



Fall 2001

This Bird Has Flown: The Uncertain Fate of Wildlife on Closed Military Bases

Lloyd Burton

Thomas Williams

Recommended Citation

Lloyd Burton & Thomas Williams, *This Bird Has Flown: The Uncertain Fate of Wildlife on Closed Military Bases*, 41 Nat. Resources J. 885 (2001).

Available at: <https://digitalrepository.unm.edu/nrj/vol41/iss4/4>

This Article is brought to you for free and open access by the Law Journals at UNM Digital Repository. It has been accepted for inclusion in Natural Resources Journal by an authorized editor of UNM Digital Repository. For more information, please contact amywinter@unm.edu, lsloane@salud.unm.edu, sarahrk@unm.edu.

LLOYD BURTON & THOMAS WILLIAMS*

This Bird Has Flown: The Uncertain Fate of Wildlife on Closed Military Bases**

ABSTRACT

As the fifth largest public lands manager in the federal government, the U.S. Department of Defense hosts significant wildlife populations on many of its large military bases in exurban and rural areas of the United States. As the military's mission began to change in the late twentieth century, Congress authorized the closure of several large bases. This closure legislation, however, makes no direct provision for the preservation of open space generally or wildlife habitat conservation specifically on these closed bases. This article presents case study research on the closure of two air force bases roughly equal in size and natural resource attributes. At one base, nearly a fourth of the land mass was preserved as a wildlife refuge; while at the other, all significant wildlife habitat was destroyed by real estate development. The two most significant factors accounting for the radical difference in these two base closure cases were (1) the political culture of the communities surrounding the bases and (2) the relative presence of what Harvard political scientist Robert Putnam refers to as social capital. Several administrative measures can be taken within the Department of Defense and at the state and local level to increase the likelihood that the nation's wildlife heritage is better preserved in future base closures than is now usually the case.

I. INTRODUCTION

We need a new system of values, a system which recognizes the organic unity between humankind and nature and promotes the ethic of global responsibility.

Mikhail S. Gorbachev¹

* Dr. Lloyd Burton is the Director of the Program in Environmental Policy, Management, and Law at the Graduate School of Public Affairs, University of Colorado at Denver. Dr. Williams is a Captain in the U.S. Air Force and Environmental Management Instructor, Civil Engineering and Services School, Air Force Institute of Technology, Wright-Patterson Air Force Base, Ohio.

** The analysis, views, and opinions expressed in this article are solely the authors' and are not being conveyed on behalf of either the University of Colorado or the United States Air Force.

1. Mikhail S. Gorbachev, *Global Green USA, The U.S. Affiliate of Green Cross International*, at <http://www.globalgreen.org>, (last visited Oct. 13, 2001).

Over the past ten years there has been a great deal written about vanishing wildlife, the destruction of wildlife habitat, and the importance of wildlife and its habitat to the future of the human race.² This article addresses the main concern that human-induced wildlife losses are increasing at an alarming rate, and once a species is extinct that unique genetic resource is gone forever.

Most of the large wildlife populations remaining in the United States reside on public lands, mostly federal lands at that.³ Within this federal estate, the Department of Defense manages 25 million acres of land (including habitat for 220 endangered species), making it the nation's fifth largest federal land management department.⁴

As the nation's military mission has changed over the last two decades, however, so have the needs of the Department of Defense. While its dependence on well-trained and at least adequately compensated personnel—as well as appropriate state-of-the-art weaponry—has never been greater, its need for the great sprawling military bases once found in states throughout the nation has in fact diminished. In 1988,⁵ and again in 1990,⁶ Congress authorized the closure of a total of 168 military installations, including several major bases comprising thousands of acres of relatively undisturbed natural landscapes, through the Base Closure and Realignment Act (BCRA) and its amendments.

In so doing, Congress also put in jeopardy the continued survival of the vast wildlife populations inhabiting this federal land, since nothing in the language of the BCRA requires that particular attention be devoted to the preservation of wildlife resources. As a result, our wildlife heritage on these closed and closing bases is now at significant risk. In some instances, entire habitats and the wildlife populations they supported have been literally wiped off the face of the American earth. In the process of preserving wild open spaces on military reservations either for training purposes or to buffer security-sensitive installations from public contact, the U.S. military also served as a steward for a surprisingly high percentage of America's wildlife resources. The great policy irony we are now facing is

2. See generally YVONNE BASKIN, *THE WORK OF NATURE: HOW THE DIVERSITY OF LIFE SUSTAINS US* (1997); STEPHEN R. KELLERT, *THE VALUE OF LIFE: BIOLOGICAL DIVERSITY AND HUMAN SOCIETY* (1996); THOMAS MICHAEL POWER, *ENVIRONMENTAL PROTECTION AND ECONOMIC WELL-BEING: THE ECONOMIC PURSUIT OF QUALITY* (2d ed. 1996); *ENVIRONMENTAL POLICY AND BIODIVERSITY* (R. Edward Grumbine ed., 1994); *RESEARCH PRIORITIES FOR CONSERVATION BIOLOGY* (Michael E. Soule & Kathryn A. Kohm eds., 1989).

3. L. Peter Boice, *Defending Our Nation and Its Biodiversity*, *ENDANGERED SPECIES BULL.* (Fish & Wildlife Serv., U.S. Dep't of the Interior.), Jan./Feb. 1997, at 4-5.

4. *Id.*

5. Base Closure and Realignment Act of 1988, 10 U.S.C. § 2687 (1994).

6. Defense Base Closure and Realignment Act of 1990, 10 U.S.C. § 2687 (1994).

that in all too many base closure instances, the nation's success in attaining military hegemony occasioned by the end of the Cold War now poses a direct and serious threat to the security of domestic wildlife populations at the urban edge, as base ownership and management have been relinquished to domestic commercial development.

The research project described in this article was designed to achieve two goals. Using the case study approach, the first was to identify those circumstances most closely associated with the BCRA being implemented in ways that either preserved wildlife habitat or doomed it to destruction. Based on these findings, our second goal was to develop policy recommendations for future implementation of the BCRA that would increase the likelihood that wildlife preservation will at least figure significantly in the base closure and conversion process.

After a brief overview of the base closure legislation and general provisions for its implementation, we tell a tale of two Air Force bases, roughly equal in size and geographic circumstance. For one, closure proved to be the best of times for its resident wildlife, for the other, the worst. How and why the BCRA could have been implemented in two such radically different ways and with such radically different results—from the standpoint of wildlife conservation—is the recurrent theme of the article, while the moral of the story comprises our concluding policy recommendations.

As described in more detail in section III below, the principal research method we employed in this study was grounded theory. Rather than testing the validity (or lack thereof) of preconceived hypotheses, we approached this task using grounded theoretical methodology to initiate semi-structured conversations with key persons actively involved in the base closure process in the two cases being studied. Then we used textual analysis of these interview transcripts as a way of discovering why these respondents themselves thought the base closure process in these two instances proceeded the way it did. Thus, it is the respondents' own experience rather than our preconceived notions that provides the basis for our conclusions regarding why the closure process at these two bases followed such radically divergent paths.

II. THE BASE CLOSURE ACT AND THE STATUS OF WILDLIFE

Protecting our national security in the post-Cold War era includes integrating the best environmental practices into all Department of Defense activities.

William J. Perry⁷

7. MICHELE LESLIE ET AL., *CONSERVING BIODIVERSITY ON MILITARY LANDS: A HANDBOOK FOR NATURAL RESOURCE MANAGERS* 1 (1996).

A. Background

Many military lands, whether they are owned by the Navy, Army, Marines, or Air Force, contain large, relatively untouched ecosystems in or near some major American cities. Since 1988, many of these bases have been handed over to local municipalities, and the redevelopment of these bases is now progressing.⁸ Some biologists are beginning to express concern about wildlife protection at these closed bases.⁹ In this process, economic development, urbanization, and agricultural activities are becoming great threats to wildlife communities that exist on them.¹⁰ These biologists and some of their colleagues believe that the protection of wildlife at closed military bases is the most pressing conservation issue facing the military today.¹¹

By creating an Environmental Office, the Department of Defense has come to recognize the significant effect of environmental degradation and biodiversity preservation on national security.¹² Environmental security refers to environmental issues that impact national security.¹³ In this vein,

[s]houldn't military planners now calculate whether a single further F-15 fighter plane at \$125 million would purchase more real, enduring, and all-around security than the same sum spent on pushing back the deserts, replanting the forests, protecting farmland soil, stabilizing climate, slowing population growth, and a lengthy list of similar items?¹⁴

Recent base closures have their roots in the military cutbacks that occurred after World War II, the Korean War, and the Vietnam Conflict. Many bases were closed because of these cutbacks.¹⁵ Subsequently, in the late 1970s, many of the bases that had not been closed after Vietnam were deemed unnecessary and were considered for closure.

8. *Civilian Reuse of Former Military Bases: Summary of Economic Adjustment Projects* (Office of Economic Adjustment, Office of the Under Secretary of Defense), Dec. 1996, at iv.

