict—environmental conservation and laissez-faire market activity. The question remains: under what conditions does the free market trump preservation of the preeminent status quo or what is often referred to as the physical environment or natural world in its pristine condition? This question leads researchers to consider the political context of enforcing environmental policy and law. Clearly, market actors should not be given the unfettered extraction of resources from what is deemed a “commons.” If the absolute freedom of the market to exploit were granted, then the consequence of such activity would bring about the market’s own demise and the ruin of humanity (Hardin 1968).

At the University of East Anglia, Norwich, UK, Timothy O’Riordan, PhD, spent his career conducting research in environmental policy analysis, environmental governance and decisionmaking. In *Environmentalism*, he characterizes Hardin’s “commons” as a new morality of limits (O’Riordan 1976, 30). According to O’Riordan, Hardin was attempting to provide the view that there existed some contradictions within economic ideology: a market with the absolute freedom to choose is immoral because its very nature precludes rational choices that insure the survival of humanity, therefore, of the market itself (Hardin 1968; O’Riordan 1976, 28). Environmentalism as a conservative ideology necessitates coercion—a form of government intervention—in order to establish a political and economic scheme that furthers collective goods for and by all (O’Riordan 1976, 29). In this way, government intervention fosters growth for the market, which in itself is only possible due to government intervention (Paehlke 1989, 185).

Hardin’s essay was written just prior to the 1970s when the ideologies of progressivism and democratic socialism were beginning to wane (Paehlke 1989, 230). Environmentalism has declined since the 1930s as a result of unchanging views on the environment within an ever-changing economic context (Paehlke 1989, 231). As Paehlke stated earlier, in order for an ideology to remain relevant it must have an appeal and that attraction to constituents must appear to be of necessity (Paehlke 1989, 5). Definitions of the issues that link the contrasting spheres of economic and environmental are at the center of debates over environmentalism as a relevant ideology because of its mass appeal (O’Riordan 1976, 91; Paehlke 1989, 5).

Differences of opinion exist regarding environmental concerns of the 1970s. More recent studies posit environmental inequities as the direct result of becoming more

informed (Saha and Mohai 2005, 618). Disparate siting of hazardous facilities after 1970 followed a pattern such that groups with more social advantages were better informed and carried more political clout than either the poor or ethnic minorities (Saha and Mohai 2005, 618). The significance of these findings supports the link between Maslow's hierarchy of needs and the disenfranchisement of the ethnic working poor concerning environmental policy until the last decade. The brief period between 1968 and 1975 was punctuated by environmental and social activism (McGurty 1997, 302). In any case, there are also differences regarding how the historical antecedents of the environmental justice movement are to be understood, which may indicate that various points in time reflect varying degrees of environmentalism as an ideology rather than differences over the facts of what happened and when.

Political Context of CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was enacted on December 11, 1980. In the broadest sense, Superfund allows for a direct federal response concerning a situation that includes environmental degradation and the ensuing threats to public health (*"CERCLA Overview..."* United States Environmental Protection Agency 2011). In 1986, the Superfund Amendments and Reauthorization Act (SARA) "required Superfund to consider requirements found in state and federal environmental laws and regulations" (*"SARA Overview..."* United States Environmental Protection Agency 2011). Implementation of this law remains significant for the U.S. Environmental Protection Agency (EPA) because it incorporates provisions for liability and remedies. CERCLA authorizes short-term responses that, depending on

the site, can extend into long-term responses for the presence of highly-toxic substances at sites on the EPA's National Priorities List (NPL), which lists "the national priorities among the known releases throughout the United States and its territories" (*"National Priorities List..."* United States Environmental Protection Agency 2011). One anticipated function for CERCLA was to revise the procedures and guidelines involved in the cleanup of contaminated sites, the remedies for known pollutants, and the removal of substances considered to be highly-toxic. The primary goal of Superfund is to clean and remove hazardous waste and/or materials when other laws have failed to deter environmental contamination:

CERCLA: established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of person responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified (*"CERCLA Overview..."* United States Environmental Protection Agency 2011).

Political actors have a direct effect on CERCLA's ability to mitigate environmental degradation because political actors represent a constituent group that depends on particular markets/industries for political gain. In some regions, an industry serves as the largest employer responsible for a thriving local economy. This fact elicits further reflection: how can industry and the environment coexist in a space of finite resources? The term "industry" also includes the goods and services supplied by the government. Karl Polanyi, political economist and author of *The Great Transformation*, challenged the idea of utility maximization as a rational way humans adapt. Polanyi once claimed that the development of the free market is an unnatural phenomenon that only came into existence because of government intervention (Paehlke 1989, 185). In such cases, the political context for CERCLA's efficacy may shift dramatically and has the

potential to challenge our understanding of environmental politics, policy, and law to include the ideological bases for environmental protection.

Distributive Justice, LULUs, and Environmental Justice

Distributive justice is one basis for environmental policy. In *The Nicomachean Ethics*, Aristotle first posited the notion of particular justice whereby the distribution of public assets such as honor, wealth, and any other divisible assets of the community comes out of state action to ensure the equitable distribution of these goods to its members. The reason for having CERCLA and other environmental laws is to provide recourse against market actors who “socialize” the costs of their activities. This type of politics helps to insure that economic benefits from market activity are more equitable according to tax policies, property rights, and social welfare (Paehlke 1989, 188). Distributive politics are secondary as a policy in itself but also serve as one facet to environmental politics, which is paramount over other policies in determining the process of insuring public safety and social equity (Paehlke 1989, 189). Equity is a key environmental issue because much of modern environmental policy debates are centered in groups who lack political equality.

For some time, there has been a view that many transgressions that are deemed environmental unfairly burden ethnic minorities and their respective communities (Bowman and Crews-Meyer 1997, 110). These communities, known as LULUs or locally unwanted land use, come into existence from a confluence of many factors, each resulting from the other. The resulting environmental degradation poses a hazard to the health and wellbeing of the immediate vicinity; in some cases, the

negative effects of LULUs can be replicated in other ways and further away from the original site.

A host of other concerns including possible detrimental effects on neighboring property value, increased numbers of flies and other nuisance or disease-related insects, damage to local roads from increased truck traffic, increased dust and other air pollution, and objectionable smells all combine to make these operations local unwanted land uses (Kubasek and Silverman 2008, 230).

As a result, there has been an emphasis on the training and education of ethnic minorities who become more aware of environmental concerns than Whites (Whittaker, Segura, and Bowler 2005, 435). Developments like the increasing awareness of environmental issues among ethnic minorities directly challenges the previous assumption that Whites are more knowledgeable about environmental issues and use such knowledge asymmetries to push hazardous waste sites toward other communities (Whittaker, Segura, and Bowler 2005, 436).

Motivation and Personality (1970) is a renown scholarly book noted for its major contribution, the “hierarchy of needs,” a concept that states poor and minority populations would be more concerned with the politics and policies that articulate their everyday needs for survival. According to its author, Abraham H. Maslow, physiological needs are the primary needs of an organism that eventually get supplanted as higher needs emerge. Once a set of needs are satisfied, there is an emergence of social goals as unsatisfied needs. Maslow’s essay also claimed that Whites will be more inclined to engage in progressive causes such as environmental policy, by implication, because they have more of their needs met and have the opportunity to become engaged with environmental causes (Maslow 1970).

The development of environmental literacy among the poor and ethnic minorities bears a crucial impact on the political landscape and the efficacy of environmental policy toward distributive politics. An increase in environmental awareness should lead to a more responsive policy on the environment. In effect, Maslow's hierarchy of needs is "turned on its head," to coin a Marxist term, because environmental politics has outgrown the traditional confines of being a luxury and has become an everyday need relevant to the poor and ethnic minority communities (Hardin 1968, 1244; Whittaker, Segura, and Bowler 2005, 436). Mohai and Bryant (1998) conducted research that indicated African-Americans were more concerned about environmental issues than Whites (Whittaker, Segura, and Bowler 2005, 436). Environmentalism, as the ideological basis of distributive politics, meets the criteria of equity (Paehlke 1989, 185).

Environmental literacy can be assessed on a national level through public opinion polls. Between 1989 and 2004, respondents to Gallup's survey about the public's concern over hazardous waste revealed a marked drop during that fifteen-year period (Arora 2004). The research indicated a corollary drop involving environmental issues, in general. The information presents other insights into public opinion over toxic waste when viewed spatially. The majority of respondents from any part of the United States other than the East Coast were less concerned with environmental contamination (Arora 2004). One possible explanation involves the higher number of high-profile contamination cases in the Eastern region. When income is taken as a factor, the survey results suggest that respondents earning \$30,000 or less are much more concerned than any other income category (Arora 2004). Some of the shortcomings of this survey include

Table 1. Public opinion poll on personal worries of environmental problems.

<u>“How about contamination of soil and water by toxic waste?” May 1989 – March 2004</u>	
Eastern	85%
Midwest	72%
South	68%
West	69%

Source: Public opinion poll, Gallup Inc., 2012. Toxic Waste: Still Dirty Words to Americans? <http://www.gallup.com/poll/11476/toxic-waste-still-dirty-words-americans.aspx> (accessed October 16, 2012).

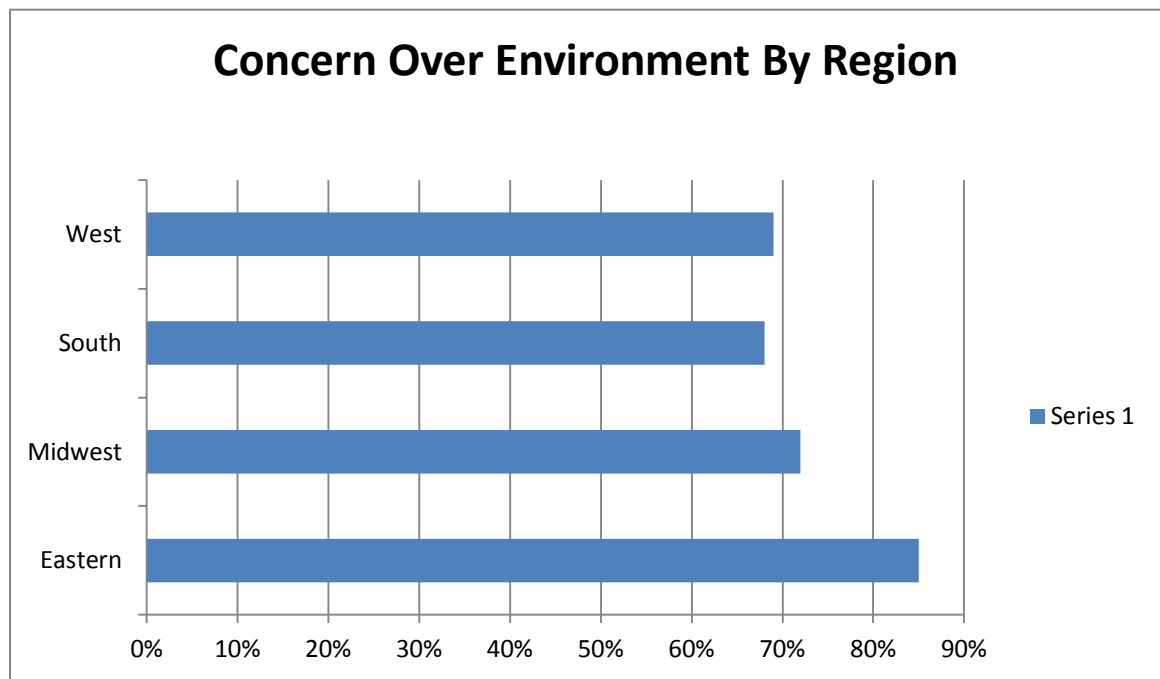


Figure 1. Public opinion poll on personal worries of environmental problems. Survey respondents were asked “How about contamination of soil and water by toxic waste?” Source: Public opinion poll, Gallup Inc., 2012. Toxic Waste: Still Dirty Words to Americans? <http://www.gallup.com/poll/11476/toxic-waste-still-dirty-words-americans.aspx> (accessed October 16, 2012). Percentage of respondents concerned by region: West—69 %, South—68 %, Midwest—72 %, and Eastern—85 %.

Table 2. Public opinion poll on personal worries of environmental problems by income.

Percent worrying "a great deal."	
\$29,999 or less	60%
\$30,000 - \$74,999	45%
\$75,000 or more	38%

Source: Public opinion poll, Gallup Inc., 2012. Toxic Waste: Still Dirty Words to Americans? <http://www.gallup.com/poll/11476/toxic-waste-still-dirty-words-americans.aspx> (accessed October 16, 2012).



Figure 2. Public opinion poll on personal worries of environmental problems by income. Survey responses based on income categories. Source: Public opinion poll, Gallup Inc., 2012. Toxic Waste: Still Dirty Words to Americans? <http://www.gallup.com/poll/11476/toxic-waste-still-dirty-words-americans.aspx> (accessed October 16, 2012). Percentage based on income of \$29,999 or less.

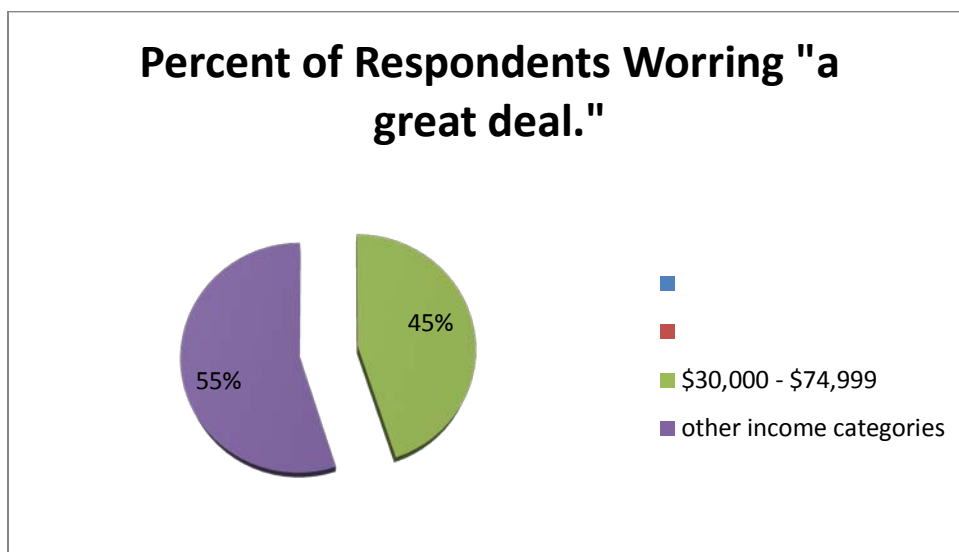


Figure 3. Public opinion poll on personal worries of environmental problems by income. Survey responses based on income categories. Source: Public opinion poll, Gallup Inc., 2012. Toxic Waste: Still Dirty Words to Americans?

<http://www.gallup.com/poll/11476/toxic-waste-still-dirty-words-americans.aspx> (accessed October 16, 2012). Percentage based on income of \$30,000 - \$74,999.

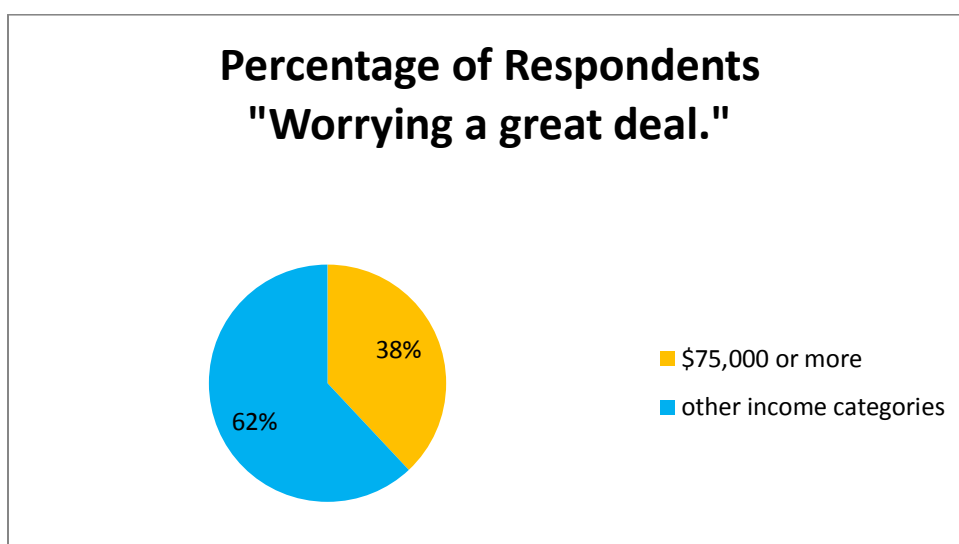


Figure 4. Public opinion poll on personal worries of environmental problems by income. Survey responses based on income categories. Source: Public opinion poll, Gallup Inc., 2012. Toxic Waste: Still Dirty Words to Americans?

<http://www.gallup.com/poll/11476/toxic-waste-still-dirty-words-americans.aspx> (accessed October 16, 2012). Percentage based on income of \$75,000 or more.

the lack of information concerning age, ethnicity, and education level of respondents. The Gallup poll supports the idea that those who would be more affected by environmental degradation have a greater concern over toxic waste.

Another development in political theory is the alternative to Maslow's hierarchy of needs, the environmental deprivation theory. According to this theory, the degradation of the environment has become a matter of need because it affects survival. The apparent need has become so politicized that in 1994, President Clinton issued Executive Order 12898 that directs federal agencies to insure an equitable environmental justice strategy and to evaluate any disproportionate environmental effects that their actions may have on the poor and ethnic minority communities (Bowman and Crews-Meyer 1997, 116; Kubasek and Silverman 2008, 42).

Interest Groups and Political Participation

Political developments like the Fifteenth Amendment, which gave black men the right to vote, and the Nineteenth Amendment, which gave women the right to vote, illustrate how current policies can be responsive to interest group pressure. The success of these examples demonstrates the influence of interest groups on the policies that affect the public good. Interest groups exert a great amount of influence through "lobbying." The EPA, like any other agency, is not immune to pressure. This may seem contradictory to public administration theory on the efficiency of bureaucracies, but upon closer analysis the EPA is affected by congressional actions that constrain the agency's role, such as public budgeting (Rubin 2006, 250).¹

¹ Senator Edmund Muskie, D-Maine, threatened to handcuff the EPA for misusing its discretion to implement the budget which would have constrained the agency.

