# \*\*\*Neg\*\*\*

# ---Case---

## Solvency

**Not that invasive**

**Not that invasive-even positive for horse owners**

**FTCLDF 13**(Farm-to-Consumer Legal Defense Fund , “USDA’s Final Rule on Animal ID”, <http://www.farmtoconsumer.org/usdas-final-rule-on-animal-id/>, January 18, 2013)

The U.S. Department of Agriculture (USDA) has published its final rule on Animal ID. Thanks to the pressure from the grassroots, the agency included important changes that make it significantly less burdensome for family farmers, ranchers, and backyard poultry owners. We have come a very long way from Big Ag’s and USDA’s proposal for the National Animal Identification System (NAIS). In this final rule, there is no premises registration, no mandatory electronic identification, no centralized databases, no reporting of movements, and no requirements for in-state movements. The final rule requires a low-tech form of identification and some form of documentation when adult cattle, dairy cattle, or show cattle cross state lines. There are also requirements for poultry that cross state lines, but hatchery chicks do not have to be identified. We want to say THANK YOU to each and every one of you who took the time to write comments on the proposed rule in response to our action alerts. Your comments truly made a difference! We didn’t get every change we pushed for, but we got most of them, thanks to your hard work and support. We have more details on the final rule below. We also want to let you know that we will be sending out action alerts shortly on two other issues: genetically engineered salmon and the FDA’s just-proposed regulations on food safety. We have many fights ahead of us, but as the Animal ID rule shows, we can make a difference when we work together to make our voices heard. Thank you for helping us protect the food producers who provide the nutrient-dense foods we all need! Animal ID Rule Details Under the final Animal ID rule, unless otherwise exempted, livestock moved across state lines would have to be officially identified and accompanied by an interstate certificate of veterinary inspection or other documentation, such as owner-shipper statements or brand certificates. There are no requirements imposed by this rule for any type of movement within a State; it only applies when animals cross state lines. In practical terms, sheep, goat, and pig owners will not be subject to new requirements; the rule refers to the ID requirements under existing disease control programs for these animals. Similarly, horse owners have already been identifying horses that cross state lines due to equine infectious anemia programs and will face few burdens in practice. The final rule made two **positive changes** in its requirements for horses: 1) Horses that are used for transportation interstate (such as by horse and buggy) are exempt; 2) The identification requirement includes a provision for a physical description that is not dependent on health authorities’ opinions in most cases.

## No War

### 1NC Yes War

#### Yes war

Allison ’14 (Graham Allison, Graham Allison is Director of the Harvard Kennedy School’s Belfer Center for Science and International Affairs, “2014: Good Year for a Great War?”, <http://nationalinterest.org/commentary/2014-good-year-great-war-9652?page=3>, January 1, 2014)

Prospects for peace seemed to be looking up in 1913, as in 2013. What are the chances we're wrong again? Precisely a hundred years ago today, the richest man in the world sent New Year’s greetings to a thousand of the most influential leaders in the U.S. and Europe announcing: mission accomplished. “International Peace,” he proclaimed, “is to prevail through the Great Powers agreeing to settle their disputes by International Law, the pen thus proving mightier than the sword.” Having immigrated to the US penniless, created the steel industry as a pillar of America's rise to preeminence, and become fabulously wealthy in the process, Andrew Carnegie had the confidence of a man who had achieved the impossible. When he turned from making money to spending it for public purposes, his goals were universal literacy at home (funding public libraries in cities and towns across America), and perpetual peace abroad, starting with the great powers of Europe and the US. Events in the year that had just ended convinced Carnegie that 1914 would be the decisive turning point towards peace. Just six months earlier, his decade-long campaign culminated in the inauguration of the Peace Palace at the Hague, which he believed would become the Supreme Court of nations. The Palace was built to house the new International Court of Arbitration that would now arbitrate disputes among nations that had historically been settled by war. As the Economist noted, “the Palace of Peace embodies the great idea that gradually law will take the place of war." Carnegie's Peace Palace captured the zeitgeist of the era. The most celebrated book of the decade, The Great Illusion, published in 1910, sold over two million copies. In it, Norman Angell exposed the long-held belief that nations could advance their interests by war as an "illusion." His analysis showed that conquest was "futile" because "the war-like do not inherit the earth." However inspiring his hopes, Carnegie’s vision proved the illusion. Six months after his New Year’s greeting, a Serbian terrorist assassinated the Austro-Hungarian Archduke. Nine months on, the guns of August began a slaughter on a scale that demanded a new category: "World War.” By 1918, Europe lay devastated, and a millennium in which it had been the creative center of the world was over. As we enter 2014, war between great powers seems almost inconceivable. But if we start at the other end of the telescope by imagining that a Great War with some similarities to World War I actually happened, what could future historians find in current conditions that permitted events to ride mankind to another catastrophe? If we start with the fact that it happened, we know who the primary combatants had to be. Russia is no longer a great power player; Europe has disarmed itself; the Middle East, Africa, and Latin America are arenas for local wars. In the growing competition between the U.S. and China, however, one can hear echoes of 1914. First, a tangled cluster of factors can be summarized as "Thucydides Trap." When a rapidly rising power rivals an established ruling power, trouble ensues. In 11 of 15 cases in which this has occurred in the past 500 years, the result was war. The great Greek historian Thucydides identified these structural stresses as the primary cause of the war between Athens and Sparta in ancient Greece. In his oft-quoted insight, “it was the rise of Athens and the fear that this inspired in Sparta that made war inevitable.” Note that Thucydides identified two factors: rise and fear. Today, a rising China naturally expects more respect and predictably demands greater say and sway in the resolution of differences among nations. It becomes more conscious of past grievances, especially in relations with Japan, and more determined to revise previous arrangements and practices to reflect new realities. For the US, accustomed to our position in the pecking order, calls for revision in the status quo raise concerns. The Pax Pacifica established and enforced by the US for seven decades since World War II has provided an economic and security order in which the nations of Asia, including China, have enjoyed unprecedented peace and prosperity. Demands for change, especially through unilateral actions, not only seem ungrateful, but raise alarms. Historically, when rising assertiveness becomes hubristic, and fears paranoid, mutual exaggeration can feed misperceptions and miscalculations, spurring posturing and provocations that lead to unintended consequences. Both Thucydides and 1914 remind us of a second cluster of factors that in these conditions can become the trigger for war: namely, entangling relationships with allies. In ancient Greece, an attack by Corcyra (now Corfu) on Corinth forced Sparta to come to its defense, leaving Athens little choice but to back up its ally. In 1914 the Austro-Hungarian Emperor took the assassination as an opportunity to reestablish his authority in Serbia, Russia felt obliged to come to the rescue of its Orthodox cousins in the Balkans, Germany supported its Austro-Hungarian ally in the hope that success in the Balkans would make it a more valuable counterbalance to the Russian-French threat, and the rest became history. As Chris Clark's new book, The Sleepwalkers, explains, these leaders proceeded "watchful but unseeing, haunted by dreams, yet blind to the reality of the horror they were about to bring into the world." What about 2014? Can we sketch a scenario today that could sleepwalk to war? Fortunately, not easily. Of course, there could well be incidents in or over the South or East China Sea in which US and Chinese warships or aircraft collide. Recall, this occurred in 2001 near Hainan Island, when a hotrodding Chinese pilot caused a U.S. spycraft to make an emergency landing in China. Tense moments ensued, but both governments contained themselves and the crisis was resolved. Recently a Chinese ship in the South China Sea would have rammed an American warship had the US captain not changed course at the last minute. While playing chicken with military ships and aircraft is foolish, both the US and China have "wargamed" these possibilities so thoroughly that it is reasonable to expect adult supervision before matters get out of hand. More problematic are potential confrontations between Japan and China. Japan is America's principal ally in Asia, and the US-Japan Mutual Defense Treaty commits the US to come to its defense. Whether knowingly or unwittingly, when the US returned Okinawa to Japan in 1972, it included a string of largely unknown islands in the East China Sea called the Senkakus. On Chinese maps, these are named the Diaoyus, and China claims them as its own. Historically, one of the surest predictors of hostility between nations are territorial disputes. (Japan and Russia have still not signed a peace treaty for the war that ended in 1945 because the Russians control four islands the Japanese regard as theirs.) Claims about others seizing "our territory" stir nationalistic passions in autocracies and democracies alike. Moreover, as the Austro-Hungarian case demonstrates vividly, nations in decline feel increasingly insecure and become more susceptible to fantasies that promise to restore their rightful place by a bold stroke. For Japanese, the last twenty years are "lost decades" of economic stagnation and national decline in which China overtook and then displaced them as the second largest economy in the world. Japan's Prime Minister Abe came to power determined to revive economic growth at home and respect for Japan abroad. By radical changes in Japanese monetary policy, including its own version of quantitative easing, decades of disinflation have been reversed, and Japan's economy is showing modest signs of recovery. Abe's grander ambitions, however, are to rebuild Japan's military power, revise what many Japanese see as a US-imposed peace treaty that ended World War II, significantly increase Japan's defense spending, and demonstrate that Japan can stand up to defend its own territory. Thus my most likely scenario for war in 2014 would begin with initiatives like China's recent unilateral declaration of an exclusive air zone over the islands in the East China Sea that trigger escalatory responses by Japan leading to the downing of a plane or sinking of a ship with scores of casualties. There could follow a process of retaliatory risk-taking in which each responds to the other, producing a small naval and air conflict between Japan and China at sea in which dozens of ships and planes are destroyed. Expecting the US Navy and Air Force to have its back, and certain that together, Japanese and US military forces currently have decisive superiority, Japanese politicians could adopt a strategy of "tit +" for "tat" and expect China to back down. Students of decisions by the regime that has governed China since 1949 would not be so sure. As Taylor Fravel’s analysis of Chinese uses or force in territorial disputes over the past six decades finds, in cases where they were unambiguously militarily weaker than their opponent, China has been three times as likely to go to war as in cases in which they had the upper hand. Americans should recall the Korean War where a Chinese Communist regime that had not yet even consolidated control over its core entered the war as the US marched just south of the Yalu, fought the US back to the 38th parallel, and forced the US to settle for an armistice. Will 2014 bring another Great War? My bet is almost certainly not, but with a note of caution. Claims that war is "inconceivable" are not statements about what is possible in the world, but rather, about what our limited minds can conceive. The fact that Presidents Obama and Xi understand that war would be folly for both China and the US is relevant but not dispositive. None of the leaders in Europe of 1914 would have chosen the war they got and that in the end they all lost. By 1918, the Kaiser was gone, the Austro-Hungarian Empire dissolved, the Tsar overthrown by the Bolsheviks, France bled for a generation, and England shorn of the flower of its youth and treasure. Given a chance for a do-over, none of the leaders would have made the choices he did. Thus as we look forward with hope to the year ahead, reflection on mistakes made a century ago reminds us of the perils of complacency.

### 2NC Yes War

#### Great power war is likely- the financial crisis changed international relations-

**Modelski ’11** [George, Ph.D. Professor of Political Science Emeritus in the University of Washington, “Preventing Global War,” September, <http://faculty.washington.edu/modelski/PreventGW.pdf>]

Not much has changed since. At this time of writing (2010), 65 years since the end of the last global war, the world system still has not had the experience of another such great conflagration. But in the long-cycle “calendar” the onset of another macro-decision is approaching fast. It might be as close as 15 years (2025, that would make it the average interval, at 80 years) or somewhat longer, more nearly that of the last time elapsed, 99 years. That pre-World War One experience of an extended interval could have been an outlier, created by a sense of rising tensions that, for a time, made it possible to deescalate mounting crises (over Morocco, German naval build-up, Balkans, Near East) and led far-sighted obervers to advocate a search for alternatives (William James, 1910, Norman Angell, 1910, German historians, mindful of historical precedents, warning against provoking Britain). The financial crisis of 2008-9 looks like a herald of approaching change. The imminence of the onset of macro-decision may also be a function of the rising quality and capacity of global institutions that might facilitate changes without violence. All in all, an interval closer to 15 than to 39 years seems more likely.

#### New actors ensure war

**Adams ’11** [William, retired colonel for the United States Navy and Department of Military Strategy, Planning, and Operations, “Achieving Nuclear Deterrence In the 21st Century,” http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA543192&Location=U2&doc=GetTRDoc.pdf]

In Knopf’s view, the fourth age of deterrence research will have to solve the problem of deterring rogue nations such as North Korea and Iran, as well as non-state actors such as Al Qaeda. A further complication is that while the United States accepted 15 mutual deterrence during the Cold War, it is not willing to be deterred by Iran, North Korea or Al Qaeda. Deterrence in this fourth age will have to be tailored to fit each group or nation to be deterred; the one size fits all deterrence of the Cold War will not work.