9. Daniel S. Cooper & Dan L. Perlman, *Habitat Conservation on Military Installations*, FREMONTIA, Jan. 1997, at 7-8.

10. *Id.* at 8.

11. *Id.*

12. LESLIE ET AL., *supra* note 7, at 17.

13. See generally Brian R. Shaw, The Woodrow Wilson Center, *When Are Environmental Issues Security Issues?*, at http://www.pnl.gov/ces/academic/ww_1shaw.htm (last visited Oct. 13, 2001).

14. NORMAN MYERS, *ULTIMATE SECURITY: THE ENVIRONMENTAL BASIS OF POLITICAL STABILITY* ix (1996).

15. Robert Scott Dering, *The Politics of Military Base Closures: 1988-1995*, at 26 (1996) (unpublished Ph.D. dissertation, University of Kansas) (on file with authors).

In early 1976, President Ford made an announcement that there would be 160 military base closures and realignments starting in March of that year.¹⁶ In response, Congress attempted to greatly restrict the ability of the Department of Defense (DoD) to close bases. For example, the 1977 fiscal military construction bill included a provision that would have affected any DoD proposal to close a domestic base employing 300 or more civilians. The bill would have required the DoD to take four steps before closing a base: first, notify the armed services committees in both chambers of Congress of the proposed closure action; second, wait nine months while assessing the economic, strategic, environmental, and operational consequences of the proposal; third, submit the results of these assessments to the appropriate committees; and fourth, wait an additional three months for approval.¹⁷

These requirements could have been used to delay closures because of mandated public meetings and environmental impact statements that were open to court challenges;¹⁸ however, President Ford vetoed the bill.¹⁹ Instead, he signed a compromise bill that reduced the advance notice requirement to 60 days but kept all other provisions intact.²⁰ Finally, the 1978 military construction bill made these terms permanent,

effectively prevent[ing] the [DoD] from closing any of its major bases. Each time the Secretary [of Defense] initiated a closure or realignment under the statute's procedures, Congress blocked it. For the next decade, DoD was forced to keep open many unneeded bases.²¹

Because of this, any base with more than 300 civilians avoided closure for a decade (1977–1987). By the end of 1987, however, the DoD was again looking for ways to economize in the face of more budget reductions.

B. Origins and Implementation of Closure Legislation

By 1987, the military had far too many bases. Representative Dick Arney (R. Texas, later to become chair of the House Appropriations Committee), who had no bases in his district, came within four votes of

16. *Id.* at 12.

17. *Id.* at 3.

18. *Id.*

19. *Id.*

20. Military Construction and Guard and Reserve Forces Facilities Authorization Acts of 1977, Pub. L. No. 94-431, 90 Stat. 1349 (codified in scattered sections of 10 U.S.C.).

21. Military Construction Authorization Act of 1978, Pub. L. No. 95-82, 91 Stat. 358 (codified in scattered sections of 10 U.S.C.); Benjamin L. Ginsberg et al., *Waging Peace: A Practical Guide to Base Closures*, 23 PUB. CONT. L. J. 169, 172 (1993).

winning a floor amendment that he sponsored to the 1988 defense authorization bill that would have created an independent panel to close bases.²² A year later, Representative Armeý proposed the same measure, and at this time it did pass.²³ With this bill, Congress finally agreed to allow base closures, suspending the congressional moratorium.²⁴ Armeý's bill was well received because Congress was looking for ways to cut the budget in the late 1980s. The bill looked promising because it provided a way to deflect the political heat from base closures while still reducing budget expenditures.²⁵

The suspension of the earlier code and the passage of Armeý's bill resulted in the creation of the Defense Authorization Amendments and the Base Closure and Realignment Act of 1988.²⁶ This Act provided the military with a single opportunity to close and realign major military bases. Under the Act, a total of 86 bases were closed, including sixteen that were considered major military installations. Major (large) bases are ones

[at which] 300 or more civilian employees are authorized to be employed, or any realignment with respect to any installation involving the reduction of 50 percent or 1,000 (whichever is smaller) of the civilian employees authorized to be employed at the base.²⁷

Out of these 16 major bases, five were Air Force bases. Base closure recommendations were made using a four-step process, with a different decision-making body responsible for each step:

the Secretary of Defense, the Defense Base Closure and Realignment Commission (BCRA Commission), the President and, finally, the Congress. By establishing these multiple phases with discrete actors, the Act strikes a delicate balance between the executive and the legislative branches.²⁸

Once bases were selected, the DoD had up to six years to complete the actual closures.²⁹ In this final disposal process, there was a statutorily established hierarchy of priority in the reuse of closed facilities: DoD

22. Dering, *supra* note 15, at 15-16.

23. *Id.*

24. Ginsberg et al., *supra* note 21, at 172.

25. Dering, *supra* note 15, at 15-19.

26. Base Closure and Realignment Act of 1988, 10 U.S.C. § 2687 (1994).

27. Ginsberg et al., *supra* note 21, at 173.

28. *Id.* at 174.

29. *Id.* at 181.

agencies first, other federal agencies second, state agencies third, local municipalities fourth, and private organizations last.³⁰

With the fall of the Berlin wall in 1989 and the ending of the Cold War in 1990³¹ (the Soviet Union did not officially disband until Gorbachev resigned in 1991³²), three more rounds of closures were authorized under a new Closure Act, the Defense Base Closure and Realignment Act of 1990.³³ This Act was nearly identical to the 1988 one. In these three rounds, 82 additional major military installations were closed, including 24 major Air Force installations.³⁴ The average large base closed by the Air Force in the past four rounds of closures was typically around 3000 acres in size, employed about 1300 civilian workers, and took about three years to close.³⁵

C. The Reuse Planning Process

Once a base was selected for closure, its reuse planning process began. Reuse planning consisted of many activities and there were two main players—the military and the local reuse committee (reuse committee is a generic title we used). The reuse committee often consisted of local, state, county, and/or city representatives. These representatives were usually state legislators, county officials, and city councilors, or representatives appointed by them. Also, these reuse committees often had sub-committees that focused on specific issues. The sub-committees included local citizens and interested parties that provided advisory information. These specific issues usually covered the following topics: base reuse planning, economic development, human resources, environment, housing, health, and education. The main purpose of a reuse committee was to create a redevelopment plan. Upon completion of the plan, the reuse committee was normally dissolved and a redevelopment authority (also a generic title) established.³⁶

30. Michael T. Brady, *Environmental Review of Military Base Closures: Implications for Affected Governments*, 1992 DUKE ENVTL. L. & POL'Y F. 79, 83-85 (1992).

31. HEDRICK SMITH, *THE NEW RUSSIANS* xxi (1991).

32. *Id.*

33. Defense Base Closure and Realignment Act of 1990, 10 U.S.C. § 2687 (1994).

34. GEORGE H. SIEHL & EDWARD KNIGHT, CONG. RESEARCH SERV., *MILITARY BASE CLOSURES SINCE 1988: STATUS AND EMPLOYMENT CHANGES AT THE COMMUNITY AND STATE LEVEL* 4 (1997).

35. See U.S. GENERAL ACCOUNTING OFFICE, GAO/NSIAD-96-149, *MILITARY BASES: UPDATE ON THE STATUS OF BASES CLOSED IN 1988, 1991, AND 1993* (1996); U.S. GENERAL ACCOUNTING OFFICE, GAO/NSIAD-95-139, *MILITARY BASES: CASE STUDIES ON SELECTED BASES CLOSED IN 1988 AND 1991* (1995); U.S. GENERAL ACCOUNTING OFFICE, GAO/NSIAD-95-3, *MILITARY BASES: REUSE PLANS FOR SELECTED BASES CLOSED IN 1988 AND 1991* (1994).

36. PRESIDENT'S ECON. ADJUSTMENT COMM., OFFICE OF THE SEC'Y OF DEF., *ORGANIZING FOR ECONOMIC ADJUSTMENT* 9, 10 (1994).

At the same time that a reuse committee was formed, base military personnel usually started work on or updated the following documents and programs:

- (1) The Environmental Impact Statement (a NEPA requirement whenever a large base was closed),
- (2) The Natural and Culture Resource Plan (partially to determine if federally listed endangered species lived on base),
- (3) The Environmental Baseline Survey (a NEPA/Superfund/RCRA-related requirement), and
- 4) The Cleanup Plan (a Superfund/RCRA-related requirement).³⁷

In addition to these environmental activities, base personnel identified installation property that was in excess of the DoD's needs, inventoried personal property, relocated active mission elements, and performed interim caretaker maintenance on base facilities. All of these steps were taken as soon as possible after the closure announcement, concurrently with each other, and with the steps taken by the reuse authority (another generic term used to describe both the reuse committee and the redevelopment authority).

