# 1AC

## 1AC—Plan

### The United States federal government should restore funding for the National Oceanic and Atmospheric Administration’s Joint Polar Satellite System.

## 1AC—Hegemony Advantage

### Contention One: Hegemony

### We will isolate three internal links—

### *First is COMPETITIVENESS*—the plan is key to national security and global competitiveness.

McEntee 11 — Christine W. McEntee, Executive Director and Chief Executive of the American Geophysical Union—a not-for-profit society of Earth and space scientists with more than 61,000 members worldwide, 2011 (“The importance of the weather satellite,” Letter to the Editor, *Washington Post*, July 3rd, Available Online at http://www.washingtonpost.com/opinions/the-importance-of-the-weather-satellite/2011/06/30/AGDTPuwH\_story.html, Accessed 07-31-2011)

As Stephen Stromberg pointed out in his June 30 PostPartisan [“Don’t gut the Weather Service”], allowing funding for the National Oceanic and Atmospheric Administration’s Joint Polar Satellite System (JPSS) to fall victim to political debate will negatively affect weather forecasting abilities.

What he did not mention were the far-reaching consequences of such a scenario. The satellite’s data will continue to help military planners deploy troops; emergency managers fight wildfires and respond to other disasters; and farmers to plan for optimum planting. He also did not mention that this penny-wise, pound-foolish budgeting approach doesn’t just stop with JPSS funding. Results from cuts to science funding could also limit our ability to assess water quality and mitigate the impacts of natural disasters.

We need to reduce the national debt, but it would be a mistake to do that by sacrificing programs that protect public safety and national security and support global competitiveness.

### Competitiveness is key to hegemony.

Tellis 9 (Ashley, Senior Associate at the Carnegie Endowment for International Peace, “Preserving Hegemony: The Strategic Tasks Facing the United States, Global Asia, accessed on July 14, 2011, <http://www.globalasia.org/Back_Issues/Volume_4_Number_1_Spring_2009/Preserving_Hegemony_The_Strategic_Tasks_Facing_the_United_States.html>, KK)

Second, and equally importantly, who wins in the ensuing struggle — whether that struggle is short or long, peaceful or violent — is as important as by how much. This is particularly relevant because the past record unerringly confirms that the strongest surviving state in the winning coalition usually turns out to be the new primate after the conclusion of every systemic struggle. Both Great Britain and the United States secured their respective ascendancies in this way. Great Britain rose through the wreckage of the wars with Louis XIV and with Napoleon. The United States did so through the carnage of the hot wars with Hitler and Hirohito, finally achieving true hegemony through the detritus of the Cold War with Stalin and his successors. If the United States is to sustain this hard-earned hegemony over the long term, while countering as necessary a future Chinese challenge should it emerge, Washington will need to amass the largest differential in power relative not only to its rivals but also to its friends and allies. Particularly in an era of globalization, this objective cannot be achieved without a conscious determination to follow sensible policies that sustain economic growth, minimize unproductive expenditures, strengthen the national innovation system, maintain military capabilities second to none and enjoin political behaviors that evoke the approbation of allies and neutral states alike.

The successful pursuit of such policies will enable the United States to cope more effectively with near-term challenges as well, including the war on terrorism and managing threatening regional powers, and will ineluctably require — to return full circle — engaging the central tasks identified earlier as facing the new US administration. These tasks involve the need to satisfactorily define the character of desirable US hegemony, the need for sound policies that will renew the foundations of US strength, and the need to recover the legitimacy of US purposes and actions. What is clearly implied is that the principal burdens facing the next US president transcend Asia writ large. The success of these pursuits, however, will inevitably impact Asia in desirable ways, even as the resolution of several specifically Asian problems would invariably contribute to the conclusive attainment of these larger encompassing goals.

### *Second is MILITARY READINESS*—NOAA is the only way to get weather data for global missions.

Conathan 11 — Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at http://www.americanprogress.org/issues/2011/02/noaa\_funding.html, Accessed 07-30-2011)

NOAA’s polar-orbiting satellites are America’s only source of weather and climate data for vast areas of the globe, including areas key to overseas military operations. Their data are integral to planning deployments of troops and aircraft—certain high-atmosphere wind conditions, for example, can prohibit mid-air refueling operations.

### Readiness is key to deterrence and conflict containment—it prevents *global war*.

Felzenberg and Gray 11 [Alvin S. Felzenberg, Professorial Lecturer at The Elliott School of International Affairs at George Washington University, Presidential Historian and Adjunct Faculty Member at the Annenberg School for Communication at the University of Pennsylvania, former Fellow at the Institute of Politics at the John F. Kennedy School of Government at Harvard University, served as Principal Spokesman for the 9/11 Commission, holds a Ph.D. in Politics from Princeton University**,---** and Alexander B. Gray, Student at the Elliott School of International Affairs at George Washington University and the War Studies Department of King’s College, London, 01-03-2011 “The New Isolationism,” The National Review, January 3rd, Available Online at http://www.nationalreview.com/articles/print/256150, Accessed 01-03-2011]

Anything Reps. Ron Paul (R., Tex.) and Barney Frank (D., Mass.) both support should give the rest of us pause. Their proposal to slash defense spending by $1 trillion over a decade — only the most recent joint effort by the new isolationists on the Left and Right to curtail American military strength around the world — is as foolhardy as it is unrealistic. Were such a policy enacted, the nation and the world would be set on a path not toward peace, but toward instability, conflict, and a lessening of freedom in many corners of the world.

As the deteriorating situation on the Korean peninsula reminds us, the security concerns of the United States do not disappear in times of economic distress. America’s interests, whether economic, strategic, diplomatic, or moral, cannot be set aside when Congress tires of them. The United States and the world paid a severe price for the ostrich-like behavior too many democratic nations exhibited during the 1920s and 1930s. Reps. Paul and Frank appear determined to repeat this mistake.

The United States continues to face an array of global challenges that require a modern, technologically superior military. It is very much in the interests of the United States to uphold the territorial integrity and economic independence of much of Asia, maintain the security of critical waterways such as the Strait of Hormuz, and protect American trade from pirates and terrorists worldwide. Rather than regard the nation’s defenses as a ready source of money available for diversion to domestic concerns, Congress and the president should identify the challenges America faces and assure that its military is able to meet them.

At its core, the Frank-Paul effort appears to be an attempt to prevent repetitions of wars the two congressmen regard as either unnecessary or faultily executed. But the United States has broader and more important long-run national-security concerns than Iraq and Afghanistan. As the U.S. became bogged down in those two countries, it began feeling strains elsewhere, precipitated by China, Russia, and potentially toxic menaces such as Iran and Venezuela.

Counterinsurgency warfare and Predator-drone strikes against transnational terrorists certainly defined much of the last decade. But the next decade will witness increasing competition among nation-states for control of valuable resources and the exertion of influence worldwide.

Russia, through its control of vital energy pipelines, seeks to draw Western Europe more closely into its orbit, thereby weakening the latter’s historical ties to the United States. By taking a similar approach to Ukraine, Kyrgyzstan, Georgia, the Baltics, and Moldova, Russia is on the verge of re-colonizing economically many of its former satellites.

China, while continuing to upgrade its naval capabilities, grows increasingly assertive. In pursuit of its own Monroe Doctrine for East Asia, Beijing has proclaimed its sovereignty over the entire South China Sea, menaced neighbors from India to Vietnam, used its economic muscle to intimidate Japan, and increased its threats against Taiwan. China’s leaders have been studying the writings of the 19th-century American naval theorist Alfred Thayer Mahan, who demonstrated the connection between sea power and economic strength. At the turn of the last century, Theodore Roosevelt found in Mahan the blueprint for achieving unprecedented American influence in world affairs. His efforts to build both a strong navy and a sound economy ushered in the “American century,” the period in which the United States became a force for good throughout the world and a beacon of hope for those yearning to breathe free.

In pursuing a “blue-water” ocean-going navy capable of supporting their expanding global economic ambitions, the Chinese are acting from a desire to defend their nation’s trade and access to world markets, with a focus on energy supplies. It is critical that the Chinese — who are closely studying both Mahan’s writings and the history of the Monroe Doctrine — and Americans who see Chinese hegemony over Asia as either inevitable or a price they are willing to pay in exchange for slashing defense spending not draw the wrong lessons from history. Both sides should understand that it was not American might that gave the Monroe Doctrine force, but the then all-powerful British navy. For much of the 19th century, Great Britain had reasons of its own for keeping other nations out of the Western Hemisphere and for wanting to see the United States develop internally.

If appropriately funded, the United States Navy has the capacity to play a similar role in China’s rise — perhaps, in the process, influencing how China develops. Should China conclude that the United States intends to remain a visible and active presence in the region, it will respond accordingly. Acting together, the two nations might embark on a series of cooperative ventures designed to help assure a steady flow of trade and an unimpeded exchange of people, goods, and ideas. They can also work together to combat a rise in piracy and terrorism in Asia and elsewhere and to respond to humanitarian crises, like the 2004 Indian Ocean tsunami. For its part, China, should it continue to hold North Korea in check, will achieve some of the status it seeks as a rising world power, with commensurate influence on the world stage.

Should China conclude, on the other hand, that the United States intends to turn inward, it may grow even more ambitious and assertive in its region and beyond, potentially menacing world peace. Its smaller neighbors nervously wait to see how the United States will respond to China’s growing assertiveness. Should they come to believe that the U.S. is in retreat, they will make their own accommodations with Beijing. That result would wreak irreparable damage both to America’s economy and to its security.

Messrs. Frank and Paul and their supporters have taken it into their minds that a reduced American presence in world affairs, particularly where the military is involved, would be a good thing. They had better think again: World politics, like nature, is hardly prone to respect vacuums. Iran and Venezuela remain as bellicose and destabilizing as ever, in spite of two years of Obama “engagement.” Iran squats beside the Strait of Hormuz, through which much of the world’s energy supply travels. Iran has also, the original Monroe Doctrine be damned, extended its military cooperation with Hugo Chávez’s authoritarian regime. Evidence is strong that Venezuela is providing sanctuary for Hezbollah terrorists in South America. The alliance of these two anti-American and increasingly menacing states could pose a threat to the United States of a kind that would make us nostalgic for the Cuban Missile Crisis.

Faced with such challenges, the United States can ill afford military retrenchment as advocated by the new isolationists. While waste in the Pentagon’s budget can and should be cut, the new isolationists want to do it with a chainsaw when a scalpel is needed. In the last decade, the U.S. Navy’s fleet has shrunk to its smallest size since the 19th century, just as potential rivals such as China have not only expanded theirs but have begun to target perceived American maritime vulnerabilities. The U.S. Air Force is fielding an aging and shrinking force, while China is developing an advanced fighter for sale to adversaries of America, including Iran.

