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The Case for a "Green BRAC"

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EXECUTIVE SUMMARY

here are several reasons to support another round of Base Realignment and Closure (BRAC). BRAC increases savings. Though there are overhead costs, the previous 5 rounds of BRAC combined save around \$13 billion annually.¹ BRAC also reduces excess capacity of the military. The Department of Defense (DoD) estimates their excess capacity is about 20-25%, which is partially why there is broad support for BRAC among the defense community.² By reducing excess capacity and increasing savings, BRAC makes the military more efficient and cost-effective. Savings and military efficiency are both important considerations for another round of BRAC, but there should be another one: the environment.

Environmental remediation is a precondition to economic redevelopment. In past rounds of BRAC, the Pentagon has allowed some former bases to lie fallow because of high environmental remediation costs, meaning some military communities see no economic benefit to their local base closing. However, allowing a base to lie fallow isn't an effective strategy for properties rife with "forever chemicals" such as per and polyfluoroalkyl substances, which can end up contaminating the groundwater of nearby communities over time. Instead of allowing properties to sit fallow, former bases should be encouraged to remediate, redevelop, and repeat. If a base is selected for a round of BRAC, DoD will be incentivized to remediate that base until it is fit for a deed transfer. Then, the land can be redeveloped for future economic use by the local military community, as has been done in previous rounds of BRAC. To incorporate environmental considerations into the BRAC process and improve cleanup processes and transparency more broadly, Congress should do the following:

- 1. Consider both environment and savings as secondary criteria, behind military value, for future rounds of BRAC
- 2. Expand the scope of Environmental Condition of Property Reports (ECPs) to include cleanup estimates and measure net known pollutants for each base to better inform the BRAC process
- 3. Create a schedule to begin funding cleanup over time while keeping to the relatively same level of defense spending
- 4. Establish a property tax for installations the DoD decides to keep after they are closed to incentivize the Pentagon to remediate and redevelop the property
- 5. Provide further funding to both the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Conservative, and Liability Act (CERCLA/Superfund)
- 6. Designate per- and polyfluoroalkyl (PFAS) chemicals a hazardous substance to bring them into the CERCLA framework

The "Stealth BRAC" and Why It's Dangerous

The current consensus is that there isn't much political willpower on Capitol Hill for another round of BRAC, which is largely true. But without BRAC, the DoD still has to "reduce personnel, cut training and operations and maintenance costs, and defer modernization, all of which will have an adverse impact on the communities and businesses that bring military communities to life."3 Anthony Principi, the former BRAC commission chairman, refers to this as a "Stealth BRAC." The "Stealth BRAC" that is currently ongoing doesn't meaningfully address environmental cleanup because the land is not being redeveloped to sell. Seen in this light, "Stealth BRAC" has all of the negative aspects of BRAC without all of the economic and environmental benefits. Christopher Preble and Adam Smith (D-WA) write that "Although members of Congress have prevented base closures with the intent of helping constituents, they are actually making the problem worse."⁴ This is not how the base closure process was originally designed to function.

After aggressive rounds of cuts in the 1960s, Congress was determined to prevent the military from closing bases and successfully did so throughout the 1970s. BRAC was created to end this stalemate and provided the Pentagon with authority to develop a list of recommended realignments and closures for an independent BRAC commission. Once the BRAC commission reviews and votes on a final list, the list is either accepted or rejected in its entirety by the president and finally, to Congress. Christopher Preble and Adam Smith (D-WA) write that "this all-or-none voting process prevents individual members from blocking the recommendations that affect their communities." The process functioned well for a while, and BRAC rounds were approved in 1988, 1991, 1993, and 1995. Altogether, those four rounds save around \$8 billion annually.⁵ Another round was approved in 2005 but focused more on realignment than closure because it came at a time of deep military engagement in Afghanistan and Iraq. As the Assistant for BRAC Andy Napoli says, "you don't want to sell a car and then realize that you need it."6 But even the 2005 round helped to reduce the military's excess capacity and saves \$5 billion annually.⁷

Nowadays, the process has returned to a stalemate because of a growing perception that BRAC harms military communities and that the short-term costs aren't worth it. The reality strays far from that narrative. BRAC has broad support among the defense community, improves economic opportunity for nearby populations through federal dollars, prevents environmental degradation to nearby communities, and short-term costs are far outweighed by long-term gains.