To facilitate the reuse plans and base redevelopment, the DoD provided grants through its Office of Economic Adjustment. Additionally, grants from other federal agencies were also made available for reuse planning and redevelopment. Table 1 shows the grants (as of 1995, in 1995 dollars, listed in descending totals) provided for seventeen major Air Force bases. The median and mean of federal funding made available for reuse authorities in 1998 dollars were \$7,915,563 and \$15,327,780, respectively.³⁸

37. OFFICE OF ECON. ADJUSTMENT, DEP'T OF DEF., COMMUNITY GUIDE TO BASE REUSE 12-15 (1995).

38. U.S. GENERAL ACCOUNTING OFFICE, GAO/NSIAD-96-149, MILITARY BASES: UPDATE ON THE STATUS OF BASES CLOSED IN 1988, 1991, AND 1993 39-40 (1996). For table information, see Thomas N. Williams, Jr., *Pave It or Save It: Wildlife Protection Planning under the Base Closure and Realignment Acts 26 (1999)* (unpublished Ph.D. dissertation, University of Colorado at Denver) (on file with authors).

Table 1
Grant Summaries for Selected Air Force Closure Bases (see footnote 38)

| Base (year) | Total OEA ^a | \$Total FAA ^b | \$Total EDA ^c | \$Total DOL ^d | \$Total |
|--------------------------|---------------------------|-----------------------------|-----------------------------|-----------------------------|-------------|
| Bergstrom (‘91) | 200,000 | 110,841,266 | 0 | 1,228,260 | 112,269,526 |
| Myrtle Beach (‘91) | 1,180,006 | 18,948,100 | 3,500,000 | 925,000 | 24,553,106 |
| Pease (‘88) | 859,790 | 7,774,618 | 10,200,000 | 0 | 18,834,408 |
| Norton (‘88) | 726,000 | 3,438,638 | 6,825,000 | 2,916,000 | 13,905,638 |
| Wurtsmith (‘91) | 1,226,318 | 508,000 | 9,717,500 | 1,250,000 | 12,701,818 |
| England (‘91) | 2,174,047 | 149,850 | 6,411,800 | 500,000 | 9,235,697 |
| George (‘88) | 533,648 | 118,638 | 6,525,000 | 1,000,000 | 8,177,286 |
| Castle (‘91) | 920,706 | 2,143,000 | 4,500,000 | 0 | 7,563,706 |
| Chanute (‘88) | 962,978 | 937,830 | 2,500,000 | 3,000,000 | 7,400,808 |
| Williams (‘91) | 1,515,339 | 3,018,000 | 587,500 | 2,000,000 | 7,120,839 |
| Loring (‘91) | 1,903,263 | 50,000 | 2,267,000 | 2,100,000 | 6,320,263 |
| Eaker (‘91) | 2,287,786 | 90,000 | 1,962,600 | 0 | 4,340,386 |
| Mather (‘88) | 933,670 | 238,526 | 75,000 | 1,750,000 | 2,997,196 |
| Lowry (‘91) | 1,771,525 | 0 | 112,500 | 800,000 | 2,684,025 |
| Rickenbacker (‘91) | 111,000 | 1,110,803 | 0 | 684,545 | 1,906,348 |
| Richard- Gebaur (‘91) | 241,985 | 1,572,000 | 0 | 0 | 1,813,985 |
| Grissom (‘91) | 1,139,528 | 0 | 50,000 | 612,500 | 1,802,028 |

^a Office of Econ. Adjustment, ^b Federal Aviation Admin., ^c Econ. Dev. Admin.,
^d Dep’t of Labor

The policies and procedures set forth in the BCRA have most frequently intersected with existing national environmental policies in two principal areas: the completion of the Environmental Impact Statements (EIS) required under the National Environmental Policy Act (NEPA)³⁹ and the restoration of contaminated sites falling under the jurisdiction of the Comprehensive Environmental Response, Compensation, and Liability Act (or CERCLA, better known as "Superfund").⁴⁰ The only federal statutory requirement explicitly concerning the status of wildlife in BCRA implementation is the Endangered Species Act. If the EIS prepared pursuant to a base closure fails to discover or document the existence of a listed species, the Act is not implicated.

III. RESEARCH METHODS—STUDYING THE APPLICATION OF GENERAL PRINCIPLES TO SPECIFIC CASES

In using the comparative case study method to discern the conditions under which base closure act legislation was used to either preserve or destroy wildlife resources, the first step was to choose closed bases for study that were as nearly alike as possible in all respects save the impact of closure on the status of wildlife. For this reason, we chose two bases that had been administered by the same branch of the armed forces—the U.S. Air Force (the affiliation of one of this article's co-authors as an Air Force officer also facilitated access to documentary data). Further, the two bases chosen were approximately equal in size, they were both located on coastal lands of the eastern seaboard, both contained extensive tracts of undisturbed open spaces including forested areas and wetlands, and both were closed under the auspices of the same base closure and conversion legislation (see Table 2).⁴¹

The two principal sources of information relied upon in this research project were documents (*e.g.*, government reports and other institutional communications, case law, news media accounts) and open-ended interviews with decision makers both in governmental institutions and citizen committees involved in the closure and conversion process at both study sites. The institutional actors interviewed at both sites included the Department of Defense Base Conversion Agency (BCA) site manager

39. 42 U.S.C. § 4332 (1994).

40. 42 U.S.C. § 9620 (1994). Regarding national environmental policy and BCRA generally, see Harold W. Bidlack, *Swords as Plowshares: The Military's Environmental Role* (1996) (unpublished Ph.D. dissertation, University of Michigan at Ann Arbor) (on file with authors); GOVERNMENT ACCOUNTING OFFICE, PUB. NO. GAO/NSIAD-95-70, *MILITARY BASES: ENVIRONMENTAL IMPACT AT CLOSING INSTALLATIONS* (1995).

41. U.S. GENERAL ACCOUNTING OFFICE, GAO/NSIAD-95-139, *MILITARY BASES: CASE STUDIES ON SELECTED BASES CLOSED IN 1988 AND 1991* 81-83, 86-88 (1995).

and environmental coordinator, the Military Natural Resource Manager at the time of the closure, and the chair and/or executive director of the reuse committee, the base liaison officer (base transition coordinator), and the chair and/or executive director of the local redevelopment authority.

Table 2
Base Comparison Table (see footnote 41)

| | Pease | Myrtle Beach |
|-------------------------------------------------------------------------------|------------------------------------------------|-------------------------------------------------|
| Size | 4,257 acres | 3,937 acres |
| Number of federally listed endangered species currently living on base | None | None |
| Largest area of continuous, undeveloped land | 1,335 acres | 1,095 acres |
| Location | New Hampshire, Northeast Atlantic coastal area | South Carolina, Southeast Atlantic coastal area |
| Metropolitan area | Yes | Yes |
| Setting | Suburban | Suburban |
| Nearest large city of 100,000 or more | 119 miles from Boston | 187 miles from Charleston |
| Planned acres of wildlife protection | 1,095 acres | 0 acres |
| Number of new civilian jobs since closure | 1,682 (+420%) | 1,080 (+26%) |

Non-governmental interviewees directly involved in one way or another in the closure and conversion process included designated neighborhood representatives, environmental interest group representatives, local business leaders, and journalists who had covered the base closure process in stories written for local newspapers. The data generated from the interviews was also used to supplement and verify the document analysis.

The interviews used a standard protocol for all individuals at the different bases. We used generic open-ended interview questions, slightly modified for the different positions. The general purpose of the interview

process was to determine in the respondent's own words why the base closure process resulted in the land use outcome achieved, with specific reference to the impact of base closure on the status of wildlife resources at the base. The field researcher (Captain Williams) summarized the contents of each of the interviews, documented and quantified salient points of commonality, identified differences, and discerned associations with wildlife status outcomes. Finally, we conducted a content analysis on all interview transcripts to discern whether respondents regularly voiced any overarching themes or perspectives not solicited by the interviewer.

The literature on sustainable development, as applied to growth management and land-use decision making within communities in First World nations such as the United States,⁴² suggests that five principal factors may contribute more directly than others to land management that protects environmental integrity while meeting both the present and reasonably foreseeable needs of future human generations: (1) demographic and geographic characteristics of the community in question; (2) relative community wealth; (3) the degree of public ethical concern with management of the natural environment, as reflected in the level of public environmental activism (relative prevalence and scope of actions of environmental interest groups); (4) the nature and scope of public participation in land use decision-making processes; and (5) legal context and processes (*i.e.*, applicable statutes, regulations, and case law comprising the legal context within which land use decision making is done).

Therefore, both in the assemblage of relevant documents and in creating the open-ended interview script that provided the starting point for interviews, we devoted particular attention to creating a research record that would seek to document the degree to which any of these factors may have played a significant role in the outcomes achieved in these two case studies. The reason we initially identified these five factors is that the literature suggests they are oftentimes important indicators of whether sustainable land use planning will indeed occur. As the discussion in the concluding section of this article indicates, several of these factors did contribute apparently to land-use planning outcomes at the two case study bases, which differed sharply in terms of environmental sustainability.