A world in which the United States willingly ceded power and influence would both be more dangerous and prove less receptive to values that most Americans share, such as respect for human rights, the need to restrain governments through the rule of law, and the sanctity of contracts. By reducing its military strength to alarmingly low levels, the United States would create dangerous power vacuums around the world that other nations, with entirely different values, would be only too happy to fill. That, as history shows, would make war more, rather than less, likely. Congress and the president would do well to reflect on those lessons and remember their duty to provide a dominant American military presence on land, at sea, and in the air.

### *Third is SHIPPING*—NOAA is the lynchpin of the shipping industry—key to *navigation*.

US Commission on Ocean Policy 4 [“SUPPORTING MARINE COMMERCE AND TRANSPORTATION” 2004; <http://www.oceancommission.gov/documents/prepub_report/chapter13.pdf> //STRONG]

Natural disasters, labor disputes, terrorist attacks, ship collisions, spills of hazardous materials, and many other human and naturally caused events can disrupt the flow of marine cargo and passenger services, causing severe economic and social ramifications nationally and internationally. Diminished port capacity might also affect vital military operations. A strategic scenario of a terrorist event conducted in 2002 demonstrated the potential for $60 billion in losses in the case of a twelve-day closure of all ports in the nation.15 Labor disputes can also present significant interruptions in port operations. A ten-day lockout of workers at twenty-nine West Coast ports in October 2002 caused an estimated $15.6 billion in losses to the national economy, and demonstrated the cascading consequences of a major port shutdown.16

### The shipping industry is the backbone of global commerce.

Lautenbacher 6 [VADM Conrad C. Lautenbacher, Jr., USN (Ret.) Under Secretary of Commerce for Oceans and Atmosphere NOAA Administrator “World Maritime Technology Conference” 🡨 spoken March 6, 2006; [www.pco.noaa.gov/PPTs/IMarEST.ppt](http://www.pco.noaa.gov/PPTs/IMarEST.ppt) //STRONG]

I would like to start with talking about the importance of Marine Technology in supporting global trade and how we all must work to making sure the necessary navigation products and services are in place to support the increased use of the intermodal transportation network. We are continuously improving our ability to providing accurate and timely navigation products and services to the our country’s maritime and intermodal transportation network. We have a responsibility to both protect economic investment as well as protecting environmental integrity and peoples lives. So I would also like to talk about how we were recently tested in these responsibilities during and after the recent Hurricanes Rita and Katrina and worked to bring the region back into the Global Economy **Economic Importance of Marine Transportation Systems:** The Marine Transportation System was critical to the start of the United States as a nation and remains today the backbone of the country’s commerce Our Nation’s ports support nearly $2 trillion dollars in U.S. waterborne foreign trade. (Source: American Association of Port Authorities) Our Nation’s ports and waterways support the annual movement of more than 2.5 billion tons of domestic and international commerce. (Source – Maritime Administration) Our Nation’s coastal and inland waterways support our commerce, our recreation, and our national security. U.S. water carriers annually generate a gross output of $32 billion, purchase $24 billion in goods and services from other industries, and employ more than 57,000 workers. Public ports generate significant local and regional economic growth, directly creating jobs for more than 1 million Americans, and indirectly creating jobs for another 3.8 million. Waterborne commerce also generates more than $16 billion in federal, state, and local taxes. (Source: IMO) An example of how observations are affecting management decision today, we only have to look to the Coastal Ocean Observation System, a future component of GEOSS. In addition to providing Hurricane Forecast Models and Warnings prior to the Hurricanes landing, NOAA also worked to assist in the disaster relief and facilitated the reopening of the area’s Marine Transportation System. Hurricanes Katrina and Rita recently put NOAA to the test in using all of our technological and human knowledge to reopen the Gulf Coast area for international commerce. With the Mississippi River mouth closed to international traffic, grain from the Midwest could not be shipped out to Africa and Europe. Chiquita Bananas had to reroute shipment of bananas and other fresh produce to other areas. 25% of its imports went through Gulfport Mississippi. Half of the Folger’s Brand of coffee comes out of New Orleans The offshore oil and gas transportation infrastructure at Port Fourchon, including pipelines, processing facilities and tanker traffic were all shut in causing severe spikes in gasoline prices. Just one Trucking Company, Yellow Roadway lost a million dollars a day with no shipments coming in or out of New Orleans. NOAA deployed its resources, including response teams, hydrographic survey vessels, and state-of-the-art technologies, as part of a large scale federally-coordinated response effort. NOAA Navigation Response Teams directly contributed to relief efforts and the resumption of maritime commerce. NOAA NRTs provided critical information, supporting Coast Guard efforts to rapidly assess and reopen waterways, which allowed maritime-based relief efforts into impacted communities. The field teams conduct hazardous obstructions surveys and mapping support through out the Atlantic Seaboard, Pacific Coast, Great Lakes and the Gulf of Mexico. The field units operate in a 365 day a year environment to support NOAA's mission of promoting safe maritime navigation. The NRTs stand ready to respond to natural and manmade incidents in our waterways; their surveys enable authorities to reopen ports and channels to navigation after accidents and weather events. NOAA conducted damage assessment flights, collecting over 8300 images, covering 1600 miles of linear flight lines. The images captured include the coastal areas of Alabama, Mississippi, and Louisiana, including the ports of Mobile, Pascagoula, Gulfport, New Orleans, and Port Fourchon. Thirty-two tide stations operated by NOAA’s National Water Level Observation Network along the Gulf Coast disseminated storm tide conditions in real and near real-time as Hurricanes Katrina and Rita approached and made landfall. These stations were supplemented by thirty-one partner stations operated to NWLON standards, doubling the storm tide observing capacity in the Gulf, and demonstrating the value of an Integrated Ocean Observing System. The Houston/Galveston PORTS® provided important navigational information following Rita required by ship masters and pilots to avoid collisions and groundings. NOAA’s Continuously Operating Reference Stations (CORS) were operating in the area affected by Katrina, and collected data to support remote sensing missions and other GPS applications such as surveying and mapping activities associated with the post-hurricane recovery work. In the wake of Hurricane Katrina, NOAA is continuing providing invaluable scientific support to the our Coast Guard and Environmental Protection Agency and the States of Louisiana, Mississippi, and Alabama in their response efforts. NOAA Restoration Teams are working with state and federal partners to assess the impacts to natural resources and to plan for restoration, within the context of the broader recovery efforts. NOAA expertise is critical to mitigate harm, provide critical information for allocation of response assets, restore adverse effects on natural resources, aid planning and response decision-making, and document damages. We continue to monitor the ecosystem in the area. We are monitoring water quality and tissue samples from fish and bivalves. In an area known for being a dead zone, where we thought that due to the massive pollution associated with hazardous spills, we were finding some good news. We were able to open up the fisheries and that is another step in rebuilding the gulf coast economy. PHOTO Bottom Left: NCCOS Biologist is using a net tow to test for toxic phytoplankton (HAB). PHOTO Bottom Right: Bert and Emily of NRT 4 at Port Allen Nowhere is the interconnections of our globe more evident than in marine commerce and transportations. We are bridging the gap between economic development and those who use oceans to transport goods to the global economy. These are global concerns as we expand our economic integration and need to observe and connect systems to provide information from multiple data sources.

### It’s *ninety percent* of global trade.

Conathan 11 — Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at http://www.americanprogress.org/issues/2011/02/noaa\_funding.html, Accessed 07-30-2011)

Consider the following numbers: \* The $700 billion maritime commerce industry moves more than 90 percent of all global trade, with arrival and departure of quarter-mile long container ships timed to the minute to maximize revenue and efficiency. Shipping companies rely on accurate forecasts to set their manifests and itineraries. \* Forecasting capabilities are particularly strained at high latitudes and shippers have estimated that the loss of satellite monitoring capabilities could cost them more than half a billion dollars per year in lost cargo and damage to vessels from unanticipated heavy weather.

### Trade *solves war*—it creates relationships that cement peace.

Boudreux 6 — Donald J. Boudreux, Chairman of the economics department at George Mason University, 11/20/06, “Want world peace? Support free trade,” http://www.csmonitor.com/2006/1120/p09s02-coop.html

During the past 30 years, Solomon Polachek, an economist at the State University of New York at Binghamton, has researched the relationship between trade and peace. In his most recent paper on the topic, he and co-author Carlos Seiglie of Rutgers University review the massive amount of research on trade, war, and peace. They find that "the overwhelming evidence indicates that trade reduces conflict." Likewise for foreign investment. The greater the amounts that foreigners invest in the United States, or the more that Americans invest abroad, the lower is the likelihood of war between America and those countries with which it has investment relationships. Professors Polachek and Seiglie conclude that, "The policy implication of our finding is that further international cooperation in reducing barriers to both trade and capital flows can promote a more peaceful world." Columbia University political scientist Erik Gartzke reaches a similar but more general conclusion: Peace is fostered by economic freedom. Economic freedom certainly includes, but is broader than, the freedom of ordinary people to trade internationally. It includes also low and transparent rates of taxation, the easy ability of entrepreneurs to start new businesses, the lightness of regulations on labor, product, and credit markets, ready access to sound money, and other factors that encourage the allocation of resources by markets rather than by government officials. Professor Gartzke ranks countries on an economic-freedom index from 1 to 10, with 1 being very unfree and 10 being very free. He then examines military conflicts from 1816 through 2000. His findings are powerful: Countries that rank lowest on an economic-freedom index - with scores of 2 or less - are 14 times more likely to be involved in military conflicts than are countries whose people enjoy significant economic freedom (that is, countries with scores of 8 or higher). Also important, the findings of Polachek and Gartzke improve our understanding of the long-recognized reluctance of democratic nations to wage war against one another. These scholars argue that the so-called democratic peace is really the capitalist peace. Democratic institutions are heavily concentrated in countries that also have strong protections for private property rights, openness to foreign commerce, and other features broadly consistent with capitalism. That's why the observation that any two democracies are quite unlikely to go to war against each other might reflect the consequences of capitalism more than democracy. And that's just what the data show. Polachek and Seiglie find that openness to trade is much more effective at encouraging peace than is democracy per se. Similarly, Gartzke discovered that, "When measures of both economic freedom and democracy are included in a statistical study, economic freedom is about 50 times more effective than democracy in diminishing violent conflict." These findings make sense. By promoting prosperity, economic freedom gives ordinary people a large stake in peace. This prosperity is threatened during wartime. War almost always gives government more control over resources and imposes the burdens of higher taxes, higher inflation, and other disruptions of the everyday commercial relationships that support prosperity. When commerce reaches across political borders, the peace-promoting effects of economic freedom intensify. Why? It's bad for the bottom line to shoot your customers or your suppliers, so the more you trade with foreigners the less likely you are to seek, or even to tolerate, harm to these foreigners.