The EPA makes site-by-site decisions, and each site has its own set of private interest groups and political actors (Sigman 2001, 316). In order to examine the response rate of the EPA, one way to measure the agency's effectiveness is the speed in which it responds to interest groups. This is a critical point because the response to an interest group also determines how the EPA prioritizes its resources (Sigman 2001, 317). For example, sites with higher levels of political participation can expect to have their environmental concerns addressed much more expeditiously. The implication is that money in the form of potential campaign contributions indicates the site that will most likely benefit from what is supposedly a government institution that furthers the ideological basis of fairness and social equity with a commons (Hardin 1968; O'Riordan 1976; Paehlke 1989). Social issues, such as health risks, are not salient for purposes of prioritizing resources (Sigman 2001, 317).

Environmental Law

Environmental law plays a critical role in distributive justice. Environmental politics is dependent on the context in which the law exerts its constitutional role (O'Riordan 1976, 240). The role of CERCLA as environmental law is to provide remedies in cases where other statutes do not (Ferrey 2007, 21). Among the additional determinants in the rule of law and its relevance to environmental issues is the role of the courts in their legal oversight of their political counterparts—the legislative and executive branches (O'Riordan 1976, 240). O'Riordan defines environmental policymaking as the “process by which political inputs are turned into political outputs” (O'Riordan 1976, 241). At times, CERCLA appears contradictory when it comes to negligence-based strict

liability. In “Intergovernmental Relations and Federalism in Environmental Management and Policy: The Role of the Courts,” the research findings show that the courts are not sending clear messages about who is responsible for environmental management (Wise and O’Leary 1997, 150).

Congress drafted and passed CERCLA hastily, omitting key provisions respecting liability, instead relying on the common law developed under other statutes. Because CERCLA incorporates by reference §311 of the Clean Water Act, which holds violators strictly liable for marine damages, courts overwhelmingly hold PRPs strictly liable in cost recovery actions under CERCLA §107, regardless of any negligence by owners, operators, transporters, or generators. Thus CERCLA liability is not negligence based. Neither is it based on common law tort. CERCLA liability is its own strict statutory species (Ferrey 2007, 382).²

It is the court that defines the role of the federal system over environmental areas and analyzes the decisions made by environmental management (Wise and O’Leary 1997, 151). From its inception on December 3, 1970, the EPA was responsible for maintaining the regulations, setting standards, monitoring and enforcing compliance with environmental standards at the national level. In 1984, the agency devolved some of those operations to the states. The problem with this particular action by the agency involves the changing interpretations of environmental laws among the courts at the state and national levels (Wise and O’Leary 1997, 151).

Current environmental regulations emanate from two landmark legislations: the Clean Air Act of 1970 and the Clean Water Act of 1977 (Parisi 1980, 1). The Clean Air Act of 1970 complemented the Air Quality Control Regions Act of 1967 (AQCR) by incorporating rural areas within its scope, and allowing the EPA to designate certain areas

² PRPs, or Potentially Responsible Parties, are parties or individuals who are identified by the EPA to perform the cleanup of a contaminated site or held responsible for Superfund cleanup costs.

under the AQCR (Ferrey 2007, 181). These two significant changes increased the scope of the Clean Air Act to a national level with primary authority given to the federal government to define anything under the AQCR (Ferrey 2007, 181). Congress passed this mandate in order to enforce uniform standards of pollutants under a set of criteria that includes particulate matter, sulfur dioxide, ozone, nitrogen oxides, carbon monoxide, and hydrocarbons (Ferrey 2007, 176). The Clean Air Act also requires the regulation of greenhouse gases under the authority of the EPA (Ferrey 2007, 176).

The Clean Water Act of 1977 complements the Federal Water Pollution Control Act of 1972 (FWPCA) by introducing new standards on the discharges from industry into water: dischargers of toxic pollutants were required to obtain the best available technology economically achievable to limit the amount of effluents from a list of 129 known priority pollutants and based on standards set by the EPA; the creation of a new standard that governed nontoxic conventional pollutants that is based on the EPA's cost-benefit analysis of effluent reduction to benefits derived; and, a best available technology economically achieved concerning nonconventional pollutants (Ferrey 2007, 253).

Research Plan

A case study approach is the research method that I will implement on three California military base closures from the National Priorities List (NPL). A careful examination of various sites will focus on military bases within a political context over cleanup. The review of each case will include background of each base, political activity, and other relevant variables to better understand the differences in strategies to counteract

environmental degradation. I will summarize the effect of environmental law enforcement on shaping the political context of each base closure.

A better understanding of what constitutes environmental politics makes it necessary to compare different sites within a single state; California serves as a type of control in the research. Since California has its own set of environmental laws and regulations, the analysis should review the differences in the variables that constitute an environmental solution through a political response. California has one set of laws that governs the environmental issues of the entire state. However, it is unclear how state actors engage with an environmental enforcement problem and its actors at the federal level. For example, it remains to be determined the impact that Executive Order 12898, enacted by President Clinton, has on the environment for those living near and around the military bases in this study. Each site is a single case study that, taken together, constitutes the research as one overarching case study—the methods sections of this thesis.

In Chapter 2, I will review published data and academic papers to contextualize the development of environmental law from its inception. The objective is to determine the political and philosophical responses of environmental law. This chapter will unpack environmental policy as a dialectic process between activists, state actors, and industry as lobbyists, all of whom interact within the parameters outlined by legal rulings. The relationship of social equity and Executive Order 12898 will be articulated.

In Chapter 3, I will apply the case study approach to select federal sites on the NPL list to date that are confined to the state of California with a regional focus on Northern California, in particular. This chapter will be broken down according to military

installation, and the study of base closure for each site will be developed through a composite review of the archival data from news media.

In Chapter 4, I will analyze the data surrounding each federal facility. The discussion will draw from the political dynamics of base closure in order to predict future environmental enforcement problems from an inductive generalization of the data. The role of the myriad institutional actors on environmental policy development will be reviewed. Policy implementation by the EPA is also assessed. The findings from the research on the efficacy of environmental law and the compliance of government agencies with environmental policies will be explained. The discussions about the case study of Mather Air Force Base, Moffett Naval Air Station, and McClellan Air Force Base are incidental to understand the efficacy of the BRAC process. Also, environmental cleanup will be known as one theme of the base closure process. A brief conclusion will include future research tracks from questions that arise as a consequence of this study. I will discuss the one critical limitation of this study, and the manner and justification of how it was handled. The last sentence of the conclusion offers the central point of the research.

CHAPTER II

THE LITERATURE OF ENVIRONMENTAL IDEOLOGY AND POLITICS

This chapter serves as the literature review that will provide the context behind the establishment of environmental law starting from the inception of environmental thought, the ferment of philosophical debates that evolve into environmentalism, the political dimension of environmental actions versus other social actions, and the recent history of Superfund (in)activity that begs the perennial policy question: Why do we have Superfund? The literature is a multidisciplinary synthesis of academic research. The rationale for creating such an eclectic base of understanding runs parallel to the many different dimensions on which environmental concerns traverse. In addition, politics, as a reflective discipline, is a function of every conceivable way that actors develop and make use of leverage in any system that determines the order of resources. In doing so, politics appears at once to be a multidisciplinary approach to articulating order in a space of finite resources punctuated by infinite versions of the “right” use/way.

I begin with a brief overview of military base closures and discuss the political basis that eventually led to the evolution of the 1988 Defense Base Realignment and Closure Act. In the next discussion, I introduce the ideological basis for environmental protection, which acts as the foundation for the culmination and thrust of

CERCLA. Theoretical constructs will demonstrate different conceptions of just behavior and how those views also inform the discourse of the environment. I will briefly discuss inequalities that serve as a transition to a section about the causes and effects of environmental politics. The literature transitions to the political dimensions of the environment including the role of presidents with a focus on President Ronald Reagan's administration. A parallel review of the role of Congress and its oversight authority introduces the political maneuvering for control of the Environmental Protection Agency. A discussion about policy innovations and the responsibility of individual states as actors provides a backdrop for a microanalysis of intergovernmental conflict. The last section of the literature review discusses the role of courts, which makes the political nature of environmental policy return full circle.

Overview of Military Base Closure

Historically, military base closure has always been intimately associated with politics, as evidenced by President John F. Kennedy's withdrawal of the Boston Navy Shipyard—a military installation that resided in Democratic House Speaker John McCormack's district—from consideration in the 1960s (Rocca 2003, 529). For political parties, base closures represent a form of leverage against an opponent. This is particularly significant in regards to checks and balances of the U.S. federal system because presidents have always capitalized on their discretion over base closure. The threat of base closure has been wielded as punishment against political foes and uncooperative members of the president's party (Lockwood and Siehl 2004, CRS-2; Rocca 2003, 534). As a result, Congress passed the Military Construction Authorization

Act of 1977 in order to leverage more control of the process from the president (Rocca 2003, 534).

The Soviet Union collapsed during the 1980s, and this event triggered a series of base closures from 1988 to 1995 (Bearden 2007, CRS-1). During this time, members of Congress took notice that national security was not better served by a bloated military defense structure.

Some of the more egregious examples of waste were Fort Douglas, an army post established in 1862 to protect Pony Express mail routes and which now sits in the middle of the University of Utah campus, and Fort Sheridan, north of Chicago on Lake Michigan, whose chief feature is one of the best military golf courses in the United States (Mayer 1995, 396).

As can be expected, the base closure process was intensely partisan, in part, because the Secretary of Defense, who would call for a base closure, was the president's appointee (Mayer 1995, 398; Rocca 2003, 534). In response, the One Hundredth United States Congress enacted Public Law 100-526 in an attempt to shift the process away from the politicization of base closure and towards a recognizable set of criteria that met the needs of the military (Beaulier, Hall and Lynch 2011; Rocca 2003, 535). The criteria for base closure were published in the Federal Register on November 30, 1990 (Lockwood and Siehl 2004, CRS-6). In selecting bases for closure, the Department of Defense (DoD) considered value to the military, return on investment, and impact to the DoD's objectives (Lockwood and Siehl 2004, CRS-7). The balance that was struck from the Defense Base Closure and Realignment Act (BRAC) included the nomination of BRAC committee members by the president, but subject to congressional approval. In addition to the set criteria for a base closure, the added benefit of the 1988 act was to give Congress the authority to reject or accept the base closure recommendations (Rocca

2003, 535). The result was an independent commission that provided a way for congressional members to deflect complicity with the base closure decisions, which would theoretically remove a great deal of political pressure and involvement (Rocca 2003, 535).

Despite the creation of BRAC, the politics surrounding base closures remained unimpeded. One reason is that politicization of the base closure process involves the extent of lobbying by politicians in response to the public's reaction (Beaulier, Hall and Lynch 2011, 2; Glassberg 1995, 97). March 2, 1994, was the day that the highest court in the United States listened to unsuccessful arguments by Senator Arlen Specter (R-PA) about the supposed unconstitutionality of the base closing law (Glassberg 1995, 97). The decision of the Rehnquist Court on May 23, 1994 affirmed that the President of the United States was not an agency and could not be held under the jurisdiction of the base closure statute (Lockwood and Siehl 2004, CRS-11). This ruling, in effect, supported the longstanding autonomy of the president to exercise authority in the area of base closure (Lockwood and Siehl 2004, CRS-2, CRS-11; Rocca 2003, 534).

The BRAC commission itself is a political presence in the context of base closure. In *The Strategic Constitution*, law professor Robert D. Cooter at the University of California, Berkeley, states that political operatives like the president's nominee to the BRAC commission is strategically-selected to appeal to a wide array of ideologies or what Cooter refers to as a "bargain set" (Beaulier, Hall and Lynch 2011, 7). As a function of presidential appointment, the independent member should reflect the political objective to shield bases in states that are important to the president's goals (Beaulier, Hall and Lynch 2011, 7). Finally, the impact studies that are used as evidence in the

decision making process must avoid being rejected by Congress and engendering media-driven public outrage (Beaulier, Hall and Lynch 2011, 7). In other words, political pressure remains salient over an objective standard from a set of criteria—the rationale supporting the creation of the Defense Base Closure and Realignment Act of 1988.

A study of base closure that included the 1995 BRAC round showed that the allocation of base closure was a politically-motivated decision (Rocca 2003, 538). Base closure carries with it political liability and both sides of American politics dealt with it in different ways. The Republican leadership tried not to expose newly-elected members by insuring that new conservatives would not be targeted by base closure. In addition, those members who were affected received some form of compensation to deal with the negative impacts of the BRAC decision (Rocca 2003, 538). Conversely, the Democrats tried to shield their senior members from base closure, which made newly-elected members vulnerable to attack from their constituents (Rocca 2003, 538). These two strategies have different approaches to leverage base closure in the political process. Republicans tended to maintain their dominance in Congress by protecting their newly-elected crop of conservatives. In seeking to regain control of Congress, the Democrats sought to protect their more experienced members from losing elections (Rocca 2003, 538).

A Brief History of Environmental Law

The Clean Air Act and the Clean Water Act are the two key landmark environmental legislations that served as the bases from which all current environmental regulations emanate (Parisi 1980, 1). In 1979, the EPA's argument for environmental law

revolved around the concept of “polluter pays.” This position stemmed from the belief that Congress could not be relied upon to appropriate funding for environmental cleanup indefinitely (Klyza 2011, 357). During discussions among senators, provisions that included victim’s compensation were later dropped in order to have an environmental bill pass the House of Representatives (Klyza 2011, 357). The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) addressed the need for an environmental law that dealt with the illegal disposal of hazardous waste materials. CERCLA was a major step in environmental policy by giving the law a more comprehensive application. CERCLA was intended to clean up improper hazardous waste disposal. Estimates claim that 750,000 plants generated approximately 57 million tons of hazardous waste per year, in 1980 (Parisi 1980, 1). The known substances that comprise the definition of “hazardous” include lead, arsenic, polychlorinated biphenols (PCB), trichloroethylene (TCE), tetrachlorodibenzoparadoxin (TCDD), dioxin, benzene, and beryllium, to name just a few (Parisi 1980, 1). An estimated 90 percent of all hazardous materials that come from just 20 industries are improperly disposed, according to the EPA, in 1980 (Parisi 1980, 1).

Part of the problem of environmental cleanup involves the principal responsibility of paying for cleanup. There is a reluctance to pay for a problem that “others” have created (Dickson 1982, 47). In addition, lack of funds has made the problem of environmental cleanup more difficult. Prior to passage of CERCLA, the proposed fund used for hazardous waste cleanup was expected to total \$4.1 billion that would be raised through fees on industries that produce any of the 46 toxic substances targeted in the Senate bill (Molotsky 1980, 54). Scientific uncertainty over the extent of

environmental hazards and the political differences over state and federal environmental enforcement have also stymied a proper response (Dickson 1982, 47). “The crux of the hazardous waste regulation problem is clear: we do not have enough solid scientific information to identify with certainty the ‘right level of regulation’” (Dickson 1982, 48). As of 1982, there were an estimated 750,000 companies that generate industrial waste, but the focus of regulation targets the highest producers—roughly 5 metric tons from just 6 percent of all generators (Dickson 1982, 47). At that time, there were 400 dump sites that still required immediate attention, yet, the EPA administrator, Ann Gorsuch, who was a Reagan appointee, stated that the focus would be on 115 of the worst known hazardous waste dumps (Dickson 1982, 48).

In 1976, the Resource Conservation and Recovery Act (RCRA) was passed to deal with the cleanup of active hazardous waste sites (Weber 2004, 157). At the time, RCRA was “the most comprehensive set of environmental regulations ever developed” (Dickson 1982, 48). RCRA incorporated a “cradle-to-grave” system, which meant its scope of enforcement began from the time hazardous waste was created to the disposal of said waste (Dickson 1982, 48). Under RCRA’s system, there was no denying who was responsible for hazardous waste removal. Definitional debates continued and this led to the treatment of hazardous waste dependent on its definition, even among scientists (Dickson 1982, 48). RCRA did not cover the problem with abandoned sites, such as Love Canal, New York. The passage of CERCLA was expedited from the events that happened at Love Canal (DiStefano 2004, 109).

William T. Love owned land near Niagara Falls and it was his intention to develop the land into a route for ships (Weber 2004, 157). Love abandoned the project

and the land was sold in 1920, which eventually became a municipal chemical dump. Decades later, the Hooker Chemical Company used the land to bury 20,000 tons of chemical waste (Weber 2004, 159). Upon reaching capacity as a dump, the land was sold to the city of Niagara Falls for \$1.00 with a description that included a warning about the disposal of chemicals underground (Weber 2004, 159). Eventually, homes were built over the land, and during the 1970s many of the residents complained of ill health. In 1978, the New York Health Commissioner declared Love Canal a public health hazard (Weber 2004, 159). A legal battle ensued, and after decades of litigation, the Occidental Chemical Company agreed to pay \$129 million for the cleanup. Love Canal is now a euphemism for “toxic waste” and served as the precursor to the development of CERCLA or Superfund (Dickson 1982, 46).

CERCLA is a matter of strict liability for potentially responsible parties (PRPs) (Hillstrom and Hillstrom 2002, 217). As such, CERCLA categorized four ways to characterize liability for a cleanup site: 1) present site owners or operators; 2) those who owned or operated at the time of the disposal; 3) persons who arranged for disposal ; and 4) transporters who selected the disposal site (Weber 2004, 158). The EPA’s implementation of CERCLA, as enforcement, is to negotiate with PRPs (Weber 2004, 158). Classification of a PRP includes the current owner or operator of a site during the time of contamination or after (Hillstrom and Hillstrom 2002, 216). The language of CERCLA makes it necessary to avoid the purchase of contaminated sites or risk being held accountable for the cleanup costs (Hillstrom and Hillstrom 2002, 216). While CERCLA remedied a void in environmental protection, the law needed and received additional support through the Superfund Amendments and Reauthorization Act of 1986

(SARA); it provided \$8.5 million for hazardous waste removal, faster cleanup, and permanent remedial practices (DiStefano 2004, 109). SARA revised the Hazardous Ranking System, which is used to decide the hazardous waste sites that will be included on the National Priorities List (NPL), to include human health issues, along with the appropriation of additional funding (Hillstrom and Hillstrom 2002, 216). In 1986, the EPA settled with PRPs to an estimated \$300 million in the first six months (Goldstein 1986, 59).