42. See Jon Rodiek & Glenn DelGiudice, *Wildlife Habitat Conservation: Its Relationship to Biological Diversity and Landscape Sustainability: A National Symposium*, 28 *LANDSCAPE & URBAN PLAN.* 1 (1994); Keith Pezzoli, *Sustainable Development: A Transdisciplinary Overview of the Literature*, 40 *J. ENVTL. PLANNING & MGMT.* 549 (1997); MICHAEL MARIEN, *ENVIRONMENTAL ISSUES AND SUSTAINABLE FUTURES: A CRITICAL GUIDE TO RECENT BOOKS, REPORTS, AND PERIODICALS* viii-ix (1996).

IV. FUELING THE GROWTH MACHINE IN SOUTH CAROLINA

The former Myrtle Beach Air Force Base lies in the relatively undeveloped southern part of Myrtle Beach, within Horry County, South Carolina, (representing 33 percent of the city's land) and has shorefront property on the intercoastal waterway on its north side.⁴³ The other end of the base is a half-mile from the ocean. Most of the undeveloped land on the base is found in the southwest portion, around the old weapons storage area. Additionally, the eastern part of the base is adjacent to a state park. The base provided habitat to the type of wildlife common for the area, including white-tailed deer, raccoons, opossum, turtles, frogs, snakes, and various birds, mainly migratory waterfowl.⁴⁴ The occasional alligator and black bear had also been spotted passing through the base, although they did not make a home there.⁴⁵

In 1942, when base operations first began, Myrtle Beach City was a sleepy seaside town and Horry County had only 51,951 people.⁴⁶ A post-World War II "baby boom" combined with a 42 percent growth in population from 1980 to 1990 (from 101,419 to 156,800) demonstrates that this has been an area of continuous—if episodic—development in the latter half of the twentieth century, with the largest proportionate increases in population having occurred during the period leading up to the closure of the base.⁴⁷ Myrtle Beach was sixth among the 25 fastest growing micropolitan areas.⁴⁸

By March of 1991, most of the 50 jets (A-10 Warthogs), 100 pilots, and 2000 support personnel of the 354th Tactical Fighter Wing stationed at Myrtle Beach Air Force Base (AFB) had returned from Gulf War combat duty in Saudi Arabia. One month later, the Secretary of Defense at that time (now Vice-President), Dick Cheney, submitted his base closure list to the United States Base Closure and Realignment Commission; Myrtle Beach AFB was on the list.⁴⁹ The Secretary of Defense cited "[p]oor flying weather and obstructions from civilian aircraft" as reasons for closing the base.⁵⁰

43. U.S. Air Force, Final Environmental Impact Statement, Disposal and Reuse of Myrtle Beach Air Force Base, South Carolina 3-82 to 3-149 (1993).

44. This wildlife profile was reconstructed from multiple secondary sources, since no comprehensive wildlife survey was conducted in the course of preparing the closure Environmental Impact Statement. See Williams, *supra* note 38, at 138-44, 150-57.

45. *Id.* at 121-22.

46. BUREAU OF THE CENSUS, U.S. DEP'T OF COMMERCE, 1 SIXTEENTH CENSUS OF THE UNITED STATES: 1940, at 979 (1943).

47. MYRTLE BEACH AREA CHAMBER OF COMMERCE, MYRTLE BEACH AND SOUTH CAROLINA'S GRAND STRAND: A DEMOGRAPHIC PROFILE 1 (1990).

48. *Id.* at 2.

49. *The Final Flyby*, THE SUN NEWS (Myrtle Beach, S.C.), Mar. 28, 1993, at 7A.

50. *Id.*

The base was closed on March 31, 1993. The first organization responsible for Myrtle Beach AFB redevelopment was the Myrtle Beach Air Force Base Redevelopment Task Force. The Task Force held 35 business meetings (all of these open to the public), three public hearings, and a community vision workshop. Its final product was the *Myrtle Beach Air Force Base Community Redevelopment Plan*.⁵¹ This was the plan on which the Air Force's Record of Decision and Closure and Reuse EIS were roughly based. On February 1, 1993, the Task Force met for the last time. Once the Task Force disbanded, the Air Base Redevelopment Commission took over base responsibilities and started to implement the Task Force's plan.

Three different government institutions were responsible for redeveloping the base: Myrtle Beach City, Horry County, and the South Carolina state government. Myrtle Beach City was mainly responsible for developing land south and west of the runway. The conveyance of this land was supposed to be handled by a negotiated sale between the Air Force and the city. The state acquired 1738 acres (1095 acres of it undeveloped) in a land swap with the Air Force. Out of this land, 1020 acres were slated to become a theme park. The city was supposed to share its responsibility for developing the rest of the base with the county, which operated the airport. The county received the airport (called the Myrtle Beach Jetport) and its land in a public airport land conveyance. As originally conceived, the Redevelopment Commission was supposed to have appointees from both the city and county councils in order to coordinate development; however, tension between Myrtle Beach City and Horry County soon developed.⁵² The main point of contention was over the projected size of the airport. Horry County wanted to build a second runway to the west and parallel to the existing runway, while the city of Myrtle Beach did not want a larger airport with a second runway. This issue effectively brought most redevelopment on the base to a halt.⁵³

Then, in the fall of 1993, prior to disclosing the Record of Decision, the Air Force asked the state to intervene. Therefore, when the Record of Decision was issued in November of 1993, it showed that most of the remaining base land would be transferred to the state—1184 acres. The state eventually created the Myrtle Beach Air Base Redevelopment Authority, a nine-person committee (three appointed by the state, three appointed by the city, and three appointed by the county). This authority is now responsible for redeveloping the remaining base land not associated with the airport or the original land swap (the 1184 acres mentioned above).

51. EDAW, Inc., *Myrtle Beach Air Force Base Community Redevelopment Plan* (1992) (unpublished report) (on file with authors).

52. Williams, *supra* note 38, at 126.

53. *Id.*

The former Myrtle Beach AFB had 1095 acres of continuous, mostly undeveloped land around its old weapons storage area. In the 1993 land swap between the state and the Air Force, the Air Force received 13,000 acres in Sumter County for use as a bombing range at Shaw Air Force Base.⁵⁴ Most of the state land, 1020 acres, was eventually earmarked for a theme park/golf course/hotel/resort. This development was to be carried out by Timberland Properties Incorporated (TPI) with the proposed name "Isle of America." In support of this development, the state clear-cut about 180 acres of forest in 1995. Once this clear-cutting was done, TPI bought 420 acres, leaving an option to buy another 600 acres at a later date. On June 17, 1997, however, TPI filed for bankruptcy and the 420 acres reverted back to the state, which then initiated plans to sell the land for housing and other related development.⁵⁵

Soon after Myrtle Beach's closure was announced and the Task Force formed its subcommittees, the county and city were asked to nominate members to the Task Force. In response, the county and city jointly appointed 50 business and community leaders: retired military officers, bankers, developers, business owners, realtors, city planners, county planners, a retired mayor, and a retired state legislator. This nomination process was not a public selection but a political appointee process. One person described it in this way:

it was mostly, you know, friends or people they [Task Force members] know—I know Joe Schmo; he's a good guy. We do business together. I think he'd be good for this kind of thing. It wasn't necessarily [that] they live next to the base and they have a stake in what happens there.⁵⁶

Therefore, there seemed to be little opportunity for non-elite members of the local community to be in positions that would directly influence decision makers. This was further demonstrated by the interview responses. All of the respondents reported that there were no ordinary (non-elite) individuals in reuse decision-making positions or even in advisory positions. The Task Force executive planner described them as "heavy hitters in the community, you know, in terms of being top leadership people." He went on to further describe them as "business, public, and private community leaders...both elected and not elected."⁵⁷

54. See generally Andrew Shain, *State-Brokered Shortcut to Swap Acreage at Base for Sumter Ranges Goes Forward*, THE SUN NEWS (Myrtle Beach, S.C.), Feb. 11, 1993, at 1C; David Wren, *Air Force Earmarks Most of Base to S.C., but Leaves Role for City, County*, THE SUN NEWS (Myrtle Beach, S.C.), Nov. 18, 1993, at 1A.

55. Williams, *supra* note 38, at 128.

56. Williams, *supra* note 38, at 157.

57. *Id.* at 158.