### This also *spills over* to other industries—kills jobs and the overall economy.

US Commission on Ocean Policy 4 [“SUPPORTING MARINE COMMERCE AND TRANSPORTATION” 2004; <http://www.oceancommission.gov/documents/prepub_report/chapter13.pdf> //STRONG]

The U.S. marine transportation system is the nation’s link to global commerce and an essential and growing component of the national economy. The movement of manufacturing jobs from the United States to overseas, the nation’s dependence on raw materials from other countries, global competition to provide high quality goods at competitive prices, and consumer demand have combined to increase the nation’s dependence on the import of foreign materials and goods. At the same time, increasing affluence in foreign nations, coupled with worldwide population growth, has stimulated international demand for U.S. agricultural and manufactured products. The world’s oceans and inland waterways are the highways of choice for the global movement of this vast international trade. As the world’s largest trading nation, the United States imports and exports more merchandise than any other country and has one of the most extensive marine transportation systems in the world (Table 13.1).1 U.S. marine import-export trade accounts for nearly 7 percent of the nation’s gross domestic product.2 Domestically, coastal and inland marine trade amounts to roughly one billion tons of cargo, worth more than $220 billion a year.3 The U.S. marine transportation system is a complex public–private partnership with many participants. It consists of state, territorial, local, and privately-owned facilities managed, financed, and operated by federal, state, territorial, and local governments. The system is a highly complex and interconnected mix of waterways, ports and terminals, water- and land-based intermodal connections, vessels, vehicles, equipment, personnel, support service industries, and users. This system provides a number of services, including: supporting the waterborne movement of foreign and domestic cargo; moving passengers and vehicles through numerous ferry systems; serving recreational boating, commercial fishing vessels, and cruise liners; and generating millions of jobs for Americans and for the nation’s international trading partners. The U.S. marine transportation system also plays an important national security role as a point of entry for foreign shipment and a conduit for the movement of military equipment, supplies, and personnel to and from overseas locations.

### It’s the key internal link.

Coble and Larsen 11 — Representatives in the U.S. House (Federal News Service 5/24. “HEARING OF THE COAST GUARD AND MARITIME TRANSPORTATION SUBCOMMITTEE OF THE HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE; SUBJECT: "CREATING U.S. MARITIME INDUSTRY JOBS BY REDUCING REGULATORY BURDENS"; CHAIRED BY: REPRESENTATIVE HOWARD COBLE -Search using: Biographies Plus News News, Most Recent 60 Days (R-NC); WITNESSES: REAR ADMIRAL KEVIN COOK, DIRECTOR OF PREVENTION POLICY, U.S. COAST GUARD; COAST GUARD DEPUTY JUDGE ADVOCATE GENERAL CALVIN LEDERER; LOCATION: 2167 RAYBURN HOUSE OFFICE BUILDING, WASHINGTON, D.C.” URL: <http://0-www.lexisnexis.com.wizard.umd.umich.edu/hottopics/lnacademic/?verb=sr&csi=297373>. DA: 7/31/11)

The subcommittee is meeting today to review the Coast Guard's regulatory program and examine ways to improve the service's rulemaking process. We're also interested in the status of various pending rules and the impact they will have on maritime safety and commerce. The Coast Guard has broad authority to regulate maritime commerce, including establishing and enforcing rules to ensure mariner safety and vessel and facility safety and security, and the protection of the environment. With such vast authority comes great responsibility to regulate industry in a fair and reasonable way. This hearing will focus on ensuring that Coast Guard rulemaking is just that, fair and reasonable. It's important to remember that the United States economy is fueled by maritime commerce. While regulations must address concerns related to safety, security and stewardship, they must also balance the importance of maintaining the free flow of maritime commerce. Domestic shipping alone is responsible for over 500,000 American jobs and $100 billion in annual economic output. Additionally, 90 percent of all global trade and over 25 percent of our gross domestic product moves via sea. With the water treatment systems aboard -- strike that. With the economy still in a fragile state and unemployment at record levels, it is imperative that federal government can foster an atmosphere where our maritime industry can compete and expand. To that end, I'm concerned about the cost and impact of several forthcoming Coast Guard rulemakings, specifically rules requiring fishing vessel examinations. The purchase of automatic identification systems for small vessels and the installation of ballast water treatment systems aboard vessels could have tremendous impacts on the economy. If these and other rules are not done on a commonsense manner, I'm concerned that they could drastically increase operating costs for businesses, hamper growth and kill jobs at a time when our nation can ill afford economic setbacks. Finally, just as we're facing tough decisions on how to cut the deficit, these and other pending regulations will require additional personnel and funding for the Coast Guard. I look forward to hearing from our witnesses how the Coast Guard intends to fund the -- to find the resources to pay for the expansion of its regulatory mission, as well as what steps it is taking to ensure rules are put forth in an efficient and commonsense manner. I thank you all for appearing today. And I'm now pleased to recognize the distinguish gentleman from Washington for his opening statement. REPRESENTATIVE RICK LARSEN (D-WA): Thank you, Mr. Chairman. Good morning and thank you for convening today's hearing to examine the status of major rulemaking activities by the U.S. Coast Guard, and their impact on job creation in our domestic maritime industries and the overall economy. Revitalizing and growing our maritime economy is a high priority for me, and I want to thank you for taking interest in this matter this morning, Mr. Chairman. REP. COBLE: You're welcome. REP. LARSEN: The Coast Guard is a multi-mission maritime military service of the United States. It is the principal federal agency responsible for ensuring marine safety, preserving maritime and port security, enhancing maritime commerce and protecting the marine environment.

### Global nuclear war.

Mead 9 (Walter Russell, Snior fellow in U.S. Foreign Policy at the Council on Foreign Relations, *The New Republic*, 2/4/09, http://www.tnr.com/politics/story.html?id=571cbbb9-2887-4d81-8542-92e83915f5f8&p=2) ET

So far, such half-hearted experiments not only have failed to work; they have left the societies that have tried them in a progressively worse position, farther behind the front-runners as time goes by. Argentina has lost ground to Chile; Russian development has fallen farther behind that of the Baltic states and Central Europe. Frequently, the crisis has weakened the power of the merchants, industrialists, financiers, and professionals who want to develop a liberal capitalist society integrated into the world. Crisis can also strengthen the hand of religious extremists, populist radicals, or authoritarian traditionalists who are determined to resist liberal capitalist society for a variety of reasons. Meanwhile, the companies and banks based in these societies are often less established and more vulnerable to the consequences of a financial crisis than more established firms in wealthier societies. As a result, developing countries and countries where capitalism has relatively recent and shallow roots tend to suffer greater economic and political damage when crisis strikes--as, inevitably, it does. And, consequently, financial crises often reinforce rather than challenge the global distribution of power and wealth. This may be happening yet again. None of which means that we can just sit back and enjoy the recession. History may suggest that financial crises actually help capitalist great powers maintain their leads--but it has other, less reassuring messages as well. If financial crises have been a normal part of life during the 300-year rise of the liberal capitalist system under the Anglophone powers, so has war. The wars of the League of Augsburg and the Spanish Succession; the Seven Years War; the American Revolution; the Napoleonic Wars; the two World Wars; the cold war: The list of wars is almost as long as the list of financial crises. Bad economic times can breed wars. Europe was a pretty peaceful place in 1928, but the Depression poisoned German public opinion and helped bring Adolf Hitler to power. If the current crisis turns into a depression, what rough beasts might start slouching toward Moscow, Karachi, Beijing, or New Delhi to be born? The United States may not, yet, decline, but, if we can't get the world economy back on track, we may still have to fight.

### Even if the economy doesn’t collapse, international perception of weakness *tanks hegemony*.

Rothkopf 8 — David Rothkopf is chairman of the National Strategic Investment Forum Dialogue, a forum convening leading institutional investors for discussions about critical issues of investment strategy. “9/11 Was Big. This Is Bigger.” URL: [http://www.washingtonpost.com/wp dyn/content/article/2008/10/03/AR2008100301969.html](http://www.washingtonpost.com/wp%20dyn/content/article/2008/10/03/AR2008100301969.html). DA:7/14/11.

On Sept. 16, 2001, President Bush addressed the nation to express his faith in the American people and "the resiliency" of the U.S. economy. Seven years later, the president again spoke to a country in crisis, using eerily similar language to try to shore up concerns about the market. This time, however, he felt compelled to go further. During a prime-time broadcast to the nation, the president of the richest and most powerful nation on Earth felt compelled to offer a defense of the free-market capitalism whose final and enduring triumph we had been celebrating only a few years earlier after the fall of our Soviet foes. "Despite corrections in the marketplace and instances of abuse," Bush said, "democratic capitalism is the best system ever devised." To many around the world, however, the president's words were not so reassuring. Not only did his argument ring hollow to those who felt anxiety and rage over Wall Street's ineptitude and greed, its attempt to buoy American capitalism by lashing it to the virtues of democracy contrasted uncomfortably with a chorus of critical assessments from leaders in democracies worldwide. French President Nicolas Sarkozy concluded recently that the world has seen the end to free-market economies. "Laissez-faire, it's finished. The all-powerful market that is always right, it's finished," he said. We would, he added, need "to rebuild the entire global financial and monetary system from the bottom up, the way it was done at Bretton Woods after World War II." Germany's finance minister offered a similar perspective in remarks to his parliamentary colleagues. "The U.S. will lose its status as the superpower of the world financial system," Peer Steinbrück declared. "This world will become multipolar. The world will never be the same again." Governments long criticized by the United States for intervening in their own economies were reveling in the spectacle of U.S. policymakers wading into their own financial markets in ways that even some socialist leaders would never have dreamt of.