BRAC Has Bipartisan Support

Even if there isn't political will on Capitol Hill because of an erroneous perception that BRAC harms military communities, there is support elsewhere. A broad coalition of think tanks, advocacy groups, and defense communities all support BRAC. In 2017, an open letter on BRAC written by Christopher Preble, Mackenzie Eaglen, and Todd Harrison included signatories from organizations as far-ranging as the Center for American Progress, Peace Action, American Enterprise Institute, Americans for Prosperity, Americans for Tax Reform, and the Center for a New American Security.⁸ An overwhelming majority of communities represented by the Association of Defense Communities prefer BRAC to the current alternative options.

Remediate, Redevelop, Repeat

Local bases are the economic lifeline of defense communities. In Colorado Springs, Peterson Air Force Base is fondly referred to as "Uncle Pete." When the Brunswick Naval Air Station was placed on the 2005 BRAC, the local area was projected to lose upwards of 6,500 jobs and \$140 million of annual income by 2011. In response, the Navy spent \$3-4 million on environmental cleanup, a necessary precondition to redevelopment.⁹ However, by November of 2016, 1,213 jobs had already been created, \$75 million in property valuation was added to the area, and \$2.6 million was being generated annually.

The Brunswick Reuse Master Plan redesignated the land of the former Naval Air Station for new business, technology industries, airport operations, alternative energy research, manufacturing and power generation, higher education, residential housing, recreation, and open space.¹⁰ If the Navy had decided to keep the property, none of those benefits would exist. Though there are clear obstacles, such as aging infrastructure, politics, and unmaintained buildings, redevelopment should be the norm for BRAC'd properties. Remediating and redeveloping the closed property benefits local communities.



Figure 1.1, Breakdown of land use from Brunswick Naval Air Station Reuse Master Plan

And it isn't just Brunswick. When Fort Harrison closed in 1996, the city of Lawrence, Indiana, created an enterprise zone, a community college, recreational facilities, and commercial sites, creating even more jobs than those lost.¹¹ The closure of Bergstrom Air Force Base near Austin, Texas, as part of the 1991 BRAC round paved the way for a larger civilian airport to accommodate Austin's booming tech industry.¹² When the Philadelphia Naval Shipvard was closed, 1,200 acres of the former base was redeveloped to construct modern buildings and now is home to businesses such as GlaxoSmithKline and Urban Outfitters. Christopher Preble writes that "for most communities, the closing of a base is actually the opening of land that can be put to more efficient economic use."13



Urban Outfitters Campus, Navy Yard, Philadelphia. Credit: A. Leonard Pundt. No changes were made to this image.

But economic redevelopment is not possible without cleanup of bases and environmental remediation. Though it has largely gone unnoticed, previous BRAC rounds have helped the environment. In the case of Bergstrom Air Force Base, there were environmental benefits to closure. In a report written in 1990 before the closure, the Air Force wrote that "Base closure would significantly reduce hazardous materials storage, use, and possible spills and accidents - all positive impacts."14 These spills aren't hypothetical, either. From 1943 to 1982, 650 to 900 gallons per month of jet propellant fuel were inadvertently released into a ditch from an overloaded oil and water separator, which then fed into nearby Onion Creek, which empties into the Colorado River. Bergstrom's closure also positively impacted the water quality in the area by preventing further use of aqueous fire-fighting foam (AFFF) containing PFAS. The Air Force wrote that the "cessation of active-duty operations would significantly reduce the introduction of contaminants to stormwater runoff."15

There is a perception that communities are protected by rejecting another round of BRAC, but these economic and environmental benefits demonstrate that isn't the case. It is worth noting that there might be environmental problems produced by what replaces former military bases. Bergstrom-Austin International, the civilian airport which replaced Bergstrom Air Force Base, still contributes to 982,968 metric tons of CO2 emissions in 2009.¹⁶ However, the civilian airport is subject to more stringent environmental policies because it is owned by the city of Austin rather than the Department of Defense.