Regarding undeveloped base land, there appears to have been a strong and clear coupling between wealthy interests outside of Myrtle Beach and remote government decision makers. The outside wealthy interests included Charleston-based TPI, Hale Irwin Golf Services Inc., and Landmark Entertainment Group of Hollywood, California.⁵⁸

The principal state government decision maker who worked with and supported TPI's theme park proposal was the governor of South Carolina: "The resort has won the support of the governor's office for a number of years, and Campbell [then governor] officials were proud the project had gone this far."⁵⁹ Many of the interviewees also talked about this partnership between TPI and the Governor. One stated that "[t]he only thing [TPI] had was connections to the governor's office." The interviewees often referred to this partnership as a backroom deal; "it looked as though it was underhanded politics."⁶⁰ The chair of the Task Force commented, "[t]here was very little public input into that land swap deal, with TPI coming in."⁶¹ This demonstrates that, in a growth machine manner, there was a coupling of business, development, and government elite in the reuse decision-making positions. Additionally, when respondents thought the process was not open, fair, or competent, their comments centered on the theme park issue.⁶²

Furthermore, the interviewees agreed that at this early stage of reuse planning and redevelopment, the local community did not seem unified or even very interested in how the base would be redeveloped.⁶³ One might ask, What was the cause for this relative lack of organized community interest about base redevelopment, base environmental issues, and the protection of base wildlife habitat? As noted by a local journalist,

you've got the situation where people are moving here...that don't really have a stake in the community. There's no people who've lived here for 40 or 50 years....And so, I think that lack of community is maybe what has the town's people sort of look the other way at the development and not really care that much about wildlife preservation.⁶⁴

Documents produced during this time also reflected a lack of environmental concern in base redevelopment. The Draft EIS was made

58. Solomon Moore, *Resort Plan Has Green Light*, THE SUN NEWS (Myrtle Beach, S.C.), June 16, 1993, at 1A; David Wren, *Repeated Attempts Made for TPI Information*, THE SUN NEWS (Myrtle Beach, S.C.), July 6, 1997, at 8A.

59. Moore, *supra* note 58.

60. Williams, *supra* note 38, at 158-59.

61. *Id.* at 161.

62. *Id.* at 160.

63. *Id.* at 159.

64. *Id.* at 160.

available for public comment during a November 14, 1991, public meeting that was held in the Myrtle Beach High School Auditorium. There were 88 comments made from a total of 22 sources (written and oral). Out of these 88 comments, only two related to wildlife issues.

The Task Force's reuse plan was also made available for public comment in 1992, and out of the 42 comments received, none related to Myrtle Beach wildlife issues. When asked about the reason for the relative lack of interest in wildlife habitat impacts, the local environmental organization respondent related it to the "newly arrived" aspect of the population in the Myrtle Beach area.

Environmental interest groups did not take part in the reuse discussion. There seemed to be two principal reasons for this. The above-mentioned low level of environmental activism was one. As related by a local environmentalist, "We're organized, but we can't seem to get very many people to join, to stay with us."⁶⁵ Since environmental interest groups usually have to rely on local support, this lack of support prevented environmental groups from establishing a local foothold. No local preservation coalition was formed to oppose growth proponents. Second, there was no organized core of local citizens committed to protecting wildlife habitat on the base. According to all non-governmental respondents interviewed, the Myrtle Beach area did not have a history of community organization and political action.⁶⁶

V. SUPERFUND AND SANCTUARY IN NEW HAMPSHIRE

The former Pease Air Force Base was commissioned in July of 1954. Located in Rockingham County in the southeastern corner of New Hampshire, it sits on a peninsula between the Piscataqua River and the Great Bay, nestled between two cities, Portsmouth (25,800 people, according to the 1990 census) and Newington (797 people, according to the 1990 census).⁶⁷ In December of 1988, the DoD announced plans to de-commission the 4257-acre base; on March 31, 1991, Pease became the first major Air Force base to close in ten years.

The local community nearest the base—the small town of Newington—fought hard to prevent its establishment in the early 1950s. The main point of opposition to the base concerned the large amount of Newington land that the military took from the city.⁶⁸ The base occupied

65. *Id.* at 153.

66. *Id.*

67. Thomas J. Morgan, *Newington Master Plan: 1990–2000*, at 42–43 (1991) (unpublished report) (on file with authors).

68. JOHN FRINK ROWE, *NEWINGTON NEW HAMPSHIRE: A HERITAGE OF INDEPENDENCE SINCE 1630*, at 271 (1987).

"2,678 acres of Newington, or 45 percent of the town's total land. Nearly two thirds of the base (63 percent) [lay] within Newington's municipal boundaries."⁶⁹

Newington was incorporated in 1764 and by 1773 its population was 548.⁷⁰ In 1990, Newington's population was still only 797 people. The 1980 U.S. Census depicts Newington as a more stable community than most others across the country. In fact, 53 percent of the population has been in their present dwellings for six years or more.⁷¹ The Newington Master Plan (1991) described the average Newington resident as "more likely to be married, is better educated, has lived in town for a longer period of time, and is more likely to be a New Hampshire native" than the average New Hampshire resident.⁷²

Closure of Pease Air Force Base was announced during Christmas week, 1988. By January 4, 1989, the Pease Redevelopment Commission (PRC) was formed with two representatives from the city of Newington and from the city of Portsmouth and four state representatives. This was the main planning body that produced the base reuse plan. A few months later, subcommittees were formed, one of which, the Natural Resource Protection Advisory Committee, immediately started to investigate ways to preserve the wildlife habitat that existed around the old weapons storage area. Newington was the main player in this particular aspect of the base reuse discussion since the area of undeveloped land that was in question would be under their jurisdiction once the base closed.

Pease Redevelopment Commission subcommittees were created three months after the PRC formed, consisting of appointed volunteers. Newington (and Portsmouth) put out ads in the local newspapers asking for committee volunteers. Many people responded: "[the] Redevelopment Commission [was] swamped with nominations...[and] received well over 100 nominations and applications."⁷³ Once all of the names were collected, a Newington selectman and Portsmouth councilman appointed committee members.

Newington selectmen pushed hard for the creation of the Natural Resource Protection Committee, and the city zoned the undeveloped base land for wildlife conservation. In fact, the city even went so far as to provide the U.S. Fish and Wildlife Service with a free building for their personnel. The Natural Resource Protection Committee met often (usually twice a month), published their minutes, passed resolutions, and created a proposal

69. Morgan, *supra* note 67, at 326-27 (1991).

70. *Id.* at 16.

71. *Id.* at 50.

72. *Id.* at 68.

73. Williams, *supra* note 38, at 213.

to establish a wildlife refuge to be managed by the U.S. Fish and Wildlife Service. The committee's proposal was later approved by the PRC and sent to the state legislature. This proposal then became the key impetus, along with a letter writing campaign, for the creation of a wildlife refuge.⁷⁴ In 1992, subsequent to state legislation supporting the action, the DoD transferred to the U.S. Fish and Wildlife Service the 1095 acres of former Pease AFB land (a fourth of the base's landmass), which was to become the Great Bay Wildlife Refuge, a site that continues to be the only six miles of undeveloped waterfront in the entire Great Bay.⁷⁵

The public documents compiled for this study refer to five environmental surveys performed for the closure of Pease. Two of these surveys were plant and habitat surveys performed by a local botanist: one a wetlands survey done by the Air Force and the other a baseline wildlife survey done for closure. A team from the New Hampshire Heritage Program also performed a federal and state survey of threatened and endangered species. In regard to environmental ethical concerns, there was a great deal of evidence that the local community was very worried about wildlife issues at Pease. In the 345 newspaper articles collected, 66 (19 percent) were related to wildlife.

Pease AFB was the first base in the nation to close under the Base Closure Act, and the Air Force was under pressure to set a precedent for realizing expected economic gains from base closure.⁷⁶ In order to accomplish this goal, the Air Force considered selling the undeveloped land. A huge letter writing campaign in opposition to this plan ensued, organized by Newington, the Society for Preservation of New Hampshire Forests, and the Audubon Society of New Hampshire, and initiated at the local level by Newington selectmen and citizens. These local community representatives then approached environmental interest groups to generate more letters and to obtain help for influencing the state legislature. This letter writing campaign generated over 2000 letters that were sent to President Bush and the Air Force in support of a no-cost transfer. Many of the letters had close to 50 signatures; many were from young school children. Distrust of remote government officials and non-local businesses was one of the reasons for the letter writing campaign.

Throughout the process for closing Pease AFB there was a great deal of public participation. When the interviewees were asked to explain their characterization of Newington's environmental activism, the comments emphasized the willingness of Newington's citizens to partici-

74. *Id.* at 200.

75. *Id.* at 178.

76. Mary Ellen Boelhower, *Real Life Refuges: Great Bay National Wildlife Refuge*, FOREST NOTES, Spring/Summer, 1993, at 7-8.

pate in the local political planning process. Local journalists explained the community's involvement by stating, "Well, Newington only has 800 people; [but] they can be very vocal people."⁷⁷

This local political activity may have been related to Newington's political culture and town hall type of government.⁷⁸ Newington's high level of political action in regard to creating a wildlife refuge was a recurring theme throughout interviews with respondent groups.⁷⁹ Six local groups became Pease "watch dog groups." The most important and vocal of these called itself "Seacoast Citizens Overseeing Pease Environment" (or SCOPE), which, as the name implies, was mainly concerned with cleaning up the base. Another group was the Pease Redevelopment Research Committee, a small informal group of Newington and Portsmouth residents who were mainly concerned with Pease redevelopment issues. The willingness of local citizens to participate in local political issues led to the rapid creation of a preservation coalition that successfully challenged growth proponents.