### 1NC Yes Extinction

#### Nuclear war causes extinction

Choi 11—writer for National Geographic News [Charles Q., 2/22/2011, National Geographic, “Small Nuclear War Could Reverse Global Warming for Years?,” <http://news.nationalgeographic.com/news/2011/02/110223-nuclear-war-winter-global-warming-environment-science-climate-change/>, DS]

Even a regional nuclear war could spark "unprecedented" global cooling and reduce rainfall for years, according to U.S. government computer models. Widespread famine and disease would likely follow, experts speculate. During the Cold War a nuclear exchange between superpowers—such as the one feared for years between the United States and the former Soviet Union—was predicted to cause a "nuclear winter." In that scenario hundreds of nuclear explosions spark huge fires, whose smoke, dust, and ash blot out the sun for weeks amid a backdrop of dangerous radiation levels. Much of humanity eventually dies of starvation and disease. Today, with the United States the only standing superpower, nuclear winter is little more than a nightmare. But nuclear war remains a very real threat—for instance, between developing-world nuclear powers, such as India and Pakistan. To see what climate effects such a regional nuclear conflict might have, scientists from NASA and other institutions modeled a war involving a hundred Hiroshima-level bombs, each packing the equivalent of 15,000 tons of TNT—just 0.03 percent of the world's current nuclear arsenal. (See a National Geographic magazine feature on weapons of mass destruction.) The researchers predicted the resulting fires would kick up roughly five million metric tons of black carbon into the upper part of the troposphere, the lowest layer of the Earth's atmosphere. In NASA climate models, this carbon then absorbed solar heat and, like a hot-air balloon, quickly lofted even higher, where the soot would take much longer to clear from the sky. (Related: "'Nuclear Archaeologists' Find World War II Plutonium.") Reversing Global Warming? The global cooling caused by these high carbon clouds wouldn't be as catastrophic as a superpower-versus-superpower nuclear winter, but "the effects would still be regarded as leading to unprecedented climate change," research physical scientist Luke Oman said during a press briefing Friday at a meeting of the American Association for the Advancement of Science in Washington, D.C. Earth is currently in a long-term warming trend. After a regional nuclear war, though, average global temperatures would drop by 2.25 degrees F (1.25 degrees C) for two to three years afterward, the models suggest. At the extreme, the tropics, Europe, Asia, and Alaska would cool by 5.4 to 7.2 degrees F (3 to 4 degrees C), according to the models. Parts of the Arctic and Antarctic would actually warm a bit, due to shifted wind and ocean-circulation patterns, the researchers said. After ten years, average global temperatures would still be 0.9 degree F (0.5 degree C) lower than before the nuclear war, the models predict. (Pictures: "Red Hot" Nuclear-Waste Train Glows in Infrared.) Years Without Summer For a time Earth would likely be a colder, hungrier planet. "Our results suggest that agriculture could be severely impacted, especially in areas that are susceptible to late-spring and early-fall frosts," said Oman, of NASA's Goddard Space Flight Center in Greenbelt, Maryland. "Examples similar to the crop failures and famines experienced following the Mount Tambora eruption in 1815 could be widespread and last several years," he added. That Indonesian volcano ushered in "the year without summer," a time of famines and unrest. (See pictures of the Mount Tambora eruption.) All these changes would also alter circulation patterns in the tropical atmosphere, reducing precipitation by 10 percent globally for one to four years, the scientists said. Even after seven years, global average precipitation would be 5 percent lower than it was before the conflict, according to the model. In addition, researcher Michael Mills, of the National Center for Atmospheric Research in Colorado, found large decreases in the protective ozone layer, leading to much more ultraviolet [uv] radiation reaching Earth's surface and harming the environment and people. "The main message from our work," NASA's Oman said, "would be that even a regional nuclear conflict would have global consequences."

### 2NC Yes Extinction

#### Even regional wars causes extinction

Robock and Toon 10—Toon: chair of the Dept of Atmospheric and Oceanic Sciences and a member of the Laboratory for Atmospheric and Space Physics at the University of Colorado @ Boulder. Robock is a Proff of atmospheric science at Rutgers University in New Brunswick, New Jersey Local Nuclear War, Global Suffering; January 2010; Scientific American Magazine; 8 Page(s), <http://www.sciamdigital.com/index.cfm?fa=Products.ViewIssuePreview&ISSUEID_CHAR=944156A6-237D-9F22-E8E572150DCA8E65&ARTICLEID_CHAR=97CA0A88-237D-9F22-E861FD76EBEE2611>)

Twenty-five years ago international teams of scientists showed that a nuclear war between the U.S. and the Soviet Union could produce a “nuclear winter.” The smoke from vast fires started by bombs dropped on cities and industrial areas would envelop the planet and absorb so much sunlight that the earth’s surface would get cold, dark and dry, killing plants worldwide and eliminating our food supply. Surface temperatures would reach winter values in the summer. International discussion about this prediction, fueled largely by astronomer Carl Sagan, forced the leaders of the two superpowers to confront the possibility that their arms race endangered not just themselves but the entire human race. Countries large and small demanded disarmament. Nuclear winter became an important factor in ending the nuclear arms race. Looking back later, in 2000, former Soviet Union leader Mikhail S. Gorbachev observed, “Models made by Russian and American scientists showed that a nuclear war would result in a nuclear winter that would be extremely destructive to all life on earth; the knowledge of that was a great stimulus to us, to people of honor and morality, to act.” Why discuss this topic now that the cold war has ended? Because as other nations continue to acquire nuclear weapons, smaller, regional nuclear wars could create a similar global catastrophe. New analyses reveal that a conflict between India and Pakistan, for example, in which 100 nuclear bombs were dropped on cities and industrial areas--only 0.4 percent of the world's more than 25,000 warheads--would produce enough smoke to cripple global agriculture. A regional war could cause widespread loss of life even in countries far away from the conflict. Regional War Threatens the World By deploying modern computers and modern climate models, the two of us and our colleagues have shown that not only were the ideas of the 1980s correct but the effects would last for at least 10 years, much longer than previously thought. And by doing calculations that assess decades of time, only now possible with fast, current computers, and by including in our calculations the oceans and the entire atmosphere--also only now possible--we have found that the smoke from even a regional war would be heated and lofted by the sun and remain suspended in the upper atmosphere for years, continuing to block sunlight and to cool the earth. India and Pakistan, which together have more than 100 nuclear weapons, may be the most worrisome adversaries capable of a regional nuclear conflict today. But other countries besides the U.S. and Russia (which have thousands) are well endowed: China, France and the U.K. have hundreds of nuclear warheads; Israel has more than 80, North Korea has about 10 and Iran may well be trying to make its own. In 2004 this situation prompted one of us (Toon) and later Rich Turco of the University of California, Los Angeles, both veterans of the 1980s investigations, to begin evaluating what the global environmental effects of a regional nuclear war would be and to take as our test case an engagement between India and Pakistan. The latest estimates by David Albright of the Institute for Science and International Security and by Robert S. Norris of the Natural Resources Defense Council are that India has 50 to 60 assembled weapons (with enough plutonium for 100) and that Pakistan has 60 weapons. Both countries continue to increase their arsenals. Indian and Pakistani nuclear weapons tests indicate that the yield of the warheads would be similar to the 15-kiloton explosive yield (equivalent to 15,000 tons of TNT) of the bomb the U.S. used on Hiroshima. Toon and Turco, along with Charles Bardeen, now at the National Center for Atmospheric Research, modeled what would happen if 50 Hiroshima-size bombs were dropped across the highest population-density targets in Pakistan and if 50 similar bombs were also dropped across India. Some people maintain that nuclear weapons would be used in only a measured way. But in the wake of chaos, fear and broken communications that would occur once a nuclear war began, we doubt leaders would limit attacks in any rational manner. This likelihood is particularly true for Pakistan, which is small and could be quickly overrun in a conventional conflict. Peter R. Lavoy of the Naval Postgraduate School, for example, has analyzed the ways in which a conflict between India and Pakistan might occur and argues that Pakistan could face a decision to use all its nuclear arsenal quickly before India swamps its military bases with traditional forces. Obviously, we hope the number of nuclear targets in any future war will be zero, but policy makers and voters should know what is possible. Toon and Turco found that more than 20 million people in the two countries could die from the blasts, fires and radioactivity--a horrible slaughter. But the investigators were shocked to discover that a tremendous amount of smoke would be generated, given the megacities in the two countries, assuming each fire would burn the same area that actually did burn in Hiroshima and assuming an amount of burnable material per person based on various studies. They calculated that the 50 bombs exploded in Pakistan would produce three teragrams of smoke, and the 50 bombs hitting India would generate four (one teragram equals a million metric tons). Satellite observations of actual forest fires have shown that smoke can be lofted up through the troposphere (the bottom layer of the atmosphere) and sometimes then into the lower stratosphere (the layer just above, extending to about 30 miles). Toon and Turco also did some "back of the envelope" calculations of the possible climate impact of the smoke should it enter the stratosphere. The large magnitude of such effects made them realize they needed help from a climate modeler. It turned out that one of us (Robock) was already working with Luke Oman, now at the NASA Goddard Space Flight Center, who was finishing his Ph.D. at Rutgers University on the climatic effects of volcanic eruptions, and with Georgiy L. Stenchikov, also at Rutgers and an author of the first Russian work on nuclear winter. They developed a climate model that could be used fairly easily for the nuclear blast calculations. Robock and his colleagues, being conservative, put five teragrams of smoke into their modeled upper troposphere over India and Pakistan on an imaginary May 15. The model calculated how winds would blow the smoke around the world and how the smoke particles would settle out from the atmosphere. The smoke covered all the continents within two weeks. The black, sooty smoke absorbed sunlight, warmed and rose into the stratosphere. Rain never falls there, so the air is never cleansed by precipitation; particles very slowly settle out by falling, with air resisting them. Soot particles are small, with an average diameter of only 0.1 micron (μm), and so drift down very slowly. They also rise during the daytime as they are heated by the sun, repeatedly delaying their elimination. The calculations showed that the smoke would reach far higher into the upper stratosphere than the sulfate particles that are produced by episodic volcanic eruptions. Sulfate particles are transparent and absorb much less sunlight than soot and are also bigger, typically 0.5 μm. The volcanic particles remain airborne for about two years, but smoke from nuclear fires would last a decade. Killing Frosts in Summer The climatic response to the smoke was surprising. Sunlight was immediately reduced, cooling the planet to temperatures lower than any experienced for the past 1,000 years. The global average cooling, of about 1.25 degrees Celsius (2.3 degrees Fahrenheit), lasted for several years, and even after 10 years the temperature was still 0.5 degree C colder than normal. The models also showed a 10 percent reduction in precipitation worldwide. Precipitation, river flow and soil moisture all decreased because blocking sunlight reduces evaporation and weakens the hydrologic cycle. Drought was largely concentrated in the lower latitudes, however, because global cooling would retard the Hadley air circulation pattern in the tropics, which produces a large fraction of global precipitation. In critical areas such as the Asian monsoon regions, rainfall dropped by as much as 40 percent. The cooling might not seem like much, but even a small dip can cause severe consequences. Cooling and diminished sunlight would, for example, shorten growing seasons in the midlatitudes. More insight into the effects of cooling came from analyses of the aftermaths of massive volcanic eruptions. Every once in a while such eruptions produce temporary cooling for a year or two. The largest of the past 500 years, the 1815 Tambora eruption in Indonesia, blotted the sun and produced global cooling of about 0.5 degree C for a year; 1816 became known as "The Year.”

#### Most recent studies vote neg

CBS 14- citing study done by National Center for Atmospheric Research (Study: ‘Small’ Nuclear War Would Destroy The World, http://denver.cbslocal.com/2014/03/26/study-small-nuclear-war-would-destroy-the-world/)

DENVER (CBS4) – With an estimated 17,000 nuclear weapons in the world, we have the power to exterminate humanity many times over.¶ But it wouldn’t take a full-scale nuclear war to make Earth uninhabitable, reports Live Science.¶ Even a relatively small regional nuclear war, like a conflict between India and Pakistan, could spark a global environmental catastrophe, says a new study.¶ “Most people would be surprised to know that even a very small regional nuclear war on the other side of the planet could disrupt global climate for at least a decade and wipe out the ozone layer for a decade,” said lead author Michael Mills, an atmospheric scientist at the National Center for Atmospheric Research in Colorado.¶ Researchers developed a computer model of the Earth’s atmosphere and ran simulations to find out what would happen if there was a nuclear war with just a fraction of the world’s arsenal.¶ What they saw was the stuff of nightmares:¶ Firestorms would belch over 5 million tons of ash into the sky.¶ The ash would absorb the sun’s rays, causing deadly cooling on the surface.¶ Global temperatures would plummet my nearly 3 degrees Farenheit on average, with most of North America experiencing winters that would be colder by 4 to 10 degrees.¶ Lethal frosts would cover the Earth and reduce the growing seasons bu about a month for several years.¶ Rainfall and other precipitation would be reduced by about 10 percent, triggering worldwide droughts and leading to wildfires in the Amazon, which would spew more smoke into the atmosphere.¶ The sky ash would heat the stratosphere and accelerate the chemical reactions that destroy the ozone layer.¶ The intense ultraviolet radiation that would get through to the surface would be a dramatic threat to human health and damage fragile ecosystems on land and sea.¶ “All in all, these effects would be very detrimental to food production and to ecosystems,” Mills said.