### That *exacerbates* every global problem—hegemony prevents *all major impacts*.

Thayer 6 Associate Professor in the Department of Defense and Strategic Studies at Missouri State University [Bradley, In Defense of Primacy, The National Interest, December (lexis)]

A grand strategy based on American primacy means ensuring the United States stays the world's number one power--the diplomatic, economic and military leader. Those arguing against primacy claim that the United States should retrench, either because the United States lacks the power to maintain its primacy and should withdraw from its global commitments, or because the maintenance of primacy will lead the United States into the trap of "imperial overstretch." In the previous issue of The National Interest, Christopher Layne warned of these dangers of primacy and called for retrenchment.1 Those arguing for a grand strategy of retrenchment are a diverse lot. They include isolationists, who want no foreign military commitments; selective engagers, who want U.S. military commitments to centers of economic might; and offshore balancers, who want a modified form of selective engagement that would have the United States abandon its landpower presence abroad in favor of relying on airpower and seapower to defend its interests. But retrenchment, in any of its guises, must be avoided. If the United States adopted such a strategy, it would be a profound strategic mistake that would lead to far greater instability and war in the world, imperil American security and deny the United States and its allies the benefits of primacy. There are two critical issues in any discussion of America's grand strategy: Can America remain the dominant state? Should it strive to do this? America can remain dominant due to its prodigious military, economic and soft power capabilities. The totality of that equation of power answers the first issue. The United States has overwhelming military capabilities and wealth in comparison to other states or likely potential alliances. Barring some disaster or tremendous folly, that will remain the case for the foreseeable future. With few exceptions, even those who advocate retrenchment acknowledge this. So the debate revolves around the desirability of maintaining American primacy. Proponents of retrenchment focus a great deal on the costs of U.S. action--but they fail to realize what is good about American primacy. The price and risks of primacy are reported in newspapers every day; the benefits that stem from it are not. A GRAND strategy of ensuring American primacy takes as its starting point the protection of the U.S. homeland and American global interests. These interests include ensuring that critical resources like oil flow around the world, that the global trade and monetary regimes flourish and that Washington's worldwide network of allies is reassured and protected. Allies are a great asset to the United States**, in part** because they shoulder some of its burdens. Thus, it is no surprise to see NATO in Afghanistan or the Australians in East Timor. In contrast, a strategy based on retrenchment will not be able to achieve these fundamental objectives of the United States. **Indeed,** retrenchment will make the United States less secure than the present grand strategy of primacy. **This is because** threats will exist no matter what role America chooses to play in international politics. Washington cannot call a "time out", and it cannot hide from threats. Whether they are terrorists, rogue states or rising powers, history shows that threats must be confronted. Simply by declaring that the United States is "going home", thus abandoning its commitments or making unconvincing half-pledges to defend its interests and allies, does not mean that others will respect American wishes to retreat. To make such a declaration implies weakness and emboldens aggression. In the anarchic world of the animal kingdom, predators prefer to eat the weak rather than confront the strong. The same is true of the anarchic world of international politics. If there is no diplomatic solution to the threats that confront the United States, then the conventional and strategic military power of the United States is what protects the country from such threats. **And** when enemies must be confronted, a strategy based on primacy focuses on engaging enemies overseas, away from American soil. **Indeed,** a key tenet of the Bush Doctrine is to attack terrorists far from America's shores and not to wait while they use bases in other countries to plan and train for attacks against the United States itself. This requires a physical, on-the-ground presence that cannot be achieved by offshore balancing. Indeed, as Barry Posen has noted, U.S. primacy is secured because America, at present, commands the "global commons"--the oceans, the world's airspace and outer space--allowing the United States to project its power far from its borders, while denying those common avenues to its enemies. As a consequence, the costs of power projection for the United States and its allies are reduced, and the robustness of the United States' conventional and strategic deterrent capabilities is increased.2 This is not an advantage that should be relinquished lightly. A remarkable fact about international politics today--in a world where American primacy is clearly and unambiguously on display**--is that** countries want to align themselves with the United States. Of course, this is not out of any sense of altruism, in most cases, but because doing so allows them to use the power of the United States for their own purposes--their own protection, or to gain greater influence. Of 192 countries, 84 are allied with America--their security is tied to the United States through treaties and other informal arrangements--and they include almost all of the major economic and military powers. That is a ratio of almost 17 to one (85 to five), and a big change from the Cold War when the ratio was about 1.8 to one of states aligned with the United States versus the Soviet Union. Never before in its history has this country, or any country, had so many allies. U.S. primacy--and the bandwagoning effect--has also given us extensive influence in international politics, allowing the United States to shape the behavior of states and international institutions. Such influence comes in many forms, one of which is America's ability to create coalitions of like-minded states to free Kosovo, stabilize Afghanistan, invade Iraq or to stop proliferation through the Proliferation Security Initiative (PSI ). Doing so allows the United States to operate with allies outside of the UN, where it can be stymied by opponents. American-led wars in Kosovo, Afghanistan and Iraq stand in contrast to the UN's inability to save the people of Darfur or even to conduct any military campaign to realize the goals of its charter. The quiet effectiveness of the PSI in dismantling Libya's WMD programs and unraveling the A. Q. Khan proliferation network are in sharp relief to the typically toothless attempts by the UN to halt proliferation. You can count with one hand countries opposed to the United States. They are the "Gang of Five": China, Cuba, Iran, North Korea and Venezuela. Of course, countries like India, for example, do not agree with all policy choices made by the United States, such as toward Iran, but New Delhi is friendly to Washington. Only the "Gang of Five" may be expected to consistently resist the agenda and actions of the United States. China is clearly the most important of these states because it is a rising great power. But even Beijing is intimidated by the United States and refrains from openly challenging U.S. power. China **proclaims that it** will**, if necessary,** resort to other mechanisms of challenging the United States, including asymmetric strategies such as targeting communication and intelligence satellites upon which the United States depends. But China may not be confident those strategies would work, and so it is likely to refrain from testing the United States directly for the foreseeable future because China's power benefits, as we shall see, from the international order U.S. primacy creates. The other states are far weaker than China. For three of the "Gang of Five" cases--Venezuela, Iran, Cuba--it is an anti-U.S. regime that is the source of the problem; the country itself is not intrinsically anti-American. Indeed, a change of regime in Caracas, Tehran or Havana could very well reorient relations. THROUGHOUT HISTORY, peace and stability have been great benefits of an era where there was a dominant power--Rome, Britain or the United States today. Scholars and statesmen have long recognized the irenic effect of power on the anarchic world of international politics. Everything we think of when we consider the current international order--free trade, a robust monetary regime, increasing respect for human rights, growing democratization--is directly linked to U.S. power. Retrenchment proponents seem to think that the current system can be maintained without the current amount of U.S. power behind it. In that they are dead wrong and need to be reminded of one of history's most significant lessons: Appalling things happen when international orders collapse. The Dark Ages followed Rome's collapse. Hitler succeeded the order established at Versailles. Without U.S. power, the liberal order created by the United States will end just as assuredly. As country and western great Ral Donner sang: "You don't know what you've got (until you lose it)." Consequently, it is important to note what those good things are. In addition to ensuring the security of the United States and its allies, American primacy within the international system causes many positive outcomes for Washington and the world. The first has been a more peaceful world. During the Cold War, U.S. leadership reduced friction among many states that were historical antagonists, most notably France and West Germany. **Today,** American primacy helps keep a number of complicated relationships aligned--between Greece and Turkey, Israel and Egypt, South Korea and Japan, India and Pakistan, Indonesia and Australia. This is not to say it fulfills Woodrow Wilson's vision of ending all war. Wars still occur where Washington's interests are not seriously threatened**, such as in Darfur,** but a Pax Americana does reduce war's likelihood, particularly war's worst form: great power wars. Second, American power gives the United States the ability to spread democracy and other elements of its ideology of liberalism. Doing so is a source of much good for the countries concerned as well as the United States because, as John Owen noted on these pages in the Spring 2006 issue, liberal democracies are more likely to align with the United States and be sympathetic to the American worldview.3 So, spreading democracy helps maintain U.S. primacy. In addition, once states are governed democratically, the likelihood of any type of conflict is significantly reduced. This is not because democracies do not have clashing interests. Indeed they do. Rather, it is because they are more open, more transparent and more likely to want to resolve things amicably in concurrence with U.S. leadership. And so, in general, democratic states are good for their citizens as well as for advancing the interests of the United States. Critics have faulted the Bush Administration for attempting to spread democracy in the Middle East, labeling such an effort a modern form of tilting at windmills. It is the obligation of Bush's critics to explain why democracy is good enough for Western states but not for the rest, and**, one gathers from the argument**, should not even be attempted. Of course, whether democracy in the Middle East will have a peaceful or stabilizing influence on America's interests in the short run is open to question. Perhaps democratic Arab states would be more opposed to Israel, but nonetheless, their people would be better off. The United States has brought democracy to Afghanistan, where 8.5 million Afghans, 40 percent of them women, voted in a critical October 2004 election, even though remnant Taliban forces threatened them. The first free elections were held in Iraq in January 2005**.** It was the military power of the United States that put Iraq on the path to democracy. Washington fostered democratic governments in Europe, Latin America, Asia and the Caucasus. **Now** even the Middle East is increasingly democratic. They may not yet look like Western-style democracies, but democratic progress has been made in Algeria, Morocco, Lebanon, Iraq, Kuwait, the Palestinian Authority and Egypt. By all accounts, the march of democracy has been impressive. Third, along with the growth in the number of democratic states around the world has been the growth of the global economy. With its allies, the United States has labored to create an economically liberal worldwide network characterized by free trade and commerce, respect for international property rights, and mobility of capital and labor markets. The economic stability and prosperity that stems from this economic order is a global public good from which all states benefit, particularly the poorest states in the Third World. The United States created this network not out of altruism but for the benefit and the economic well-being of America. This economic order forces American industries to be competitive, maximizes efficiencies and growth, and benefits defense as well because the size of the economy makes the defense burden manageable. Economic spin-offs foster the development of military technology, helping to ensure military prowess. Perhaps the greatest testament to the benefits of the economic network comes from Deepak Lal, a former Indian foreign service diplomat and researcher at the World Bank, who started his career confident in the socialist ideology of post-independence India. Abandoning the positions of his youth, Lal now recognizes that the only way to bring relief to desperately poor countries of the Third World is through the adoption of free market economic policies and globalization, which are facilitated through American primacy.4 As a witness to the failed alternative economic systems, Lal is one of the strongest academic proponents of American primacy due to the economic prosperity it provides. Fourth and finally, the United States, in seeking primacy, has been willing to use its power not only to advance its interests but to promote the welfare of people all over the globe. The United States is the earth's leading source of positive externalities for the world. The U.S. military has participated in over fifty operations since the end of the Cold War--and most of those missions have been humanitarian in nature. **Indeed,** the U.S. military is the earth's "911 force"--it serves, de facto, as the world's police, the global paramedic and the planet's fire department. Whenever there is a natural disaster, earthquake, flood, drought, volcanic eruption, typhoon or tsunami, the United States assists the countries in need. On the day after Christmas in 2004, a tremendous earthquake and tsunami occurred in the Indian Ocean near Sumatra, killing some 300,000 people. The United States was the first to respond with aid. Washington followed up with a large contribution of aid and deployed the U.S. military to South and Southeast Asia for many months to help with the aftermath of the disaster. About 20,000 U.S. soldiers, sailors, airmen and marines responded by providing water, food, medical aid, disease treatment and prevention as well as forensic assistance to help identify the bodies of those killed. Only the U.S. military could have accomplished this Herculean effort. No other force possesses the communications capabilities or global logistical reach of the U.S. military. In fact, UN peacekeeping operations depend on the United States to supply UN forces. American generosity has done more to help the United States fight the War on Terror than almost any other measure. Before the tsunami, 80 percent of Indonesian public opinion was opposed to the United States; after it, 80 percent had a favorable opinion of America. Two years after the disaster, and in poll after poll, Indonesians still have overwhelmingly positive views of the United States. In October 2005, an enormous earthquake struck Kashmir, killing about 74,000 people and leaving three million homeless. The U.S. military responded immediately, diverting helicopters fighting the War on Terror in nearby Afghanistan to bring relief as soon as possible. To help those in need, the United States also provided financial aid to Pakistan; and, as one might expect from those witnessing the munificence of the United States, it left a lasting impression about America. For the first time since 9/11, polls of Pakistani opinion have found that more people are favorable toward the United States than unfavorable, while support for Al-Qaeda dropped to its lowest level. Whether in Indonesia or Kashmir, the money was well-spent because it helped people in the wake of disasters, but it also had a real impact on the War on Terror. When people in the Muslim world witness the U.S. military conducting a humanitarian mission, there is a clearly positive impact on Muslim opinion of the United States. As the War on Terror is a war of ideas and opinion as much as military action, for the United States humanitarian missions are the equivalent of a blitzkrieg.