The issue of liability in CERCLA revolves around common law as a result of other statutes (Ferrey 2007, 382). When it comes to cost recovery actions, the courts hold PRPs under strict liability whether or not there is proof of negligence involved, and any amount of a hazardous substance is grounds for PRP liability as defined by CERCLA. Representatives for PRPs routinely argue that due process is necessary to prove current liability in cases where there is no ongoing activity on a hazardous site. The courts have sustained that cases involving liability are applicable to past activities—a retroactive aspect of Superfund liability (Ferrey 2007, 382).

In *United States v. Northeastern Pharmaceutical and Chemical Co., Inc.*, 810 F.2d (1986), the government had not proven negligence in its recovery of response costs pursuant to the Resource Conservation and Recovery Act (RCRA) § 7003(a). The Resource Conservation and Recovery Act provides the EPA with the authority to control hazardous waste generation, transportation, treatment, storage, and disposal by serving as a management framework (“*Summary of the ...*” United States Environmental Protection Agency 2012). The government’s view held that RCRA was a matter of strict liability, in which case recovery of response costs can be imposed even when it concerns past

activities. Even as the language of RCRA reflected a change in the words of the amendment, the court's interpretation of RCRA was to provide recourse for past activities of the present conditions without fault or negligence (Ferrey 2007, 338, 343). In addition, the appellants counter-argued that substantive changes in the amendments to RCRA reflect a substantive change to the law itself. However, the court maintained that the change in the language from "contributing to" to a more concise reading of "without fault or negligence" is precisely the intent of Congress to clarify the law. Whether the appellants contributes to or is without fault or negligence, the fact remains that an agreement to dispose of hazardous waste materials at a location was only possible with the appellant's activity. There could be nobody else to blame for this environmental hazard than those who admitted their involvement. The debate over liability for a possible link between specific waste materials and a specific harm has been scrutinized and resolved in the following case.

In *United States v. Monsanto Co.*, 491 U.S. 600 (1989), the defendants were held liable for \$1,813,624 in response costs stemming from 7,000 drums of chemical waste that was only partially removed. The defendants counter-argument stated that the government prevented evidence in their defense from being presented as allowed under section 107(b)(3). Furthermore, they accused the government of failing to prove a link between waste materials and harm associated with the waste. The court interprets the language of congressional intent: "107(a)(2) extends liability . . . regardless of their degree of participation." Since the owners of the site do not dispute ownership, the 107(a)(2) liability had been satisfied. Under 107(b)(3) the required proof of release or threatened release and proof of precautions against foreseeable acts or omissions of any

were neither found in the evidence, as stated by the lower court. As for specific chemicals or specific harm from said chemicals, the mere showing of similarity between hazardous substances is sufficient (*United States v. South Carolina Recycling & Disposal, Inc.*, 653 F. Supp. at 993 n.6).

The EPA has come under scrutiny for the way it handles environmental enforcement. The agency is said to rely mostly on temporary treatment methods, and that management is not effective (Klyza 2011, 359). In addition, critics have stated the EPA does not hold PRPs responsible for the costs that the agency lacks expertise to conduct meaningful oversight of waste cleanup sites (Klyza 2011, 359). Finally, the length of litigation-incurred costs are often more than the costs of cleanup. In some cases, the EPA recovers less than 15 percent from PRPs relative to what the agency spends to the cleanup site (Klyza 2011, 359).

Twenty years from the enactment of CERCLA, the statute's impact on environmental waste sites includes 6,400 emergency actions, completed constructions on 757 NPL sites, cleanup by PRPs of 70 percent of all NPL sites, and the removal of 219 sites from the NPL (Weber 2004, 158). As of 2010, 1270 sites remain on the NPL with 340 sites removed from the list; 63 new sites have been proposed since the NPL was created (Klyza 2011, 359). The agency has been scrutinized by citizens groups both for the hazardous material in their neighborhoods, but also for the proposed method of handling the waste—NIMBY syndrome, where people say “not in my backyard” (Goldstein 1986, 59).

Executive Leadership and the Environment

It would not be cynical to suggest a parallel between CERCLA enforcement and the political viability of the president who signed it into law. President James Earl “Jimmy” Carter, Jr., led the United States during the Cold War, the Camp David Peace Accords, gas shortages, and a rising tide of unpopularity at home (Biven 2002, 156; Haas 1992, 105; Hargrove 1998, 146-159; Morris 1996, 1). The facts surrounding Love Canal, and the disparate effects of environmental hazards on the poor and ethnic minorities, prompted President Carter to advocate for CERCLA. Perhaps it is only coincidental that CERCLA became law as one of the final acts of an embattled leader (Daynes and Sussman 2010, 93; Rohrman 2004, 51). Since then, CERCLA’s enforcement remains contentious. The EPA often makes agreements with PRPs in order to get them to comply to some extent with the law—a strategy that avoids the protracted legal maneuvers that punctuate the enforcement of CERCLA (Klyza 2011, 359). Economics seems to be the primary form of leverage to explain away responsibility for cleanup costs. Economic considerations take this discussion all the way back to the inception of environmental law, not as a means to protect trees, not as a means to safeguard clean air or water, but strictly as a relation of the Commerce Clause evidenced in the Rivers and Harbors Act of 1899: to prevent waterways from being obstructed so that trade could be facilitated (Eames 1970, 1447).

James Earl Carter was considered an “outsider” whose leadership style alluded to his belief in an activist role for the federal government when it concerned environmental policy (Daynes and Sussman 2010, 85). Carter referred to the energy

crisis of the 1970s as a “moral equivalent of war” and his success as President of the United States includes the passage of amendments to the Clean Air Act and the Clean Water Act (Daynes and Sussman 2010, 92, 93). In addition, President Carter supported the creation of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) in 1980 as well as the creation of a new Department of Energy (Daynes and Sussman 2010, 93, 95). As president, Carter’s proclamations include education in the areas of conservation and energy use, preservation of public lands, establishment of many national monuments, Earth Day and Earth Week (Daynes and Sussman 2010, 96). President Carter followed his view of an activist federal government in the area of environmental policy.

Ronald Wilson Reagan was elected America’s 40th president and his successful campaign was due in large part to his persuasive oratory, which provided a clear demarcation away from the domestic and international problems of the 1970s. President Reagan’s tenure witnessed the end of the Cold War and destruction of the Berlin Wall. His administration also ushered in an era of neoliberal policies that have constricted economies around the world (Harvey 2005). In his effort to achieve a more relaxed regulatory environment, Reagan effectively “reduced the size, scope, and effectiveness of environmental agencies” (Kraft and Vig 1984, 437).

During Reagan’s first term, he appointed Anne Gorsuch to the post of EPA Administrator. In her tenure at the agency, Gorsuch requested that the Clean Air Act amendments should make compliance easier and far less punitive in terms the cost of compliance (Lash, Gillman and Sheridan 1984, 30). During this time, a director objected to an amendment that would have made optional the compliance of state inspection and

maintenance of pollution controls (Lash, Gillman and Sheridan 1984, 31). The newly confirmed Gorsuch retorted: “I was in the Colorado legislature. We would have done more and done it better, but for the heavy-handed interference of the EPA” (Lash, Gillman and Sheridan 1984, 31).

Attrition at the EPA was also paramount to centralizing the power of the agency into Reagan’s appointees (Lash, Gillman and Sheridan 1984, 60). A story in the New York Times stated that the size of the EPA went from 4,700 personnel down to 2,500 in 1982 (Lash, Gillman and Sheridan 1984, 61). The rate of attrition was expressed as “three times the average decline for non-defense agencies of the federal government” (Lash, Gillman and Sheridan 1984, 62). The political appointment of Anne Gorsuch to the highest post at the EPA signaled a sweeping change in priorities away from the Carter administration.

Much of Reagan’s success in changing the efficacy of environmental statutes can be attributed to the subordination of those provisions to his economic program (Kraft and Vig 1984, 437). The characterization of Reagan’s new federalism dovetails well under the auspices of Reagan’s environmental policy (Portney 1984, 57). Funding is essential to environmental law enforcement, but what we know from scholarly works in public administration is that funding can be contingent on the present set of priorities. The Reagan administration reduced funding for the EPA, which accomplished two goals simultaneously—to reduce the rate of federal spending on domestic programs, and to effectively limit federal regulatory activity (Portney 1984, 66). The findings of an empirical study demonstrated that funding for the EPA dropped 44 percent in 1984 compared to the agency’s budget in 1981 (Portney 1984, 66). Public funding is fungible

in all ways because of the political reasons that predicate increases or limitations on public funding (Kraft and Vig 1984, 431).

During the Reagan Era, environmental programs underwent a cost-benefit analysis that was introduced as improving efficiency of such programs (Kraft and Vig 1984, 420). Scholars Michael E. Kraft and Norman J. Vig state that sweeping environmental policy changes were a response to the Watergate scandal's effect on the presidency (Kraft and Vig 1984, 419). The administrative presidency was not immune from political obstacles to its goals on environmental policy (Durant 1993, 551; Kraft and Vig 1984, 433, 436). In the era of divided government, the Reagan administration struggled to gain institutional control of the Environmental Protection Agency. As the Reagan administration centralized case clearance and drastically-reduced EPA enforcement, Congress responded with additional requirements for the EPA through the Superfund Amendments and Reauthorization Act (Whitford 2005, 35).

The leadership of President William Jefferson Clinton had a direct positive impact on the environmental justice frame. The successes of President Clinton's tenure include the passage of the California Desert Protection Act and the Everglades water flow bill (Daynes and Sussman 2010, 107). He invoked the Antiquities Act of 1906 to preserve as national monuments three million acres of land, the Grand Staircase-Escalante National Monument, Pinnacles National Monument and the Grand Canyon-Parashant National Monument (Daynes and Sussman 2010, 109). In addition to the preservation of natural resources, President Clinton made efficient use of the EPA and appointed Carol Browner—the longest serving administrator of the agency (Daynes and Sussman 2010,

110). Clinton's tenure affected the creation of the National Biological Service, which assesses species that require federal protection (Daynes and Sussman 2010, 111).

Executive Order 12898 is an example of environmental activists' success in the policy-making arena, and it is the decree for which President Clinton is most associated with concerning environmental justice. The executive order is aligned with Clinton's idea of federalism—the implementation of “justice” for every citizen, in particular, for ethnic minorities and poverty-stricken groups who live near industrial areas and are at risk of the effluents discharged (Daynes and Sussman 2010, 112). Political debates over environmental justice are attempts to control the meaning of the ends. At times, opponents of environmentalism try to spin the goals of environmental justice activists as “special interests” (Pellow 1999, 668). This phenomenon runs parallel to scholarly works that illustrate partisan conflicts as attempts to control the meaning behind a president's leadership (Skowronek 2008, 90). If successful, a president can no longer control how his actions are received by the public (Skowronek 2008, 90). Executive Order 12898 is a presidential action, the meaning of which construes environmental justice as a policy to insure equity for all citizens—a classic rights frame.

These comparisons on executive leadership describe environmental issues as an indicator of a political paradigm. Carter focused on peace among the region that supplies the United States with much needed oil, but at the expense of a bigger threat to world security. Reagan ended the most dangerous threat to global security—a nuclear arms buildup in a bipolar competition for resource domination, but his leadership introduced the ingredients for future conflicts. The effect of Carter's “public trusteeship” leadership style mitigated environmental racism and the impacts of consumption by those

who are economically better off against those who can least afford the healthcare as a result of exposure to hazardous waste. The robust economic expansion that correlated with Reagan's election brought about an indifference to the externalities created by heightened productivity in a relaxed regulatory environment. This was possible due to the inability of Congress to resist Reagan's strategy—to gain control over domestic policy (Kraft and Vig 1984, 437). This link between distributional benefits and electoral outcomes has been replicated in political contests long after the Reagan presidency (Rocca 2003, 529, 534, 538, 542).

Finally, the presidency of William Jefferson Clinton receives only minor consideration when it comes to the relationship between executive leadership and environmental protection. While one can argue that it is too recent to judge the legacy of President Clinton's administration, the tenure of his leadership acts as the sequel to the political clash President Carter and President Reagan. Executive Order 12898 forwards the priorities set by CERCLA because it requires federal agencies to maintain environmental justice in its policies, programs and activities in order to mitigate any adverse effects to the most vulnerable groups throughout the United States and its territories (*"EPA Insight Policy..."* United States Environmental Protection Agency 2011). President Carter and Congress established CERCLA just as more low-income residents were being subjected to living conditions where hazardous waste materials were present (O'Neil 2007, 1087). While CERCLA involves a distinct environmental cleanup program, it follows that low-income residents, who are the primary reason behind the enactment of Executive Order 12898, benefit when CERCLA and Executive Order 12898 work as complementary enforcement. In addition, research has demonstrated that for

Executive Order 12898 to become fully operational, the EPA must implement the presidential order consistently in the presence of CERCLA's environmental cleanup (O'Neil 2007, 1092). President Clinton effectively articulated a legacy for the environmental aspect of Carter's leadership and provided a solution to the effects of Reagan's expansionist policies. Executive Order 12898 legitimizes government action by acknowledging the goals of CERCLA and the ideological basis that predicates environmental protection in its own practices.

Political Dimensions of the Environment

The role of congressional oversight is advantageous in the area of institutional corruption and waste. However, discretion of authority is often fragmented and those who dispense government grants lack the oversight authority (Lazarus 1991). Congress is charged with making laws, but a certain degree of autonomy at each level is required to insure that environmental policy reflects utility—a cost-benefit rationale. At the regional level, states are better equipped to determine the content of environmental statutes for their particular needs. Also, the EPA's regional offices buttress state environmental policy enforcement through CERCLA determinations (Davis and Puro 1999).

In "Environmental Policy and Party Divergence," Charles R. Shipan and William R. Lowry analyze the question of party divergence or convergence over time and other factors leading to such shifts on environmental issues. In order to determine actual divergence on environmental issues, specific policy areas are examined; a methodology developed by Groseclose, Levitt and Snyder is implemented to measure the ratings from the League of Conservation Voters over time; and, party divergence is further understood

through analysis of its three major change agents—region, faction, and individual party member.³ Among the findings, Shipan and Lowry (2001) conclude that the economy can be a stronger force for convergence than “social” issues such as the environment. The authors are referring to the lay understanding that economic tradeoffs exist with regard to government spending. For example, job creation is more salient than saving the Spotted Owl. According to their hypothesis, the salience of an issue (economy) causes factions (prominent party leaders of the Northeast) to become constrained (Shipan and Lowry 2001, 254).

In some ways, the results from Shipan and Lowry’s empirical examination of environmental policy areas mirrors the results from ideological measurements by Dunlap, Xiao and McCright, though both studies make use of LCV ratings (Dunlap, Xiao and McCright 2001, 29; Shipan and Lowry 2001, 249). Dunlap, Xiao and McCright’s study demonstrates the divergence between the parties on the environment, while Shipan and Lowry’s study demonstrates how party divergence occurs (Dunlap, Xiao and McCright 2001, 45; Shipan and Lowry 2001, 253). However, Shipan and Lowry offer something beyond a numerical representation of votes given a specific time.

Another interesting point involves Shipan and Lowry’s hypothesis about shifts in regional composition: an increase of Democrats from the South will reflect a closer alignment with Republicans voting scores (Shipan and Lowry 2001, 252). It is unclear whether the differences over time between Southern Democrats and Non-Southern Democrats are influenced by actual regional shifts or if the closer integration of

³ The League of Conservation Voters (LCV) is a nonprofit organization that scores the voting records by members of Congress over environmental issues.

environmental positions among Democrats can be attributed to support by interest groups that can cut across party lines and within regional party differences (Shipan and Lowry 2001, 253).

The longer the tenure of a particular member of Congress, the more risk-averse the incumbent becomes. The implication is that long-term congressional members lead to steady party divergence. Increases in turnover lead to even greater divergence on environmental issues because newly-elected members can take more extreme positions. This does not explain the particular forces behind the changes in congressional members that are examined by Shipan and Lowry—region, faction, and the impact of individual party members. It appears that party divergence over environmental issues requires Democrats to become more risk-averse and Republicans to elect new members who can reflect extreme policy positions on the environment (Shipan and Lowry 2001, 255).

Policy implementation is susceptible to regional effects. Successful environmental policy by neighboring states is a quick and efficient method for adoption or policy diffusion (Mooney 2001, 119). For purposes of state policy implementation, policy diffusion is one way, at the state level, that environmental enforcement can avoid the trappings of political sanctions. Historically, Congress has been negligent in its role as agency oversight (Lazarus 1991, 208). In addition, states contribute to the problem of environmental policy deliberations through the attitudinal effects of state administrators: “successful policy implementation depends in part on the attitudes of policy implementers” (Gormley, Jr. 1987, 286). For these reasons, comprehensive environmental policies should reflect EPA standards.

The EPA must not only deal with political forces that shape the scope of its authority, the agency must also find creative ways to deal with non-compliance. Local autonomy is one way that environmental protection can have a specialized impact. While the EPA does not directly govern land use, many proposed sites for development reside near or around Superfund sites (Whitford 2007).

The Environment vs. Economic Growth

Beginning with the early 1980s, Americans have generally supported environmental protection over economic prosperity, that is, until 2009 when the nation's economy was in a recession (Jacobe 2012). Prior to 2007, public opinion polls supported the prioritization of the environment by a wide margin of 18 percent (Jacobe 2012). Compare the 2007 polling results with those from a 2012 public opinion survey and the difference of public attitudes in a five-year span show a dramatic 26 percent change in favor of economic growth (Jacobe 2012). The information from the Gallup polls indicate human behavior and the ensuing public policy choices over environmental issues are subordinate considerations to the economic outlook of the nation, and by implication, of one's own financial opportunities.

In order to further test a nuanced understanding of human behavior as a function of economic times, a discussion about political party affiliation, age, and political ideology are important demographics to evaluate. As can be expected, those respondents who identify themselves as Republicans are 2.5 times more likely to support economics issues over the environment (Jacobe 2012). The results of those who are self-described conservatives mirror the results of Republicans within a 2 percent

Table 3. Higher Priority for Economic Growth or Environmental Protection.