The Environment and Savings as Tipping Points

What kind of bases would be identified for closure in a "Green BRAC?" Rightfully, military value is the primary consideration for BRAC, but there should be more room for secondary considerations. In the 2005 round of BRAC, Military Value Analysis (MVA) was the approach used to examine the military value of each installation, acting as the primary consideration for closure and realignment.¹⁷ When the DoD uses Military Value Analysis (MVA) models to compare installations for possible closure or realignment, oftentimes the MVA scores are similar. Say Base A has an MVA score of 6.5 and Base B has an MVA score of 6.4. In previous rounds of BRAC, Base B would be closed instead of Base A without much consideration given to secondary factors. However, a "Green BRAC" would take into consideration the environmental condition of each base informed by the Environmental Condition of Property Report (ECP). Base B might have much higher annual CO2 emissions or be putting a local town's drinking water source at risk. These factors would increase the likelihood that Base B would be considered for closure in a "Green BRAC" over Base A.

Another secondary consideration for BRAC should be savings. Andy Napoli believes that even though military value should be the primary consideration, "a blind and myopic focus on military value at any price can lead to crazy or irrational outcomes."18 One way to blend these two considerations could be to create a metric of military value per dollar saved to tip the scales in instances where MVA scores of two bases are similar. If Base A has an MVA of 6.5 and Base B has an MVA of 6.4 but Base B produces twice as much annual savings, this should tip the scales in favor of closing Base A over Base B (see figure 1.2). Doing so would sacrifice only a tiny fraction of military value in order to increase savings. Implementing savings as a secondary consideration would also help offset costs of base cleanup and remediation.

	MVA Score	Annual CO2 emissions	Estimated Annual Savings
Base A	6.5	7000 million tons	\$50 million
Base B	6.4	3500 million tons	\$100 million

Figure 1.2, Comparison between Base A and B

Adding these two secondary considerations would still allow the DoD to retain bases "in the portfolio." Military installations that have special capabilities could still be kept open, regardless of military value, environment, and economic considerations. Radford Army Ammunition Plant, for example, is the only place in the U.S. where the DoD has an RCRA permit to produce TNT. Despite ranking 80th out of 97 in MVA scores in the 2005 round of BRAC, Radford was kept open because of this unique qualification.¹⁹

Low Military Value, High Environmental Contamination

Though the bases with the highest military value tend to be some of the biggest polluters, there are also bases with low military value and high environmental impact that makeup part of the DoD's estimated 20-25% excess capacity. In the 2005 BRAC round, Umatilla Chemical Depot, Kansas Army Ammunition Plant, Deseret Chemical Depot, and Fort Gillem would all fit into this category.

Out of the bases with low military value and high environmental liability closed in the 2005 round, few of them received adequate attention for cleanup. Toxic waste was dumped at Fort Gillem in Georgia during the 1990s and began contaminating groundwater plumes in Clayton County. This issue has still not been resolved today. Residents have shared cell phone photos of raw sewage that had backed up into their kitchen sinks.²⁰

BRAC can be effective at preventing further contamination, but Fort Gillem serves as a reminder that federal cleanup processes should be funded regardless of the status of the installation. A worst-case scenario is closing a base without disposal. Barry Steinberg, a partner at Kutak Rock who has represented several defense communities, writes that "Closing a base without disposal is the worst of all alternatives. Building's rot, vermin move in, jobs are lost, infrastructure fails, homeless and vagrants occupy, federal jurisdiction remains, the local community has no interest in policing the property, and no incentive for cleanup."²¹

Putting a Price on Property

How can the DoD be incentivized in a round of "Green BRAC" to remediate and redevelop? Part of the problem is that the DoD treats the land it owns as free. There is little incentive for the Pentagon to remediate and redevelop properties closed in the BRAC process. Under CERCLA law, "all remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property" must be taken before the transfer of any deed. Designating the PFAS family as a hazardous substance creates stricter standards for the transfer of deeds. As a result, the DoD may be even more inclined to hold on to closed BRAC properties. There can be legitimate reasons why the DoD might resist remediation and redevelopment of closed properties. Some closed bases may not have much property value or are unlikely to cause harm to civilian populations. In other cases, costs of remediation may simply be too high. However, too often the DoD allows BRAC'd sites to sit fallow, and instead they should be incentivized to remediate and redevelop the land. This would provide economic and environmental benefits to nearby populations.