### Transition from U.S. dominance causes conflict—the *perception* of weakness empirically spurs war.

Friedberg 11 (July/August, Aaron L., professor of politics and international affairs at the Woodrow Wilson School at Princeton University, Hegemony with Chinese Characteristics, The National Interest, lexis)

THE UNITED States and the People’s Republic of China are locked in a quiet but increasingly intense struggle for power and influence, not only in Asia, but around the world. And in spite of what many earnest and well-intentioned commentators seem to believe, the nascent Sino-American rivalry is not merely the result of misperceptions or mistaken policies; it is driven instead by forces that are deeply rooted in the shifting structure of the international system and in the very different domestic political regimes of the two Pacific powers. Throughout history, relations between dominant and rising states have been uneasy—and often violent. Established powers tend to regard themselves as the defenders of an international order that they helped to create and from which they continue to benefit; rising powers feel constrained, even cheated, by the status quo and struggle against it to take what they think is rightfully theirs. Indeed, this story line, with its Shakespearean overtones of youth and age, vigor and decline, is among the oldest in recorded history. As far back as the fifth century BC the great Greek historian Thucydides began his study of the Peloponnesian War with the deceptively simple observation that the war’s deepest, truest cause was “the growth of Athenian power and the fear which this caused in Sparta.” The fact that the U.S.-China relationship is competitive, then, is simply no surprise. But these countries are not just any two great powers: Since the end of the Cold War the United States has been the richest and most powerful nation in the world; China is, by contrast, the state whose capabilities have been growing most rapidly. America is still “number one,” but China is fast gaining ground. The stakes are about as high as they can get, and the potential for conflict particularly fraught. At least insofar as the dominant powers are concerned, rising states tend to be troublemakers. As a nation’s capabilities grow, its leaders generally define their interests more expansively and seek a greater degree of influence over what is going on around them. This means that those in ascendance typically attempt not only to secure their borders but also to reach out beyond them, taking steps to ensure access to markets, materials and transportation routes; to protect their citizens far from home; to defend their foreign friends and allies; to promulgate their religious or ideological beliefs; and, in general, to have what they consider to be their rightful say in the affairs of their region and of the wider world. As they begin to assert themselves, ascendant states typically feel impelled to challenge territorial boundaries, international institutions and hierarchies of prestige that were put in place when they were still relatively weak. Like Japan in the late nineteenth century, or Germany at the turn of the twentieth, rising powers want their place in the sun. This, of course, is what brings them into conflict with the established great powers—the so-called status quo states—who are the architects, principal beneficiaries and main defenders of any existing international system. The resulting clash of interests between the two sides has seldom been resolved peacefully. Recognizing the growing threat to their position, dominant powers (or a coalition of status quo states) have occasionally tried to attack and destroy a competitor before it can grow strong enough to become a threat. Others—hoping to avoid war—have taken the opposite approach: attempting to appease potential challengers, they look for ways to satisfy their demands and ambitions and seek to incorporate them peacefully into the existing international order. But however sincere, these efforts have almost always ended in failure. Sometimes the reason clearly lies in the demands of the rising state. As was true of Adolf Hitler’s Germany, an aggressor may have ambitions that are so extensive as to be impossible for the status quo powers to satisfy without effectively consigning themselves to servitude or committing national suicide. Even when the demands being made of them are less onerous, the dominant states are often either reluctant to make concessions, thereby fueling the frustrations and resentments of the rising power, or too eager to do so, feeding its ambitions and triggering a spiral of escalating demands. Successful policies of appeasement are conceivable in theory but in practice have proven devilishly difficult to implement. This is why periods of transition, when a new, ascending power begins to overtake the previously dominant state, have so often been marked by war.

### Finally, the U.S. will always try to maintain hegemony—it is only a question of *success*.

Ferguson 9 (Niall, American Interest, http://www.the-american-interest.com/ai2/article.cfm?Id=335&MId=16)

So much for the American predicament. What of Posen’s alternative grand strategy based on American self-restraint? The terms he uses are themselves revealing. The United States needs to be more “reticent” about its use of military force, more “modest” about its political goals overseas, more “distant” from traditional allies, and more “stingy” in its aid policies. Good luck to the presidential candidate who laces his next foreign policy speech with those adjectives: “My fellow Americans, I want to make this great country of ours more reticent, modest, distant and stingy!” Let us, however, leave aside this quintessentially academic and operationally useless rhetoric. What exactly does Posen want the United States to do? I count six concrete recommendations. The United States should: 1) Abandon the Bush Doctrine of “preemption”, which in the case of Iraq has been a policy of preventive war. Posen argues that this applies even in cases of nuclear proliferation. By implication, he sees preventive war as an inferior option to deterrence, though he does not make clear how exactly a nuclear-armed Iran would be deterred, least of all if his second recommendation were to be implemented. 2) Reduce U.S. military presence in the Middle East (“the abode of Islam”) by abandoning “its permanent and semi-permanent land bases in Arab countries.” Posen does not say so, but he appears to imply the abandonment of all these bases, not just the ones in Iraq, but also those in, for example, Qatar. It is not clear what would be left of Central Command after such a drastic retreat. Note that this would represent a break with the policy not just of the last two Presidents, but with that of the last 12. 3) Ramp up efforts to provide relief in the wake of natural disasters, exemplified by Operation Unified Assistance after the Indian Ocean tsunami of December 26, 2004. No doubt the American military did some good in the wake of the tsunami, but Posen needs to explain why a government that so miserably bungled the aftermath of Hurricane Katrina less than a year later should be expected to be consistently effective in the wake of natural disasters. 4) Assist in humanitarian military interventions only “under reasonable guidelines” and “in coalitions, operating under some kind of regional or international political mandate.” Does Posen mean that he would favor sending American troops to Darfur at the same time as he is withdrawing them from other “abodes of Islam?” He does not say. 5) Promote not democracy abroad but “the rule of law, press freedom and the rights of collective bargaining.” Here again I am experiencing cognitive dissonance. The government that sought systematically to evade the Geneva Conventions in order to detain indefinitely and torture suspected terrorists as an upholder of the rule of law? 6) Stop offering “U.S. security guarantees and security assistance, [which] tend to relieve others of the need to do more to ensure their own security.” This is in fact the most important of all Posen’s recommendations, though he saves it until last. He envisages radical diminution of American support for other members of NATO. Over the next ten years, he writes, the United States “should gradually withdraw from all military headquarters and commands in Europe.” In the same timeframe it should “reduce U.S. government direct financial assistance to Israel to zero”, as well as reducing (though not wholly eliminating) assistance to Egypt. And it should “reconsider its security relationship with Japan”, whatever that means. Again, this represents a break with traditional policy so radical that it would impress even Noam Chomsky, to say nothing of Osama bin Laden (who would, indeed, find little here to object to). Posen, in other words, has proceeded from relatively familiar premises (the limits of American “hyperpower”) to some quite fantastic policy recommendations, which are perhaps best summed up as a cross between isolationism and humanitarianism. Only slightly less fantastic than his vision of an American military retreat from the Middle East, Europe and East Asia is Posen’s notion that it could be sold to the American electorate—just six years after they were the targets of the single largest terrorist attack in history—in the language of self-effacement. Coming from a man who wants to restart mainstream debate on American grand strategy, that is pretty rich.

## 1AC—Natural Disasters Advantage

### Contention Two: Natural Disasters

### Funding cuts for the JPSS will lead to information gaps and delayed natural disaster forecasts.

Cook 11 [Jason Cook, staff writer, Sustainable, Online Magazine, “What is the real cost of NOAA funding cuts?” June, http://sustainableonlinemagazine.com/cost-of-noaa-funding-cuts/]

The storms and tornadoes that ripped through the U.S. towards the end of May caused an estimated $4 billion to $7 billion in insured losses. According to AIR Worldwide, a disaster-modeling firm, the high side of this estimate would match 1989’s Hurricane Hugo, which is the seventh costliest hurricane on record. These estimates include the cost of insurance claims for homes, automobiles, business and industrial properties damaged during the storms from May 20- May 27 only. “The two major [tornado] outbreaks of this year—the first in late April, the second in late May—are the costliest on record,” said AIR’s Tim Doggett. Cost can’t always be discussed in terms of monetary value, however. For instance, as of June 6th 2011, there were 1438 tornadoes and 525 related deaths in the U.S. In comparison, the combined total tornado related deaths for the 3 years prior was only 192. There is no monetary value for the lives lost. And sure you can put a cash value on a house, but can you do the same for a “home”? The Red Cross reported that since March 31, 2011 it has opened 251 shelters for people displaced by tornadoes, flooding and fires throughout the South and Midwest. All of this and we’re only half way through the year. No matter what your stance on climate change, you have to admit that the weather has been a bit strange lately, from tornadoes, to snow storms, to floods. Climate research done by the National Oceanic and Atmospheric Administration (NOAA) gives us insight into these weather occurrences, and this knowledge can then be used to predict, and improve preparedness for, severe weather In fact, in the recent tornado outbreak from April 25-28th, NOAA’s polar orbiting satellites were able to provide residents in the affected areas an average warning time of 27 minutes before funnels touched down. As budget cuts were announced, a team from Raytheon Company installed the first antenna receptor for NOAA’s Joint Polar Satellite System (JPSS) program at McMurdo Station, Antarctica. JPSS will maintain continuity of critical global data collected from polar orbits by NOAA’s polar satellite program, which, for more than 40 years has provided observations that are critical for life-saving weather forecasts. “Having more data available much faster will strengthen NOAA’s ability to monitor atmospheric triggers that eventually lead to a tornado outbreak, hurricane, snow storm, wildfire or flood, so we are all prepared before severe weather strikes,” said Kathryn Sullivan, Ph.D., NOAA’s assistant secretary for environmental observation and protection. But the budget shortfalls in the JPSS program could lead to problems down the road, she added. Without proper funding, the U.S. polar-orbiting satellite coverage will be interrupted beginning in 2016-17, at the end of the life of NASA’s National Polar-orbiting Operational Environmental Satellite System Preparatory Project (NPP) which is scheduled to launch October 25. “If JPSS is not in place at the end of NPP’s life, there will be a significant decline in the accuracy of NOAA weather forecasts, including hurricane track prediction two days out,” Sullivan said. “It’s absolutely critical that we have continuous polar satellite coverage.” The 2011 hurricane season, which is predicted to be “above normal” with an expected 12-18 storms and 3-6 of those becoming major hurricanes with 111+ mph winds, got started on June 1 and runs through November 30th.”The active Atlantic hurricane era that we entered back in 1995 continues,” NOAA Administrator Jane Lubchenco said. “During this period, the conditions in the oceans and the atmosphere have produced a larger number of storms and more powerful hurricanes.“ Lubchenco warned that a lack of satellites could spell disaster, “NOAA’s satellites underpin hurricane forecasts by providing meteorological data over vast areas where we don’t have other means of information.” She goes on to say that NOAA is working with Congress to secure funding for this program. “We continue to emphasize how much, how important this program is as a matter of public safety. This is of national significance, and we are hopeful we will be able to get the funding to get this program back on track.“ And NOAA’s work does more than just tell us when a storm is coming.”Funding JPSS is a national preparedness issue,” said Christine McEntee, executive director of the American Geophysical Union. “A gap in satellite coverage could jeopardize everything from agriculture and aviation safety, to the oil and gas industry, to wildfire response and other search and rescue operations.” The cuts in funding for many government programs will surely take some of the strain off the national budget, but those costs may very well be paid in other ways.