Year	Economic Development	Environment
1985	28%	61%
1991	20%	71%
1999	28%	67%
2003	42%	47%
2005	36%	53%
2007	37%	55%
2011	54%	36%
2012*	49%	41%

* This year is an approximation.

Source: Public opinion poll, Gallup Inc., 2012. Americans Still Prioritize Economic Growth Over Environment. <http://www.gallup.com/poll/153515/americans-prioritize-economic-growth-environment.aspx> (accessed October 16, 2012).

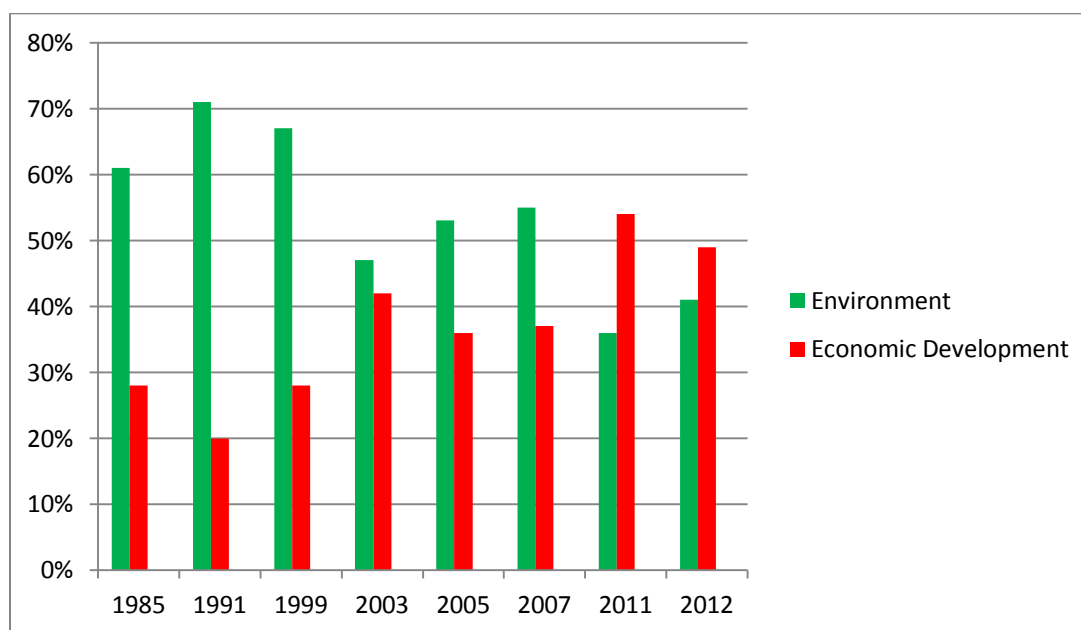


Figure 5. Higher Priority for Economic Growth or Environmental Protection.

Since 2009, public opinion has shifted from pro-environment to pro-economy, and in the last year the shift was stable with an eight-point gap favoring economic growth (Jacobe 2012). One possible explanation is the impact of the 2009 recession on employment opportunities. Source: Public opinion poll, Gallup Inc., 2012. Americans Still Prioritize Economic Growth Over Environment. <http://www.gallup.com/poll/153515/americans-prioritize-economic-growth-environment.aspx> (accessed October 16, 2012).

Table 4. Americans' Priorities Shift Over a Five-Year Period Since 2007.

Year	Economic Growth	Environment
2007	37%	55%
2012	49%	41%

Source: Public opinion poll, Gallup Inc., 2012. Americans Still Prioritize Economic Growth Over Environment. <http://www.gallup.com/poll/153515/americans-prioritize-economic-growth-environment.aspx> (accessed October 16, 2012).

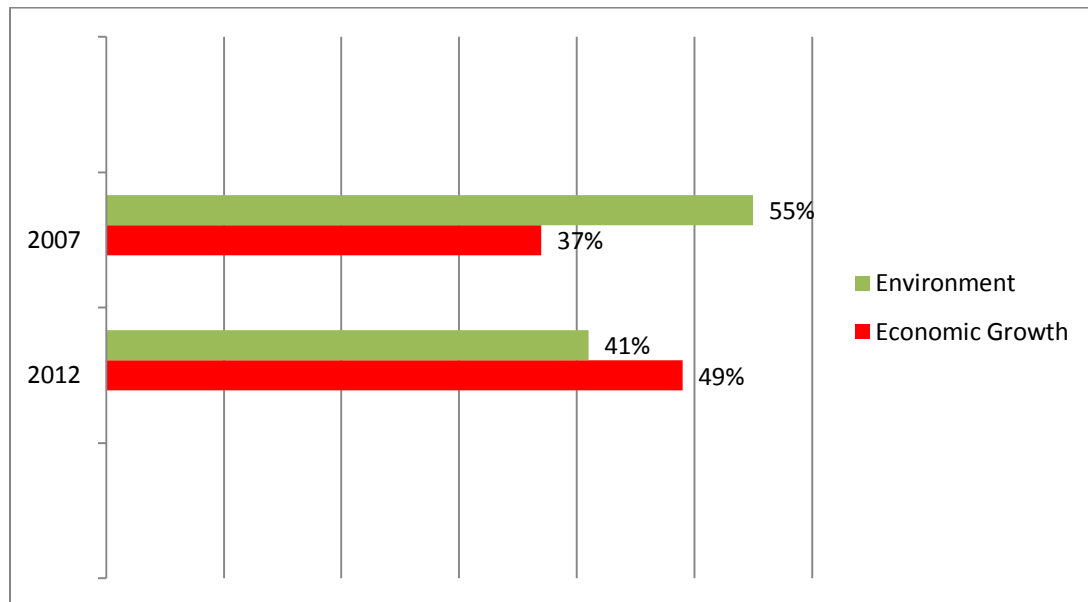


Figure 6. Americans' Priorities Shift Over a Five-Year Period Since 2007.

This figure shows the differences on public policy choices based on the economy in 2007 before the recession of 2009. A marked 26 percent shift within a five-year period shows public support of eight percent favoring economic growth. Source: Public opinion poll, Gallup Inc., 2012. Americans Still Prioritize Economic Growth Over Environment. <http://www.gallup.com/poll/153515/americans-prioritize-economic-growth-environment.aspx> (accessed October 16, 2012).

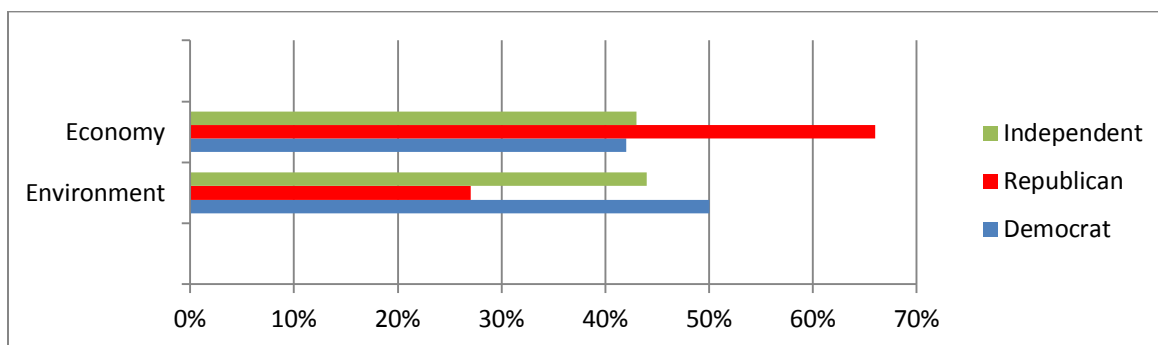


Figure 7. Higher Priority for Economic Growth or Environmental Protection, Political Party. Source: Public opinion poll, Gallup Inc., 2012. Americans Still Prioritize Economic Growth Over Environment. <http://www.gallup.com/poll/153515/americans-prioritize-economic-growth-environment.aspx> (accessed October 16, 2012).

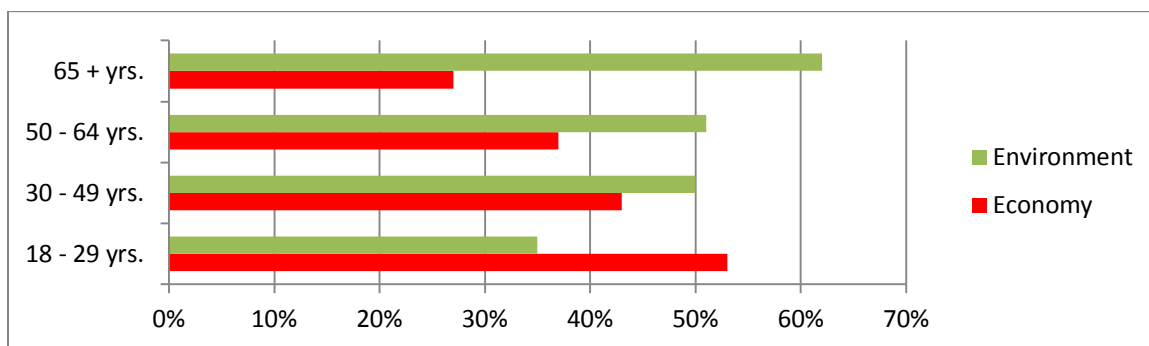


Figure 8. Higher Priority for Economic Growth or Environmental Protection, Age Group. Source: Public opinion poll, Gallup Inc., 2012. Americans Still Prioritize Economic Growth Over Environment. <http://www.gallup.com/poll/153515/americans-prioritize-economic-growth-environment.aspx> (accessed October 16, 2012).

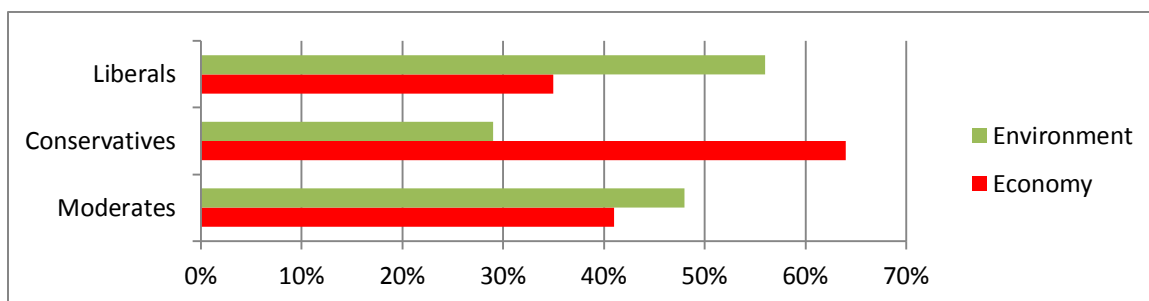


Figure 9. Higher Priority for Economic Growth or Environmental Protection, Ideology. Source: Public opinion poll, Gallup Inc., 2012. Americans Still Prioritize Economic Growth Over Environment. <http://www.gallup.com/poll/153515/americans-prioritize-economic-growth-environment.aspx> (accessed October 16, 2012).

difference (Jacobe 2012). Independent voters are evenly split with just a 1 percent difference, but that was the only category in the survey where there was no marked difference of opinion (Jacobe 2012). Democrats demonstrated support for the environment, but not at the same level in which Republicans supported the economy (Jacobe 2012). Moderates were also in favor of the environment with a 7 percent margin over the economy, while liberals were vastly opposed to support for the economy at the expense of the environment (Jacobe 2012).

Age differences also play a key role in predicting the more likely public policy choices regardless of economic time. The only clear support for the environment was evidence by those who are between the ages of 18 and 29 years old (Jacobe 2012). From there, each age group surveyed demonstrated increasing support for the economy over the environment as a person gets older (Jacobe 2012). Throughout the Gallup polls, there were other potentially significant variables that were unavailable in the results of the survey. A respondent's gender was the most noticeable demographic that was not reported.

Conclusion

The development of environmental law begins with theoretical constructs that determine the way we view environmental concerns. The ferment of economic considerations about how society should be structured eventually led to the development of environmental justice. Lodged in the tension between freedom and fairness lies the nexus for public policies that reflects the desire for property, as the embodiment of

individual freedom, and the need for coercion, as the only measure to ensure resources are distributed equitably.

In Chapter 3, I will discuss the case study on military base closures. I will begin with a background of each federal site in order to better understand the relationship between military base closure and environmental cleanup. The objective of this case study is to highlight the role of environmental law in shaping the political trajectory of military base closure policy.

CHAPTER III

CASE STUDY: ENVIRONMENTAL CLEANUP AND MILITARY BASE CLOSURES

The environmental cleanup process of military base closure began when Congress passed the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) and engaged the whole nation in a long-term debate over the environmental cleanup process of hazardous waste (Rubenson and Anderson 1995, 1). The relationship of environmental law to base closure is to prevent any risk to human health from exposure to hazardous materials (Rubenson and Anderson 1995, 15). The “polluter pays” principle was intended to limit the amount of federal expenditures for environmental cleanup (Rubenson and Anderson 1995, 1). The closure of military bases throughout the United States was predicated on the expected savings to the Department of Defense (DoD). Among the major installations that were considered for base closure and realignment, the most contaminated installations represented about one-fourth of all bases on the Superfund list in 1995 (Bloom and Bach 1995).

During this round of base closures, Saul Bloom and Eve Bach worked for the nonprofit San Francisco-based Arms Control Research Center, which specialized in policy matters of base closure (Bloom and Bach 1995). According to Bloom and Bach, any savings that resulted from base closures were channeled toward land acquisitions and the development of new infrastructure that essentially circumvented the supposed public

benefits from base closure (Bloom and Bach 1995). Worse yet, none of the monies generated from base closures were allocated toward cleanup efforts—a blatant disregard by the DoD of its obligation to cleanup environmental contamination that would have mitigated the impacts to those communities adversely-affected economically by base closures (Bloom and Bach 1995). These situations were exacerbated by a newly-elected Congress that cut the funding necessary for community development, such as new vocational training and placement, along with programs and infrastructure that would offset the negative economic impacts created by base closure.

The Senate voted to rescind \$100 million from last year's budget for programs for dislocated defense workers. A proposal to amend the Superfund laws to limit the federal government's responsibility for cleaning contaminated properties made it out of the House Committee on National Security . . . Closing bases isn't part of an honest downsizing of the military. It provides instead a distraction that allows expansion to go unnoticed (Bloom and Bach 1995).

Base closure, in addition to land acquisition, serves the DoD's economic interest at the expense of the environment and those communities that are directly and indirectly affected. For small business owners, military installations like McClellan Air Force Base, located in Sacramento, California, represent upwards of ninety-percent of business (Williams 1995). While the benefits of base closure have not always been realized, the sale of excess military property never produced the much anticipated level of profits either. Cleanup costs have been woefully underestimated and the job recovery that the Golden State was sure to see was less than the amount of job losses (Yim 1995). As a member of the California Military Base Reuse Task Force, attorney Randall Yim stated that the aforementioned problems were a result of misunderstanding the second part of

base reuse: “peacetime-based economic revitalization and diversification from the base reuse” (Yim 1995).

President Clinton’s “five point plan” was intended to facilitate cleanup through reuse-driven planning (Rubenson and Anderson 1995, 3). Clinton’s plan articulated some of Randall Yim’s points, such as the allocation of funding for areas with the least cleanup requirements that also hold the greatest potential in terms of land value and value to the nearby communities (Rubenson and Anderson 1995, 3; Yim 1995). Between 1988 and 1995, military reductions equaled roughly 200,000 direct and indirect jobs that were lost with an annual decline of personal income well into the billions of dollars (Yim 1995). California alone accounted for approximately 70% of the nation’s reduction in military and civilian workers (Yim 1995).

The studies conducted on finding solutions to base conversion and reuse are equally to blame. Duplicative environmental studies abound with no tangible worth for the amount of monies spent on research and development. Contamination issues on military bases have been consistent. Therefore, cleanup strategies should intuitively follow along a similar protocol. Established protocols should focus on those properties deemed of highest reuse value with an emphasis on risk reduction, source removal, and better toxic waste management (Yim 1995). An emphasis on these opportunities offers the best chance to leverage private development funds (Yim 1995). The amount of public funding for base reuse planning is insufficient and much of the available funding for cleanup programs is often spent needlessly on litigation and other fees.

While much of the discourse over base closure includes the rhetoric of conversion and reuse as leverage, one must bear in mind that the ends of CERCLA and

SARA, as types of regulatory apparatuses, remains the risk-driven goals of environmental law; other considerations, like reuse-driven planning, are not environmental laws per se but generate interest in the cleanup effort as a way to end mounting liability costs (Rubenson and Anderson 1995, 15). The Dod's approach of simultaneously meeting CERCLA and its own policies was exemplified in the dual goals of reuse and risk reduction that can also mitigate community involvement because of the divergent interests (Rubenson and Anderson 1995, 18). For example, real estate interests may prioritize environmental cleanup efforts along the rhetorical plank of redevelopment—the beneficial impact would be to prevent the development of toxic ghettos.

Community groups may prioritize hazardous waste removal through environmental impact reports that state the severity of ground water contamination. Public health threats supersede redevelopment when the contamination exceeds the ability to pay for cleanup. Fast-tracking is a program aimed at accelerating the cleanup process of base closures in order to return property back to the community by reorganizing divergent interests that may disagree over risk by formalizing these interests in order to build common goals—a strategy used by the Department of Defense (DENIX 2012; Rubenson and Anderson 1995, 21).⁴ Risk-driven goals are considered legal facets of environmental policy because the primary goal of CERCLA is to prevent and reduce risk to either human health and/or the environment (Rubenson and Anderson 1995, 15, 21).

⁴ See Appendix A.

The Politics of Base Closure

In December 1988, members of a bipartisan federal commission, which included Representative Jack Edwards (R-Ala.) and Senator Abraham Ribicoff (D-Conn.), urged Secretary Frank C. Carlucci and his commission on Base Realignment and Closure (BRAC) to close 86 military bases, including six in California, for an annual savings that equaled \$700 million (Healy 1988). The establishment of BRAC was intended as a cost savings measure that circumvented political gridlock over military base closures (Halloran 1988). Although the desired realignments that result from base closures was forecasted to save \$693 million per year in operating costs, not a single base was closed in the decade since (Halloran 1988). In order to stop the closures, Congress had to reject the measure with a two-thirds vote before the start of official base closures in 1990 (Healy 1988). The passage of a joint resolution was the only provision given to Congress under the base closure law (Lockwood and Siehl 2004, CRS-4). To take matters further, both Defense Secretary Carlucci and Congress were required to accept or reject the entire list rather than selecting those bases to be closed apart from those that would be consolidated (Halloran 1988). As part of a forcing mechanism of BRAC legislation, any Secretary of Defense would have to follow the base closure recommendations of the BRAC commission (Lockwood and Siehl 2004, CRS-4).