#### Prefer our evidence- longevity of study, specificity of details, and superior models

UCAR 14The University Corporation for Atmospheric Research is a consortium of more than 100 member colleges and universities focused on research and training in the atmospheric and related Earth system sciences. Our members set d irections and priorities for the National Center for Atmospheric Research, which UCAR manages with sponsorship by the National Science Foundation, 2014, “Regional Nuclear War Would Have Global Reach”, http://www2.ucar.edu/atmosnews/research/11155/regional-nuclear-war-would-have-global-reach)

Scientists for several decades. have studied the potential environmental impacts of a nuclear conflict—either an all-out conflagration between superpowers or a more limited regional war Now a research team led by NCAR has produced an unusually detailed picture of the aftermath of a hypothetical regional nuclear war by using a modeling approach that includes simulations of atmospheric chemistry, the oceans, land surface, and sea ice.¶ The study, published this month in the American Geophysical Union journal Earth’s Future, finds that an exchange of 100 nuclear weapons between two regional adversaries would have more severe global implications for society and the environment than previously thought.¶ The research team’s model simulations show that global temperatures would drop initially by 1.5 degrees Celsius (about 2.7 degrees Fahrenheit) to their lowest levels in more than 1,000 years. The cooling would be caused by firestorms in major cities lofting ash and other particles high into the atmosphere, where they would block incoming solar heat. The colder temperatures would reduce precipitation, likely leading to widespread fires in regions such as the Amazon and pumping still more smoke into the atmosphere.¶ Whereas previous studies had projected that global temperatures would recover after about a decade, the new work indicates that cooling would persist at least 26 years, which is as far into the future as the simulations went. Two major factors would cause this prolonged cooling: an expansion of sea ice that would reflect more solar heat into space, and a significant cooling in the upper 100 meters (about 330 feet) of the oceans, which would warm only gradually.¶ The new study also tracked the influence of the urban firestorms on stratospheric chemistry. Approximately five teragrams of black carbon would be lofted up to the stratosphere, where it would spread globally. The smoke would absorb sunlight and heat the stratosphere, accelerating chemical reactions that destroy ozone. The resulting damage to the ozone layer would allow much greater amounts of ultraviolet radiation to reach Earth’s surface. The midlatitudes would experience a summertime UV increase of 30-80 percent.¶ The colder temperatures and higher UV levels could have widespread and potentially devastating impacts on society, the authors found. In addition to the destruction caused directly by the nuclear bombs, the colder temperatures worldwide would lead to killing frosts that would reduce growing seasons by 10-40 days per year for several years. The higher levels of UV would pose a threat to human health, agriculture, and terrestrial and aquatic ecosystems.¶ The research team used an NCAR-based computer model: the Community Earth System Model, which simulates interactive responses in atmosphere, ocean, land, and sea ice components of the Earth's climate system. For the atmospheric component, the team turned to the Whole Atmosphere Community Climate Model, which extends from the Earth's surface to the edge of space, and includes interactive calculations of stratospheric ozone chemistry and atmospheric dynamics.¶ The scientists ran a total of seven simulations, comparing a hypothetical war between two nations that have developed nuclear arms relatively recently (India and Pakistan) with control simulations in which there was no nuclear war.¶ “It’s such a complex process that you need sophisticated climate models to understand it,” said NCAR scientist Michael Mills, the lead author. “As we get a more detailed picture, we find that the atmospheric effects for a given amount of weapons deployed are even more severe than we previously thought.”¶ He added that the 100 relatively small nuclear bombs in the study represent just a small fraction of the world’s approximately 17,000 nuclear weapons.

## Small Farms

**1NC Disease Defense**

#### No impact to disease

Posner ‘5 (Richard A, judge on the U.S. Court of Appeals, Seventh Circuit, and senior lecturer at the University of Chicago Law School, Winter. “Catastrophe: the dozen most significant catastrophic risks and what we can do about them.” http://findarticles.com/p/articles/mi\_kmske/is\_3\_11/ai\_n29167514/pg\_2?tag=content;col1, March 11, 2005)

Yet the fact that Homo sapiens has managed to survive every disease to assail it in the 200,000 years or so of its existence is a source of genuine comfort, at least if the focus is on extinction events. There have been enormously destructive plagues, such as the Black Death, smallpox, and now AIDS, but none has come close to destroying the entire human race. There is a biological reason. Natural selection favors germs of limited lethality; they are fitter in an evolutionary sense because their genes are more likely to be spread if the germs do not kill their hosts too quickly. The AIDS virus is an example of a lethal virus, wholly natural, that by lying dormant yet infectious in its host for years maximizes its spread. Yet there is no danger that AIDS will destroy the entire human race. The likelihood of a natural pandemic that would cause the extiinction of the human race is probably even less today than in the past (except in prehistoric times, when people lived in small, scattered bands, which would have limited the spread of disease), despite wider human contacts that make it more difficult to localize an infectious disease. The reason is improvements in medical science. But the comfort is a small one. Pandemics can still impose enormous losses and resist prevention and cure: the lesson of the AIDS pandemic. And there is always a lust time.

### 2NC Disease Defense

#### Science means extinction is impossible

#### a.) Any disease that kills its host too fast will die off

UE 07 – understanding evolution, Website on Evolution from UC Berkeley (December, "Evolution from a virus's view," http://evolution.berkeley.edu/evolibrary/news/071201\_adenovirus)

Since transmission is a matter of life or death for pathogen lineages, some evolutionary biologists have focused on this as the key to understanding why some have evolved into killers and others cause no worse than the sniffles. The idea is that there may be an evolutionary trade-off between virulence and transmission. Consider a virus that exploits its human host more than most and so produces more offspring than most. This virus does a lot of damage to the host — in other words, is highly virulent. From the virus's perspective, this would, at first, seem like a good thing; extra resources mean extra offspring, which generally means high evolutionary [fitness](http://evolution.berkeley.edu/evolibrary/glossary/glossary_popup.php?word=fitness). However, if the viral reproduction completely incapacitates the host, the whole strategy could backfire: the illness might prevent the host from going out and coming into contact with new hosts that the virus could jump to. A victim of its own success, the viral lineage could go extinct and become an evolutionary dead end. This level of virulence is clearly not a good thing from the virus's perspective.

#### b.) Natural Immunities

Sowell ‘1 – Fellow at Hoover Institution (Thomas, March 5, Jewish World Review, “The Dangers of “Equality”, http://www.jewishworldreview.com/cols/sowell030501.asp)

People have different vulnerabilities and resistances to a variety of diseases. That is why one disease is unlikely to wipe out the human species, even in one place. An epidemic that sweeps through an area may leave some people dying like flies while others remain as healthy as horses. New disease control models allow reducing diseases to extinction and predicting outbreaks allowing control Ira 09, American Physical Society, (Schwartz, “Fluctuations in epidemic modeling - disease extinction and control” Physical Society, 2009 APS March Meeting, March 16-20, 2009, abstract #D7.003http: adsabs.harvard.edu/abs/2009APS..MAR.D7003S) The analysis of infectious disease fluctuations has recently seen an increasing rise in the use of new tools and models from stochastic dynamics and statistical physics. Examples arise in modeling fluctuations of multi-strain diseases, in modeling adaptive social behavior and its impact on disease fluctuations, and in the analysis of disease extinction in finite population models. Proper stochastic model reduction [1] allows one to predict unobserved fluctuations from observed data in multi-strain models [2]. Degree alteration and power law behavior is predicted in adaptive network epidemic models [3,4]. And extinction rates derived from large fluctuation theory exhibit scaling with respect to distance to the bifurcation point of disease onset with an unusual exponent [5]. In addition to outbreak prediction, another main goal of epidemic modeling is one of eliminating the disease to extinction through various control mechanisms, such as vaccine implementation or quarantine. In this talk, a description will be presented of the fluctuational behavior of several epidemic models and their extinction rates. A general framework and analysis of the effect of non-Gaussian control actuations which enhance the rate to disease extinction will be described. In particular, in it is shown that even in the presence of a small Poisson distributed vaccination program, there is an exponentially enhanced rate to disease extinction. These ideas may lead to improved methods of controlling disease where random vaccinations are prevalent.

#### Responses check

Ensom ‘3 (Jim, Crisis Management Trainer at Business Continuity Consultants, Former Editor of Survive Magazine, Former Journalist for the BBC, <http://www.globalcontinuity.com/article/articleview/94/1/30/>, June 20, 2003)

In reaching these landmarks in the containment of SARS, the most severely affected countries and areas have identified and rapidly corrected long-standing weaknesses in their health systems in ways that will mean permanent improvements for the management of all diseases. In addition, systems of data collection and reporting, and new patterns of openly and frankly communicating information to the public will hold the world in good stead when the next new disease emerges and the next influenza pandemic breaks out.

#### Burn out stops disease

Lederberg ‘99 (Joshua, Professor of Genetics – Stanford University School of Medicine, Epidemic The World of Infectious Disease, p. 13, 1999)

The toll of the fourteenth-century plague, the "Black Death," was closer to one third. If the bugs' potential to develop adaptations that could kill us off were the whole story, we would not be here. However, with very rare exceptions, our microbial adversaries have a shared interest in our survival. Almost any pathogen comes to a dead end when we die; it first has to communicate itself to another host in order to survive. So historically, the really severe host- pathogen interactions have resulted in a wipeout of both host and pathogen. We humans are still here because, so far, the pathogens that have attacked us have willy-nilly had an interest in our survival. This is a very delicate balance, and it is easily disturbed, often in the wake of large-scale ecological upsets.

#### Humans will adapt

Gladwell ‘95 (Malcolm, The New Republic, Excerpted in Epidemics: Opposing Viewpoints, p. 29, July 17, 1995)

In Plagues and Peoples, which appeared in 1977. William MeNeill pointed out that…while man’s efforts to “remodel” his environment are sometimes a source of new disease. They are seldom a source of serious epidemic disease. Quite the opposite. As humans and new microorganisms interact, they begin to accommodate each other. Human populations slowly build up resistance to circulating infections. What were once virulent infections, such as syphilis become attenuated. Over time, diseases of adults, such as measles and chicken pox, become limited to children, whose immune systems are still naïve.

### 1NC Bioterror Defense

#### No risk of a bioterror attack, and there won’t be retaliation - your evidence is hype

Matishak ‘10 (Martin, Global Security Newswire, “U.S. Unlikely to Respond to Biological Threat With Nuclear Strike, Experts Say,”, <http://www.globalsecuritynewswire.org/gsn/nw_20100429_7133.php>, April 29, 2010)

WASHINGTON -- The United States is not likely to use nuclear force to respond to a biological weapons threat, even though the Obama administration left open that option in its recent update to the nation's nuclear weapons policy, experts say (See GSN, April 22). "The notion that we are in imminent danger of confronting a scenario in which hundreds of thousands of people are dying in the streets of New York as a consequence of a biological weapons attack is fanciful," said Michael Moodie, a consultant who served as assistant director for multilateral affairs in the U.S. Arms Control and Disarmament Agency during the George H.W. Bush administration. Scenarios in which the United States suffers mass casualties as a result of such an event seem "to be taking the discussion out of the realm of reality and into one that is hypothetical and that has no meaning in the real world where this kind of exchange is just not going to happen," Moodie said this week in a telephone interview. "There are a lot of threat mongers who talk about devastating biological attacks that could kill tens of thousands, if not millions of Americans," according to Jonathan Tucker, a senior fellow with the James Martin Center for Nonproliferation Studies. "But in fact, no country out there today has anything close to what the Soviet Union had in terms of mass-casualty biological warfare capability. Advances in biotechnology are unlikely to change that situation, at least for the foreseeable future." No terrorist group would be capable of pulling off a massive biological attack, nor would it be deterred by the threat of nuclear retaliation, he added. The biological threat provision was addressed in the Defense Department-led Nuclear Posture Review, a restructuring of U.S. nuclear strategy, forces and readiness. The Obama administration pledged in the review that the United States would not conduct nuclear strikes on non-nuclear states that are in compliance with global nonproliferation regimes. However, the 72-page document contains a caveat that would allow Washington to set aside that policy, dubbed "negative security assurance," if it appeared that biological weapons had been made dangerous enough to cause major harm to the United States. "Given the catastrophic potential of biological weapons and the rapid pace of biotechnology development, the United States reserves the right to make any adjustment in the assurance that may be warranted by the evolution and proliferation of the biological weapons threat and U.S. capacities to counter that threat," the posture review report says. The caveat was included in the document because "in theory, biological weapons could kill millions of people," Gary Samore, senior White House coordinator for WMD counterterrorism and arms control, said last week after an event at the Carnegie Endowment for International Peace. Asked if the White House had identified a particular technological threshold that could provoke a nuclear strike, Samore replied: "No, and if we did we obviously would not be willing to put it out because countries would say, 'Oh, we can go right up to this level and it won't change policy.'" "It's deliberately ambiguous," he told Global Security Newswire. The document's key qualifications have become a lightning rod for criticism by Republican lawmakers who argue they eliminate the country's previous policy of "calculated ambiguity," in which U.S. leaders left open the possibility of executing a nuclear strike in response to virtually any hostile action against the United States or its allies (see GSN, April 15). Yet experts say there are a number of reasons why the United States is not likely to use a nuclear weapon to eliminate a non-nuclear threat. It could prove difficult for U.S. leaders to come up with a list of appropriate targets to strike with a nuclear warhead following a biological or chemical event, former Defense Undersecretary for Policy Walter Slocombe said during a recent panel discussion at the Hudson Institute. "I don't think nuclear weapons are necessary to deter these kinds of attacks given U.S. dominance in conventional military force," according to Gregory Koblentz, deputy director of the Biodefense Graduate Program at George Mason University in Northern Virginia. "There's a bigger downside to the nuclear nonproliferation side of the ledger for threatening to use nuclear weapons in those circumstances than there is the benefit of actually deterring a chemical or biological attack," Koblentz said during a recent panel discussion at the James Martin Center. The nonproliferation benefits for restricting the role of strategic weapons to deterring nuclear attacks outweigh the "marginal" reduction in the country's ability to stem the use of biological weapons, he said. In addition, the United States has efforts in place to defend against chemical and biological attacks such as vaccines and other medical countermeasures, he argued. "We have ways to mitigate the consequences of these attacks," Koblentz told the audience. "There's no way to mitigate the effects of a nuclear weapon." Regardless of the declaratory policy, the U.S. nuclear arsenal will always provide a "residual deterrent" against mass-casualty biological or chemical attacks, according to Tucker. "If a biological or chemical attack against the United States was of such a magnitude as to potentially warrant a nuclear response, no attacker could be confident that the U.S. -- in the heat of the moment -- would not retaliate with nuclear weapons, even if its declaratory policy is not to do so," he told GSN this week during a telephone interview. Political Benefits Experts are unsure what, if any, political benefit the country or President Barack Obama's sweeping nuclear nonproliferation agenda will gain from the posture review's biological weapons caveat. The report's reservation "was an unnecessary dilution of the strengthened negative security and a counterproductive elevation of biological weapons to the same strategic domain as nuclear weapons," Koblentz told GSN by e-mail this week. "The United States has nothing to gain by promoting the concept of the biological weapons as 'the poor man's atomic bomb,'" he added.