This can be done by creating a federal property tax for the DoD based on the estimated value, size, and the environmental footprint of the property. For instance, a large base near a growing population center that is closed in a round of "Green BRAC" would likely have a higher property tax to incentivize the DoD to remediate and redevelop the land. "Location, location, location" is a famous mantra in real estate, and it should be no different in deciding rates for federal property tax for military bases.

Property Sales

The actual sale of the property of closed bases to private equity can also generate income and offset costs of remediation. The transition of Naval Air Station Brunswick (NAS Brunswick) illustrates how the profits from selling the land to private investors for redevelopment can act as another incentive to remediate and redevelop closed bases. Between 2012 and 2020, the Navy received \$8.5 million for the closure and transition of the Brunswick Naval Air Station. Successfully negotiating the land away from the Navy is credited in part due to a "strong and trusting partnership (including a very motivated and resourceful base commander), and cooperative environmental regulators."²² Similarly, Fort Gillem in Georgia was sold for about \$30-35 million dollars.²³ Though there are short-term costs to BRAC, those expenses can be recouped through mechanisms such as property sales in addition to the billions in long-term annual savings.

A Better Informed BRAC

The BRAC process is already relatively well-informed, but it could be improved upon to incorporate newer environmental challenges. The Environmental Condition of Property Report (ECP) was implemented in the 2005 BRAC round and provides a comprehensive overview of the environmental condition of military bases. Its primary objectives are to:

- 1. Provide the Military Department with information it may use to make disposal decisions regarding the property
- 2. Provide the public with information relative to the environmental condition of the property
- 3. Assist in community planning for the reuse of the BRAC property.²⁴

ECPs detail the environmental history of each installation, specific to the buildings, surveying locations of hazardous substances, unexploded ordinances, radioactive materials, and more. However, ECPs were only deployed for transferable property in the 2005 BRAC round. A "Green BRAC" would require ECPs for all military installations, rather than just transferable properties on the BRAC list. Doing so would create more transparency to communities about their local bases while better informing the BRAC process. ECPs should also be expanded to measure the net known pollutants being emitted into the environment at each installation. To do so, Congress should specify a list of emissions for military bases to track, including PFAS, Trichloroethylene (TCE), Polychlorinated biphenyls (PCBs), and annual CO2 emissions.

Cleanup Schedule

Establishing a cleanup schedule will further incentivize remediation and redevelopment. Congress can use the information provided from the expanded ECPs to create a schedule for military bases to begin funding cleanup over time while keeping to the relatively same level of defense spending. This should apply to bases that are both open and closed. With regards to BRAC, the advantage of a cleanup schedule is that the fewer environmental liabilities a base has, the easier it is to redevelop that base. Furthermore, because organized citizen groups and environmental advocacy groups can create extra costs for DoD through lawsuits and legal fees, its more efficient for DoD to establish a cleanup schedule.²⁵ Establishing a cleanup schedule requiring military bases to meet certain thresholds for contaminants could prioritize the welfare of Americans while keeping to the same level of spending.

Public Input

One advantage that BRAC has over the ongoing "Stealth BRAC" is public input. The BRAC commission conducts public hearings and is transparent about its recommendations. The military is required to publicly reveal and debate why a particular facility is no longer needed, allowing people to raise objections and mitigate the risk of politicization.²⁶ What does this look like in action? The preliminary decision of the BRAC commission with regards to the Brunswick Naval Air Station was to re-align the installation and maintain it as an auxiliary facility. The town of Brunswick feared that the property would be mothballed and not be available for redevelopment, and thus asked for a full closure, which they received.²⁷

Public input with regards to the environment will no doubt be far more impactful than it was in the 2005 round. Environmental advocacy groups such as Sierra Club and Environmental Working Group that have grown in the past 16 years can mobilize to make their voices heard. According to a 2019 Gallup poll, 65% of Americans believe "protection of the environment should be given priority, even at the risk of curbing economic growth," up from 36% just a decade ago.²⁸ Meanwhile, 56% of Americans worry about the pollution of drinking water.²⁹ Many current and former defense communities, such as Brunswick, have already

put pressure on the DoD to clean up bases, and those voices will only be augmented further in another round of BRAC.