The political context of base closures included vigorous resistance by congressional members to the extent that the precise release of the report was cloaked in secrecy (Halloran 1988). The report was not made available to either the Pentagon or Congress until Thursday, December 29, 1988 at 9:45 a.m. Members of Congress who wanted a copy had to wait until 10:00 a.m. before entering the locked room (Halloran

1988). A press aide distributed the report at the Pentagon, but not without an escort provided by a Marine sergeant armed with a nightstick (Halloran 1988). House Armed Services Committee Chairman Les Aspin (D-Wisconsin) stated that the base-closing recommendation should proceed as planned because the majority of the 86 bases slated for closure were not part of the districts of most House members and included only 27 communities that have fewer than 30 employees (Healy 1988). Additional justification for the base closures was the projected savings of \$5.6 billion, although it would have taken 20 years to realize the cost-effective measure (Healy 1988).

California represents just seven percent of the total closures, even though the state has more military bases on average, which makes it an obvious target. California's high economic growth makes it more suitable than other states to absorb the impact to state budget shortfalls that would result from having a net loss of 25,000 jobs (Halloran 1988; Healy 1988). However, arguments over economic fairness are sidelined by the legal ramifications and the priority of base closure. With military value being the highest priority, most of the arguments targeted flaws and miscalculations in the Pentagon's analysis (Bornmeier 1993). The effort by Governor Wilson and Senator Feinstein highlights a bipartisan effort, but one with clear partisan perspectives. Wilson and Feinstein both pointed to empirical studies in pie charts and graphs that gave a visual demonstration of the serious economic impacts on California disproportionately (Bornmeier 1993). In his testimony before the BRAC commission, Wilson argued through a clearly realist perspective: California bases are needed to protect American security interests with Pacific Rim trading partners, and he noted the security threat posed by North Korea (Bornmeier 1993). Senator Feinstein argued against California base

closures as a matter of fairness and equity: “California has less than 15% of the total domestic military and civilian Defense Department personnel . . . Yet, we have endured over 50% of all personnel reductions as a result of base closures since 1988” (Bornmeier 1993). Proponents of McClellan Air Force Base have successfully steered the base away from the 1993 base closure list by referring to the high costs associated with environmental cleanup and the impact on military value—the highest priority of the base closure commission (Bornmeier 1993; *The Associated Press* 1994). McClellan Air Force Base was officially closed on July 13, 2001.

Congress maintains a general sense of accountability over hazardous waste contamination, but when it comes to base closures there is an added caveat: “close his, not mine” (Gugliotta 1991). Representative Tom Campbell (D-CA) was an exception to this practice because he felt that balancing the budget would require a concession by each district or what he referred to as “fairness” (Gugliotta 1991). Members of Congress were not so inclined. For example, the Democrats talked about a Republican conspiracy; Representative Thomas M. Foglietta (D-Pa.), whose district faced the loss of the Philadelphia Naval Yard, called the base closure “unjust and unfair;” for Senator John F. Kerry (D-Mass.), Defense Secretary Richard Cheney’s base closure announcement was “treachery” (Gugliotta 1991). Part of the reason that Congress resists base closures is that it translates into job losses that trigger voter dissatisfaction (Gugliotta 1991). The Pentagon has long opposed state regulators’ interference with highly technical decisions by maintaining “politics would unfairly skew cleanup efforts through aggressive, publicity-seeking attorneys general (Morain 1990). California has been impacted like no other state in the union due to the sheer number of military bases stationed there. The

DoD's opaque base closure process caused state regulators to draw parallels between the complexity of detecting and cleaning hazardous waste at California military installations with Love Canal—the euphemism for toxic waste (Dickson 1982, 46; Morain 1990).

Mather Air Force Base

Historical Background

Opened on March 15, 1918, Mather Field began its mission as a flight training school and eventually became the sole aerial training facility for the United States Air Force and its allies after World War II (Mueller 1989, 375). Renamed Mather Air Force Base on January 13, 1948, this aerial training facility was located 12 miles east of Sacramento and encompassed a total of 5,845 acres when it closed on October 1, 1993 (Mueller 1989, 375). Between 1958 and 1966, the U.S. Air Force disposed of spent trichloroethylene—an organic chemical used to remove grease from fabricated metal parts—in an open pit that was located near a drinking water well; contaminated drinking water was not discovered until 1979 (*NPL Site Narrative for Mather...* United States Environmental Protection Agency 2011).

Trichloroethylene contamination of drinking water has been associated with liver damage and cancer (*“Basic Information About...”* United States Environmental Protection Agency 2012). Prior to the enactment of CERCLA in 1980, the Department of Defense established the Installation Restoration Program (IRP) in 1978, which made it possible for Mather Air Force Base to identify and clean up the contamination of hazardous materials (*“NPL Site Narrative for Mather...”* United States Environmental Protection Agency 2011). On July 22, 1987, Mather Air Force Base underwent Phase II

of the IRP that was divided into three stages: Stage 1—discovery of the causes and extent of contamination in three areas of the base; Stage 2—investigation of an additional fifteen areas; Stage 3—the present investigation into Stage 1 that involves continued analysis of wells and groundwater (“*NPL Site Narrative for Mather...*” United States Environmental Protection Agency 2011).

Politics of Mather Air Force Base Closure

Compared to the projected \$280 million per year savings in 1988, the closure of Mather included the loss of 3,000 jobs that equal \$240 million based on a 1988 payroll (Healy 1988). A grant from the Economic Development Agency worth \$8.25 million started the conversion of Mather Air Force Base to civilian use; the Sacramento Housing and Redevelopment Agency (SHRA) sought Mather’s 1,271 single-family homes for sale to first-time home buyers (Gibson 1995). The conversion after environmental cleanup included public works improvements as an incentive to declare Mather a redevelopment area (Gibson 1995). The estimated cost for the redevelopment was estimated at \$300 million that would have been generated through tax increments by development at Mather (Gibson 1995).

After 28 months of negotiations, the proposed redevelopment plan stalled because of a disagreement over the sale of Mather’s housing units (Kalb 1995). The Sacramento Housing and Redevelopment Agency’s offer was \$6 million less than the Air Force’s asking price for those single-family homes (Kalb 1995). The discussions between SHRA Executive Director John E. Molloy and Air Force Secretary Sheila Widnall were joined by California Senator Barbara Boxer and Representative Robert Matsui, both of

whom supported SHRA (Kalb 1995). The difficulty of these negotiations involved the Air Force's economic interest that appeared to be largely political. The words of the program director for the Northwest Division of the Air Force Base Conversion Agency, John P. Carr, are a testament to the political realities of these negotiations: "The Air Force will come under a large amount of criticism for not protecting the taxpayer's investment if we sell too low" (Kalb 1995).

Obstacles to Base Closure

The cleanup of hazardous materials usually includes chemicals that are used in the manufacturing of solid rocket fuels such as perchlorate or ammonium perchlorate. Mather Air Force Base, like many others throughout the state made California a leader in understanding the occurrence of perchlorate in water. The cleanup process at Mather Air Force Base involved a contingent from the Base Conversion Agency to implement an environmental cleanup and reuse plan that would have converted the base into an air cargo and maintenance facility—a process that would have taken 20 years at a cost of \$300 million (Gibson 1995; Groves 1993). The Air Force would retain property deeds until the environmental cleanup was completed, which posed a problem as Mather would continue to be a federal installation (Gibson 1995; *The Sacramento Bee* 1995).

Public utilities only provide service up to the gate of the base, and federal installations, such as Mather, must provide their own utilities including telephone, gas and electricity (*The Sacramento Bee* 1995). The duration of environmental cleanup at Mather Air Force Base implicates the need for changes to the approach of base closure duties to include changes in the rules by the Public Utilities Commission and the Federal

Communications Commission (*The Sacramento Bee* 1995). The transition between environmental cleanup and base reuse would require utility companies take over a military base like Mather, but would also require cooperation at the state and federal level (*The Sacramento Bee* 1995).

The study of Mather Air Force Base reveals political tactics throughout the base closure process. Stalled negotiations over the sale of Mather's housing units required political intervention among Senator Barbara Boxer, Representative Robert Matsui, SHRA Executive Director John E. Molloy and Secretary of the Air Force Sheila Widnall (Kalb 1995). The political stakes were high in light of the \$6 million difference from the original purchase offer (Kalb 1995). A report by the General Accounting Office includes one key policy that led to the standoff between SHRA and the Air Force. The General Services Administration policy on the sale of government property "prohibits the disclosure of the government's appraisal because disclosure makes it more difficult for the government to negotiate a higher price (*"Military Base Closures..."* United States General Accounting Office 2012). A disagreement over the fair market value of the housing units pivoted on a lack of evidence to substantiate the claims of higher property values. There were four rounds of appraisals involved with the sale of Mather housing units, and between the first and the third appraisals the Air Force attempted to complete the transaction with a fifty-percent reduction in the asking price (*"Military Base Closures..."* United States General Accounting Office 2012). Since the SHRA did not change its offer, the negotiations collapsed and the issue went to the Federal District Court. A judge issued a restraining order on the sale of any units until the Air Force decided to renegotiate with SHRA. The fourth appraisal was accepted by the General

Services Administration in August 1995 (*“Military Base Closures...”* United States General Accounting Office 2012). On August 1997, the Deputy Assistant Secretary of the Air Force reached an agreement with SHRA.

For both sides, the final transaction had the potential for generating taxpayer disappointment and outrage. A contextual understanding of Mather’s base closure, cleanup, and land reuse is essentially the political dynamics involved. The following passage drives this point further: “The Air Force will come under a large amount of criticism for not protecting the taxpayer’s investment if we sell too low” (Kalb 1995). This statement offers an economic explanation, but one which cloaks political ends.

Moffett Naval Air Station

Historical Background

In 1931, the U.S. military purchased a 1000-acre site located within the cities of Sunnyvale and Mountain View, California, for one dollar (*“Moffett Federal Airfield”* GlobalSecurity.org 2012). Originally named Naval Air Station Sunnyvale, in 1933, it was designed to house the 785-foot long aircraft, the USS Macon. Later renamed Moffett Federal Airfield, the military installation expanded to encompass 2,263 acres. Half of the property consists of two parallel runways. One is 9,200 feet in length, and the other is 8,124 in length; both are 200 feet wide (*“Moffett Federal Airfield”* GlobalSecurity.org 2012). During its peak operation, Moffett Field had 8,000 employees that consisted of 7,500 military personnel, 1,500 civilian workers, and 1,000 reservist personnel (*“Moffett Federal Airfield”* GlobalSecurity.org 2012). During the 1990s base closures, the DoD recommendation that Moffett Federal Airfield unit be relocated to McClellan Air Force

Base was not implemented since McClellan was already listed for closure (“*Moffett Federal Airfield*” GlobalSecurity.org 2012). Moffett Naval Air Station was closed on July 1, 1994.

Moffett Naval Air Station participated in the Installation Restoration Program (IRP) of 1978, which involved the identification and cleanup of hazardous waste materials. As of April 10, 1985, the records search of Phase I was completed and the remedial investigation of Phase II was underway (“*NPL Site Narrative for Moffett...*” United States Environmental Protection Agency 2011).⁵ In the following month, the California Regional Water Control Board required Moffett to meet the specific tasks that determined the brevity of contaminated soil and groundwater (“*NPL Site Narrative for Moffett...*” United States Environmental Protection Agency 2011). The Navy issued a final report in April 1986, which stated a revision of Moffett’s quality assurance project plan. Since no Subtitle C corrective action of the Resource Conservation and Recovery Act was necessary, Moffett Naval Air Station was placed on the federal section of the National Priorities List (“*NPL Site Narrative for Moffett...*” United States Environmental Protection Agency 2011).

Politics of Moffett Naval Air Station Closure

The Golden State experienced a disproportionate share of base closures and the resulting negative economic setbacks to those communities that depended on public revenue from military bases when they were closed. The Moffett Field Committee, which was comprised of city councils, chambers of commerce, country manufacturers and the

⁵ See Appendix B for a description of Phases I and II.

aerospace industry, were involved in negotiations to stop the loss of an additional 21,000 jobs in Silicon Valley (Gugliotta 1991). The impending closure of Moffett Naval Air Station meant that Lockheed Missiles, Space Co., and NASA would no longer be able to conduct business in the region (Gugliotta 1991). Closing Moffett also posed a significant economic hit in the form of job losses and the resulting decline in tax revenues.

California, whose economic gerth at one time eclipsed all except four nations in the world, would have to face the prospects of losing a huge section of the high-tech industry (Gugliotta 1991; Legislative Analyst's Office 2002).

Obstacles to Base Closure

Military base closure incurs huge costs that include environmental restoration. The Pentagon's 1991 annual budget for environmental restoration was roughly \$1.2 billion that included \$100 million in earmarks for bases already near closure (Campbell 1991). Aside from negative reactions to base closure from the affected communities, cleanup costs of hazardous materials present a formidable obstacle to base closure. In the case of Moffett Naval Air Station, finding alternative ways of providing environmental restoration has also posed an obstacle to base closure, but with some success.

An experiment was conducted in 1985 by Stanford University engineers, who were trying to find quick, alternative ways to clean up the environmental hazards found at Moffett Naval Air Station (Soiffer 1985). The U.S. Environmental Protection Agency funded the \$552,400 grant that introduced methylotrophs into 20 test wells to see if the microbes would have produced enough enzymes to transform TCE to CO₂, or carbon dioxide (Soiffer 1985). The potential for this experiment to work could save billions of

dollars and save countless hours. The results of biological remediation from methylotrophs require additional experimentation, but the findings suggest that TCE could be destroyed completely through this process (Russell, Matthews and Sewell 1992). Toxic ghettos are formed in blighted areas when cleanup stalls because of a lack of funding.

The cleanup process involved conducting a study, but the amount of the study was time-consuming and involved taking samples to test for the level of contamination (Morain 1990). The Navy projected the cost of hazardous waste cleanup of Moffett Naval Air Station at \$120 million over a decade-long process (Holversten 1991). Aside from the potential health risks, which would have taken years to detect, residents near Moffett could not receive loans to renovate their homes, since the lending institutions were averse to the potential liability (Diringer 1991). The perceived risk involved with lending to areas near a Superfund site centered around the unknown spread of contamination.

Chemicals that escaped from underground tanks at three Mountain View plants migrated beneath Highway 101, merging with wastes from Moffett Naval Air Station to form one giant underground plume that, recent tests suggests, may now have reached wetlands bordering San Francisco Bay. Too often these plumes have been allowed to seep in peace . . . It's not something that improves with time. (Diringer 1991).

Some parts of California have experimented with different approaches to land reuse after base closure and cleanup. Parcels of land that were formerly occupied by Moffett Naval Air Station were replaced with the campuses of Carnegie-Mellon University, San Jose State University, as well as 1,600 housing units and 28 million square feet of office space (Johnson 2003). Base closure and environmental cleanup of hazardous waste found at former military facilities require a concerted effort of federal,

state and local government and the communities that were adversely affected to bring about productive, time-sensitive solutions that put an end to skyrocketing costs (Davidson 2006). Similar examples of collaborative efforts include McClellan Air Force Base, which has successfully completed the first privatized cleanup with Parcel C-6 (*“Former McClellan AFB...”* United States Environmental Protection Agency 2012).

McClellan Air Force Base

Historical Background

In 1935, construction began on the Pacific Air Depot that included administration buildings, barracks and a hospital. Located on 2,600 acres at eight miles northeast of Sacramento, California, it would later be renamed in 1948 after Major Hezekiah McClellan in honor of his receiving the Distinguished Flying Cross posthumously (Mueller 1989, 397). The primary function of McClellan Air Force Base was to repair and overhaul P-38 and P-39 fighter planes; assembly of P-40 fighter planes and storage of B-29s were functions added after World War II (Mueller, 1989, 400). McClellan worked on the planes that were used in the Pacific Theatre by the United States Army Air Forces and the B-25s medium bombers for the Tokyo Raid (California State Military Museum 2012; Sherry 1987, 122).

On October 15, 1984, McClellan Air Force Base encompassed 56 acres that were designated for waste storage and disposal in 46 separate areas, of which 36 were aggregated into a single site (*“NPL Site Narrative for McClellan...”* United States Environmental Protection Agency 2011). The Air Force investigated contaminations of public and private wells near McClellan by solvents such as trichloroethylene, 1,1,1-

trichloroethane, and 1,1-dichloroethylene (“*NPL Site Narrative for McClellan...*” United States Environmental Protection Agency 2011).⁶ The Air Force completed Phase I (records search) and Phase II (preliminary survey), with Phase IV (remedy investigation) having been implemented at on-site locations. Phase II included an investigation of an additional 22 waste disposal areas on top of the original 46 that were previously mentioned; in anticipation of other unknown sources of contamination, there were 88 more areas that required Phase II investigations (“*NPL Site Narrative for McClellan...*” United States Environmental Protection Agency 2011).⁷ On July 22, 1987, the Air Force was near completion of a project that would connect 500 homes to a municipal water supply. Since there were areas subject to Subtitle C of RCRA that were not included in site scoring, the base was placed on the NPL list for federal facilities per the NPL Deletion/Deferral Policy and RCRA Subtitle C Corrective Action policy of 1983 (“*NPL Site Narrative for McClellan...*” United States Environmental Protection Agency 2012).

Politics of McClellan Air Force Base Closure

Sacramento Mayor Joe Serna accused each branch of the military of being parochial because each had sought its own interest without collaboration (Delsohn 1995). Serna pointed out that there was little resistance when Mather Air Force Base and the Sacramento Army Depot were both closed, but McClellan was a different matter. McClellan represented high-tech electronics and repair capabilities, which placed the

⁶ The organic compounds 1,1,1-trichloroethane and 1,1-dichloroethylene are known human carcinogens used as solvents in the cleaning of metal parts (Agency for Toxic Substances and Disease Registry 2012; “*Basic Information About...*” United States Environmental Protection Agency 2012).