#### No extinction from bioweapons

O’Neill ‘4 – (Brendan, 8-19 “Weapons of Minimum Destruction” http://www.spiked-online.com/Articles/0000000CA694.htm)

David C Rapoport, professor of political science at University of California, Los Angeles and editor of the Journal of Terrorism and Political Violence, has examined what he calls 'easily available evidence' relating to the historic use of chemical and biological weapons. He found something surprising - such weapons do not cause mass destruction. Indeed, whether used by states, terror groups or dispersed in industrial accidents, they tend to be far less destructive than conventional weapons. 'If we stopped speculating about things that might happen in the future and looked instead at what has happened in the past, we'd see that our fears about WMD are misplaced', he says. Yet such fears remain widespread. Post-9/11, American and British leaders have issued dire warnings about terrorists getting hold of WMD and causing mass murder and mayhem. President George W Bush has spoken of terrorists who, 'if they ever gained weapons of mass destruction', would 'kill hundreds of thousands, without hesitation and without mercy' (1). The British government has spent £28million on stockpiling millions of smallpox vaccines, even though there's no evidence that terrorists have got access to smallpox, which was eradicated as a natural disease in the 1970s and now exists only in two high-security labs in America and Russia (2). In 2002, British nurses became the first in the world to get training in how to deal with the victims of bioterrorism (3). The UK Home Office's 22-page pamphlet on how to survive a terror attack, published last month, included tips on what to do in the event of a 'chemical, biological or radiological attack' ('Move away from the immediate source of danger', it usefully advised). Spine-chilling books such as Plague Wars: A True Story of Biological Warfare, The New Face of Terrorism: Threats From Weapons of Mass Destruction and The Survival Guide: What to Do in a Biological, Chemical or Nuclear Emergency speculate over what kind of horrors WMD might wreak. TV docudramas, meanwhile, explore how Britain might cope with a smallpox assault and what would happen if London were 'dirty nuked' (4). The term 'weapons of mass destruction' refers to three types of weapons: nuclear, chemical and biological. A chemical weapon is any weapon that uses a manufactured chemical, such as sarin, mustard gas or hydrogen cyanide, to kill or injure. A biological weapon uses bacteria or viruses, such as smallpox or anthrax, to cause destruction - inducing sickness and disease as a means of undermining enemy forces or inflicting civilian casualties. We find such weapons repulsive, because of the horrible way in which the victims convulse and die - but they appear to be less 'destructive' than conventional weapons. 'We know that nukes are massively destructive, there is a lot of evidence for that', says Rapoport. But when it comes to chemical and biological weapons, 'the evidence suggests that we should call them "weapons of minimum destruction", not mass destruction', he says. Chemical weapons have most commonly been used by states, in military warfare. Rapoport explored various state uses of chemicals over the past hundred years: both sides used them in the First World War; Italy deployed chemicals against the Ethiopians in the 1930s; the Japanese used chemicals against the Chinese in the 1930s and again in the Second World War; Egypt and Libya used them in the Yemen and Chad in the postwar period; most recently, Saddam Hussein's Iraq used chemical weapons, first in the war against Iran (1980-1988) and then against its own Kurdish population at the tail-end of the Iran-Iraq war. In each instance, says Rapoport, chemical weapons were used more in desperation than from a position of strength or a desire to cause mass destruction. 'The evidence is that states rarely use them even when they have them', he has written. 'Only when a military stalemate has developed, which belligerents who have become desperate want to break, are they used.' (5) As to whether such use of chemicals was effective, Rapoport says that at best it blunted an offensive - but this very rarely, if ever, translated into a decisive strategic shift in the war, because the original stalemate continued after the chemical weapons had been deployed. He points to the example of Iraq. The Baathists used chemicals against Iran when that nasty trench-fought war had reached yet another stalemate. As Efraim Karsh argues in his paper 'The Iran-Iraq War: A Military Analysis': 'Iraq employed [chemical weapons] only in vital segments of the front and only when it saw no other way to check Iranian offensives. Chemical weapons had a negligible impact on the war, limited to tactical rather than strategic [effects].' (6) According to Rapoport, this 'negligible' impact of chemical weapons on the direction of a war is reflected in the disparity between the numbers of casualties caused by chemicals and the numbers caused by conventional weapons. It is estimated that the use of gas in the Iran-Iraq war killed 5,000 - but the Iranian side suffered around 600,000 dead in total, meaning that gas killed less than one per cent. The deadliest use of gas occurred in the First World War but, as Rapoport points out, it still only accounted for five per cent of casualties. Studying the amount of gas used by both sides from1914-1918 relative to the number of fatalities gas caused, Rapoport has written: 'It took a ton of gas in that war to achieve a single enemy fatality. Wind and sun regularly dissipated the lethality of the gases. Furthermore, those gassed were 10 to 12 times as likely to recover than those casualties produced by traditional weapons.' (7) Indeed, Rapoport discovered that some earlier documenters of the First World War had a vastly different assessment of chemical weapons than we have today - they considered the use of such weapons to be preferable to bombs and guns, because chemicals caused fewer fatalities. One wrote: 'Instead of being the most horrible form of warfare, it is the most humane, because it disables far more than it kills, ie, it has a low fatality ratio.' (8) 'Imagine that', says Rapoport, 'WMD being referred to as more humane'. He says that the contrast between such assessments and today's fears shows that actually looking at the evidence has benefits, allowing 'you to see things more rationally'. According to Rapoport, even Saddam's use of gas against the Kurds of Halabja in 1988 - the most recent use by a state of chemical weapons and the most commonly cited as evidence of the dangers of 'rogue states' getting their hands on WMD - does not show that unconventional weapons are more destructive than conventional ones. Of course the attack on Halabja was horrific, but he points out that the circumstances surrounding the assault remain unclear. 'The estimates of how many were killed vary greatly', he tells me. 'Some say 400, others say 5,000, others say more than 5,000. The fighter planes that attacked the civilians used conventional as well as unconventional weapons; I have seen no study which explores how many were killed by chemicals and how many were killed by firepower. We all find these attacks repulsive, but the death toll may actually have been greater if conventional bombs only were used. We know that conventional weapons can be more destructive.' Rapoport says that terrorist use of chemical and biological weapons is similar to state use - in that it is rare and, in terms of causing mass destruction, not very effective. He cites the work of journalist and author John Parachini, who says that over the past 25 years only four significant attempts by terrorists to use WMD have been recorded. The most effective WMD-attack by a non-state group, from a military perspective, was carried out by the Tamil Tigers of Sri Lanka in 1990. They used chlorine gas against Sri Lankan soldiers guarding a fort, injuring over 60 soldiers but killing none. The Tamil Tigers' use of chemicals angered their support base, when some of the chlorine drifted back into Tamil territory - confirming Rapoport's view that one problem with using unpredictable and unwieldy chemical and biological weapons over conventional weapons is that the cost can be as great 'to the attacker as to the attacked'. The Tigers have not used WMD since.

### 2NC Bioterror Defense

#### No extinction - history proves

Easterbrook ‘3 (Gregg, Senior Fellow – New Republic, “We’re All Gonna Die!”, Wired Magazine, July, http://www.wired.com/wired/archive/11.07/doomsday.html?pg=1&topic=&topic\_set=)

3. Germ warfare!Like chemical agents, biological weapons have never lived up to their billing in popular culture. Consider the 1995 medical thriller Outbreak, in which a highly contagious virus takes out entire towns. The reality is quite different. Weaponized smallpox escaped from a Soviet laboratory in Aralsk, Kazakhstan, in 1971; three people died, no epidemic followed. In 1979, weapons-grade anthrax got out of a Soviet facility in Sverdlovsk (now called Ekaterinburg); 68 died, no epidemic. The loss of life was tragic, but no greater than could have been caused by a single conventional bomb. In 1989, workers at a US government facility near Washington were accidentally exposed to Ebola virus. They walked around the community and hung out with family and friends for several days before the mistake was discovered. No one died. The fact is, evolution has spent millions of years conditioning mammals to resist germs. Consider the Black Plague. It was the worst known pathogen in history, loose in a Middle Ages society of poor public health, awful sanitation, and no antibiotics. Yet it didn’t kill off humanity. Most people who were caught in the epidemic survived. Any superbug introduced into today’s Western world would encounter top-notch public health, excellent sanitation, and an array of medicines specifically engineered to kill bioagents. Perhaps one day some aspiring Dr. Evil will invent a bug that bypasses the immune system. Because it is possible some novel superdisease could be invented, or that existing pathogens like smallpox could be genetically altered to make them more virulent (two-thirds of those who contract natural smallpox survive), biological agents are a legitimate concern. They may turn increasingly troublesome as time passes and knowledge of biotechnology becomes harder to control, allowing individuals or small groups to cook up nasty germs as readily as they can buy guns today. But no superplague has ever come close to wiping out humanity before, and it seems unlikely to happen in the future.

#### Their evidence is exaggerated

Leitenberg ‘5 (Milton, Senior Research Scholar @ University of Maryland, “ASSESSING THE BIOLOGICAL WEAPONS AND BIOTERRORISM THREAT,” December 2005)

Framing “the threat” and setting the agenda of public perceptions and policy prescriptions. For the past decade the risk and immanence of the use of biological agents by nonstate actors/terrorist organizations—“bioterrorism”—has been systematically and deliberately exaggerated. It became more so after the combination of the 9/11 events and the October- November 2001 anthrax distribution in the United States that followed immediately afterwards. U.S. Government officials worked hard to spread their view to other countries. An edifice of institutes, programs, conferences, and publicists has grown up which continue the exaggeration and scare-mongering. In the last year or two, the drumbeat had picked up. It may however become moderated by the more realistic assessment of the likelihood of the onset of a natural flu pandemic, and the accompanying realization that the U.S. Government has been using the overwhelming proportion of its relevant resources to prepare for the wrong contingency.

#### Weather blocks and solves death toll

Laquer ‘99 (Walter, Cochair of the International Research Council at The Center for Strategic and International Studies, “The New Terrorism”)

Ironically, the major factor retarding the use of gases and germs by states and terrorists is no the revulsion or moral constraints but technical difficulties. “Ideal” conditions for an attack seldom if ever exist, and the possibility of things going wrong is almost unlimited, aerosols may nor function, the wind may blow in the wrong direction, missiles carrying a deadly load may land in the wrong place or neutralize the germs on impact. In the course of time these technical difficulties may be overcome, but it is still very likely that roughly nine out of ten of the early attempts by terrorists to wage chemical or biological warfare will fail. But they will not pass unnoticed; the authorities and the public will be alerted, and the element of surprise lost. The search for perpetrators may begin even before the first successful attack. And what has just been said with regard to terrorists may also be to state terrorism.

**1NC Disease Turn**

**ADT prevents disease spread and is less invasive than NAIS**

**CattleNetwork 13** (Samuel Roberts Noble Foundation, “New animal identification rules aid disease traceability”, <http://www.cattlenetwork.com/cattle-news/New-animal-identification-rules-aid-disease-traceability-208192501.html> ,May 20, 2013)

On March 11, 2013, the United States Department of Agriculture (USDA) initiated the Animal Disease Traceabil­ity Program (ADTP) to track interstate livestock movement. According to the USDA, “Animal disease traceability, or knowing where diseased or at-risk animals are, where they have been and when, is very important to ensur­ing a rapid response when animal disease events take place. This will reduce the number of animal owners impacted by an animal disease event and reduce the economic strain on owners and affected communities.” The new rule replaces the previous unpopular version of the National Animal Identification System (NAIS) and pertains to all livestock, including cattle, horses, sheep and goats. The new rules will minimally change official identification require­ments for animals that are shipped interstate, yet it will improve animal disease traceability. The ADTP will require livestock that move interstate to be accompanied by an Interstate Certificate of Veterinary Inspection (ICVI), owner-shipper statement or a brand certificate. The owner-shipper statement and brand certificate must be approved by officials in both the state of origin and the receiving state. Animals moved intrastate will be under the jurisdiction of the state’s regulations.