A BRAC Fit for Shifting National Security Challenges

Addressing environmental concerns through BRAC is vital not only from a human security standpoint but from a national security perspective. According to a Center for Climate and Security report, U.S. military capability "rests on an assumption of stability for the 95,471 miles of coastline along which there are 1,774 U.S. military sites across the globe."³⁰ That stability is put at risk by the U.S. military emitting 1.2 billion metric tons of greenhouse gasses into the atmosphere since the invasion of Afghanistan in 2001. With rising sea levels, flooding, and storm surges, the military's domestic and overseas coastal infrastructure is threatened.³¹ By the end of the century, eight bases may lose a quarter to half of their land.³² Threats to coastal infrastructure may also have a real impact on the U.S. ability to "deter our enemies, defend our interests, and support our friends."³³ A national security strategy fit for the 21st century must bear in mind these dynamics when creating policy, no matter how small. A "Green BRAC" that takes into account environmental impact as a secondary consideration would be one way to reflect a shifting understanding of national security threats due to climate.



Naval Air Station Key West, a military base at risk of losing 75-95% of its land by 2100. No changes have been made to this image.

PFAS - A Case Study

At the height of the Cold War, conspiracy theories about fluoridation ran rampant. Dr. Strangelove famously parodied this through the creation of the fictitious Base Commander Jack D. Ripper. Convinced that the communists are purposely contaminating American water with fluoride, the general orders a first-strike nuclear attack on the Soviet Union to enact revenge for impurifying "our precious bodily fluids."34 Dr. Strangelove offered commentary on a number of Cold War issues-nuclear proliferation, threat inflation, chain of command-but the idea of a communist plot to contaminate America's water supplies was simply ridiculous. As it turns out, America's water was being contaminated, though Stanley Kubrick may have been wrong about some of the details. Just as American audiences packed into theaters to watch the bleak Cold War comedy, the U.S. military was ramping up its use of a fire suppressant called AFFF, which has since contaminated the drinking water of millions of Americans. AFFF, while remarkably useful for military drills and local fire departments, contains PFAS chemicals linked to higher rates of thyroid disease, cancer, and weakened immunity. A substance was being introduced into "our precious bodily fluids," but it was our own doing.



U.S. Air Force 55th Civil Engineering Squadron spraying Aqueous Film Forming Foam (AFFF) over simulated aircraft wreckage during a training exercise, Offutt Air Force Base, Nebraska. Credit: U.S. National Archives. No changes were made to this image.

The last round of BRAC was in 2005, and our understanding of PFAS has changed drastically since then. Dr. Eli Fahrenkrug of Colorado College says that "16 years has been a lifetime in terms of the evolution of PFAS."³⁵ In addition to AFFF, PFAS enters the bloodstream through a vast array of consumer products and commercial applications, such as nonstick

pots and pans.³⁶ However, with the DoD estimating that 401 military installations have been contaminated with PFAS, military use of AFFF is one of the primary ways in which the "forever chemical" enters the bloodstream of Americans. PFAS has the potential to be extremely deadly, even in low quantities. One study conducted by 3M and Dupont revealed that monkeys exposed to any quantity of PFOS (a member of the PFAS family) had "lost weight, developed enlarged livers, and, in some cases, died within three weeks."³⁷ According to Patrick Breysse of the CDC, The presence and concentration of PFAS in U.S. drinking water present "one of the most seminal public health challenges for the next decades."38 BRAC has inadvertently had positive environmental impacts in past rounds, but the evolution of PFAS demonstrates that alone isn't enough to meet today's environmental challenges.