⁷ See Appendix B.

base in a unique category. The argument that the DoD offered revolved around military value. The parochial interest suspicions were aroused because McClellan represents the very reason for changes in the reorganization of national defense—to meet future threats to national security. If base closure represents downsizing antiquated defense operations, then it seems disingenuous to downsize high-tech operations (Delsohn 1995).

Nearly a decade from 1985, McClellan experienced a net loss of about half the civilian workforce (Delsohn 1995). The Sacramento Area Commerce and Trade Organization spokesperson, Al Gianini, stated that 19,000 jobs were lost from downsizing McClellan and the base closures of Mather and Army Depot—all of which contributed to the recessions of 1992 and 1993 (Delsohn 1995). Former Sacramento Mayor Anne Rudin believed that base closure impacts to the local economy could have been mitigated if the proper steps had been taken; by focusing attention on preventing McClellan's closure instead of planning for ways to absorb the economic impact, political leaders have missed a critical opportunity (Delsohn 1995). Rudin's additional comment turns the parochial gun against Mayor Serna: "she was surprised that some business and political leaders who advocate a smaller federal government don't use the same argument when it applies to the military" (Delsohn 1995). Still, others commented that it would have been prudent to channel resources for base reuse rather than attempting to keep military facilities open. Sacramento City Manager Bill Edgar countered that there remains no political feasibility in preparing for something that constituents would rather fight and that the base closure committee would perceive its decision as having no resistance (Delsohn 1995).

McClellan's closure was projected at 31,000 jobs lost and a net loss of 59,221 direct and indirect jobs (Swett 1995). While economic impacts are ranked sixth among eight criteria the commission used in the selection of base closure, the economic impact could be mild provided there was another sector for job growth (Swett 1995).⁸ Theoretically, analysts viewed the Sacramento region as robust enough to absorb the economic impact, but empirical arguments point to the difference that an impact of one percent can make between sluggish and decent economic growth and the replacement of approximately \$350 million in gross income for the region (Swett 1995).

Closing McClellan Air Force Base seemed eminent, but a key law that limited the money spent on private firms was retained (Sample 1995). The 60/40 rule was a measure that required 60% of the expenditures for equipment maintenance to be allocated at government repair stations, while not more than 40% of expenditures would be available for private repair stations (Sample 1995). The law would make it extremely difficult to privatize McClellan provided that the law would not be either repealed or amended, according to Representative Vic Fazio, D-West Sacramento (Sample 1995). The bipartisan effort to reject the commission's recommendations included members from those California districts affected: Representative Vic Fazio, D-West Sacramento, Representative John Doolittle, R-Rocklin, Representative Richard Pombo, R-Tracy (Sample 1995). The House passed its version of a defense authorization measure that included the elimination of the 60/40 rule by December 1996 (Sample 1995). The Senate retained the law but left the final decision of repeal for a later date and required the Pentagon to allocate repair work accordingly (Sample 1995).

⁸ See Appendix C.

Obstacles of Base Cleanup

In 1987, 500 homes were connected to a different water supply than the contaminated wells at McClellan's western edge, as a result of finding 20 homes linked to contaminated wells—a much less expensive procedure than constant monitoring. In 1993, McClellan's contamination was declared a public health hazard, while at the same time regulators at the Agency for Toxic Substances and Disease Registry stated the base did not pose a threat to nearby residents (Vogel 1995). A study was conducted on 600 residents living within a mile of the base to assess the extent of any harm to any residents from groundwater contamination. One groundwater treatment that had been implemented was a soil-vapor-extraction system that percolated 250 gallons per minute through a tower where volatile chemicals would be carried off by air to be incinerated—a technique that removed and destroyed 300,000 pounds of harmful chemicals over a 2.5 year period (Vogel 1995). But, cleanup at McClellan had been threatened because language in a military authorization bill had not included the decision to close the base (Sample 1996). Paul Brunner, McClellan's director of environmental management, said the effect of this technical glitch would delay cleanup for up to a year (Sample 1996).

In addition to incomplete cleanup of closed military facilities, the DoD remained highly selective of which installations would be cleaned. California health officials called the U.S. Nuclear Regulatory Commission to review the case (Bowman 2007). Among the findings were 43 corroded barrels of highly radioactive waste and 10 unlined trenches that were suspected of containing plutonium, americium and cesium—all highly radioactive compounds (Bowman 2007). These discoveries alerted

environmental experts that topical burial of radioactive waste, since World War II through the Cold War, was a policy prescription not for health and safety, but for the avoidance of short-term economic costs (Bowman 2007). The Air Force admits that it cannot account for the amount or types of waste that were buried at McClellan through the cap and leave plan.

The completion of the Parcel C-6 project in the southwestern portion of McClellan Air Force Base was the first successful privatized cleanup in the United States (*“Former McClellan AFB...”* United States Environmental Protection Agency 2012). Parcel C-6 comprises 12 sites on 62 acres and was required by the EPA to undergo cleanup of soil contamination by PCBs, dioxins, and many other chemicals including VOCs (*“Former McClellan AFB...”* United States Environmental Protection Agency 2012). According to the Department of Defense, privatization of the environmental cleanup included the allocation of funds and the transfer of ownership to include cleanup responsibilities to McClellan Business Park. Thermal desorption was the treatment method used on 11,200 cubic yards of contaminated soil, and the final Remedial Action Completion Report was approved on August 2011, with completion of environmental cleanup on September 2011 (*“Former McClellan AFB...”* United States Environmental Protection Agency 2012).

In Chapter 4, I will discuss the research findings from the studies of three base closures: Mather Air Force Base, Moffett Naval Air Station, and McClellan Air Force Base. The discussion will include the similarities and differences between the base closures as it focuses on the relationship between military base closure and environmental cleanup. The conclusion will offer potential research tracks for future study.

CHAPTER IV

DISCUSSION OF THE FINDINGS AND CONCLUSION

In this chapter, the relationship between military base closure and environmental protection will be discussed from the case study. Analysis of the findings will provide a clearer understanding for the efficacy of environmental law and base closure through a comparative analysis of Mather Air Force Base, Moffett Naval Air Station, and McClellan Air Force Base. This chapter begins with a discussion about the similarities and differences between the closures of these three bases. The discussion will focus on the relationship between military base closure and the environmental cleanup process. The conclusion of this chapter will offer possible tracks for future research.

Analysis of the Case Study

Comparisons: Political Contexts of Base Closures

The discursive politics over military base closure always involves negative impacts to the local economy either in the form of lost tax revenues, high costs of the required cleanup, or job losses (Campbell 1991; Delsohn 1995; Gibson 1995; Groves 1993; Gugliotta 1991; Healy 1988; Holversten 1991; Kalb 1995; Soiffer 1985; Swett 1995). In this thesis, analysis of the three military base closures—Mather Air Force Base, Moffett Naval Air Station, and McClellan Air Force Base—demonstrates a

comparatively different set of political contexts that predicate the objective of the BRAC commission: the process of initiation and completion of a base closure that is immune to political intervention.

The case study about base closures for Mather Air Force Base, Moffett Naval Air Station, and McClellan Air Force Base reveal the level and nature of political involvement that can be characterized as endemic to each community in which the base resides. The process of Mather's base closure was stalled due to financial factors and the involvement of political leaders who supported the Sacramento Housing and Redevelopment Agency's proposed offer (Kalb 1995). One can say for certain the Mather situation offered clear plans in the aftermath of base closure (Gibson 1995). Therefore, the developments of base closure and the transition to redevelopment, which included cogent financing options, were not as contentious as expected.

The facts surrounding the closure of Moffett Naval Air Station did not include clear plans that would suggest anything to fill the vacuum that was created as a result of losing an agglomeration of a business network that depended on the defense and space industries (Gugliotta 1991). However, the Moffett base closure involved innovative ways of dealing with the cleanup of hazardous materials—a requirement of CERCLA that each base closure must include.

Finally, McClellan's base closure was vehemently contested by the community, its local leaders, and state officials. Unlike Mather Air Force Base and Moffett Naval Air Station, the leadership's focus on preventing McClellan's closure affected missed opportunities to offset the amount and nature of loss as a result (Delsohn 1995). Of the three base closures in this study, McClellan Air Force Base supports the

contention that the BRAC base closure process works. President Clinton was asked to intervene in order to stop McClellan Air Force Base from closure, but like so many actors involved, Clinton safeguarded his interest—the upcoming election. Bureaucracy in the political context of base closure was true to its purpose: to execute government action that is indifferent to political influence. Despite the vigorous defense at all levels of McClellan’s case, political intervention failed to prevent the base from closure (Delsohn 1995).

Differences in Community Involvement

Communities play a prominent role in the case study. The section about McClellan stands out because of the level of community involvement to save the base from closure. Military personnel and civilian workers were united in their efforts to safeguard their jobs. Republican and Democratic leaders tried to channel the energy of the affected communities into political muscle because by doing so they would gain a heightened degree of electability in their districts. McClellan Air Force Base was the most contentious base closure of the three bases in this case study. After the economic impacts from closing Mather Air Force Base and the Sacramento Army Depot, government officials from all levels responded in a bipartisan manner to protect the base from being closed. Senator Feinstein and Governor Wilson, once bitter gubernatorial rivals, approached the base closure issue from their respective political ideologies. Wilson pointed to potential security threats from the Pacific Rim, while Feinstein highlighted the selective criteria that were used to evaluate California’s base closures compared with other states (Bornmeier 1993). McClellan was a significant asset because

of its unique capabilities. Military value was one of the supposed ends of base closure selections, and it was this line of argument where McClellan truly shined. McClellan offered value to the Department of Defense in the areas of microelectronic capabilities, advanced composite technologies, large and small radar applications, night vision program and electronic warfare systems expertise (Griffith 1995). In addition, McClellan could have been used for Navy fighter maintenance (Sample 1995).

The end of the Cold War required changes in strategic defense and the vast roster of military bases weighted the Department of Defense with what it viewed as unnecessary bulk. Sacramento Mayor Joe Serna accused the military of being parochial (Delsohn 1995). But, the same parochial gun could be pointed in the direction of state officials who were concerned about another negative impact to California's budget. The view of state officials was that the two previous base closures in the Sacramento region, Mather Air Force Base in 1993, and Sacramento Army Depot in 1995, were accountable for the recessions experienced in 1992 and 1993 respectively (Delsohn 1995). Former Sacramento Mayor Anne Rudin stated that the inevitable [base closure] would happen, yet there was no leadership to offset the impact to the region. Rudin saw no effort to devise an alternative plan, in the event McClellan would be closed (Delsohn 1995).

Support for McClellan came in all manner of ways with some high-ranking military officials vocalizing the need to keep McClellan open. One report depicted Joe Serna as defending McClellan by referring to the facility as a "negative asset" (Gibson 1995). Empirical evidence was drawn from a study by the Real Estate and Land Use Institute at the California State University, Sacramento. The study concluded a more severe recession than in previous years would impact the region (Swett 1995).

McClellan's supporters also attempted to solicit President Clinton's intervention of the BRAC recommendations (Pine and Richter 1995). Clinton's solution was politically-timed for the upcoming election. President Clinton asked to keep McClellan open, but if the base were to close, he asked that military and civilian workers would remain employed for some years after (Sample 1995).

Some examples of community involvement include reaching out to their leaders to discuss creative alternatives to base conversion and reuse. In the case of Moffett Naval Air Station, the community's involvement led to the preservation of the Hangar One frame for the sake of historical value. Hangar One is the most prominent remnant of military history in California (Davidson 2006). The construction of Hangar One began in 1933 and the dome-shaped naval airship station can be seen from Highway 101. The decision over what to do with Hangar One including the cleanup of contaminants such as PCSs and asbestos are considerations for the Navy, which is legally responsible though management of its 8 acres has been ceded to the NASA Ames Research Center (Davidson 2006). Save Hangar One, a local activist group, successfully lobbied for its preservation. It's important to note that the intent of base closures was not concerned with the preservation of historical artifacts.

Comparisons: Obstacles to Base Closure

The obstacles to finalizing a base closure so that it may be transferred for land reuse and development involves the amount of time and resources necessary for the treatment and removal of hazardous waste materials (Bowman 2007; Davidson 2006; Diringer 1991; Gibson 1995; Groves 1993; Holversten 1991; Morain 1990; Sample 1996;

Soiffer 1985; *The Sacramento Bee* 1995; Vogel 1995). The fact that McClellan Air Force Base garnered the most attention, and therefore, provided more data than either Mather Air Force Base or Moffett Naval Air Station is not significant when it comes to a discussion of base closure and environmental cleanup. Regardless of the amount of attention that was devoted to McClellan's closure, the analysis reviews differences in the base closure process, which was designed to be apolitical and consistent.

California has become a leader in understanding the characteristics and threats to human health posed by ammonium perchlorate. Until the chemical was sufficiently cleaned, Mather Air Force Base remained a federal installation. As a result, the cost of keeping the base open but non-operational presented an economic situation with an unintentional effect—changes to the rules of the Public Utilities Commission and the Federal Communications Commission (*The Sacramento Bee* 1995). This required greater cooperation in this part of the base closure process between state and federal governments (*The Sacramento Bee* 1995). In this way, base reuse commenced much more quickly after environmental cleanup as public utilities were required to provide service at military installations which were opened but non-operational. In the case of Moffett Naval Air Station, the potential liability involved with hazardous materials in close proximity to a military base prevented homeowners from the surrounding community from obtaining home improvement loans (Diringer 1991). The Environmental Protection Agency and nearby Stanford University offered to provide funding for a trial experiment that included an alternative method to hazardous waste removal and cleanup. Rather than relying on the government to provide a remedy, the situation at Moffett was

more proactive. Moffett is also a case where different levels of government worked with the community to bring about productive, time-saving remedies (Davidson 2006).

McClellan Air Force Base faced a different problem: language in the military authorization bill would only fund environmental cleanup if the base wasn't closed (Sample 1996). Volatile chemicals contaminated the drinking water in the community immediately surrounding McClellan (Vogel 1995). Successful groundwater treatment required a vaporization process that could take up to 2.5 years to complete with an additional year due to the language in the military authorization bill (Sample 1996; Vogel 1995). The case involving McClellan was significant because the language contained in the military authorization bill could potentially stall environmental cleanup. In light of this development and the fact that the DoD was highly selective about which military installations would be cleaned, the objective of the BRAC commission—the process of base closure immune to political intervention—could only be accomplished by deferring to political intervention in order to change the language in the military authorization bill (Bowman 2007; Sample 1996).

Relationship of Base Closures and Environmental Cleanup

The purpose of base closure is to streamline the defense structure of the United States. Environmental cleanup is a latter part of the process of base closure. The degree to which the transfer of land from former military installations depends on the transaction costs involved. For example, if a community is willing to purchase land from a former military base for a specified time, that justification holds the degree to which hazardous materials will be removed from the base prior to its sale. The case study of

Mather Air Force Base, Moffett Naval Air Station, and McClellan Air Force Base demonstrates that money is at the center of the contentious debate over base closure: savings was the rationale behind the implementation of the BRAC commission; the loss of tax revenues from direct and agglomerated job losses as well as whole industries moving out of the state; and, time and other resources that articulate the costs associated with environmental cleanup.

A view of the relationship between base closures and environmental cleanup is a continuum of financial responsibility that none of the actors in this case study wants to assume. Least of these are members of the BRAC commission and the politicians who attempt to stop a base closure from happening. The BRAC commission is only doing its job to successfully implement a base closure, even though each “independent” member is selected through political affordance by politicians who are only too happy to appear as advocates against job losses.

Conclusion

The case study in this thesis illustrates that the historical antecedents of base closure have not gone away. While BRAC legislation is successful in achieving its intended purpose—closing military installations as part of the United States Department of Defense’s reorganization in preparation for future threats to national security—it is only possible because of political intervention. The BRAC commission and its imperative were cast as indifferent to the negative impacts on the economy at either the state or local level. Recent research in the area of base closure and the costs of environmental cleanup

demonstrates that economic impacts have been negligible and that environmental cleanup has become one of the central themes in the base closure process.

Since it has been proven that the BRAC process works by design, it may indicate that scholarly research in this area is relatively light because of its success. More should be done to understand this facet of government. This research was particularly difficult due to the fact that it was nearly impossible to determine correct figures such as negative economic impacts to communities and states. Each side in the debate over base closure has a bias. For purposes of developing a better view of this phenomenon, the research relies on the General Accounting Office for concrete figures. As demonstrated throughout the case study, the Department of Defense has its own calculations but an investigation would require an understanding of how these calculations are made and for the specific objectives that are served. There are many ways to arrive at environmental cleanup costs and these methods are not necessarily about cleanup as they are about arguing a case that can complete the transaction of land reuse and transfer. In sum, it is no accident that the research attempts to avoid settling on exact numbers. For the most part, the archival research uncovers the social/political aspect of the base closure process to include the negative impact to local businesses and a state economy.

Possible tracks for future research should include an investigation into the actual benefit to the United States military, surrounding communities, and states in which new training facilities were built on pristine lands that were acquired as a consequence of selling former military installations that were previously contaminated. Additional research about the changing threat to national security should include evidence to show just how prepared the nation's military has become as a result of each successive round

of base closures, in light of bases and military facilities that the United States maintains in other parts of the world. And, just why does the U.S. Navy seem to get its way more than any other military branch?

Much of the discussion centers on environmental law. Additional research is needed to understand the reasons that some environmental situations receive prompt attention over others. The progressive developments in environmental law, such as CERCLA, should impart a sense of consistency in the way that laws are applied to certain situations. The problem of environmental issues in relation to the law is the potential for market actors to continue strategizing their practices to prevent triggering the attention of law enforcement. The failure to understand the hierarchy of environmental protection may lead to an increase of innovative ways to degrade the environment.

Environmental problems involve many different issues and one of the most prominent narratives was the impact to local businesses and jobs. Future research on military base closures should include empirical evidence of its impact. An interesting point from the research is while a base closure affects an agglomerated economy, however extended that may be, the negative impacts that incur environmental cleanup are localized—a recurring narrative of inequality: privatize the profits but socialize the losses. Additional research is needed to understand the nature of agglomeration, a base closure's economic impact to that economic region, and the extent of negative impacts at different levels.