### Advance data monitoring is key to natural disaster response—we’ll isolate 4 scenarios:

### *First is HURRICANES*—

### The plan saves *thousands of lives*—fully funding the JPSS is key.

American Geophysical Union 11 — American Geophysical Union—a not-for-profit society of Earth and space scientists with more than 61,000 members worldwide, 2011 (“Scientists Warn of Public Safety Impact if Weather Satellite Program Remains Unfunded,” Press Release Available from *PR Newswire*, May 19th, Available Online at http://www.prnewswire.com/news-releases/scientists-warn-of-public-safety-impact-if-weather-satellite-program-remains-unfunded-122243468.html, Accessed 07-30-2011)

As the nation readies itself for an expected active hurricane season, the American Geophysical Union (AGU) calls on Congress to restore funding to the Joint Polar Satellite System (JPSS), which will produce continuous data for weather forecasting, storm tracking and long-term monitoring that can save thousands of lives and billions of dollars each hurricane season. Additionally, AGU asks Congress to maintain funding to the National Weather Service (NWS), which will utilize JPSS data to issue forecasts and warnings for adverse weather events.

According to NOAA's Climate Prediction Center, the 2011 hurricane season across the entire Atlantic Basin is expected to be above-normal. The seasonal outlook, which was released today, predicts a 70 percent probability of the following ranges:

\* 12 to 18 named storms (top winds of 39 mph or higher), of which:

\* 6 to 10 could become hurricanes (top winds of 74 mph or higher), including:

\* 3 to 6 major hurricanes (Category 3, 4 or 5; winds of at least 111 mph)

"Last year, adverse weather was the direct cause of nearly 500 deaths, over 7,000 traffic fatalities and more than 700,000 additional injuries on our nation's highways and roads," said AGU Executive Director and CEO Christine McEntee. "Imagine how many more lives could be lost if funding is not restored for the satellite systems that are considered vital for the nation's weather forecasting and storm tracking systems."

If Congress does not provide the necessary $1.07 billion to the JPSS program, the country will be left with a serious gap in satellite data, significantly diminishing the two to three day advance warning of extreme weather events. In addition, the NWS needs $988 million to maintain operations.

"Funding JPSS is a national preparedness issue," said McEntee. "A gap in satellite coverage could jeopardize everything from agriculture and aviation safety, to the oil and gas industry, to wildfire response and other search and rescue operations."

### Accurate forecasts are key to effective evacuation strategies—*empirically proven*.

Arnold and Park 2008 [Adam D. Arnold, University of Arizona, Jenni L. Evans, Penn State University, Department of Meteorology, “Vulnerability Metrics of Hurricane Forecast Accuracy,”]

Evacuations of the affected population in the face of an approaching hurricane have saved thousands of lives and the heartbreak of failure to evacuate has also been graphically illustrated. The importance of having an effective evacuation plan that is inclusive of all citizens was graphically demonstrated in the tragic Louisiana landfall of Hurricane Katrina in August 2005. However, Hurricane Rita (2005) demonstrated that even a well-thought out evacuation plan can fail in the face of public panic. Even given effective evacuation strategies, the problem of determining where and when to evacuate in an individual event has plagued emergency management officials for many decades. An incorrect decision to issue an evacuation declaration can have consequences either way: failure to evacuate in the face of a landfall may cause losses of both lives and property; evacuating unnecessarily may result in lost credibility and/or economic productivity.

With the exception of Monroe County (Monroe County 2008), evacuation decisions in Florida are made predominantly on the area of likely storm surge intrusion and also includes vulnerable populations from outside the surge zone (SERT 2008). Since storm surge relates to hurricane intensity, the area – and hence population – evacuated is dependent on the forecast storm intensity and location at landfall. Thus, accurate forecasts of these storm parameters are crucial to effective protection of people and property in the face of a hurricane.

### *Second is TORNADOES*—

### A lack of polar orbiting satellites would gut 85% of the nation’s weather models and cut accuracy of readings in half—this will eliminate tornado evacuation warnings.

Spinner 11 [Kate Spinner, Columnist, Herald-Tribune, “Satellite gap could put hurricane forecasts at risk,” 6/9, http://www.heraldtribune.com/article/20110609/ARTICLE/110609535?p=all&tc=pgall&tc=ar]

A looming gap in U.S. weather satellite coverage could jeopardize the seven-day forecasts people have relied upon for everything from planning weekend picnics to preparing for hurricanes. Hit hard by federal spending cutbacks this year, the National Oceanic and Atmospheric Administration has been forced to delay a critical satellite scheduled to be in orbit by 2016. The postponement could cause an unprecedented year-and-a-half loss of weather data, undermining hurricane track forecasts and public warnings on the potential for deadly tornadoes. The satellite data feeds into computer models that forecasters use for long-range predictions. For instance, in May, forecasters warned that Southwest Missouri would be at a higher risk for tornadoes several days before the deadly EF-5 twister devastated Joplin. Such warnings may not be possible in the absence of the satellite data. The only way the nation will avoid an estimated 50 percent reduction in long-range forecast accuracy is if another satellite, scheduled to launch in October, works longer than expected. "It could always last longer," said Ajay Mehta, deputy director for NOAA's Joint Polar Satellite System. But as a planning tool, he added, "hope is never a good strategy." Risking critical forecasting skill runs counter to many of NOAA's goals, especially for improving hurricane track forecasts and advisories about potential tornado outbreaks. NOAA requested a $1.06 billion budget this year for its weather satellite program, a $678 million increase over 2010. The additional money was to help pay for the initial costs to get the satellite built and ready for launch, but leaders in Congress did not feel NOAA had justified the expense or proven that it could avoid previous problems with cost overruns. Unable to get congressional approval for the money, President Barack Obama's administration is now asking for a $1.1 billion budget increase for the NOAA satellite program in the 2012 budget to avoid further delays. The cost is high, but polar orbiting satellites provide 85 percent of the data that goes into the nation's computer weather models, said NOAA spokesman John Leslie. All meteorologists, from local weather anchors to top scientists at the National Hurricane Center, use those models. "If we don't fund this we're going to be pennywise and pound foolish," said Christine McEntee, executive director of the American Geophysical Union. "It's a public safety issue and it's also an economic issue." Any industry that depends on accurate weather information — farmers and fishermen for instance — stands to lose if the satellite data disappears, McEntee said. Weather forecasters rely on polar orbiting satellites operated by Europe, the U.S. Department of Defense and NOAA to gather detailed information on the atmosphere. The European and defense satellites take morning weather data and the NOAA satellite covers the afternoon. The satellites travel at a low altitude, allowing them to capture much sharper data and images than other satellites. They also contain equipment that penetrates through clouds to take measurements throughout the atmosphere. The information is primarily used to predict large-scale weather patterns, including those that steer severe tropical weather, supercell thunderstorms and other systems. "For Florida, the real impact is these polar orbiters, they're able to give us these images without having to worry about whether there's clouds in the way," said Dan Kottlowski, expert senior meteorologist with Accuweather.com. Crucial information, such as whether a hurricane is increasing or decreasing in strength, could be lost without them. Since theƒj U.S. launched its first polar orbiting satellite in the 1960s, the nation has not had a gap in coverage, according to Leslie. The gap is not inevitable, but it is becoming increasingly likely amid budget cuts. In October, NOAA will launch a satellite expected to operate for five years, assuming the role of the current orbiting satellite expected to reach the end of its lifespan next fall. The satellite NOAA is launching in October was built for testing new sensing equipment so that any problems could be fixed before it begins day-to-day forecasting. But budget cuts and agency reorganization last year forced NOAA instead to adapt the satellite for immediate operation. While meteorologists can use radar, weather balloons and geostationary satellite images and data for short-term weather forecasts and warnings, the polar orbiting satellites relay information crucial for longer-range forecasts. The data collected feeds directly into supercomputers that spin out detailed weather models showing current conditions and future predictions. One of the most important instruments the polar orbiting satellite carries is a microwave humidity sounder, which penetrates clouds to collect information throughout the atmosphere. Microwave sounder data first became available from polar orbiting satellites in 1978, with the last major improvements made in 1998. Since 1990, hurricane track forecasts have improved 50 percent, largely because atmospheric observations, including sounder data, have improved. Loss of that data will cloud analysis of the atmosphere and is likely to hamper hurricane forecasting. "Probably the biggest impact would be on track," said Michael Brennan, a senior hurricane specialist with the National Hurricane Center. The hurricane center is working to extend its track forecast from five days to seven. Even if the hurricane center develops an accurate seven-day forecast now, the future data loss could pose a significant setback. There is uncertainty over how the data loss would affect the hurricane forecast. The hurricane center would have to run forecasts without the data to see the actual changes. But expecting a less accurate forecast makes sense, Brennan said, because errors in the initial analysis of the atmosphere lead to larger inaccuracies, especially for predictions several days out. How the data gap will translate for tornado predictions is equally difficult to quantify, said Russell Schneider, director of the Storm Prediction Center, which warns of immediate severe weather threats and issues severe weather outlooks up to eight days in advance. Like the National Hurricane Center, the Storm Prediction Center relies on computer models using satellite data to generate accurate long-range weather forecasts. The satellite information helps the computers create a realistic picture of the conditions in the atmosphere, Schneider said. "Any degradation to the collection process affects all types of weather prediction in the U.S.," he said.