## Exports

### 1NC Environment Defense

#### Environmental improvements now – their evidence ignores long term trends

Hayward, 11 [Steven P, american author, political commentator, and policy scholar. He argues for libertarian and conservative viewpoints in his writings. He writes frequently on the topics of environmentalism, law, economics, and public policy.2011 Almanac of Environmental Trends by Steven F. Hayward April 2011 ISBN-13: 978-1-934276-17-4, <http://www.pacificresearch.org/docLib/20110419_almanac2011.pdf>]

Quick: What’s the largest public-policy success story in American society over the last generation? The dramatic reduction in the crime rate, which has helped make major American cities livable again? Or welfare reform, which saw the nation’s welfare rolls fall by more than half since the early 1990s? Both of these accomplishments have received wide media attention. Yet the right answer might well be the environment. As Figure 1 displays, the reduction in air pollution is comparable in magnitude to the reduction in the welfare rolls, and greater than the reduction in the crime rate—both celebrated as major public-policy success stories of the last two decades. Aggregate emissions of the six “criteria” pollutants1 regulated under the Clean Air Act have fallen by 53 percent since 1970, while the proportion of the population receiving welfare assistance is down 48 percent from 1970, and the crime rate is only 6.4 percent below its 1970 level. (And as we shall see, this aggregate nationwide reduction in emissions greatly understates the actual improvement in ambient air quality in the areas with the worst levels of air pollution.) Measures for water quality, toxic-chemical exposure, soil erosion, forest growth, wetlands, and several other areas of environmental concern show similar positive trends, as this Almanac reports. To paraphrase Mark Twain, reports of the demise of the environment have been greatly exaggerated. Moreover, there is good reason to believe that these kinds of improvements will be experienced in the rest of the world over the course of this century. We’ll examine some of the early evidence that this is already starting to occur. The chief drivers of environmental improvement are economic growth, constantly increasing resource efficiency, technological innovation in pollution control, and the deepening of environmental values among the American public that have translated to changed behavior and consumer preferences. Government regulation has played a vital role, to be sure, but in the grand scheme of things regulation can be understood as a lagging indicator, often achieving results at needlessly high cost, and sometimes failing completely. Were it not for rising affluence and technological innovation, regulation would have much the same effect as King Canute commanding the tides. INTRODUCTION introduction 3 figure 1 a comparison of crime rate, Welfare, and air Pollution, 1970–2007 -60.0% -40.0% -20.0% 0.0% 20.0% 40.0% 60.0% 1970 1975 1980 1985 1990 1995 2000 2005 2007 % of Population on Welfare Crime Rate (per 100,000 population) Aggregate Emissions Source: FBI Uniform Crime Reports, U.S. Department of Health and Human Services, EPA 4 Almanac of Environmental Trends The American public remains largely unaware of these trends. For most of the last 40 years, public opinion about the environment has been pessimistic, with large majorities—sometimes as high as 70 percent—telling pollsters that they think environmental quality in the United States is getting worse instead of better, and will continue to get worse in the future. One reason for this state of opinion is media coverage, which emphasizes bad news and crisis; another reason is environmental advocacy groups, for whom good news is bad news. As the cliche goes, you can’t sell many newspapers with headlines about airplanes landing safely, or about an oil tanker docking without a spill. Similarly, slow, long-term trends don’t make for good headline copy. INTRODUCTIONintroduction 5Improving Trends:Causes and ConsequencesMost environmental commentary dwells on the laws and regulations we have adoptedto achieve our goals, but it is essential to understand the more important role of technologyand economic growth in bringing about favorable environmental trends. Thebest way to see this is to look at some long-term trends in environmental quality thatpredate modern environmental legislation.To be sure, the earliest phases of the Industrial Revolution led to severe environmentaldegradation. But the inexorable process of technological innovation andthe drive for efficiency began to remedy much of this damage far earlier than iscommonly perceived. In addition, new technologies that we commonly regard as environmentally destructive often replaced older modes of human activity that were far worse by comparison. A good example is the introduction of coal for heating andenergy in Britain.

#### No impact to the environment

Easterbrook ‘95 (Gregg, Distinguished Fellow @ The Fullbright Foundation and Reuters Columnist, “A Moment on Earth,” p. 25, 1995)

In the aftermath of events such as Love Canal or the Exxon Valdez oil spill, every reference to the environment is prefaced with the adjective "fragile." "Fragile environment" has become a welded phrase of the modern lexicon, like "aging hippie" or "fugitive financier." But the notion of a fragile environment is profoundly wrong. Individual animals, plants, and people are distressingly fragile. The environment that contains them is close to indestructible. The living environment of Earth has survived ice ages; bombardments of cosmic radiation more deadly than atomic fallout; solar radiation more powerful than the worst-case projection for ozone depletion; thousand-year periods of intense volcanism releasing global air pollution far worse than that made by any factory; reversals of the planet's magnetic poles; the rearrangement of continents; transformation of plains into mountain ranges and of seas into plains; fluctuations of ocean currents and the jet stream; 300-foot vacillations in sea levels; shortening and lengthening of the seasons caused by shifts in the planetary axis; collisions of asteroids and comets bearing far more force than man's nuclear arsenals; and the years without summer that followed these impacts. Yet hearts beat on, and petals unfold still. Were the environment fragile it would have expired many eons before the advent of the industrial affronts of the dreaming ape. Human assaults on the environment, though mischievous, are pinpricks compared to forces of the magnitude nature is accustomed to resisting.

### 2NC Environment Defense

#### Double bind- either the environment is resilient or its destruction is inevitable

Lazarus ‘10 (Richard J. Lazarus, prof of law at Georgetown University Law Center, “Human Nature, the Laws of Nature, and the Nature of Environmental Law” 24 VA. ENVTL. L.J. 231-261, January 2010)

Some environmental pollution is, of course, unavoidable. Basic human life requires the consumption of the surrounding natural environment. While the First Law of Thermodynamics provides for the conservation of energy (and classical physics for the conservation Of mass),16 the Second Law provides for the inevitable increases in entropy that result from human activity. The term "entropy" refers to the degree of disorder in a system. For instance, as energy is transformed from one form to another, some energy is lost as heat; as the energy decreases, the disorder in the system, and hence the entropy, increases. IS Natural resource destruction and environmental contamination is a form of entropy. Disorder in the ecosystem is increased when common resources such as air and water are polluted. Disorder is likewise increased whenever complex natural resources are broken down into smaller parts. In consuming natural resources to provide the basic necessities of energy, food, shelter, and clothing, humankind necessarily increases entropy in parts of the ecosystem in the form of polluted global resources and destroyed natural resources. Fundamental human biological processes compel it. Human life depends, as life does in many animals, on a series of chemical reactions within the cells of the human body capable of breaking down complex chemical compounds such as glucose into its component parts of carbon dioxide and water.19 The technical name of the necessary biochemical process for the breakdown of glucose is carbohydrate catabolism, which itself consists of three major stages: glycosis, citric acid cycle (known as the "Krebs cycle") and phosphorylation.20 For the purposes of this essay, however, what is important for the nonscientific reader to understand is how these many biochemical processes ultimately depend on the breaking down of more complex and ordered chemical compounds into less complex and more disordered chemical elements. Some natural resource destruction and environmental pollution are necessarily implicated by such processes. As energy is transformed from one form to another, natural resources are consumed and contamination of existing natural resources results. To the extent, moreover, that it is human nature to seek to survive, it is human nature to undertake activities that cause such natural resource destruction and environmental pollution. That central threshold proposition should be noncontroversial. What is no doubt more controversial is whether it is similarly human nature to consume the natural environment in a nonsustainable fashion. Garrett Hardin's classic article "The Tragedy of the Commons," published in Science in 1968,21 offers a disturbing answer to that question. Although Hardin's central thesis is well-known, it is worth emphasis here by repetition: The tragedy of the commons develops in this way. Picture a pasture open to all. It is to be expected that each herdsman will try to keep as many cattle as possible on the commons. Such an arrangement may work reasonably satisfactorily for centuries because tribal wars, poaching, and disease keep the numbers of both man and beast well below the carrying capacity of the land. Finally, however, comes the day of reckoning, that is, the day when the long-desired goal of social stability becomes a reality. At this point, the inherent logic of the commons remorselessly generates tragedy. As a rational being, each herdsman seeks to maximize his gain. Explicitly or implicitly, more or less consciously, he asks, "What is the utility to me of adding one more animal to my herd?" . .. [T]he rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another. .. But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit-in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all.22 Hardin describes his thesis in the limited context of human nature faced with a pasture for animal grazing, but it all too easily extends with potentially catastrophic results to many contemporary environmental settings. The expansive reach of modern technology has turned the once seemingly infinite into the finite. Populations of ocean fisheries can be irreversibly destroyed. Underground aquifers of drinking water supplies can be forever lost. And, of course, potentially destructive global climate change may occur from increased loadings of carbon to the atmosphere from anywhere in the globe. Modern technology also has its limits, as the nation was tragically reminded in the aftermath of Hurricane Katrina this past year. Modern technology allowed for the development of a major metropolitan area where nature, standing alone, would have precluded any such possibility. New Orleans was largely below sea level and existed only by grace of a complex series of levees designed to keep water from flowing along its natural course. Even when properly constructed, such levees are no match, however, for the enormous force of hurricanes like Katrina, especially when thousands of acres of surrounding wetlands, which might have otherwise provided some natural protection from flood waters, are filled to satisfy ever-rising demands for residential, commercial, and industrial development. The upshot: the devastation of a city, the loss of human life, and the destruction of an invaluable aquatic ecosystem by floodwaters laden with toxic contaminants.23 Hardin's central insight regarding the implications of human nature for the natural environment extends much further, however, than to just the potential tragic destruction of resource commons. Each of the individual actors in Hardin's proffered tragedy cause ruin to all because of their inability to look beyond the here and now. They perceive well their own, present short-term needs. They are unable to apprehend and take into account the longerterm implications for individual persons at other times or in other places. Even if presented by information detailing those broader spatial and temporal impacts, they would be unable on their own to temper their own immediate actions as necessary to avoid the resource common's tragic destruction. The risks facing New Orleans have been well-known for decades. Yet, short-term needs always trumped government's willingness and ability to expend the massive resources necessary to guard against long-term, low-risk events, even if of potentially catastrophic consequences.z4 More recent research into behavioral psychology and human cognitive biases offers contemporary confirmation of Hardin's basic thesis. Experimental research shows that humans strongly favor avoidance of immediate costs over less immediate, longerterm, and distant risks. Dubbed by some a "myopia" bias, scientists argue that a strong basic desire to avoid immediate costs is present throughout nature and is deeply rooted in evolutionary biology.25 Others similarly argue that human genetic evolution has systematically favored consumerism and materialism, *i.e.,* the so-called "selfish gene. "26 When, over thousands of years ago, human beings relied on hunting and gathering to get their next meal, long-term planning was of little value. After all, without a means of preserving food, there was little reason to plan. It was better to consume what one found when one found it, especially when there was no assurance that more would be found tomorrow. "Our brains were built for a world in which the currency of the day did lose value over time. Put simply: food rotS."27 "[N]ature created within us a short-sighted set of moral instincts."28 Selfish shortsightedness and materialism became dominant tendencies in the competition with other species for survival. "Rather than leave some precious energy lying around to mold or be stolen, put it in your stomach and have your body convert the food into an energy savings account. "29 The drive for survival arguably extended to the production of heirs-survival by the passing of genes to one's children-and the accumulation of material wealth often seen as a necessary prerequisite for successful reproduction. *3D* And, "even though wealth may not relate to babies in an industrialized world, our instincts come from a time when concerns over material possessions were crucial."31 One commentator has gone so far as to suggest, provocatively, that "[h]uman failings, such as those that some call the Seven Deadly Sins, may all derive from our evolutionary traps. "32

#### No extinction – tech has decoupled humanity for the environment

Science Daily ‘10 (Science Daily, reprinted from materials provided by American Institute of Biological Sciences, "Human Well-Being Is Improving Even as Ecosystem Services Decline: Why?", http://www.sciencedaily.com/releases/2010/09/100901072908.htm, September 1, 2010)

Global degradation of ecosystems is widely believed to threaten human welfare, yet accepted measures of well-being show that it is on average improving globally, both in poor countries and rich ones. A team of authors writing in the September issue of BioScience dissects explanations for this "environmentalist's paradox." Noting that understanding the paradox is "critical to guiding future management of ecosystem services," Ciara Raudsepp-Hearne and her colleagues confirm that improvements in aggregate well-being are real, despite convincing evidence of ecosystem decline. Three likely reasons they identify -- past increases in food production, technological innovations that decouple people from ecosystems, and time lags before well-being is affected -- provide few grounds for complacency, however. Raudsepp-Hearne and her coauthors accept the findings of the influential Millennium Ecosystem Assessment that the capacity of ecosystems to produce many services for humans is now low. Yet they uncover no fault with the composite Human Development Index, a widely used metric that incorporates measures of literacy, life expectancy, and income, and has improved markedly since the mid-1970s. Although some measures of personal security buck the upward trend, the overall improvement in well-being seems robust. The researchers resolve the paradox partly by pointing to evidence that food production (which has increased globally over past decades) is more important for human well-being than are other ecosystem services. They also establish support for two other explanations: that technology and innovation have decoupled human well-being from ecosystem degradation, and that there is a time lag after ecosystem service degradation before human well-being will be affected.

#### Their impact evidence is alarmist and false

Kaleita ‘7 (Amy, PhD, Assistant Professor of Agricultural and Biosystems Engineering @ IA State, “Hysteria’s History: Environmental Alarmism in Context,” <http://www.pacificresearch.org/docLib/20070920_Hysteria_History.pdf>, 2007)

Apocalyptic stories about the irreparable, catastrophic damage that humans are doing to the natural environment have been around for a long time. These hysterics often have some basis in reality, but are blown up to illogical and ridiculous proportions. Part of the reason they’re so appealing is that they have the ring of plausibility along with the intrigue of a horror flick. In many cases, the alarmists identify a legitimate issue, take the possible consequences to an extreme, and advocate action on the basis of these extreme projections. In 1972, the editor of the journal Nature pointed out the problem with the typical alarmist approach: “[Alarmists’] most common error is to suppose that the worst will always happen.”82 But of course, if the worst always happened, the human race would have died out long ago. When alarmism has a basis in reality, the challenge becomes to take appropriate action based on that reality, not on the hysteria. The aftermath of Silent Spring offers examples of both sorts of policy reactions: a reasoned response to a legitimate problem and a knee-jerk response to the hysteria. On the positive side, Silent Springbrought an end to the general belief that all synthetic chemicals in use for purposes ranging from insect control to household cleaning were uniformly wonderful, and it ushered in an age of increased caution on their appropriate use. In the second chapter of her famous book, Carson wrote, “It is not my contention that chemical insecticides must never be used. I do contend that… we have allowed these chemicals to be used with little or no advance investigation of their effect on soil, water, wildlife, and man himself.” Indeed, Carson seemed to advocate reasoned response to rigorous scientific investigation, and in fact this did become the modern approach to environmental chemical licensure and monitoring. An hour-long CBS documentary on pesticides was aired during the height of the furor over Silent Spring. In the documentary, Dr. Page Nicholson, a water-pollution expert with the Public Health Service, wasn’t able to answer how long pesticides persist in water once they enter it, or the extent to which pesticides contaminate groundwater supplies. Today, this sort of information is gathered through routine testing of chemicals for use in the environment. 20 V: Lessons from the Apocalypse Ironically, rigorous investigation was not used in the decision to ban DDT, primarily due to the hysteria Silent Spring generated. In this example, the hysteria took on a life of its own, even trumping the author’s original intent. There was, as we have seen, a more sinister and tragic response to the hysteria generated by Silent Spring. Certain developing countries, under significant pressure from the United States, abandoned the use of DDT. This decision resulted in millions of deaths from malaria and other insect-borne diseases. In the absence of pressure to abandon the use of DDT, these lives would have been spared. It would certainly have been possible to design policies requiring caution and safe practices in the use of supplemental chemicals in the environment, without pronouncing a death sentence on millions of people. A major challenge in developing appropriate responses to legitimate problems is that alarmism catches people’s attention and draws them in. Alarmism is given more weight than it deserves, as policy makers attempt to appease their constituency and the media. It polarizes the debaters into groups of “believers” and “skeptics,” so that reasoned, fact-based compromise is difficult to achieve. Neither of these aspects of alarmism is healthy for the development of appropriate policy. Further, alarmist responses to valid problems risk foreclosing potentially useful responses based on ingenuity and progress. There are many examples from the energy sector where, in the presence of economic, efficiency, or societal demands, the marketplace has responded by developing better alternatives. That is not to say that we should blissfully squander our energy resources; on the contrary, we should be careful to utilize them wisely. But energy-resource hysteria should not lead us to circumvent scientific advancement by cherry-picking and favoring one particular replacement technology at the expense of other promising technologies. Environmental alarmism should be taken for what it is—a natural tendency of some portion of the public to latch onto the worst, and most unlikely, potential outcome. Alarmism should not be used as the basis for policy. Where a real problem exists, solutions should be based on reality, not hysteria.