In the early part of this thesis, a question challenges the rationale for having Superfund as a policy from which to curb environmental degradation. Although Superfund has not been funded for many years, the statute still serves as a critical

juncture in progressive social policy from which to establish additional progressive environmental legislation, and legal responses to the ever changing ways that individuals seek leverage in the commons. The research also questions the potential for the institutions of government to conduct business as if government is above the very laws it dispenses.

REFERENCES

REFERENCES

- Agency for Toxic Substances and Disease Registry. 2012. "Interaction Profiles for Toxic Substances." <http://www.atsdr.cdc.gov/interactionprofiles/ip02.html> (accessed September 13, 2012).
- Aristotle. *The Nicomachean Ethics*. Translated by Robert C. Bartlett and Susan D. Collins. Chicago: The University of Chicago Press, 2011.
- Arora, Raksha. 2004. Toxic Waste: Still Dirty Words to Americans? <http://www.gallup.com/poll/11476/toxic-waste-still-dirty-words-americans.aspx> (accessed October 16, 2012).
- Bearden, David M. 2007. Military Base Closures: Role and Costs of Environmental Cleanup. *Congressional Research Service*, RA22065, Aug.31 (accessed October 31, 2011).
- Beaulier, Scott A., Joshua C. Hall, and Allen K. Lynch. 2011. "The Impact of Political Factors on Military Base Closures." *Journal of Economic Policy Reform*, 14, no.4 (Oct.): 333-342.
- Biven, W. Carl. 2002. *Jimmy Carter's Economy: Policy in an Age of Limits*. Chapel Hill: The University of North Carolina Press.
- Bloom, Saul, and Eve Bach. 1995. While California military bases close, others get bigger: Savings, minimal. *San Francisco Examiner*, Jul. 16. <http://search.proquest.com/docview/270412557?accountid=10346>. (accessed October 31, 2011).
- Bornemeier, James. 1993. State officials urge panelists to save military bases: Gov. Wilson, Sen. Feinstein tell commission the closure plan is economically unfair and strategically unwise. Members appear impressed with California presentation. *Los Angeles Times* (Pre-1997 Full text), Apr. 26. <http://search.proquest.com/docview/281980540?accountid=10346>. (accessed October 31, 2011).
- Bowman, Chris. 2007. Toxic-pits cleanup dropped air force's plan to seal sites at old McClellan base stirs outcry over safety. *The Sacramento Bee*, May 21. <http://search.proquest.com/docview/246727714?accountid=10346>. (accessed October 11, 2011).
- Bowman, Ann O'M., and Kelley A. Crews-Meyer. 1997. "Locating Southern LULUs: Race, Class and Environmental Justice." *State and Local Government Review*. 29, no.2 (Spring): 110-119.

- Campbell, Charles. 1991. Military bases present toxic-waste problems environment: A consultant says sites slated for closure may never be fit for civilian use. The Pentagon estimates cleanup costs at \$1 billion. *Los Angeles Times* (Pre-1997 Full text), Sept 08.
<http://search.proquest.com/docview/281497182?accountid=10346>.
 (accessed November 7, 2011).
- Clean Air Act* 42 U.S.C. § 7401 et seq. (1970).
- Clean Water Act* 33 U.S.C. § 1251-1274 et seq. (1972).
- Cooter, Robert D. 2000. *The Strategic Constitution*. Princeton: Princeton University Press.
- Davidson, Keay. 2006. MOUNTAIN VIEW / fate of huge hangar in air at moffett field/ 13 options on table for historic but contaminated site. *San Francisco Chronicle*, May 06.
<http://search.proquest.com/docview/411736828?accountid=10346>.
 (accessed November 7, 2011).
- Daynes, Byron W., and Glen Sussman. 2010. *White House Politics and the Environment: Franklin D. Roosevelt to George W. Bush*. College Station: Texam A&M University Press.
- Davis, Susan M., and Steven Puro. 1999. "Paterns of Intergovernmental Relations in Environmental Cleanup at Federal Facilities." *Publius*, 29, no.4. (Autumn): 33-53.
- Delsohn, Gary. 1995. Base Struggles against the tide McClellan caught in global cutback trend. *The Sacramento Bee*, May 14.
<http://search.proquest.com/docview/246199935?accountid=10358>.
 (accessed October 31, 2011).
- DENIX. DoD Environment, Safety and Occupational Health Network and Information Exchange. <http://www.denix.osd.mil/tools/facts/cfm>
 (accessed September 30, 2012).
- Dickson, David. 1982. "United States: Lessons of Love Canal Prompt Clean Up." *Ambio*. 11, no.1: 46-50.
- Diringer, Elliot. 1991. How toxic cleanups bog down / residents near superfund sites wait in vain for action. *San Francisco Chronicle*. May 31.
<http://search.proquest.com/docview/302562899?accountid=10346>.
 (accessed October 31, 2011).

- Distefano, Thomas D. "Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)." In *Pollution A to Z*, ed. Richard M. Stapleton, no.1, 109-110. New York: MacMillan Reference USA, 2004.
- Dunlap, Riley E., Chenyang, Xiao, and Aaron M. McCright. 2001. "Politics and Environment in America: Partisan and Ideological Cleavages in Public Support for Environmentalism." *Environmental Politics*, 10, no.4 (Winter): 23-48.
- Eames, Diane D. 1970. "The Refuse Act of 1899: Its Scope and Role in Water Pollution." *California Law Review*, 58, no.6 (Nov.): 1444-1473.
- Ferrey, Steven. 2007. *Environmental Law: Examples & Explanations*. New York: Aspen Publishers.
- Gibson, Steve. 1995. Air base's conversion moving along Mather installation struggles to put pieces together for major industrial site. *San Francisco Examiner*, Jan 01. <http://search.proquest.com/docview/270373801?accountid=10358> (accessed October 31, 2011).
- _____. 1995. Cost of clean base is sought panelist wants McClellan data. *The Sacramento Bee*, May 27. <http://search.proquest.com/docview/246138160?accountid=10346>. (accessed October 31, 2011).
- _____. 1995. McClellan too dirty to close? Base's toxic cleanup will cost \$10 billion, backers tell closure panel. *The Sacramento Bee*. May 26. <http://search.proquest.com/docview/246190149?accountid=10346>. (accessed November 7, 2011).
- _____. 1995. Touching base at McClellan closure panel on fact-finding tour. *The Sacramento Bee*, May 23. <http://search.proquest.com/docview/246139866?accountid=10346>. (accessed November 7, 2011).
- Glassberg, Andrew D. 1995. "Intergovernmental Relations and Base Closing." *Publius*, 25, no.3 (Summer): 87-98.
- GlobalSecurity.org. "Moffett Federal Airfield." <http://www.globalsecurity.org/military/facility/moffett.htm> (accessed September 12, 2012).
- Goldstein, Mark L. 1986. "Sorting Out Superfund." *Industry Week*. (September): 59.

- Gormley, Jr., William T. 1987. "Intergovernmental Conflict on Environmental Policy: The Attitudinal Connection." *The Western Political Quarterly*, 40, no.2: 285-303.
- Groseclose, Tim, Levitt, Steven D., and James M. Snyder, Jr. 1999. "Comparing Interest Group Scores Across Time and Chambers: Adjusted ADA Scores for the U.S. Congress." *American Political Science Review*, 93, no.1 (March): 33-50.
- Groves, Martha. 1993. Life after base closures often turbulent, communities find. *Los Angeles Times*, Apr. 12.
<http://search.proquest.com/docview/421035691?accountid=10358>.
 (accessed October 31, 2011).
- Gugliotta, Guy. 1991. Lawmaker takes base closings in stride; GOP Rep. Campbell willing to accept loss of 12,200 jobs in his area. 'If it's fair.' *The Washington Post* (Pre-1997 Full text), Apr 22.
<http://search.proquest.com/docview/307399584?accountid=10346>.
 (accessed November 7, 2011).
- Haas, Garland A. 1992. *Jimmy Carter and the Politics of Frustration*. Jefferson: McFarland & Company, Inc.
- Halloran, Richard. 1988. Closing urged for 86 bases / panel sees big saving for U.S. *St. Petersburg Times*, Dec 30.
<http://search.proquest.com/docview/262622704?accountid=10358>.
 (accessed October 31, 2011).
- Hardin, Garrett. 1968. "The Tragedy of the Commons." *Science*. 162 (Dec.): 1243-1248.
- Hargrove, Erwin C. 1988. *Jimmy Carter as President: Leadership and the Politics of the Public Good*. Baton Rouge: Louisiana State University Press.
- Harvey, David. 2005. *A Brief History of Neoliberalism*. New York: Oxford University Press.
- Healy, Melissa. 1988. Panel proposes closing 86 bases \$700 million in yearly savings is projected. *Los Angeles Times* (Pre-1997 Full text), Dec 30.
<http://search.proquest.com/docview/280669599?accountid=10346>.
 (accessed November 2, 2011).
- Hillstrom, Laurie Collier, and Kevin Hillstrom. "Comprehensive Environmental Response Cleanup and Liability Act (CERCLA)." *Encyclopedia of Small Business*. 1, 216-218, Detroit: Gale, 2002.

- Hoversten, Paul. 1991. 'Some military bases will never be cleaned up.' *USA TODAY* (Pre-1997 Full text), Jul 05.
<http://search.proquest.com/docview/306445536?accountid=10346>.
 (accessed November 7, 2011).
- Jacobe, Dennis. 2012. Americans Still Prioritize Economic Growth Over Environment.
<http://www.gallup.com/poll/153515/americans-prioritize-economic-growth-environment.aspx> (accessed October 16, 2012).
- Johnson, Steve. 2003. Old military bases are mixed blessing for San Francisco bay-area communities. *McClatchy-Tribune Business News*, Jun 23.
<http://search.proquest.com/docview/464071064?accountid=10346>.
 (accessed November 7, 2011).
- Kalb, Loretta. 1995. Mather talks end in quagmire. *The Sacramento Bee*, Jan 08.
<http://search.proquest.com/docview/246103091?accountid=10358>.
 (accessed October 31, 2011).
- Klyza, Christopher McGrory. "Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)." *Environmental Encyclopedia*. 1, 357-359, Detroit: Gale, 2011.
- Kraft, Michael E., and Norman J. Vig. 1984. "Environmental Policy in the Reagan Presidency." *Political Science Quarterly*, 99, no.3 (Autumn): 415-439.
- Kubasek, Nancy K., and Gary S. Silverman. 2008. *Environmental Law*, 6th Ed. Upper Saddle River: Pearson Education, Inc.
- Lash, Jonathan, Gillman, Katherine, and David Sheridan. 1984. *The Story of the Reagan Administration's Attack on the Environment: A Season of Spoils*. New York: Pantheon Books.
- Lazarus, Richard J. 1991. "The Neglected Question of Congressional Oversight of the EPA: 'Quis Custodiet Ipsos Custodes' (Who Shall Watch the Watchers Themselves)?" *Law and Contemporary Problems*. 54, no.4 (Autumn): 205-239.
- League of Conservation Voters. <http://www.lcv.org/scorecard/scorecard-methodology.html> (accessed October 31, 2011).
- Legislative Analyst's Office. 2002. Cal Facts: California's Economy and Budget In Perspective. http://www.lao.ca.gov/2002/cal_facts/econ.html (accessed October 21, 2011).

- Lockwood, David E., and George Siehl. 2004. Military Base Closures: A Historical Review from 1988 to 1995. *Congressional Research Service*, 97-305 F, Oct. 18.
- Maslow, Abraham H. 1970. *Motivation and Personality*. New York: Harper & Row.
- Mayer, Kenneth R. 1995. "Closing Military Bases (Finally): Solving Collective Dilemmas through Delegation." *Legislative Studies Quarterly*, 20, no.3 (Aug.): 393-413.
- McGurty, Eileen Maura. 1997. "From NIMBY to Civil Rights: The Origins of the Environmental Justice Movement." *Environmental History*, 2, no.3 (Jul.): 301-323.
- Mohai, Paul, and Bunyon Bryant. 1998. "Is There a 'Race' Effect on Concern for Environmental Quality?" *The Public Opinion Quarterly*, 62, no.4 (Winter): 475-505.
- Molotsky, Irvin. Senate Panel Nears Approval of Waste Cleanup Bill. *New York Times*, Sept. 14 <http://search.proquest.com/docview/423983826?accountid=10346>. (accessed October 31, 2011).
- Mooney, Christopher Z. 2001. "Modeling Regional Effects of State Policy Diffusion." *Political Research Quarterly*, 54, no.1 (Mar): 103-124.
- Morain, Dan. 1990. Complex, costly cleanups may snarl base closings series: TOXIC WASTE: A federal failure. Last in a series. *Los Angeles Times* (Pre-1997 Full text), Jun 19. <http://search.proquest.com/docview/281167808?accountid=10346>. (accessed November 7, 2011).
- Morris, Kenneth E. 1996. *Jimmy Carter, American Moralist*. Athens: University of Georgia Press.
- Mueller, Robert. 1989. *Active Air Force Bases within the United States of America on 17 September 1982*. Maxwell Air Force Base: United States Air Force Series.
- O'Neil, Sandra George. 2007. "Superfund: Evaluating the Impact of Executive Order 12898." *Environmental Health Perspectives*, 115, no.7 (Jul.): 1087-1093.
- O'Riordan, Timothy. 1976. *Environmentalism*. London: Pion.
- Paehlke, Robert C. 1989. *Environmentalism and the Future of Progressive Politics*. New Haven: Yale University Press.

- Parisi, Anthony J. 1980. "Who Pays? Cleaning Up The Love Canals." *The New York Times*. (June): 1.
- Pellow, David N. 1999. "Framing Emerging Environmental Movement Tactics: Mobilizing Consensus, Demobilizing Conflict." *Sociological Forum*. 14, no.4 (Dec.): 659-683.
- Polanyi, Karl. 1957. *The Great Transformation*. Boston: Beacon Press.
- Portney, Paul R. 1984. *Natural Resources and the Environment*. Washington, D.C.: The Urban Institute Press.
- Rocca, Michael S. 2003. "Military Base Closures and the 1996 Congressional Elections." *Legislative Studies Quarterly*, 28, no.4 (Nov.): 529-550.
- Rohrman, Douglass. 2004. "Poisoned Love." *Frontiers in Ecology and the Environment*, 2, no.1 (Feb.): 51.
- Rubenson, David, and John R. Anderson. 1995. *California base closure: lessons for DoD's cleanup program*. Santa Monica: RAND Corporation.
- Rubin, Irene S. 2006. *The Politics of Public Budgeting: Getting and Spending, Borrowing and Balancing*. Washington: CQ Press.
- Russell, Hugh H., Matthews, John E., and Guy W. Sewell. 1992. "TCE Removal from Contaminated Soil and Groundwater."
<http://www.epa.gov/oerrpage/superfund/remedytech/tsp/download/tce.pdf>
(accessed October 15, 2012).
- Saha, Robin, and Paul Mohai. 2005. "Historical Context and Hazardous Waste Facility Siting: Understanding Temporal Patterns in Michigan." *Social Problems*. 52, no.4 (Nov.): 618-648.
- Sample, Herbert A. 1995. Base-closers expected to look at McClellan again. *The Sacramento Bee*, May 10.
<http://search.proquest.com/docview/246204388?accountid=10346>.
(accessed November 7, 2011).
- _____. 1995. Last hope to change McClellan plan dies house refuses to oppose panel on closures. *The Sacramento Bee*, Sept. 09.
<http://search.proquest.com/docview/246194940?accountid=10346>.
(accessed October 31, 2011).

- _____. 1996. Funds lacking for cleanup at McClellan. *The Sacramento Bee*, Jan 27. <http://search.proquest.com/docview/246223730?accountid=10358>. (accessed October 31, 2011).
- _____. 1997. Chemical making a name for itself closure. *The Sacramento Bee*, Dec. 01. <http://search.proquest.com/docview/246364293?accountid=10346>. (accessed November 2, 2011).
- Saxenian, AnnaLee. 1994. *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Cambridge: Harvard University Press.
- Sherry, Michael S. 1987. *The Rise of American Air Power: The Creation of Armageddon*. New Haven and London: Yale University Press.
- Shipan, Charles R., and William R. Lowry. 2001. "Environmental Policy and Party Divergence in Congress." *Political Research Quarterly*. 54, no.2 (June): 245-263.
- Sigman, Hilary. 2001. "The Pace of Progress at Superfund Sites: Policy Goals and Interest Group Influence." *Journal of Law and Economics*, 44, no.1 (April): 315-343.
- Skowronek, Stephen. 2008. *Presidential Leadership in Political Time: Reprise and Reappraisal*. Lawrence: University of Kansas.
- Soiffer, Bill. 1985. Bacteria that may help clean up toxic waste. *San Francisco Chronicle* (Pre-1997 Full text), Aug 14. <http://search.proquest.com/docview/301910991?accountid=10346>. (accessed November 7, 2011).
- Swett, Clint. 1995. Grim view of McClellan closure may cost 31,000 jobs. *The Sacramento Bee*, Jun 17. <http://search.proquest.com/docview/246163137?accountid=10346>. (accessed October 31, 2011).
- Targeted News Service*. 2011. McClellan Business Park completes first in the nation privatized cleanup, redevelopment at military superfund site in Sacramento. Sep 30. <http://search.proquest.com/docview/895282251?accountid=10346>. (accessed October 31, 2011).
- The Associated Press*. 1994. Closures put bases in tainted light. *The Salt Lake Tribune*, Jul 06. <http://search.proquest.com/docview/288561387?accountid=10346>. (accessed October 31, 2011).

The California State Military Museum.

<http://www.militarymuseum.org/McClellanAFB.html>
(accessed September 30, 2012.)

The Sacramento Bee. 1995. Dim bulbs at Mather. February 11.

<http://search.proquest.com/docview/246127944?accountid=10346>.
(accessed November 2, 2011).

United States Department of Defense. “BRAC 2005 Base Closure and Realignment Selection Criteria.”

<http://www.hqda.army.mil/acsim/brac/BRACSelectionCriteria.pdf>
(accessed October 21, 2011).

United States General Accounting Office. *Hazardous Waste: Status of Air Force’s*

Installation Restoration Program. NSIAD-86-28BR. Washington, DC: General Accounting Office, 1985. <http://gao.justia.com/departments-of-defense/1985/12/hazardous-waste-nsiad-86-28br/NSIAD-86-28BR-full-report.pdf> (accessed October 21, 2011).