While successful in getting the wildlife refuge established, the town of Newington later found itself in opposition to the positions taken by the Pease Development Authority (PDA), an agency comprised of representatives of local, regional, and state government that was charged with the responsibility for implementing the land use plan created by its predecessor, the Redevelopment Commission. In its efforts to hasten the redevelopment process (Pease being the first base closed under the BCRA), the Air Force had transferred to the PDA by long-term lease several tracts of land. This land continued to be subject to environmental remediation under the jurisdiction of CERCLA.⁸⁰ In response, after unsuccessful administrative appeals, the Conservation Law Foundation and the Town of Newington brought suit against the Air Force for alleged failure to comply with not only CERCLA but the Clean Air Act and NEPA as well.⁸¹

In 1994, the U.S. District Court for the District of New Hampshire ruled against the Air Force for failure to adequately disclose the environmental impacts of base closure as required by NEPA⁸² and for trying to transfer contaminated land for which final cleanup plans under CERCLA

77. Williams, *supra* note 38, at 208.

78. *Id.* at 209.

79. *Id.*

80. 42 U.S.C. § 9620 (1994 & Supp. 1999). Regarding national environmental policy and BCRA generally, see Bidlack, *supra* note 40; GOVERNMENT ACCOUNTING OFFICE, *supra* note 40; Dering, *supra* note 15, at 15-19.

81. Conservation Law Found. v. Dep't of the Air Force, 864 F. Supp. 265 (D.N.H. 1994) *aff'd in part, rev'd in part sub nom*, Conservation Law Found. v. Busey, 79 F.3d 1280 (1st Cir. 1996).

82. *Id.* at 292.

had not been approved.⁸³ While both sides prepared to argue the case on appeal, the state's congressional delegation entered the fray as well. In early August of 1995, New Hampshire Senator Bob Smith sponsored an amendment to CERCLA to retroactively authorize the leasing-while-remediating arrangement that the district court had earlier declared illegal.⁸⁴ Later that month, Congress adopted the amendment.⁸⁵

Thus, by the time the First Circuit Court of Appeals took up the matter in 1996, it had no problem reversing the district court on the CERCLA finding⁸⁶ while agreeing with the lower court that there was a NEPA violation (which the federal government had not appealed)⁸⁷ but no violation of the Clean Air Act.⁸⁸ The court reasoned that if the State of New Hampshire wanted to adjust its State Implementation Plan to allow more pollution-generating vehicular traffic to flow to and through the Pease site during both remediation and subsequent development, that was the state's prerogative, regardless of local community views.⁸⁹

VI. CONCLUSION: RESEARCH FINDINGS AND POLICY RECOMMENDATIONS

"Would you tell me, please, which way I ought to go from here?" "That depends a good deal on where you want to get to," said the Cat. "I don't much care where—," said Alice. "Then it doesn't matter which way you go," said the Cat.

Lewis Carroll, *Alice's Adventures in Wonderland*⁹⁰

A. Research Findings

If a comparative analysis of these two cases tells us anything, it is that one crucial determinant of what the fate of wildlife will be at a closed military base is whether the surrounding community has a clear vision of what it wants the former base to become and whether it is willing to invest itself vigorously in bringing that vision into being. Thus, in her exchange with the Cheshire Cat, Alice's state of mind seems considerably more

83. *Id.*

84. 141 CONG. REC. S11557 (daily ed. Aug. 5, 1995).

85. 42 U.S.C. § 9620(h)(3)(B) (Supp. II 1996).

86. *See Conservation Law Found. v. Busey*, 79 F.3d 1250, 1272 (1st Cir. 1996).

87. *Id.* at 1270-72.

88. *Id.* at 1260.

89. *Id.* at 1259.

90. LEWIS CARROLL, *ALICE'S ADVENTURES IN WONDERLAND* 67 (Chronicle Books 2000) (1865).

reflective of the citizens of Myrtle Beach than the Town of Newington. The BCRA itself is basically silent on the issue of wildlife preservation. The law appears to leave the matter almost entirely in the hands of local communities, and local, regional, and state-level political leaders. Reflecting back on the factors examined in these two case studies as possibly contributing to either wildlife habitat preservation or destruction, this case study research did find significant differences in three principal realms.

1. Nature and Scope of Public Participation in Land Use Decision-Making Processes

Among the most dramatic differences between these two cases was the highly organized and consistently vigorous nature of widespread public participation in the re-use planning process and plan implementation at Pease AFB in New Hampshire, as compared with Myrtle Beach AFB in South Carolina.

2. Environmental Activism

Not only was there broad and active public participation in re-use planning and implementation in New Hampshire, but this participation was also strongly oriented toward environmental protection—specifically, wildlife and wildlife habitat preservation. A mobilized citizenry worked closely and effectively with established environmental organizations as well as locally created ones to achieve their preservation goals. Conversely, in South Carolina environmental organizations themselves were never active players, nor was the citizenry generally either organized or mobilized to define and achieve wildlife preservation goals.

3. Legal Context and Processes

The Conservation Law Foundation and the Town of Newington effectively used the fact that Pease Air Force Base is a Superfund site to call into question the eagerness on the part of the Department of Defense to encourage local land development activities, even when final hazardous and toxic environmental cleanup had not only not been completed but not even completely planned. In response, Congress amended CERCLA to specifically authorize the transfer of Superfund sites from military to civilian uses under the BCRA, even while cleanup is still in progress or just getting underway. This sequence of events gives further credence to the view that BCRA is more than essentially neutral on the question of whether resource conservation is a goal that must be contemplated in the closure process. Additionally, Congress actually signaled its intention to implement the act in ways that expedite the development of even seriously damaged lands and resources through its BCRA-related 1995 amendments to CERCLA.

In the South Carolina case, Superfund implementation was not implicated, meaning both that there was less perceived cause for concern over what future uses of the base might be, and that there was less federal funding available for environmental restoration purposes as the base was transferred from public military to private commercial uses. It also meant one less cause of action available to citizens who might not have been in agreement with the course the closure and conversion process was following.

4. Social Dynamics Underlying the Differences Discovered: Social Capital and the Politics of Place

The discovery of significant differences between the two case studies, particularly in levels of public participation and environmental activism, led to the consideration of a secondary question, Why did these attributes exist in one case and not the other? A closer examination and content analysis of the interview transcripts yielded what we believe to be the answer.

As reflected in several of the interview transcripts from which the quotes in section IV above were drawn, the Town of Newington had a long history of active public involvement in nearly every aspect of community life. Additionally, the town had not changed appreciably in population size since its founding in pre-Revolutionary War days. Moreover, its political culture was described by respondents in the community as including a quintessentially New England town-hall trait. Direct public participation was allowed in decision making affecting the community. Citizens were born into a tradition of investing their time and energy in assuring that government did not make decisions and take actions of which they did not approve.

In the current social science literature, this willingness to invest one's time and energy in public affairs influencing the quality of community life is most commonly and frequently described as "social capital." In his pioneering research on the subject,⁹¹ Robert Putnam has used an array of study results to convincingly demonstrate that over the last generation Americans as a national society have become markedly less likely to participate in any sort of communally, organizationally, or publicly sponsored voluntary group activities, especially those of a service nature. As these social bonds weaken and dissolve, it becomes much less likely that citizens at the community level will be able to effectively organize and influence the future of their own communities.

91. See generally ROBERT PUTNAM, *BOWLING ALONE: THE COLLAPSE AND REVIVAL OF AMERICAN COMMUNITY* (2000).

From this perspective, the Town of Newington, by reason of its unique New England political culture, its historical roots reaching back to colonial times, and its remarkably stable population dynamics, gave rise to high levels of community participation in the base closure and planning process, exemplifying (by Putnam's reckoning) one of those increasingly rare communities in which high levels of social capital still exist. In our view, dramatic differences in social capital probably account for the difference in the fate of wildlife at Pease and Myrtle Beach Air Force bases to a greater degree than any other single factor. As comparative analysis of these two case studies reveals, from the standpoint of wildlife preservation outcomes, the Base Closure and Realignment Act can be implemented in radically different ways.

Closely related to, but also distinguishable from, the social capital phenomenon is another dynamic best described in the title to Daniel Kemmis's book on the subject, *Community and the Politics of Place*.⁹² Kemmis puts forward the thesis that genuinely sustainable environmental management is only possible in communities in which members feel some degree of personal affinity with, or "rootedness in" both their community and the environment in which it is located. As interview transcripts and demographic data clearly demonstrate, that affinity with a historically rooted sense of place, in combination with the relatively high level of social capital available in the Town of Newington (occasioned by its long-term community cohesion and stability), made possible the level of environmental activism necessary to secure a substantial portion of the closed base as a wildlife refuge.

Conversely, Myrtle Beach had grown so explosively and so recently prior to the closure of its Air Force base that there was little sense of ownership of the quality of community life and, consequently, little or no discernible appreciation of the relationship between the community and the natural environment within which it is situated. Given this relative lack of community interest in or involvement with the preservation of wildlife habitat, the situation was ripe for commercial development interests to effectively dominate the redevelopment process.