### 1NC Environment Turn

#### TURN: growing cattle is good for the environment-sequesters carbon and prevents soil erosion

Niman 14 (Nicolette Hahn Niman-livestock rancher, environmental attorney, and author of Righteous Porkchop: Finding a Life and Good Food Beyond Factory Farms (2009). “Actually, Raising Beef Is Good for the Planet” ,[http://www.wsj.com/articles/actually-raising-beef-is-good-for-the-planet-1419030738](http://www.wsj.com/articles/actually-raising-beef-is-good-for-the-planet-1419030738" \t "_blank) ,Dec. 19, 2014 6:12 p.m. ET)

As a longtime vegetarian and environmental lawyer, I once bought into these claims. But now, after more than a decade of living and working in the business—my husband, Bill, founded Niman Ranch but left the company in 2007, and we now have a grass-fed beef company—I’ve come to the opposite view. It isn’t just that the alarm over the environmental effects of beef are overstated. It’s that raising beef cattle, especially on grass, is an environmental gain for the planet. Let’s start with climate change. According to the Environmental Protection Agency, all of U.S. agriculture accounts for just 8% of our greenhouse emissions, with by far the largest share owing to soil management—that is, crop farming. A Union of Concerned Scientists report concluded that about 2% of U.S. greenhouse gases can be linked to cattle and that good management would diminish it further. The primary concern is methane, a potent greenhouse gas. But methane from cattle, now under vigorous study by agricultural colleges around the world, can be mitigated in several ways. Australian research shows that certain nutritional supplements can cut methane from cattle by half. Things as intuitive as good pasture management and as obscure as robust dung beetle populations have all been shown to reduce methane. At the same time, cattle are key to the world’s most promising strategy to counter global warming: restoring carbon to the soil. One-tenth of all human-caused carbon emissions since 1850 have come from soil, according to ecologist Richard Houghton of the Woods Hole Research Center. This is due to tillage, which releases carbon and strips the earth of protective vegetation, and to farming practices that fail to return nutrients and organic matter to the earth. Plant-covered land that is never plowed is ideal for recapturing carbon through photosynthesis and for holding it in stable forms. Most of the world’s beef cattle are raised on grass. Their pruning mouths stimulate vegetative growth as their trampling hoofs and digestive tracts foster seed germination and nutrient recycling. These beneficial disturbances, like those once caused by wild grazing herds, prevent the encroachment of woody shrubs and are necessary for the functioning of grassland ecosystems. Research by the Soil Association in the U.K. shows that if cattle are raised primarily on grass and if good farming practices are followed, enough carbon could be sequestered to offset the methane emissions of all U.K. beef cattle and half its dairy herd. Similarly, in the U.S., the Union of Concerned Scientists estimates that as much as 2% of all greenhouse gases (slightly less than what’s attributed to cattle) could be eliminated by sequestering carbon in the soils of grazing operations. Grass is also one of the best ways to generate and safeguard soil and to protect water. Grass blades shield soil from erosive wind and water, while its roots form a mat that holds soil and water in place. Soil experts have found that erosion rates from conventionally tilled agricultural fields average one to two orders of magnitude greater than erosion under native vegetation, such as what’s typically found on well-managed grazing lands.

### 2NC Cattle KT Food

#### Cattle key to global food supply and don’t take away crop land

Niman 14 (Nicolette Hahn Niman-livestock rancher, environmental attorney, and author of Righteous Porkchop: Finding a Life and Good Food Beyond Factory Farms (2009). “Actually, Raising Beef Is Good for the Planet” ,[http://www.wsj.com/articles/actually-raising-beef-is-good-for-the-planet-1419030738](http://www.wsj.com/articles/actually-raising-beef-is-good-for-the-planet-1419030738" \t "_blank) ,Dec. 19, 2014 6:12 p.m. ET)

Eating beef also stands accused of aggravating world hunger. This is ironic since a billion of the world’s poorest people depend on livestock. Most of the world’s cattle live on land that cannot be used for crop cultivation, and in the U.S., 85% of the land grazed by cattle cannot be farmed, according to the U.S. Beef Board. The bovine’s most striking attribute is that it can live on a simple diet of grass, which it forages for itself. And for protecting land, water, soil and climate, there is nothing better than dense grass. As we consider the long-term prospects for feeding the human race, cattle will rightly remain an essential element.

### 2NC Cattle Turn AT: Water Consumption

#### Cattle don’t consume much water-nutrient value offsets

Niman 14 (Nicolette Hahn Niman-livestock rancher, environmental attorney, and author of Righteous Porkchop: Finding a Life and Good Food Beyond Factory Farms (2009). “Actually, Raising Beef Is Good for the Planet” ,[http://www.wsj.com/articles/actually-raising-beef-is-good-for-the-planet-1419030738](http://www.wsj.com/articles/actually-raising-beef-is-good-for-the-planet-1419030738" \t "_blank) ,Dec. 19, 2014 6:12 p.m. ET)

Nor are cattle voracious consumers of water. Some environmental critics of cattle assert that 2,500 gallons of water are required for every pound of beef. But this figure (or the even higher ones often cited by advocates of veganism) are based on the most water-intensive situations. Research at the University of California, Davis, shows that producing a typical pound of U.S. beef takes about 441 gallons of water per pound—only slightly more water than for a pound of rice—and beef is far more nutritious.

### 1NC- Beef consumption down

#### Meat consumption down now thanks to high prices-especially for beef

Maday 13 (John Maday-Editor Bovine Veterinarian magazine and Managing Editor CattleNetwork, “Meat consumption drops as prices rise”, <http://www.cattlenetwork.com/cattle-news/Meat-consumption-drops-as-prices-rise-193674211.html> ,February 27, 2013)

U.S. meat consumption is down, and beef consumption in particular has lost ground, according to the 2013 “Power of Meat” study. Price is a key reason for the decline as beef prices have climbed through a period of tight consumer budgets, but other factors also are involved. The report, published by the American Meat Institute and the Food Marketing Institute with funding from Cryovac, illustrates the challenges and opportunities the beef industry faces in building sales and market share. According to the survey results, consumers on average prepare 5.1 home-cooked dinners each week, with 3.6 of those including a portion of meat or poultry, down from 4.1 meals last year. Respondents on average eat 0.9 dinners out each week and order out or carry home the remaining dinner. The report does not cover the contents of the restaurant or home-delivery meals. The number of consumers reporting they include meat in at least one dinner per week, at 93 percent, was down just one percentage point from 2012 and has held steadily at 93 or 94 percent since 2009. However, just 69 percent report including meat in dinners at least three times per week, compared with 74 percent last year, and 18 percent include a meat item six times per week compared with 23 percent in 2012. Much of the decline occurred in beef, which is not surprising since beef has experienced larger price increases than pork or poultry in recent years. The report shows retail beef prices increased by 7.4 percent over the past year, and pound sales of beef dropped by 6.3 percent. In contrast, pork prices increased by 0.8 percent and pound sales of pork declined by just 0.3 percent. Chicken prices increased by 4.4 percent, but chicken remains the lowest-priced meat available, and pound sales increased by just under 1 percent.

### 2NC- Beef consumption down

#### Meat prices already high

White 14 (Martha C. White-writes about consumer credit, debt and retail banking for TIME.com, “Meat Prices Expected to Keep Climbing in 2015”, <http://www.nbcnews.com/business/economy/meat-prices-expected-keep-climbing-2015-n276906> , DEC 30 2014)

Meat, it's what's *not* on the menu in 2015. A litany of proteins, including beef, pork and eggs, will be more expensive in 2015 — after their prices already shot up in 2014 — putting them further out of reach of America's working poor. "The need has increased. Food — even the food we buy for here — has increased, but the pay hasn't," said Kathy Pelletier, the food bank coordinator at the Gardiner Food Center at Chrysalis Place, in Gardiner, Maine.

#### Beef prices are particularly high-it’s a luxury

White 14 (Martha C. White-writes about consumer credit, debt and retail banking for TIME.com, “Meat Prices Expected to Keep Climbing in 2015”, <http://www.nbcnews.com/business/economy/meat-prices-expected-keep-climbing-2015-n276906> , DEC 30 2014)

And beef is in a class by itself: "Most retail beef prices, on average, are also at record highs, even after adjusting for inflation," the U.S.D.A.'s Economic Research Service said. It predicts beef and veal prices will end up with an 11 to 12 percent increase for 2014, and will rise by another 5 percent or so in 2015. "Beef is becoming a luxury in the U.S. market at this point," said Altin Kalo, an economist at Steiner Consulting Group. "The days of simply going to the grocery store and buying a few steaks… those are going to be few and far between," he said. Kalo said beef prices will be 90 percent higher in 2015 than they were in 2009, and that will be the new norm for now. "We don't think there's going to be much relief in terms of beef prices," he said.

# ---AT: Add-on’s---

## California AG

### 2NC Food Defense

#### (cross apply the allouche evidence- if not already read, read here)

#### Food shortages won’t cause war

Allouche 11, research Fellow – water supply and sanitation @ Institute for Development Studies, frmr professor – MIT (Jeremy, “The sustainability and resilience of global water and food systems: Political analysis of the interplay between security, resource scarcity, political systems and global trade,” Food Policy, Vol. 36 Supplement 1, p. S3-S8, January)

The question of resource scarcity has led to many debates on whether scarcity (whether of food or water) will lead to conflict and war. The underlining reasoning behind most of these discourses over food and water wars comes from the Malthusian belief that there is an imbalance between the economic availability of natural resources and population growth since while food production grows linearly, population increases exponentially. Following this reasoning, neo-Malthusians claim that finite natural resources place a strict limit on the growth of human population and aggregate consumption; if these limits are exceeded, social breakdown, conflict and wars result. Nonetheless, it seems that most empirical studies do not support any of these neo-Malthusian arguments. Technological change and greater inputs of capital have dramatically increased labour productivity in agriculture. More generally, the neo-Malthusian view has suffered because during the last two centuries humankind has breached many resource barriers that seemed unchallengeable. Lessons from history: alarmist scenarios, resource wars and international relations In a so-called age of uncertainty, a number of alarmist scenarios have linked the increasing use of water resources and food insecurity with wars. The idea of water wars (perhaps more than food wars) is a dominant discourse in the media (see for example Smith, 2009), NGOs (International Alert, 2007) and within international organizations (UNEP, 2007). In 2007, UN Secretary General Ban Ki-moon declared that ‘water scarcity threatens economic and social gains and is a potent fuel for wars and conflict’ (Lewis, 2007). Of course, this type of discourse has an instrumental purpose; security and conflict are here used for raising water/food as key policy priorities at the international level. In the Middle East, presidents, prime ministers and foreign ministers have also used this bellicose rhetoric. Boutrous Boutros-Gali said; ‘the next war in the Middle East will be over water, not politics’ (Boutros Boutros-Gali in Butts, 1997, p. 65). The question is not whether the sharing of transboundary water sparks political tension and alarmist declaration, but rather to what extent water has been a principal factor in international conflicts. The evidence seems quite weak. Whether by president Sadat in Egypt or King Hussein in Jordan, none of these declarations have been followed up by military action. The governance of transboundary water has gained increased attention these last decades. This has a direct impact on the global food system as water allocation agreements determine the amount of water that can used for irrigated agriculture. The likelihood of conflicts over water is an important parameter to consider in assessing the stability, sustainability and resilience of global food systems. None of the various and extensive databases on the causes of war show water as a casus belli. Using the International Crisis Behavior (ICB) data set and supplementary data from the University of Alabama on water conflicts, Hewitt, Wolf and Hammer found only seven disputes where water seems to have been at least a partial cause for conflict (Wolf, 1998, p. 251). In fact, about 80% of the incidents relating to water were limited purely to governmental rhetoric intended for the electorate (Otchet, 2001, p. 18). As shown in The Basins At Risk (BAR) water event database, more than two-thirds of over 1800 water-related ‘events’ fall on the ‘cooperative’ scale (Yoffe et al., 2003). Indeed, if one takes into account a much longer period, the following figures clearly demonstrate this argument. According to studies by the United Nations Food and Agriculture Organization (FAO), organized political bodies signed between the year 805 and 1984 more than 3600 water-related treaties, and approximately 300 treaties dealing with water management or allocations in international basins have been negotiated since 1945 (FAO, 1978 and FAO, 1984). The fear around water wars have been driven by a Malthusian outlook which equates scarcity with violence, conflict and war. There is however no direct correlation between water scarcity and transboundary conflict. Most specialists now tend to agree that the major issue is not scarcity per se but rather the allocation of water resources between the different riparian states (see for example Allouche, 2005, Allouche, 2007 and [Rouyer, 2000] ). Water rich countries have been involved in a number of disputes with other relatively water rich countries (see for example India/Pakistan or Brazil/Argentina). The perception of each state’s estimated water needs really constitutes the core issue in transboundary water relations. Indeed, whether this scarcity exists or not in reality, perceptions of the amount of available water shapes people’s attitude towards the environment (Ohlsson, 1999). In fact, some water experts have argued that scarcity drives the process of co-operation among riparians (Dinar and Dinar, 2005 and Brochmann and Gleditsch, 2006). In terms of international relations, the threat of water wars due to increasing scarcity does not make much sense in the light of the recent historical record. Overall, the water war rationale expects conflict to occur over water, and appears to suggest that violence is a viable means of securing national water supplies, an argument which is highly contestable. The debates over the likely impacts of climate change have again popularised the idea of water wars. The argument runs that climate change will precipitate worsening ecological conditions contributing to resource scarcities, social breakdown, institutional failure, mass migrations and in turn cause greater political instability and conflict (Brauch, 2002 and Pervis and Busby, 2004). In a report for the US Department of Defense, Schwartz and Randall (2003) speculate about the consequences of a worst-case climate change scenario arguing that water shortages will lead to aggressive wars (Schwartz and Randall, 2003, p. 15). Despite growing concern that climate change will lead to instability and violent conflict, the evidence base to substantiate the connections is thin ( [Barnett and Adger, 2007] and Kevane and Gray, 2008).