_____. *Questions Concerning the Proposed Sale of Housing at Mather Air Force Base*.

NSIAD-99-13. Washington, DC: General Accounting Office, 1998. <http://www.gao.gov/assets/230/226422.pdf>
(accessed October 31, 2012).

United States Environmental Protection Agency. “An Introduction to Indoor Air Quality.” <http://www.epa.gov/iaq/voc.html> (accessed September 13, 2012).

_____. “Basic Information about Trichloroethylene in Drinking Water.”

<http://water.epa.gov/drink/contaminants/basicinformation/trichloroethylene.cfm> (accessed September 12, 2012).

_____. “CERCLA Overview.” <http://www.epa.gov/superfund/policy/cercla.htm>
(accessed October 21, 2011).

_____. “EPA Insight Policy Paper: Executive Order #12898 on Environmental Justice.”

http://www.epa.gov/fedfac/documents/executive_order_12898.htm
(accessed October 21, 2011).

_____. “First Privatized Cleanup of a Superfund Site—McClellan Air Force Base.”

<http://www.epa.gov/region9/superfund/mcclellan/index.html>
(accessed October 21, 2011).

_____. “Former McClellan AFB Cleanup Success: 2011 Privatized Cleanup Update.”

http://www.epa.gov/region9/superfund/mcclellan/McClellan9_11.pdf
(accessed September 13, 2012).

- _____. "Mather Air Force." [http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/84e3d3f7480943378825723300794f02/d9e66a521ed2384e88257007005e9433!](http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/84e3d3f7480943378825723300794f02/d9e66a521ed2384e88257007005e9433!OpenDocument)
OpenDocument (accessed September 12, 2012).
- _____. "National Priorities List (NPL)." <http://www.epa.gov/superfund/sites/npl/>
(accessed October 21, 2011).
- _____. "NPL Site Narrative for Mather Air Force Base. (AC&W Disposal Site)." <http://www.epa.gov/superfund/sites/npl/nar941.htm>
(accessed October 21, 2011).
- _____. "NPL Site Narrative for McClellan Air Force Base (Ground Water Contamination)." <http://www.epa.gov/superfund/sites/npl/nar920.htm>
(accessed October 21, 2011).
- _____. "NPL Site Narrative for Moffett Naval Air Station." <http://www.epa.gov/superfund/sites/npl/nar967.htm>
(accessed October 21, 2011).
- _____. "SARA Overview." <http://www.epa.gov/superfund/policy/sara.htm>
(accessed October 21, 2011).
- _____. "Summary of the Resource Conservation and Recovery Act." <http://www.epa.gov/lawsregs/laws/rcra.html> (accessed October 9, 2012).
- _____. "Superfund Liability." <http://www.epa.gov/compliance/cleanup/superfundliability.html>
(accessed October 21, 2011).
- United States v. Monsanto Co.* 491 U.S. 600 (1989).
- United States v. Northeastern Pharmaceutical & Chemical Co., Inc.* 810 F.2d (1986).
- United States v. South Carolina Recycling & Disposal, Inc.* 653 F. Supp. at 993 n.6 (1984).
- Vogel, Nancy. 1995. Past Haunts McClellan toxics imperil conversion. *The Sacramento Bee*, May 28.
<http://search.proquest.com/docview/246162939?accountid=10346>.
(accessed November 7, 2011).
- Weber, Gregory S. "Comprehensive Environmental Response, Compensation, and Liability Act (1980)." In *Major Acts of Congress*, ed. Brian K. Landsberg. no.1, 157-160. New York: MacMillan Reference USA, 2004.

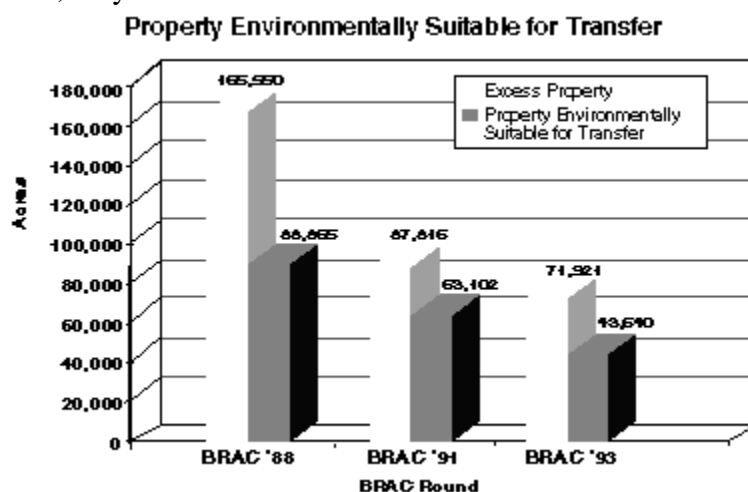
- Whitford, Andrew B. 2005. "The Pursuit of Political Control by Multiple Principals." *The Journal of Politics*. 67, no.1 (Feb.): 29-49.
- _____. 2007. "Decentralized Policy Implementation." *Political Research Quarterly*. 60, no.1 (Mar.): 17-30.
- Whittaker, Matthew, Gary M. Segura, and Shaun Bowler. 2005. "Racial/Ethnic Group Attitudes Toward Environmental Protection in California: Is 'Environmentalism' Still a White Phenomenon?" *Political Research Quarterly*. 58, no.3 (Sep.): 435-447.
- Williams, Norman D. 1995. Merchants brace again as base closure looms. *The Sacramento Bee*, May 11.
<http://search.proquest.com/docview/246174027?accountid=10346>.
 (accessed November 7, 2011).
- Wise, Charles, and Rosemary O'Leary. 1997. "Intergovernmental Relations and Federalism in Environmental Management and Policy: The Role of the Courts." *Public Administration Review*. 57, no.2 (Mar.-Apr.): 150-159.
- Yim, Randall. 1995. McClellan needs more investors, not more studies. *The Sacramento Bee*, Aug 02.
<http://search.proquest.com/docview/246164525?accountid=10346>.
 (accessed October 31, 2011).

APPENDIX A

Fast -Track Cleanup Moves Ahead

"Environmental experts from EPA, DoD, and the state will work together, and a professional cleanup team will be stationed at every site."

--President Clinton, July 1993



The Fast-Track Cleanup Program continues to improve the way DoD is cleaning up its base realignment and closure (BRAC) installations. President Clinton introduced the program in July 1993 as part of his Community Reinvestment Program aimed at speeding the economic recovery of communities affected by BRAC actions. Fast-Track Cleanup outlines an approach for accelerating environmental cleanup and transferring property to communities at closing bases, while ensuring that human health and the environment are protected.

DoD published highlights of its continuous self-evaluation efforts in a report entitled *Fast-Track Cleanup, Successes and Challenges, 1993-1995*. Some of those accomplishments are excerpted here, followed by examples of how Fast-Track Cleanup is working in the field.

Teamwork

DoD, with support from the U.S. Environmental Protection Agency (EPA) and state regulatory agencies, has established BRAC Cleanup Teams at installations included in the 1988, 1991, 1993, and 1995 rounds of BRAC. BRAC Cleanup Teams consisting of DoD, EPA, and state environmental agency representatives are challenged to find ways to expedite cleanup actions needed to prepare real property for transfer and reuse. BRAC

Cleanup Teams take a common-sense approach to environmental cleanup by developing common goals, making decisions, and setting priorities based on the identified goals.

State and territory laws and regulations are identified early on in the cleanup process, and regulatory personnel are intimately involved in the early phases of the restoration.

Partnership

The partnerships DoD has formed through Fast-Track Cleanup efforts are proving to be one of the most effective means of completing the many tasks involved in cleanup. Partnerships among representatives of DoD, EPA, state regulatory agencies, municipalities, redevelopment authorities, and installations help to determine common objectives and resolve differences.

Reuse

Property must be made available to communities for reuse as quickly as possible.

In his Community Reinvestment Program, the President emphasized early community redevelopment of "excess property" that is, property that is no longer needed by DoD. To achieve this goal, all elements of the program must work in concert to incorporate community priorities for sustainable redevelopment and job creation, while speeding assessment and cleanup of contaminated property to make it environmentally suitable for reuse and transfer.

As cleanup efforts continue at BRAC installations, DoD, EPA, state regulatory agencies, and redevelopment authorities are finding innovative and environmentally protective ways of pursuing economic revitalization. These innovations, made possible through teamwork and partnership, are also being applied at non-BRAC installations, particularly as the initiatives of the Fast-Track Cleanup Program prove successful and information on the lessons learned is transferred.

On the surface, the accomplishments of the Fast-Track Cleanup Program are measured and easily quantified by the amount of property made available to communities for transfer and reuse. As the program matures and sites are restored with increasing efficiency, the amount of property environmentally suitable for transfer increases relative to the amount of excess property.

The continued success of the Fast-Track Cleanup Program will depend on factors not easily quantified. Strong partnerships with regulatory agencies and the public are integral to future progress. In a short time, DoD has gained significant results by diligently working to accelerate environmental actions, promote redevelopment of valuable assets, increase job opportunities, and spur economic growth.

The people implementing the principles of the program, including BRAC Cleanup Teams and other stakeholders, are the primary reason for the program's success. The partnerships that have formed and the spirit of teamwork that has ensued is impressive. Property transfer is the ultimate goal of the Fast-Track Cleanup Program, but teamwork and partnerships are the true foundation of the program.

Overriding Principles of Fast-Track Cleanup

- *Protect human health and the environment*
- *Make property available for reuse and transfer*
- *Provide for effective community involvement*

APPENDIX A REFERENCE

DENIX. DoD Environment, Safety and Occupational Health Network and Information Exchange. <http://www.denix.osd.mil/tools/facts/.cfm>
(Accessed September 30, 2012)

APPENDIX B

GAO**United States General Accounting Office****Briefing Report to
Representative Vic Fazio,
House of Representatives**

RESTRICTED-----Not to be released outside the General
Accounting Office except on the basis of specific
approval by the Office of Congressional Relations.

RELEASED**December 1985**

HAZARDOUS WASTE

Status of Air Force's Installation Restoration Program



128931

GAO/NSIAD-86-28BR**534039**

STATUS OF AIR FORCE'S
INSTALLATION RESTORATION PROGRAM

AIR FORCE IRP

In accordance with Department of Defense (DOD) policy, the Air Force Installation Restoration Program (IRP) was established to identify the location and contents of past toxic and hazardous waste disposal sites and to eliminate the hazards to public health in an environmentally responsible manner at Air Force bases. The Air Force has spent over \$195 million for the IRP and plans to spend \$710 million through fiscal year 1992. Initial Air Force IRP guidance was published in January 1982 and has been revised several times. The most recent guidance, published in July 1985, states that the numerous changes in the guidance are intended to transfer to all interested Air Force components the experience gained from managing the program and that the guidance will be periodically revised as the state-of-the-art continues to develop. The IRP consists of four phases.

Phase I

Phase I (Records Search) is intended to identify, on an installation basis, the potential for environmental contamination from past hazardous waste disposal practices. Phase I consists of a review of installation files on past missions, current operations, waste generation, past disposal practices, and interviews with key current and former installation employees. The Phase I study will result in one of the following:

- Termination of the IRP on the installation if no potential hazard is found.
- A Phase II to perform additional evaluation and sampling to confirm suspected contamination.
- A Phase IV remedial action to ameliorate contamination that presents an imminent threat to public health.

As of September 30, 1985, the Air Force had completed 162 Phase I studies and had 57 in process. Of the 57 in process, 55 were Air National Guard sites that are now to be included in the Air Force IRP. To date, only four completed Air Force Phase I studies did not recommend at least a Phase II effort.

Phase II

Phase II (Confirmation and Quantification) is intended to define and quantify the presence or absence of contamination that may have an adverse effect on public health or the

environment. Phase II consists of comprehensive environmental and ecological surveys, which include sampling and analysis to verify the presence of contamination and the magnitude and rate of contamination movement. Current Air Force guidance recognizes that a Phase II may require more than one study to adequately assess contaminant concentration and rate of movement. The concept was implemented in a February 1984 guidance change and was based on program experience.

The completion of Phase II efforts will result in one of the following at each investigated site.

- Termination of the IRP at a base if contamination is not confirmed or is determined to be insignificant.
- Long-term monitoring when contamination does not warrant remedial action at the time.
- A recommendation for Phase IV remedial actions when appropriate technology already exists, or a request for a Phase III effort to develop appropriate remedial technology.

As of September 30, 1985, the Air Force had completed Phase II efforts at 151 sites. Phase II studies were underway at 1,072 sites on 100 bases.

Phase III

Phase III (Technology Development) is intended to implement research and development on new toxic and hazardous waste cleanup methods. A Phase III requirement can be identified and instituted at any time during the IRP. Prior to the July 1985 guidance, Phase III was intended to assess various decontamination and containment technologies and to assess their cost/benefits. This evaluation of existing technologies is now to be addressed in Phase IV.

Phase IV

Phase IV (Remedial Actions) is intended to assess, select, and implement appropriate control measures that will comply with DOD and Air Force policy regarding former hazardous waste disposal sites. Phase IV will generally encompass individual sites or closely spaced groups of sites rather than all sites on an installation.

A January 1984 program guidance changed Phase IV to a two-staged approach. Previously, Phase IV entailed the design, construction, and operation of any necessary pollution abatement

facilities and the completion of remedial actions, which could include long-term monitoring. This is now designated Phase IV-B.

The new key element of Phase IV, Phase IV-A, entails the development of a Remedial Action Plan (RAP). The RAP is a detailed study listing available control technologies, an assessment of their effectiveness and cost/benefits, and selection of a preferred alternative which will become the basis for Phase IV-B. Air Force officials told us that creation of the IV-A process is consistent with the Environmental Protection Agency's (EPA) feasibility study procedure.

AIR FORCE IRP ORGANIZATIONAL STRUCTURE AND ROLES

The following is a brief description of the offices or activities involved in the IRP and the responsibilities of each, primarily as they relate to McClellan.

Headquarters

The Office of the Deputy for Environment, Safety, and Occupational Health in the Office of the Deputy Assistant Secretary of the Air Force for Installations, Environment, and Safety sets the overall policy for the Air Force IRP. Also, it has the final approval authority for any major project to correct any hazardous waste contamination at Air Force installations.

At Air Force headquarters, Washington, D.C., the Directorate of Engineering and Services, is the organization with overall management responsibility for the overall Air Force IRP. Its primary function is to implement Air Force IRP policy. The Air Force Surgeon General is responsible for Phase II studies as well as Phase III health effects research.

Air Force Installation Restoration Management Committee

The Air Force Installation Restoration Management (AFIRM) Committee was established in February 1985 to review and approve RAPs. The AFIRM Committee is chaired by a representative from the Directorate of Engineering and Services and consists of representatives from the major Air Force commands, the Surgeon General, and Judge Advocate staff. A contractor who is nationally recognized as an authority in hazardous waste disposal site restoration and representatives from the Air Force Regional Civil Engineers serve as technical consultants to this committee.

The AFIRM Committee serves as a focal point for the transfer of remedial action technologies and management techniques among Air Force organizations to assure a consistent

APPENDIX B REFERENCE

United States General Accounting Office. *Hazardous Waste: Status of Air Force's Installation Restoration Program*, NSIAD-86-28BR. Washington, DC: General Accounting Office, 1985. <http://gao.justia.com/departments-of-defense/1985/12/hazardous-waste-nsiad-86-28br/NSIAD-86-28BR-full-report.pdf> (accessed October 21, 2011).

APPENDIX C



ACQUISITION,
TECHNOLOGY
AND LOGISTICS

THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON
WASHINGTON, DC 20301-3010

JAN 4 2005

MEMORANDUM FOR INFRASTRUCTURE EXECUTIVE COUNCIL MEMBERS INFRASTRUCTURE STEERING GROUP MEMBERS JOINT CROSS-SERVICE GROUP CHAIRMAN

Subject: 2005 Base Closure and Realignment Selection Criteria

The Ronald Reagan National Defense Authorization Act for Fiscal Year 2005, Public Law 108-375, amended the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, to specify the selection criteria. Specifically, the amendment revised the criteria previously published by the Secretary of Defense by adding the word "surge" to criterion three. The amendment also revised the wording, but not the meaning, of criteria one and seven, to avoid the use of the possessive.

The Department shall use the attached 2005 Base Closure and Realignment (BRAC) Selection Criteria, along with the force-structure plan and infrastructure inventory, to make recommendations for the closure or realignment of military installations inside the United States, as defined in the base closure statute. This direction supersedes any previous direction regarding selection criteria for the BRAC 2005 process. The 2005 BRAC Commission will also use these criteria in their review of the Department of Defense's final recommendations.

A handwritten signature in black ink, appearing to read "Michael W. Wynne".

Michael W. Wynne
(Acting USD (Acquisition, Technology & Logistics))
Chairman, Infrastructure Steering Group

Attachment:
As stated



Final Selection Criteria
Department of Defense Base Closure and Realignment

In selecting military installations for closure or realignment, the Department of Defense, giving priority consideration to military value (the first four criteria below), will consider:

Military Value

1. The current and future mission capabilities and the impact on operational readiness of the total force of the Department of Defense, including the impact on joint warfighting, training, and readiness.
2. The availability and condition of land, facilities, and associated airspace (including training areas suitable for maneuver by ground, naval, or air forces throughout a diversity of climate and terrain areas and staging areas for the use of the Armed Forces in homeland defense missions) at both existing and potential receiving locations.
3. The ability to accommodate contingency, mobilization, surge, and future total force requirements at both existing and potential receiving locations to support operations and training.
4. The cost of operations and the manpower implications.

Other Considerations

5. The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs.
6. The economic impact on existing communities in the vicinity of military installations.
7. The ability of the infrastructure of both the existing and potential receiving communities to support forces, missions, and personnel.
8. The environmental impact, including the impact of costs related to potential environmental restoration, waste management, and environmental compliance activities.

APPENDIX C REFERENCE

United States Department of Defense. BRAC 2005 Base Closure and Realignment Selection Criteria.
www.hqda.army.mil/acsim/brac/BRACSelectionCriteria.pdf (accessed October 21, 2011).