Factors and dynamics at work in community and regional land use decision making that generally have the effect of maximizing the profitability of developer investments (and tax revenue streams) at the expense of longer-term environmental sustainability goals are most commonly and collectively referred to in the planning literature as the "growth machine."⁹³

92. DANIEL KEMMIS, *COMMUNITY AND THE POLITICS OF PLACE* (1991).

93. For a good compendium of the recent literature on growth machine economics and politics, see *THE URBAN GROWTH MACHINE: CRITICAL PERSPECTIVES, TWO DECADES LATER* (Andrew Jonas & David Wilson eds., 1999).

The term describes a primarily political dynamic in which stakeholder groups such as investors, real estate developers, construction industry representatives, (occasionally) news media representatives, and some well-placed elective and appointed political leaders join forces to convert existing land uses into those that are generally expected to yield the highest level of return in the shortest period of time.

Although the growth machine dynamic does not necessarily or inevitably lead to environmentally unsustainable land use decision making, the probability of its doing so is nearly always higher, since the analytic methods used in studies that focused on short-term investment return and tax revenue stream maximization are inherently biased against the valuation of wildlife resources in ways that would make their preservation a competitive planning option.⁹⁴ That appears to be just what happened in the Myrtle Beach case.

At both Pease AFB in New Hampshire and Myrtle Beach in South Carolina, developers wanted to build on open space then serving as wildlife habitat. At Pease, the developers, working with the state, had to deal primarily with local municipalities and the surrounding community. The community surrounding the undeveloped land at Pease did not want development of the land; they wanted it to be set aside for wildlife. Therefore, a land-use planning struggle ensued, and the local community initiated the creation of a preservation coalition opposing the growth machine. In the end, the local community determined land use patterns in their surrounding community by having the Air Force transfer the land directly to the U.S. Fish and Wildlife Service for use as a wildlife refuge.

At Myrtle Beach the developers went to the state (specifically the governor's office), and the state convinced the Air Force to give the undeveloped base land to the state in the form of a land swap. Once the state had this land, it was immediately slated for development as a theme park by the development agency that proposed the idea (TPI). In this way the growth machine circumvented possible local intervention by using the reuse priorities in base redevelopment planning regulations (much like the preservation coalition did at Pease). In the Myrtle Beach case, the relative lack of community cohesion and stability acting to discourage the investment of social capital did not give rise to a "politics of place" sufficient to effectively preserve any of that community's former wildlife habitat resource.

94. See generally HERMAN DALY & JOHN COBB, *FOR THE COMMON GOOD: REDIRECTING THE ECONOMY TOWARD COMMUNITY, THE ENVIRONMENT, AND A SUSTAINABLE FUTURE* (1989).

B. Policy Recommendations for the Future Implementation of the BCRA

Based on these observations and analysis, we believe there are specific measures that can be taken to enhance the interactive effects of social capital, environmental activism, and the politics of place—thereby increasing the likelihood that wildlife habitat will be adequately protected subsequent to future base closures. These recommendations are made at two levels of government: the Department of Defense (the federal level) and the community adjacent to future closed bases (the local level). These two levels of government are, by law, the most directly involved in the closure and redevelopment of military bases.

1. *Encourage a Focus on Wildlife Resources in the Re-Use Planning Process*

As noted at the outset of this article, with the establishment and expansion of domestic military bases, especially during and after World War II, the U.S. Department of Defense also perforce became one of the most significant wildlife resource management agencies in the federal government. Now that this important stewardship role is diminishing due to base closures and conversions, it remains very much an open question whether the Department feels any sense of obligation to future generations of Americans concerning the fate of the wildlife heritage it has successfully preserved through most of the previous century. As these case studies have shown, while Congress did not specifically instruct either the Department of Defense or local communities to pay particular attention to wildlife in the closure process, it also did not preclude them from doing so.

If the DoD were to decide to try to ensure that its wildlife stewardship efforts have not been in vain, there are several ways to do this. For example, the controlling DoD agency at a closure base could attempt to educate and train the surrounding community on the base's existing wildlife habitat and its importance to the local ecosystem. This educational process could be attached to the same closure and redevelopment educational process that is provided by the military. For instance, base closure act implementing regulations in effect as of this writing state, in part,

It is DoD policy to: (a) Help communities impacted by base closures and realignments achieve rapid economic recovery through effective reuse of the assets of closing and realigning bases—more quickly, more effectively and in ways based on local market conditions and locally developed reuse plans. This will be accomplished by quickly insuring [sic] that communities and the Military Departments communicate

effectively and work together to accomplish mutual goals of quick property disposal and rapid job generation.⁹⁵

The end of the first sentence could be changed to read, "in ways based on local market conditions, environmental constraints, and locally developed reuse plans."

The federal government could require that future reuse committees create a natural resource protection subcommittee, like the one established at Pease. Currently, there are no regulations specifically outlining what subcommittees should be established. The Office of Economic Adjustment, which provides a great deal of the reuse planning funds, only suggests that subcommittees be formed, no more. The chair of the reuse committee at Myrtle Beach thought that the most important thing that could be done to improve the reuse planning and base redevelopment process was to provide, "through the Air Force and the future base closures, some concrete guidance to the community that we're going to turn the base over to on how you're going to form a Task Force [reuse committee]. Here's the budget for this. This is what you need to do."⁹⁶

By connecting reuse planning and redevelopment money provided by the Office of Economic Adjustment to a requirement to create a natural resources protection subcommittee, the federal government may raise the environmental awareness of the local community members involved in base redevelopment. This suggestion, however, could lengthen an already long process and encourage more criticism about the plodding pace of the base redevelopment process.

Conversely, the local community could require that a natural resource protection subcommittee be formed. This implies, however, that a certain level of environmental activism already exists in the community. If this activism does not exist, the local community needs to form an environmentally concerned political action group (a preservation coalition). A local community surrounding a closure base may not be very cohesive or stable, however, in which case the recommendations below may be more applicable.

2. *Increase Community Cohesion and Stability*

Clearly, a small, close-knit community like Newington's town hall government is very stable because of its long history and slow growing population. But not all, or even most, communities neighboring military bases being closed approximate the New England-style community government ethic. This is the social capital paradox; it can be a life-

95. 32 C.F.R. § 174.4 (2000).

96. Williams, *supra* note 38, at 262.

enhancing quality if a community exhibits it, but if it does not, social capital can be difficult to revive and enhance.⁹⁷

How can a community overcome this social capital paradox? First, the growth of social capital based upon increasing community stability is only a "paradox" if one is attempting to do it quickly. If time is not a critical concern, any measures taken by a community to reduce transience may eventually improve community cohesion.

Local communities could encourage practices that support the "setting down of roots." This could be done through the creation of local government policies promoting long-term home ownership by making housing more affordable, since homeowners tend to be less transient than renters.⁹⁸ Goudy supports this view in his research,⁹⁹ showing a strong relationship between length of residence, income, age, and community attachment. Newington, with its long history of the same family owning the same home for generations, provides such an example. Furthermore, other actions could also be taken that would increase the quality of life in the area, and this too may encourage more people to "set down roots." This recommendation has a serious drawback, however, because of its long timeline for implementation; for social capital purposes, time is a commodity that is in short supply during base closure and redevelopment.

Another possibility is that a local community around a closed military base could ask that a neutral facilitator be provided and funded by DoD to become involved in the redevelopment process. Since a local community that is not very cohesive would probably not be very organized, it would be underrepresented in the base redevelopment planning process compared to the growth machine and its interests. The growth machine has an organizational advantage because it is the developers' job to build and advancing that end is a part of their organizational mission, for which they are well staffed, well funded, and otherwise well-prepared.

In contrast, members of a local community must take time away from their other activities (this often includes time away from work) to become involved in community planning issues such as base redevelop-

97. See generally Melissa Kay Miller, *Social Ties and Political Participation: Assessing a Dynamic Relationship* (Sept. 1998) (unpublished paper presented at the Annual Meeting of the American Political Science Association) (on file with authors); Allan Wallis, *Social Capital and Community Building, Part Two*, 87 NAT'L CIVIC REV. 317-37 (1998); Robert Putnam, *Bowling Alone: America's Declining Social Capital*, 6 J. DEMOCRACY 65 (1995).

98. See BENJAMIN A. GOLDMAN ET AL., *SUSTAINABLE AMERICA: NEW PUBLIC POLICY FOR THE 21ST CENTURY* 40 (1995).

99. Willis J. Goudy, *Community Attachment in a Rural Region*, 55 RURAL SOC. 178 (1990).

ment.¹⁰⁰ In this way, a local community that is not very cohesive or politically active could acquire greater representation by a neutral facilitator without having to organize into a coalition and pay the cost (in time and money) that they may not be able to afford. Developers can almost always better absorb the transaction costs associated with attaining their goals in the environmental decision-making process.