#### Double bind – either no food scarcity, or there are tons of alt causes

Adeline 13 – food preservation specialist (02/17, “Food Storage: The Solution to Food Shortage,” http://beforeitsnews.com/survival/2013/02/food-storage-the-solution-to-food-shortage-2462712.html)

We humans need food for proper nutrition. In times of crisis, access to a stable food supply is the key to continued survival. In the presence of natural disasters, human conflicts, climate change, and overpopulation, the threat of food shortages and total famine is not as far-fetched as it seems. Preparing long-term food supplies can buffer the effects of these potential catastrophes. The Anatomy of a Catastrophe Many people think that food shortages may be a thing of the past. Thanks to the marvels of modern technology and scientific farming methods, we have a constant and abundant supply of food. It is difficult to imagine how a food shortage can happen – but it is still a possibility. During ancient times, humans hunted and gathered for food. Then a revolution occurred and changed the course of history: we learned how to cultivate the soil, plant crops, and domesticate animals for a stable source of food. Eventually, modern technology has improved farming and fishing techniques, that food production has now become large-scale. People now depend on hard-working farmers and fishermen for their everyday supply of food. But what happens when the harvests are poor? The farmer will keep his produce to feed his own family first – other people are left without food. Such scenario is still possible today because there are man-made disasters and natural calamities that threaten the world’s food supply. For example, a hurricane rages across the country and floods several states. Our access to food is restricted because travel is nearly impossible. To add to that, business establishments like groceries and supermarkets are probably closed down due to the flood as well as a power outage. Some might argue that this is not a real food shortage scenario because the problem is merely logistics: there is food; it is just that we have no access to it. It is true that natural calamities and wars cause a food shortage only temporarily. However, recent studies show that at present, we consume more than we produce. The UN warns that grain reserves are progressively getting lower because of droughts and crop failures in major food producing countries. The famine in Africa may possibly be felt in other parts of the world. This is an emergency situation that requires us to prepare beforehand. We must have a supply of food and water for us to survive.

### 2NR Food Defense

#### Empirics disprove food wars

Salehyan 7 (Idean, Professor of Political Science – University of North Texas, “The New Myth About Climate Change”, Foreign Policy, Summer, http://www.foreignpolicy.com/story/cms.php?story\_id=3922)

First, aside from a few anecdotes, there is little systematic empirical evidence that resource scarcity and changing environmental conditions lead to conflict. In fact, several studies have shown that an abundance of natural resources is more likely to contribute to conflict. Moreover, even as the planet has warmed, the number of civil wars and insurgencies has decreased dramatically. Data collected by researchers at Uppsala University and the International Peace Research Institute, Oslo shows a steep decline in the number of armed conflicts around the world. Between 1989 and 2002, some 100 armed conflicts came to an end, including the wars in Mozambique, Nicaragua, and Cambodia. If global warming causes conflict, we should not be witnessing this downward trend. Furthermore, if famine and drought led to the crisis in Darfur, why have scores of environmental catastrophes failed to set off armed conflict elsewhere? For instance, the U.N. World Food Programme warns that 5 million people in Malawi have been experiencing chronic food shortages for several years. But famine-wracked Malawi has yet to experience a major civil war. Similarly, the Asian tsunami in 2004 killed hundreds of thousands of people, generated millions of environmental refugees, and led to severe shortages of shelter, food, clean water, and electricity. Yet the tsunami, one of the most extreme catastrophes in recent history, did not lead to an outbreak of resource wars. Clearly then, there is much more to armed conflict than resource scarcity and natural disasters.

## Food/Water Scarcity

### 2NC Water Defense

#### No water impact

Allouche ‘11 (Jeremy Allouche, research Fellow, water supply and sanitation @ Institute for Development Studies, former professor – MIT, PhD in International Relations from the Graduate Institute of International Studies [“The sustainability and resilience of global water and food systems: Political analysis of the interplay between security, resource scarcity, political systems and global trade,” Food Policy, Volume 36, Supplement 1, Pages S3–S8, Science Direct, January 2011)

The question of resource scarcity has led to many debates on whether scarcity (whether of food or water) will lead to conflict and war. The underlining reasoning behind most of these discourses over food and water wars comes from the Malthusian belief that there is an imbalance between the economic availability of natural resources and population growth since while food production grows linearly, population increases exponentially. Following this reasoning, neo-Malthusians claim that finite natural resources place a strict limit on the growth of human population and aggregate consumption; if these limits are exceeded, social breakdown, conflict and wars result. Nonetheless, it seems that most empirical studies do not support any of these neo-Malthusian arguments. Technological change and greater inputs of capital have dramatically increased labour productivity in agriculture. More generally, the neo-Malthusian view has suffered because during the last two centuries humankind has breached many resource barriers that seemed unchallengeable. Lessons from history: alarmist scenarios, resource wars and international relations In a so-called age of uncertainty, a number of alarmist scenarios have linked the increasing use of water resources and food insecurity with wars. The idea of water wars (perhaps more than food wars) is a dominant discourse in the media (see for example Smith, 2009), NGOs (International Alert, 2007) and within international organizations (UNEP, 2007). In 2007, UN Secretary General Ban Ki-moon declared that ‘water scarcity threatens economic and social gains and is a potent fuel for wars and conflict’ (Lewis, 2007). Of course, this type of discourse has an instrumental purpose; security and conflict are here used for raising water/food as key policy priorities at the international level. In the Middle East, presidents, prime ministers and foreign ministers have also used this bellicose rhetoric. Boutrous Boutros-Gali said; ‘the next war in the Middle East will be over water, not politics’ (Boutros Boutros-Gali in Butts, 1997, p. 65). The question is not whether the sharing of transboundary water sparks political tension and alarmist declaration, but rather to what extent water has been a principal factor in international conflicts. The evidence seems quite weak. Whether by president Sadat in Egypt or King Hussein in Jordan, none of these declarations have been followed up by military action. The governance of transboundary water has gained increased attention these last decades. This has a direct impact on the global food system as water allocation agreements determine the amount of water that can used for irrigated agriculture. The likelihood of conflicts over water is an important parameter to consider in assessing the stability, sustainability and resilience of global food systems. None of the various and extensive databases on the causes of war show water as a casus belli. Using the International Crisis Behavior (ICB) data set and supplementary data from the University of Alabama on water conflicts, Hewitt, Wolf and Hammer found only seven disputes where water seems to have been at least a partial cause for conflict (Wolf, 1998, p. 251). In fact, about 80% of the incidents relating to water were limited purely to governmental rhetoric intended for the electorate (Otchet, 2001, p. 18). As shown in The Basins At Risk (BAR) water event database, more than two-thirds of over 1800 water-related ‘events’ fall on the ‘cooperative’ scale (Yoffe et al., 2003). Indeed, if one takes into account a much longer period, the following figures clearly demonstrate this argument. According to studies by the United Nations Food and Agriculture Organization (FAO), organized political bodies signed between the year 805 and 1984 more than 3600 water-related treaties, and approximately 300 treaties dealing with water management or allocations in international basins have been negotiated since 1945 ( [FAO, 1978] and [FAO, 1984]). The fear around water wars have been driven by a Malthusian outlook which equates scarcity with violence, conflict and war. There is however no direct correlation between water scarcity and transboundary conflict. Most specialists now tend to agree that the major issue is not scarcity per se but rather the allocation of water resources between the different riparian states (see for example [Allouche, 2005], [Allouche, 2007] and [Rouyer, 2000]). Water rich countries have been involved in a number of disputes with other relatively water rich countries (see for example India/Pakistan or Brazil/Argentina). The perception of each state’s estimated water needs really constitutes the core issue in transboundary water relations. Indeed, whether this scarcity exists or not in reality, perceptions of the amount of available water shapes people’s attitude towards the environment (Ohlsson, 1999). In fact, some water experts have argued that scarcity drives the process of co-operation among riparians ( [Dinar and Dinar, 2005] and [Brochmann and Gleditsch, 2006]). In terms of international relations, the threat of water wars due to increasing scarcity does not make much sense in the light of the recent historical record. Overall, the water war rationale expects conflict to occur over water, and appears to suggest that violence is a viable means of securing national water supplies, an argument which is highly contestable. The debates over the likely impacts of climate change have again popularised the idea of water wars. The argument runs that climate change will precipitate worsening ecological conditions contributing to resource scarcities, social breakdown, institutional failure, mass migrations and in turn cause greater political instability and conflict ( [Brauch, 2002] and [Pervis and Busby, 2004]). In a report for the US Department of Defense, Schwartz and Randall (2003) speculate about the consequences of a worst-case climate change scenario arguing that water shortages will lead to aggressive wars (Schwartz and Randall, 2003, p. 15). Despite growing concern that climate change will lead to instability and violent conflict, the evidence base to substantiate the connections is thin ( [Barnett and Adger, 2007] and [Kevane and Gray, 2008]).

### 2NR Water Defense

#### No water wars

**Barnaby ‘9** (Wendy, editor of People & Science, the magazine published by the British Science Association, “Do nations go to war over water?,”, <http://www.nature.com/nature/journal/v458/n7236/full/458282a.html>, March 19, 2009)

The United Nations warned as recently as last week that climate change harbours the potential for serious conflicts over water. In its World Water Development Report1 of March 2009, it quotes UN Secretary-General Ban Ki-moon noting the risk of water scarcity "transforming peaceful competition into violence". It is statements such as this that gave birth to popular notions of 'water wars'. It is time we dispelled this myth. Countries do not go to war over water, they solve their water shortages through trade and international agreements. Cooperation, in fact, is the dominant response to shared water resources. There are 263 cross-boundary waterways in the world. Between 1948 and 1999, cooperation over water, including the signing of treaties, far outweighed conflict over water and violent conflict in particular. Of 1,831 instances of interactions over international freshwater resources tallied over that time period (including everything from unofficial verbal exchanges to economic agreements or military action), 67% were cooperative, only 28% were conflictive, and the remaining 5% were neutral or insignificant. In those five decades, there were no formal declarations of war over water.

#### Their ev is bad scholarship

**Barnaby ‘9** (Wendy, editor of People & Science, the magazine published by the British Science Association, “Do nations go to war over water?,”, http://www.nature.com/nature/journal/v458/n7236/full/458282a.html, March 19, 2009)

Yet the myth of water wars persists. Climate change, we are told, will cause water shortages. The Intergovernmental Panel on Climate Change estimates that up to 2 billion people may be at risk from increasing water stress by the 2050s, and that this number could rise to 3.2 billion by the 2080s7. Water management will need to adapt. But the mechanisms of trade, international agreements and economic development that currently ease water shortages will persist. Researchers, such as Aaron Wolf at Oregon State University, Corvallis, and Nils Petter Gleditsch at the International Peace Research Institute in Oslo, point out that predictions of armed conflict come from the media and from popular, non-peer-reviewed work. There is something other than water for which shortages, or even the perceived threat of future shortages, does cause war — oil. But the strategic significance of oil is immeasurably higher than that of water. Serious interruptions of oil supplies would stop highly developed economies in their tracks. Oil is necessary for a developed economy, and a developed economy provides for all the needs of its citizens, including water. People in developed economies do not die of thirst. My encounter with Allan's work killed my book. I offered to revise its thesis, but my publishers pointed out that predicting an absence of war over water would not sell.