### That guarantees higher tornado casualties.

Brinton 11 [Turner Brinton, reporter for military space and missile defense, Space News, “After Tornado Spate, Fourteen US Senators Call for JPSS Funding,” 5/20, http://www.spacenews.com/policy/110620-fourteen-senators-call-jpss-funding.html

A group of 14 U.S. senators — many from states hard hit by a rash of tornadoes and ongoing flooding — are warning of potentially grave consequences if Congress continues to short change an overdue effort to replace the nation’s polar-orbiting weather satellites. In a June 17 letter to Sens. Daniel Inouye (D-Hawaii) and Thad Cochran (R-Miss.), the chairman and vice chairman, respectively, of the Senate Appropriations Committee, 13 Democrats and one Republican — Sen. Richard Shelby (Ala.) — warn that a projected looming gap in weather satellite coverage will worsen without more support for the U.S. National Oceanic and Atmospheric Administration (NOAA)’s Joint Polar Satellite System (JPSS). “As you know, a harmful loss of satellite coverage is already slated to occur in coming years, and we are deeply concerned that without adequate funding to swiftly implement JPSS, American lives, property, and prosperity will be needlessly endangered,” the senators wrote. They did not call for a specific amount of funding. The JPSS program is an offshoot of the National Polar-orbiting Operational Environmental Satellite System, a joint military-civilian program that the White House dismantled in February 2010. As a result, NOAA was directed to fund a constellation of polar-orbiting weather satellites for civil weather and climate forecasting, the development of which would be managed by NASA. The Air Force was directed to build its own military weather spacecraft. NOAA sought just over $1 billion for JPSS for 2011 but a long-delayed government spending package that finally passed in April provided only $382 million for the program. NOAA’s 2012 budget request, submitted to Congress in February, included $1.06 billion for JPSS. Agency officials, however, have said even if the full amount is provided, the nation still risks a minimum one-year gap in weather satellite coverage Neither the House nor Senate has yet to take up a 2012 spending bill for NOAA. In May, the House Appropriations commerce, justice, science subcommittee — a 12-member panel drafting legislation to fund NOAA and NASA, among other agencies, for the year ahead — received a top-line budget allocation of $50.2 billion, an amount $3 billion below what it appropriated for 2011 and some $7 billion below the amount the White House is requesting. The Senate Appropriations Committee, which is expected to oppose many of the steep budget cuts advocated in the Republican-controlled House, has not released its top-line spending allocations. The letter notes the United States has seen a series of devastating weather events in 2011, including 1,300 tornadoes across multiple states that have killed more than 500 people and caused more than $10 billion in property damage. The results of these storms would have been far worse without early warnings from polar-orbiting weather satellites, the letter said. “As we enter a predicted above-average hurricane season, we hope that the early warnings these satellites provide will continue to save lives, but we are concerned that lack of funding now will bring about unnecessary death and destruction in the future, when there are no accurate multi-day forecasts of severe weather,” they wrote. Polar-orbiting weather satellites also played a role in the planning of the May 1 raid that killed Osama Bin Laden in Pakistan and the recent NATO military actions in Libya, the letter says. “It is worth noting that both the raid to capture Osama Bin Laden and the air strikes on Libya were appropriately delayed due to forecasts of unfavorable weather. It is critical to our national security that we maintain a robust system of satellites to observe the weather and feed forecasts globally – a system that requires both Air Force and NOAA weather satellites.”

### *Third is FLOODING*—

### Failure to fund the JPSS will increase precipitation forecasting errors in the southern U.S., cutting warning time from days to hours for evacuations—more people will die as a *direct result*.

Kintisch 11 [Eli Kintisch, staff writer and editor for *Science* with an emphasis on climate and energy research, Science Insider, “Budget Cuts mean ’18-month gap’ in crucial weather data, says ocean agency,” 4/13, http://news.sciencemag.org/scienceinsider/2011/04/budget-cuts-mean-18-month-gap-in.html]

If passed into law, the federal budget for 2011 that lawmakers will vote on this week will harm key efforts in daily weather forecasting, search-and-rescue operations, and long-term weather prediction, says a top U.S. government official. Speaking at a Senate committee hearing this afternoon, National Oceanic and Atmospheric Administration Administrator Jane Lubchenco said that the $4.5 billion level for NOAA's budget this year set by congress would delay the launch of the first satellite in the $12 billion Joint Polar Satellite System (JPSS) from 2016 to 2018. Polar satellites are uniquely important for weather prediction. Whereas geostationary crafts orbit over fixed points some 36,000 km above Earth's surface, polar crafts like JPSS-1 will whiz around Earth in a north-south direction at an altitude of 770 km, providing much finer data resolution and scanning every point on Earth as the planet spins. JPSS-1 would acquire a "much better quality" temperature and moisture profile than those of geostationary weather satellites, says JPSS Deputy Director Ajay Mehta. Plus polar crafts fill gaps in coverage, he says: "There's really no imagery for Alaska, for example, if you rely just on geostationary satellites." For years, concern about NOAA's troubled polar satellite program has focused on climate sensors, six of which were stripped from JPSS's predecessor, NPOESS, in 2006, to preserve weather data. But now weather information itself is in jeopardy. In October, NASA intends to launch a polar satellite, the NPOESS Preparatory Project (NPP), that would gather data similar to that gathered by JPSS-1. But according to its design life, NPP will not function after 2017. That would leave an 18-month data gap between the end of the NPP mission and launch of JPSS-1, Lubchenco says. JPSS-1's launch will be delayed in part because NOAA's $4.5 billion budget under the 2011 bill is roughly $1 billion lower than what the Obama Administration requested; roughly 80% of the cut comes from the procurement, acquisition, and construction part of the agency's budget. Congressional dithering has also put the JPSS program behind schedule, Mehta says. (NOAA expressed similar concerns last month.) Because of the budget uncertainty, Mehta says, NOAA has done almost no work on JPSS since last October. A data gap between NPP and JPSS in 2017 could have profound consequences. Several polar satellites fly in formation, passing the same points on Earth in sequence every 8 hours or so. The U.S. military DMSP program covers the so-called morning orbit, DMSP and European crafts share coverage of the midday orbit, and NPP and JPSS-1 cover the afternoon orbit. Having data from all three orbits is important, but Mehta says that data from NOAA crafts are uniquely tailored for U.S. weather prediction for short- and medium-term forecasts. Loss of the afternoon data would mean a "50% error increase in [forecasting] precipitation rates in southern US," according to a NOAA presentation. "Future errors of this scale could result in flood forecast error providing less time for population to react and increasing risk to life and property (hours vs days)." Search-and-rescue operations at sea could also be jeopardized by the gap, because JPSS includes a crucial sensor that listens for emergency signals sent by emergency beacons. Cutting the satellite budget will likely cost taxpayers more in the end. NOAA expects to end up spending roughly $650 million less on JPSS-1 this year than it had planned. But "for every dollar we didn't spend [on satellites] in 2011, we will have to spend $3 to $5 in the future," Lubchenco told lawmakers today.

### *Fourth is SEA-BASED DISASTERS*—

### Polar orbiting satellites save hundreds of lives a year from maritime emergencies.

Conathan 11 — Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at http://www.americanprogress.org/issues/2011/02/noaa\_funding.html, Accessed 07-30-2011)

When disaster strikes at sea, polar-orbiting satellites receive emergency distress beacons and relay positioning data to rescuers. This resulted in 295 lives saved in 2010 alone and the rescue of more than 6,500 fishermen, recreational boaters, and other maritime transportation workers since the program began in 1982.

### Our framework for assessing these risks is PREVENTABILITY—policymakers need to ask the *“What If?” question* to prevent unnecessary death and suffering from preventable disasters.

Johnson 5 [Barry Johnson, Assistant Surgeon General (ret.] adjunct professor, Department of Environmental and Occupational Health at Emory’s Rollins School of Public Health, Human and Ecological Risk Assessment, Editorial, “Hurricane Katrina and That Vexing What If? Question,” http://content.ebscohost.com.proxy1.cl.msu.edu/pdf17\_20/pdf/2005/I61/01Dec05/18913654.pdf?T=P&P=AN&K=18913654&S=R&D=eih&EbscoContent=dGJyMNXb4kSeqLU4yOvqOLCmr0mep69Srqa4TbGWxWXS&ContentCustomer=dGJyMPGusU6yrbVMuePfgeyx44Dt6fIA]

I am still sad, even given the passage of a few months since Hurricane Katrina churned much of the U.S. Gulf Coast into a scene of death and injury, hazardous waste, and finger-pointing by local, state, and federal politicians. My sadness is the product of one part frustration and one part disappointment. There is not a pal- liative, I fear, within easy reach. I am sad because a significant amount of human suffering was avoidable and human lives were needlessly lost. Lost because of incom- petence in preparing for and responding to the hurricane, lame leadership in key response agencies, and failure by policymakers to understand the importance of the what if? question. Setting aside my concerns, let’s return to the what if? question.

In a previous editorial, it was asserted that asking what if? is the essential question in hazard evaluation and risk assessment (Johnson 2003). It was argued there that thinking prospectively about the potential risk posed by an environmental hazard or some other risk factor was in the spirit of the prevention ethos of environmental protection and public health practice. Moreover, the question is the gist of the precautionary principle, which has been discussed in HERA on several occasions (e.g., see HERA 11(1)). The editorial in 2003 had been prompted by the loss of life from fire in a nursing home in Tennessee. Seems that the state had exempted some older nursing homes from having to install sprinkler systems. In making such an exemption, the state’s policymakers had failed to ask what if? a fire erupts in an exempted nursing home. They had failed to factor into their policy exemption the full calculus of risk. The result was the needless death of elderly patients whose demise was preventable.

Well, sadly, two hurricane-caused events in Louisiana have resurrected the horrible specter of elderly patients dying from moribund policymaking. In these instances, patients were abandoned to the rising waters that flooded much of New Orleans and its environs. By one account, 45 persons died in an abandoned New Orleans hospital and 34 nursing home residents in an adjacent parish drowned when flood waters engulfed their facility (cited in Dowd 2005). These egregious events will surely be the subject of investigations. One hopes that those who abandoned their patients will be held accountable for their actions. But for now, it is not too soon to ask again what if?.

Commendably, the what if the levees break? question had been reportedly asked and answered in past years by local emergency response planners and the U.S. Army Corps of Engineers. If this is true, what failed? Why was there needless loss of life and widespread human suffering in New Orleans? I believe this occurred because policymakers either didn’t ask what if or else they didn’t believe the results of risk assessment scenarios that had accurately forecast the flooding of New Orleans. What if local, regional, and federal policymakers had taken seriously the warnings from the U.S. Army Corps of Engineers that the levees that protected New Orleans from flooding needed repair and upgrade and might not sustain a level 3 or greater hurricane? What if persons of professional competence had been appointed to key leadership positions in emergency management agencies at federal and other levels, rather than appointing persons lacking such credentials but favored because of political influence? What if local and state political leaders had taken their own risk of levee breakage more seriously and provided more state and local funds and other resources for levee maintenance?

What if the Congress had increased funds for levee repair, rather than cutting funds in order to fund projects of clearly lesser importance in terms of risk to hu- man health and ecological integrity? Moreover, why isn’t risk comparison a part of the Congressional appropriations process, particularly in the arena of pork-barrel spending on projects so dear to members of Congress and state legislatures. The cur- rent operational approach, of course, is for members of legislative bodies to bring home some goodies for their constituents, a process that led Congress to appropriate funds to build a bridge to an uninhabited Alaskan island. Will our elected officials ever be able to make the transition from enacting legislation that might be nice for local constituents to legislating what is needed by the people? Could comparative risk assessment be the guide for such a transition at both the federal and state levels of government?