From a DoD point of view, how can the planning processes in regard to base redevelopment be restructured to encourage community cohesion? Again, community cohesion and stability is a background factor over which DoD has no direct control and that, for understandable reasons, it may be loath to address. A possible option is the creation of a publicly selected local participatory policy analysis group¹⁰¹ or an empowered citizen advisory committee¹⁰² that would become the decision-making body in regard to local development taking place around a closed base. Reuse committees and subcommittees structured in this way may cause members of the general public to feel like the community is a part of them instead of them just being "in" the community.

3. Increase Public Participation

This study raises an important policy question, What is the appropriate role of the military in general and the Air Force in particular in regard to the implementation of the base closure acts and wildlife protection? In answer to this question there are two options: (1) rewrite federal regulations so that wildlife protection issues have to be addressed by reuse committees or (2) continue to allow the local communities to determine base redevelopment patterns but provide suggestions on how public participation by the community immediately around the base can be increased. The way that the reuse process is currently designed, public participation is based upon an invitation to participate. At Pease, when members of the public were invited to participate, they arrived in droves; however, when the invitation (understated to begin with) was extended at Myrtle Beach, the public failed to show up.

100. Interview with Anne Callison, President, George Washington Home Owners Association, in Denver, Colo., (Aug. 5, 1998); Interview with Peter Bresciano, member, Maine/New Hampshire VOICE, in Portsmouth, N.H. (Sept. 17, 1998); Karen Mecartney Joyce, Community Structure and Political Participation 17-19 (Sept. 1998) (unpublished paper) (on file with authors); Melissa Kary Miller, Social Ties and Political Participation: Assessing a Dynamic Relationship 3-5 (Sept. 1998) (unpublished paper) (on file with authors); Bruce E. Tonn & Carl Petrich, *Everyday Life's Constraints on Citizenship in the United States*, 30 FUTURES 783 (1998).

101. See generally PETER DELEON, *DEMOCRACY AND THE POLICY SCIENCES* 111 (1997).

102. See generally Frances M. Lynn & George J. Busenberg, Citizen Advisory Communities and Environmental Policy: What We Know, What's Left to Discover, 15 RISK ANALYSIS 147 (1995).

The Pease closure committees (specifically the natural resource protection committee) behaved like empowered citizen advisory boards. In future closures, the federal government could encourage subcommittees to be organized in a similar manner. Reuse committees could then be required to solicit volunteers from the local community rather than relying on the "friends" of political appointees to fill these positions. Currently, there are no regulations specifically outlining subcommittee membership. The DoD Office of Economic Adjustment, which provides a good deal of the reuse planning funds, only suggests that subcommittees be formed, no more.¹⁰³ During interviews, the chair of the reuse committee at Myrtle Beach observed that the most important need in the reuse planning and base redevelopment process was "some concrete guidance to the community."¹⁰⁴ By connecting reuse planning and redevelopment money provided by the Office of Economic Adjustment to a requirement to fill subcommittee positions with publicly solicited local community volunteers selected by the reuse committee, the federal government could encourage local community involvement while reducing the growth machine's planning monopoly.

Another suggestion that could be implemented along with or in place of the previous one is that conservation funds could be provided to other federal agencies, such as the U.S. Fish and Wildlife Service, to manage wildlife lands transferred from closed DoD facilities. This was a recommendation made by the U.S. Fish and Wildlife Service officers in charge of the Great Bay Wildlife Refuge at Pease, who complained about a lack of funds for previous base lands that the U.S. Fish and Wildlife Service had already acquired:

[T]here are two sides to the way the [Fish & Wildlife] Service is looking at it. There's the folks on one side that say it's sucking up all our money and all our resources to take care of these parcels of land that we're getting, basically, just as turnover from the military.... And then there's other people that [are] going, wow, look at this large acreage of land that we have up there and the opportunities we have to manage it.¹⁰⁵

This recommendation has particular advantages. First, "[a] billion dollar land rush is under way in Congress, with both political parties saying they want to preserve open spaces, protect wildlife and set aside environ-

103. OFFICE OF ECON. ADJUSTMENT, U.S. DEP'T OF DEF., COMMUNITY GUIDE TO BASE REUSE 21 (1995).

104. Williams, *supra* not 38, at 267.

105. *Id.* at 268.

mentally sensitive areas."¹⁰⁶ There have been several congressional proposals to dramatically increase conservation spending (some proposals have been as high as \$2.59 billion dollars). During his tenure, Interior Secretary Bruce Babbitt had a "\$295 million shopping list of 86 priority projects..."¹⁰⁷ With such funding, the U.S. Fish and Wildlife Service could survey bases slated for closure to assess wildlife resources and make recommendations for habitat preservation and/or loss mitigation.

Leaving redevelopment up to local individuals, communities, municipalities, and development organizations has been the basic policy promoted by the military. If the military wanted to continue this trend but also attempt to protect wildlife, providing voluntary guidelines could be a viable option. The military could provide the same guidelines as for increasing public participation but not make them a requirement or attach them to money provided by the Office of Economic Adjustment.

In much the same way that the DoD would have a difficult time influencing community background factors, local communities may have a hard time influencing reuse committee dynamics. From the local community point of view, however, steps could still be taken to increase community power and influence. For example, Newington had developed a local political culture that promoted participatory democracy instead of elite democracy. Key to this was the way Newington selectman directly represented Newington citizens (mainly through town hall meetings). Furthermore, when Newington was asked to provide members for the subcommittees, they asked for volunteers from their community. For small towns, holding town meetings to discuss base redevelopment issues may be an option. But, there are very few cities around bases subject to closure that are as small and as stable as Newington; therefore, developing town hall meeting processes for these cities is not an easy option. Nevertheless, there are other ways to exercise and increase community power,¹⁰⁸ and these avenues should be investigated by communities that question whether their interests are adequately represented by their local officials.

106. Josef H. Hebert, *Democrats, Republicans Agree on Concept of Land Conservation*, DENVER POST, Apr. 22, 1999, at 34A.

107. *Id.*

108. See generally MEREDITH RAMSAY, *COMMUNITY, CULTURE, AND ECONOMIC DEVELOPMENT: THE SOCIAL ROOTS OF LOCAL ACTION* (1996); THEORIES OF URBAN POLITICS (David Judge et al. eds., 1995); MARITZA PICK, *HOW TO SAVE YOUR NEIGHBORHOOD, CITY, OR TOWN: THE SIERRA CLUB GUIDE TO COMMUNITY ORGANIZING* (1993); THE STRUCTURE OF COMMUNITY POWER (Michael Aiken & Paul E. Mott eds., 1970).

C. The Past as Prologue

In 1835 Alexis de Tocqueville identified a malady of the spirit among Euro-American settlers that, unchecked, would eventually contribute to untold environmental destruction:

Those Americans who go out far away from the Atlantic Ocean, plunging into the West, are adventurers impatient of any sort of yoke, greedy for wealth....

An American will build a house in which to pass his old age and sell it before the roof is on; he will plant a garden and rent it just as the trees come into bearing; he will clear a field and leave others to reap the harvest; he will take up a profession and leave it, settle in one place and soon go off elsewhere with his changing desires.¹⁰⁹

Tocqueville was describing a transient, restless, rootless population who saw in their surroundings only a commodity, something not to be cherished but simply consumed before moving westward to repeat the "settlement" process once again. This is a sad legacy of a people without the capacity to genuinely care for the land because they had no intimate personal connection with it. That connection is essential before a "politics of place" can be practiced and before sufficient social capital can be made available for investment in the preservation of our wildlife legacy.

In choosing case studies for this research, we made a deliberate effort to find bases in which closure outcomes were as different as possible from the standpoint of wildlife conservation. The emphasis in this narrative has also necessarily been on how different they were. By emphasizing extremes, however, some of the subtleties and nuances of the politics of base closure in these two cases have been overlooked. For instance, the growth machine was very much in operation in New Hampshire just as it was in South Carolina and but for the concerted opposition of a well-organized New England "town hall" community, the outcome at Pease would no doubt have been far more similar to that in Myrtle Beach.

There are also South Carolinians in and around Myrtle Beach, some of whom were interviewed during the course of this research, who feel every bit as much affinity for the landscape of which they are a part—a sense of place—as did the New Englanders who prevailed in getting one fourth of Pease AFB declared a national wildlife refuge. There were simply not enough of them and they were not well organized enough to at least

109. 1, 2 ALEXIS DE TOCQUEVILLE, *DEMOCRACY IN AMERICA* 376, 536 (George Lawrence trans., J.P. Mayer ed., Anchor Books 1969) (1835).

make sure that wildlife resource preservation played some role in the closure and conversion of Myrtle Beach Air Force Base.

As discussed in the literature cited above, community cohesion and stability, social capital, and a sense of place are not instant freeze-dried commodities one generates simply by adding water and stirring. They need to be recognized, acknowledged, and stewarded, just like our wildlife, if they—like our wildlife—are to have the opportunity to flourish in communities from which the iron birds have flown.