### 2NC Food Defense

#### (cross apply the allouche evidence- if not already read, read here)

#### Food shortages won’t cause war

Allouche 11, research Fellow – water supply and sanitation @ Institute for Development Studies, frmr professor – MIT (Jeremy, “The sustainability and resilience of global water and food systems: Political analysis of the interplay between security, resource scarcity, political systems and global trade,” Food Policy, Vol. 36 Supplement 1, p. S3-S8, January)

The question of resource scarcity has led to many debates on whether scarcity (whether of food or water) will lead to conflict and war. The underlining reasoning behind most of these discourses over food and water wars comes from the Malthusian belief that there is an imbalance between the economic availability of natural resources and population growth since while food production grows linearly, population increases exponentially. Following this reasoning, neo-Malthusians claim that finite natural resources place a strict limit on the growth of human population and aggregate consumption; if these limits are exceeded, social breakdown, conflict and wars result. Nonetheless, it seems that most empirical studies do not support any of these neo-Malthusian arguments. Technological change and greater inputs of capital have dramatically increased labour productivity in agriculture. More generally, the neo-Malthusian view has suffered because during the last two centuries humankind has breached many resource barriers that seemed unchallengeable. Lessons from history: alarmist scenarios, resource wars and international relations In a so-called age of uncertainty, a number of alarmist scenarios have linked the increasing use of water resources and food insecurity with wars. The idea of water wars (perhaps more than food wars) is a dominant discourse in the media (see for example Smith, 2009), NGOs (International Alert, 2007) and within international organizations (UNEP, 2007). In 2007, UN Secretary General Ban Ki-moon declared that ‘water scarcity threatens economic and social gains and is a potent fuel for wars and conflict’ (Lewis, 2007). Of course, this type of discourse has an instrumental purpose; security and conflict are here used for raising water/food as key policy priorities at the international level. In the Middle East, presidents, prime ministers and foreign ministers have also used this bellicose rhetoric. Boutrous Boutros-Gali said; ‘the next war in the Middle East will be over water, not politics’ (Boutros Boutros-Gali in Butts, 1997, p. 65). The question is not whether the sharing of transboundary water sparks political tension and alarmist declaration, but rather to what extent water has been a principal factor in international conflicts. The evidence seems quite weak. Whether by president Sadat in Egypt or King Hussein in Jordan, none of these declarations have been followed up by military action. The governance of transboundary water has gained increased attention these last decades. This has a direct impact on the global food system as water allocation agreements determine the amount of water that can used for irrigated agriculture. The likelihood of conflicts over water is an important parameter to consider in assessing the stability, sustainability and resilience of global food systems. None of the various and extensive databases on the causes of war show water as a casus belli. Using the International Crisis Behavior (ICB) data set and supplementary data from the University of Alabama on water conflicts, Hewitt, Wolf and Hammer found only seven disputes where water seems to have been at least a partial cause for conflict (Wolf, 1998, p. 251). In fact, about 80% of the incidents relating to water were limited purely to governmental rhetoric intended for the electorate (Otchet, 2001, p. 18). As shown in The Basins At Risk (BAR) water event database, more than two-thirds of over 1800 water-related ‘events’ fall on the ‘cooperative’ scale (Yoffe et al., 2003). Indeed, if one takes into account a much longer period, the following figures clearly demonstrate this argument. According to studies by the United Nations Food and Agriculture Organization (FAO), organized political bodies signed between the year 805 and 1984 more than 3600 water-related treaties, and approximately 300 treaties dealing with water management or allocations in international basins have been negotiated since 1945 (FAO, 1978 and FAO, 1984). The fear around water wars have been driven by a Malthusian outlook which equates scarcity with violence, conflict and war. There is however no direct correlation between water scarcity and transboundary conflict. Most specialists now tend to agree that the major issue is not scarcity per se but rather the allocation of water resources between the different riparian states (see for example Allouche, 2005, Allouche, 2007 and [Rouyer, 2000] ). Water rich countries have been involved in a number of disputes with other relatively water rich countries (see for example India/Pakistan or Brazil/Argentina). 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The argument runs that climate change will precipitate worsening ecological conditions contributing to resource scarcities, social breakdown, institutional failure, mass migrations and in turn cause greater political instability and conflict (Brauch, 2002 and Pervis and Busby, 2004). In a report for the US Department of Defense, Schwartz and Randall (2003) speculate about the consequences of a worst-case climate change scenario arguing that water shortages will lead to aggressive wars (Schwartz and Randall, 2003, p. 15). Despite growing concern that climate change will lead to instability and violent conflict, the evidence base to substantiate the connections is thin ( [Barnett and Adger, 2007] and Kevane and Gray, 2008).

#### Double bind – either no food scarcity, or there are tons of alt causes

Adeline 13 – food preservation specialist (02/17, “Food Storage: The Solution to Food Shortage,” http://beforeitsnews.com/survival/2013/02/food-storage-the-solution-to-food-shortage-2462712.html)

We humans need food for proper nutrition. In times of crisis, access to a stable food supply is the key to continued survival. In the presence of natural disasters, human conflicts, climate change, and overpopulation, the threat of food shortages and total famine is not as far-fetched as it seems. Preparing long-term food supplies can buffer the effects of these potential catastrophes. The Anatomy of a Catastrophe Many people think that food shortages may be a thing of the past. Thanks to the marvels of modern technology and scientific farming methods, we have a constant and abundant supply of food. It is difficult to imagine how a food shortage can happen – but it is still a possibility. During ancient times, humans hunted and gathered for food. Then a revolution occurred and changed the course of history: we learned how to cultivate the soil, plant crops, and domesticate animals for a stable source of food. Eventually, modern technology has improved farming and fishing techniques, that food production has now become large-scale. People now depend on hard-working farmers and fishermen for their everyday supply of food. But what happens when the harvests are poor? The farmer will keep his produce to feed his own family first – other people are left without food. Such scenario is still possible today because there are man-made disasters and natural calamities that threaten the world’s food supply. For example, a hurricane rages across the country and floods several states. Our access to food is restricted because travel is nearly impossible. To add to that, business establishments like groceries and supermarkets are probably closed down due to the flood as well as a power outage. Some might argue that this is not a real food shortage scenario because the problem is merely logistics: there is food; it is just that we have no access to it. It is true that natural calamities and wars cause a food shortage only temporarily. However, recent studies show that at present, we consume more than we produce. The UN warns that grain reserves are progressively getting lower because of droughts and crop failures in major food producing countries. The famine in Africa may possibly be felt in other parts of the world. This is an emergency situation that requires us to prepare beforehand. We must have a supply of food and water for us to survive.

### 2NR Food Defense

#### Empirics disprove food wars

Salehyan 7 (Idean, Professor of Political Science – University of North Texas, “The New Myth About Climate Change”, Foreign Policy, Summer, http://www.foreignpolicy.com/story/cms.php?story\_id=3922)

First, aside from a few anecdotes, there is little systematic empirical evidence that resource scarcity and changing environmental conditions lead to conflict. In fact, several studies have shown that an abundance of natural resources is more likely to contribute to conflict. Moreover, even as the planet has warmed, the number of civil wars and insurgencies has decreased dramatically. Data collected by researchers at Uppsala University and the International Peace Research Institute, Oslo shows a steep decline in the number of armed conflicts around the world. Between 1989 and 2002, some 100 armed conflicts came to an end, including the wars in Mozambique, Nicaragua, and Cambodia. If global warming causes conflict, we should not be witnessing this downward trend. Furthermore, if famine and drought led to the crisis in Darfur, why have scores of environmental catastrophes failed to set off armed conflict elsewhere? For instance, the U.N. World Food Programme warns that 5 million people in Malawi have been experiencing chronic food shortages for several years. But famine-wracked Malawi has yet to experience a major civil war. Similarly, the Asian tsunami in 2004 killed hundreds of thousands of people, generated millions of environmental refugees, and led to severe shortages of shelter, food, clean water, and electricity. Yet the tsunami, one of the most extreme catastrophes in recent history, did not lead to an outbreak of resource wars. Clearly then, there is much more to armed conflict than resource scarcity and natural disasters.

## Warming

### 2NC Warming Defense

#### Not rapid

McGrath ’13 (Matt McGrath, Environment correspondent, BBC News, “Climate slowdown means extreme rates of warming 'not as likely'”, http://www.bbc.co.uk/news/science-environment-22567023, May 19, 2013)

Scientists say the recent downturn in the rate of global warming will lead to lower temperature rises in the short-term. Since 1998, there has been an unexplained "standstill" in the heating of the Earth's atmosphere. Writing in Nature Geoscience, the researchers say this will reduce predicted warming in the coming decades. But long-term, the expected temperature rises will not alter significantly. “Start Quote The most extreme projections are looking less likely than before” Dr Alexander Otto University of Oxford The slowdown in the expected rate of global warming has been studied for several years now. Earlier this year, the UK Met Office lowered their five-year temperature forecast. But this new paper gives the clearest picture yet of how any slowdown is likely to affect temperatures in both the short-term and long-term. An international team of researchers looked at how the last decade would impact long-term, equilibrium climate sensitivity and the shorter term climate response. Transient nature Climate sensitivity looks to see what would happen if we doubled concentrations of CO2 in the atmosphere and let the Earth's oceans and ice sheets respond to it over several thousand years. Transient climate response is much shorter term calculation again based on a doubling of CO2. The Intergovernmental Panel on Climate Change reported in 2007 that the short-term temperature rise would most likely be 1-3C (1.8-5.4F). But in this new analysis, by only including the temperatures from the last decade, the projected range would be 0.9-2.0C. Ice The report suggests that warming in the near term will be less than forecast "The hottest of the models in the medium-term, they are actually looking less likely or inconsistent with the data from the last decade alone," said Dr Alexander Otto from the University of Oxford. "The most extreme projections are looking less likely than before."

#### We adapt

Mendelsohn ‘9 – Robert O. Mendelsohn 9, the Edwin Weyerhaeuser Davis Professor, Yale School of Forestry and Environmental Studies, Yale University, June 2009, “Climate Change and Economic Growth,” online: <http://www.growthcommission.org/storage/cgdev/documents/gcwp060web.pdf>

These statements arelargely alarmist and misleading. Although climate change is a serious problem that deserves attention, society’s immediate behavior has an extremely low probability of leading to catastrophic consequences**.** The science and economicsof climate change is quite clear that emissions over the next few decades will lead to onlymild consequences. The severe impacts predicted by alarmists require a century (or two in the case of Stern 2006) of no mitigation. Many of the predicted impacts assume there will be no or little adaptation. The net economic impacts from climate change over the next 50 years will be small regardless. Most of the more severe impacts will take more than a century or even a millennium to unfold and many of these **“**potential” impacts will never occur because people will adapt. It is not at all apparent that immediate and dramatic policies need to be developed to thwart long‐range climate risks. What is needed are long‐run balanced responses.

### 2NR Warming Defense

#### Archeology disproves environmental extinction

AFP ’13 (Agence France-Presse, “Climate change boosted human development: study”, May 21, 2013)

PARIS — Early humans living in South Africa made cultural and industrial leaps in periods of wetter weather, said a study Tuesday that compared the archaeological record of Man's evolution with that of climate change. Anatomically modern humans, Homo sapiens, first made their appearance in Africa during the Middle Stone Age which lasted from about 280,000 to 30,000 years ago. Some of the earliest examples of human culture and technology are found in South Africa -- with fossil evidence of innovative spurts whose cause has left scientists puzzled. The record reveals that a notable period of human advancement occurred about 71,500 years ago, and another between 64,000 and 59,000 years ago. Examples of such innovation include the use of symbols, linked to the development of complex language, in engravings, the manufacture and use of stone tools and personal adornment with shell jewellery. "We show for the first time that the timing of... these periods of innovation coincided with abrupt climate change," study co-author Martin Ziegler of the Cardiff University School of Earth and Ocean Sciences told AFP of the study in the journal Nature Communications. "We found that South Africa experienced wetter conditions during these periods of cultural advance. "At the same time, large parts of sub-Saharan Africa experienced drier conditions, so that South Africa potentially acted as a refugium for early humans." Ziegler and a team reconstructed the South African climate over the past 100,000 years using a sediment core drilled out from the country's east coast. The core shows changes in river discharge and rainfall. "It offers for the first time the possibility to compare the archaeological record with a record of climate change over the same period and thus helps us to understand the origins of modern humans," Ziegler said by email. Co-author Chris Stringer of London's Natural History Museum said the findings supported the view that population growth fuelled cultural advancement through increased human interactions. "Such climate-driven pulses in southern Africa and more widely were probably fundamental to the origin of key elements of modern human behaviour in Africa and to the subsequent dispersal of Homo sapiens from its ancestral homeland," concluded the study.

#### Warming won’t cause extinction

Barrett ‘7 (Scott, Professor of natural resource economics @ Columbia University, “Why Cooperate? The Incentive to Supply Global Public Goods, introduction”, 2007)

First, climate change does not threaten the survival of the human species.5 If unchecked, it will cause other species to become extinction (though biodiversity is being depleted now due to other reasons). It will alter critical ecosystems (though this is also happening now, and for reasons unrelated to climate change). It will reduce land area as the seas rise, and in the process displace human populations. “Catastrophic” climate change is possible, but not certain. Moreover, and unlike an asteroid collision, large changes (such as sea level rise of, say, ten meters) will likely take centuries to unfold, giving societies time to adjust. “Abrupt” climate change is also possible, and will occur more rapidly, perhaps over a decade or two. However, abrupt climate change (such as a weakening in the North Atlantic circulation), though potentially very serious, is unlikely to be ruinous. Human-induced climate change is an experiment of planetary proportions, and we cannot be sur of its consequences. Even in a worse case scenario, however, global climate change is not the equivalent of the Earth being hit by mega-asteroid. Indeed, if it were as damaging as this, and if we were sure that it would be this harmful, then our incentive to address this threat would be overwhelming. The challenge would still be more difficult than asteroid defense, but we would have done much more about it by now.

# Miscellaneous

## Pork DA

### Link

#### Plan kills the pork industry

**NPPC No Date** (National Pork Producers Council, “Mandatory Animal Identification System”, <http://www.nppc.org/issues/animal-health-safety/mandatory-animal-identification-system/> )

A mandatory animal identification system plays three vital roles for America’s pork producers and consumers: strengthens the security of the nation’s livestock industry, especially in the event of an intentional introduction of **a pathogen or toxin** that could affect animal health; provides U.S. pork producers and federal and state animal health officials with improved tools to manage swine herd health through disease surveillance, control and eradication programs; and enables U.S. pork producers to maintain and promote access to international markets**, which are critical to the continued viability of the pork industry.**