Congress has demonstrated interest in legislation preventing further contamination of PFAS. The National Defense Authorization Act (NDAA) for Fiscal Year 2020 included legislation to phase out two members of the PFAS family, PFOS and PFOA.³⁹ The NDAA for Fiscal Year 2021 offered prize money of up to \$5,000,000 for developing non-PFAS-containing foam for fighting fires.⁴⁰ Though use of PFAS in AFFF is slowly being phased out, a round of BRAC can prevent further contamination, as it did with Bergstrom Air Base. The Environmental Protection Agency (EPA) has also been slow to regulate. On the last day of the Trump administration, the EPA finally announced it will "initiate the process to develop a national primary drinking water regulation," but only for PFOS and PFOA.⁴¹ These preventive steps towards regulation are welcome, but the focus on only PFOS and PFOA is worrisome to people like Dr. Fahrenkrug. PFOS and PFOA are the two most well-researched members of the PFAS family, of which there are thousands. At many bases, AFFF containing PFOS has simply been replaced by GenX, another PFAS chemical that is just as harmful.⁴²

There is also not enough being done on the back end to clean up groundwater contamination at domestic bases. A future round of BRAC must take this lack of clean-up into consideration. In the past, many BRAC'd properties have been retained by the DoD because clean-up efforts are too expensive. For nearby communities that have had their drinking water contaminated by PFAS from AFFF, this is unacceptable. PFAS is known as a "forever chemical" because it is extremely difficult to break down, meaning letting a property sit fallow isn't an effective strategy. Cleanup costs will likely only grow as time passes because organized citizen groups and environmental advocacy groups can make the process more difficult with lawsuits. Jeffrey Jordan of the Midcoast Regional Redevelopment Authority writes that "it would be much more efficient for the military service to lean forward and begin cleanup rather than playing defense with advocacy groups."⁴³ Congress can help move that process forward by amending the role of BRAC to further incentivize remediation and redevelopment.

Current Cleanup Processes

The two primary cleanup processes led by the EPA are the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response, Conservative, and Liability Act (CERCLA/ Superfund). Though the two processes are similar, the key difference is that RCRA cleans up hazardous waste facilities in use, whereas CERCLA responds to abandoned hazardous waste sites.⁴⁴ Before a "Green BRAC" can occur, the EPA must first designate the PFAS family as a hazardous substance.

Otherwise, the CERCLA process, which governs the remediation of many closed military sites, is unable to consider PFAS in the remediation process. This should happen relatively soon, given that the EPA's PFAS action plan from February 2019 included evaluating the need to designate PFOS and PFOA as hazardous substances. To be sure, Congress should introduce legislation to designate the entire PFAS family a hazardous substance to prevent PFOS and PFOA from being replaced by other PFAS containing chemicals. Senator Tom Carper (D-DE) initiated this process by introducing an amendment to the 2020 NDAA which would have designated all PFAS as hazardous substances, but it was not voted on.⁴⁵

CERCLA has a useful long-term framework for the remediation of hazardous substances, but it is underutilized. The most promising emerging technologies to remediate PFAS include Granular Activated Carbon and electrochemical oxidation. The latter, according to Dr. Fahrenkrug, is scalable, relatively cheap, and can even generate electricity.⁴⁶ Both of these methods have already demonstrated success at cleaning up PFAS at the former Pease Air Force Base.⁴⁷ If the PFAS family is designated a hazardous substance, CERCLA can utilize these emerging technologies to address PFAS contamination on military bases throughout the country.

PFAS Nation

This is a job for the federal government. Up to 110 million Americans may be contaminated with PFAS.48 The EPA established its health advisory level for PFOS and PFOA at 70 parts per trillion (ppt). There are 13 military sites where PFAS contamination is over 1 million ppt. Through Freedom of Information Act requests, the Environmental Working Group (EWG) has so far confirmed PFAS in the tap water or groundwater at 328 military installations.⁴⁹ With a slow federal response, some states have had to fill in the gaps in legislation. Many states have proposed Maximum Contaminant Levels (MCLs) for different PFAS. California has a standard of 5.1 ppt for PFOA and a 6.5 ppt for PFOS. Yet, it doesn't have a standard for GenX, the replacement chemical for PFOS which has been found to be just as toxic.⁵⁰ Meanwhile, Florida doesn't have any state standards, despite 9 of the 100 most heavily contaminated military installations in the U.S. being located there.⁵¹ Designating PFAS as a hazardous substance would be the first step in creating a uniform standard.

Lessons from Pease AFB

Pease Air Force Base in Portsmouth, New Hampshire, was closed in 1991 and subsequently placed on the Superfund list. Pease was found to have PFOS levels 12.5 times above the EPA advisory. In response, the Air Force diverted \$66 million towards remediation efforts, \$35 million of which went to Pease.⁵² The BRAC Environmental Coordinator at Pease, Roger Walton, used the funds to build two groundwater treatment systems that can treat more than 350 million gallons of contaminated water annually for the surrounding Portsmouth community.⁵³ Walton was even awarded the Federal Facility Response Outstanding Achievement Team award by the EPA. Today, Pease is a trade port, home to shopping centers, businesses, and daycares. While Pease is certainly a success story, the diversion towards remediation efforts came at the cost of other ongoing clean-up efforts. According to a list provided by Ellen Lord, the former Undersecretary for Acquisition and Sustainment, 26 cleanup projects lost funding due to the diversion of funds to Pease.⁵⁴ Though military bases compete for funding of remediation efforts, it doesn't have to be this way. A "Green BRAC" is less zero-sum. Properties that are sold or leased can generate funds back into the BRAC account, and the proposed property tax on BRAC'd DoD properties would further incentivize selling to private investors.

Conclusion

A closed base conjures up images of shuttered windows and lost jobs, but this isn't the case. Previous rounds of BRAC have resulted in long-term economic development in places like Brunswick, Austin, Philadelphia, and Portsmouth. Flight Deck Brewing is a brewery located in the former small arms range of the redeveloped Brunswick Naval Air Station. On their website, Flight Deck writes that "We're the only brewery located in a former shooting range (that we know of). If you find another one, put us in touch we'd love to start a club."55 With an estimated 20-25% excess capacity in the military, there should be a club for creative uses of redevelopment. Why not an ice hockey rink at a former Air Force hangar? Or incorporating a former army hospital into a university campus? At former Fort Lowry and Fitzsimons Army Medical Center in Denver, those have already been done.⁵⁶ But the visibility of these places hails in comparison to the images of shuttered windows, in part because there are cases in which DoD maintains BRAC's properties because of environmental remediation costs, preventing the opportunity of economic redevelopment. A "Green BRAC" aims to build on this, incentivizing environmental remediation and redevelopment even more than previous rounds.

Furthermore, a "Green BRAC" incorporates shifting nationwide opinion on climate action and the military budget into the base closure process. According to a 2020 poll, only 25% of Americans would oppose a 10% defense budget cut. Since BRAC only aims to reduce some 5% of the estimated 20-25% excess capacity, another round of BRAC is a modest proposal.⁵⁷ By adding environment and savings as secondary considerations, incentivizing remediation and redevelopment through property sales and the creation of a tax on BRAC'd properties, providing further funding to the RCRA and CERCLA processes, establishing a cleanup schedule for closed military installations, increasing transparency, expanding the scope of ECPs, and designating the PFAS family as a hazardous substance, both the BRAC process and base cleanup processes more generally can be improved upon to meet today's challenges. Even if only a few of these reforms are adopted, BRAC still can have some positive environmental impact inadvertently, as the example of Bergstrom Air Base illustrates. Whether it is a "Green BRAC" or a BRAC singularly focused on military value like the 2005 round, both are preferable to the ongoing "Stealth BRAC". Military communities impacted by the current "death-by-a-thousandcuts approach" and negative environmental records of nearby bases should be prioritized when considering whether to support another round of BRAC.



Flight Deck Brewing, a local business located on the redeveloped Brunswick Naval Air Station. Credit: Flight Deck Brewing.

On the ten-year anniversary of the 2005 BRAC, former chairman of the BRAC commission Anthony Principi wrote "now is the time to do what's right for our men and women in uniform. Spending dollars on infrastructure that does not serve their needs is inexcusable." Those federal dollars spent maintaining and upkeeping excess capacity bases would be better spent on cleaning up the land so that it can be redeveloped. Considering rising human security and national security challenges, Congress should pass a "Green BRAC" into law.

Endnotes

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