## 1AC—Solvency

### Contention Three: Solvency

### Funding cuts for the Joint Polar Satellite System *ensure* a data gap by 2017.

Spaceflight Now 11 — Spaceflight Now—*the leading source for online space news*, 2011 (“NOAA chief sounds alarm over likely weather data gap,” Byline Stephen Clark, April 15th, Available Online at http://spaceflightnow.com/news/n1104/15jpss/, Accessed 07-31-2011)

The administrator of NOAA warned lawmakers this week the United States could face eroding weather forecast capabilities due to insufficient funding for the Joint Polar Satellite System, a new series of civil spacecraft to monitor severe storms, observe major disasters and collect information for long-term climate prediction models.

Like many federal agencies, NOAA was hit with a significant funding reduction in the budget bill passed by Congress Thursday. The agency's procurement budget, which includes satellite development, was reduced by $25 million from the 2010 level to $1.34 billion through the end of September.

That's more than $700 million less than the spending requested by NOAA for fiscal year 2012, which begins Oct. 1. Agency leaders maintain that is the budget necessary to keep its satellite programs on track, especially the next-generation polar-orbiting JPSS constellation.

Jane Lubchenco, NOAA's administrator, told the Senate Commerce Committee's oceans, atmosphere, fisheries and coast guard subcommittee Wednesday that the budget legislation then under consideration would "almost certainly" lead to a gap in weather coverage.

"I think it's safe to say there will almost certainly be a gap in coverage that, at this point, looks like it might be at least 18 months," Lubchenco said.

The data gap could start as soon as 2017, according to Lubchenco.

Congress passed the budget bill Thursday and sent it to the White House for President Obama to sign it into law.

### Cutting the program now raises costs over the long-term.

Spaceflight Now 11 — Spaceflight Now—*the leading source for online space news*, 2011 (“NOAA chief sounds alarm over likely weather data gap,” Byline Stephen Clark, April 15th, Available Online at http://spaceflightnow.com/news/n1104/15jpss/, Accessed 07-31-2011)

Cutting money from the JPSS program now will not necessarily lead to savings in the long run, according to Lubchenco.

"I can tell you that for every dollar we didn't spend this year on JPSS, we will need to spend three to five dollars down the road because we have to cancel the contracts, we have to let people go," Lubchenco said. "These are very sophisticated, skilled workers, and then you need to bring the programs back up."

### There’s no replacement for the JPSS—it has *sole responsibility* for afternoon orbit.

Spaceflight Now 11 — Spaceflight Now—*the leading source for online space news*, 2011 (“NOAA chief sounds alarm over likely weather data gap,” Byline Stephen Clark, April 15th, Available Online at http://spaceflightnow.com/news/n1104/15jpss/, Accessed 07-31-2011)

NOAA, the U.S. military and Eumetsat, Europe's weather satellite operator, share responsibility for global coverage in three different types of polar orbits. The Air Force is primarily interested in an orbit in which satellites fly over regions on Earth in the early morning, while Eumetsat and NOAA assets cover mid-morning and afternoon orbits, respectively.

Because NOAA has sole responsibility for the afternoon orbit, there aren't any backup options if JPSS is still grounded when NPP goes dark.

"There is no other polar-orbiting satellite that will be flying in the orbit that JPSS was intended to fly in, so that's why there will be a data gap. There is no redundancy," Lubchenco said.

### NOAA is key to polar satellites and severe weather monitoring

Sullivan 11 — Dr. Kathryn D. Sullivan, Assistant Secretary of Commerce for Environmental Observation and Prediction, Deputy Administrator of the National Oceanic and Atmospheric Administration, 2011 (Written Statement to the U.S. Senate Committee on Appropriation’s Subcommittee on Financial Services and General Government hearing “Federal Disaster Assistance Budgeting: Are We Weather-ready?,” July 28th, Available Online at http://www.noaanews.noaa.gov/stories2011/20110728\_sullivan.html, Accessed 07-31-2011)

As the federal government's sole official voice for issuing warnings during life-threatening weather events, and as an established reliable and trusted source, NOAA provides the Nation's first line of defense against severe weather. NOAA operates the Nation's geostationary and polar orbiting satellites, a nationwide network of Doppler weather radars and surface observing stations. Scientists develop computational models that combine these observations with equations describing the physics of our atmosphere and ocean, and our forecasters interpret and deliver critical information. Alerts and warnings for severe weather and other near term hazards (tornadoes, hurricanes, severe thunderstorms, winter storms, most floods, chemical spills, volcanic ash, tsunami, space weather, etc.,) are delivered through multiple redundant mechanisms, including: NOAA Weather Radio, which triggers the Emergency Alert System; NWSChat, which focuses on real-time coordination with local core customers in the broadcast media and emergency management; the Internet; and, through our private sector partners, commercial television and radio, which communicate critical information to much larger audiences and effectively inform those in harm's way to take appropriate action.

### The JPSS is key—polar-orbiting satellites *can’t be replaced by other technologies*.

Globe and Mail 11 — Christine W. McEntee, Executive Director and Chief Executive of the American Geophysical Union—a not-for-profit society of Earth and space scientists with more than 61,000 members worldwide, 2011 (“U.S. weather satellites run into budget storm,” Byline Chantaie Allick, July 18th, Available Online at http://www.theglobeandmail.com/news/technology/science/us-weather-satellites-run-into-budget-storm/article2100491/, Accessed 07-31-2011)

There are expiring American satellites orbiting earth and not enough money to replace them.

The U.S. National Oceanic and Atmospheric Administration (NOAA) has designed its next generation of polar-orbiting meteorological satellites to continue the task of watching the weather from above. But the cash-strapped American government is short on funds for the project, known as the Joint Polar Satellite System (JPSS). Experts say a gap in service between the aging orbiters and the next generation could weaken forecasting of extreme weather. Gaps in coverage could also compromise long-term climate records.

The closer-orbiting polar satellites provide more detailed images of weather conditions than those offered by geostationary communication satellites that hang in one place relative to the earth and help connect our cellphones and computers. Polar orbiting satellites operated by the United States and others produce data that help predict extreme weather, including tornadoes, floods and droughts, three to five days in advance.

In February, 2009, the last of the first generation of weather polar-orbiting weather satellites was launched from Vandenberg Air Force Base in California. Now, with the launch plan for the replacement JPSS pushed back to 2017 by budget woes, NOAA is preparing to launch a spaceraft called the NPP that was only intended for experimental use in preparation for JPSS.

NOAA will receive $382.2-million (U.S.) of the $1-billion (U.S.) it requested for fiscal 2011 and expects to receive a similar amount for 2012.

“What that means is, we’re not going to be able to launch to ensure continuity of satellite observations. We’re going to have a gap,” says Ajay Mehta, NOAA’s deputy program manager for JPSS.

Canadian forecasters and climate researchers rely on a number of polar orbiters owned by Europe, the United States and China, said Mike Manore of the Meteorological Services of Canada. “Satellite data from both polar and geostationary satellites are absolutely critical to Environment Canada’s weather forecasting operation,” he said.

With better technologies would come better forecasts and improved models, says Mr. Manore, adding that Canada intends to update its equipment to use the JPSS system once it’s launched.

Ronald Stewart, an extreme weather expert with the University of Manitoba, describes JPSS as technology that will become invaluable as weather patterns become more unpredictable due to climate change. The ability to monitor extreme weather and the conditions that lead up to it become even more important “because standard rules don’t apply any more,” he said.

The value of richer satellite coverage is illustrated, according to Mr. Mehta, by the “Snowmageddon” storm of 2010 that blanketed much of the American Northeast. Scientists did a simulation in which they removed NOAA data from the afternoon orbit that the JPSS will cover and ended up with a forecast that was off by 50 per cent. At the time, computer models based on satellite information were predicting 20 inches of snow; without information from just one satellite they would have only predicted 10.

# Inherency

## Cuts Now Decimate Effectiveness

### NOAA weather satellites are the lynchpin of America’s weather preparedness but recent cuts will devastate their effectiveness—it is a matter of life and death.

Conathan 11 — Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at http://www.americanprogress.org/issues/2011/02/noaa\_funding.html, Accessed 07-30-2011)

Weather predictions used to be a frequent punchline but they have improved dramatically in recent years. More often than not you’ll need an umbrella if your local television channel or website of choice tells you to bring one when you leave the house. But we could take a huge step back to the days when your dartboard had a reasonable chance of outpredicting Al Roker if House Republicans have their way with the 2011 federal budget.

The House of Representatives is debating the Full Year Continuing Resolution Act (H.R. 1) to fund the federal government for the remainder of fiscal year 2011. The Republican leadership has proposed sweeping cuts to key programs across the climate change, clean energy, and environmental spectrum. They have also decided that accurate weather forecasting and hurricane tracking are luxuries America can no longer afford.

The GOP’s bill would tear $1.2 billion (21 percent) out of the president’s proposed budget for the National Oceanic and Atmospheric Administration, or NOAA. On the surface, cutting NOAA may seem like an obvious choice. The FY 2011 request for the agency included a 16 percent boost over 2010 levels that would have made this year’s funding level of $5.5 billion the largest in NOAA’s history.

Even this total funding level, however, is woefully insufficient for an agency tasked with managing such fundamental resources as the atmosphere that regulates our climate, the 4.3 million square miles of our oceanic exclusive economic zone, the ecological health of coastal regions that are home to more than 50 percent of all Americans, response to environmental catastrophes including the Deepwater Horizon oil spill, and fisheries that employ thousands of Americans and annually contribute tens of billions of dollars to the national economy.

More than $700 million of the president’s proposed 2011 increase in NOAA funding would be tagged for overhauling our nation’s aging environmental satellite infrastructure. Satellites gather key data about our oceans and atmosphere, including cloud cover and density, miniscule changes in ocean surface elevation and temperatures, and wind and current trajectories. Such monitoring is integral to our weather and climate forecasting and it plays a key role in projections of strength and tracking of major storms and hurricanes—things most Americans feel are worth keeping an eye on.

In fact, NOAA has been making great strides in hurricane tracking. The average margin of error for predicting landfall three days in advance was 125 miles in 2009—half what it was 10 years prior. This data translates into a higher degree of confidence among the public in NOAA’s forecasts, which means individuals will be more likely to obey an evacuation order. Further, since evacuating each mile of shoreline costs approximately up to $1 million, greater forecasting accuracy translates to substantial savings.

The United States needs these satellites if we’re to continue providing the best weather and climate forecasts in the world. The implications of the loss of these data far exceed the question of whether to pack the kids into snowsuits for the trip to school. The concern here is ensuring ongoing operational efficiency and national security on a global scale. In some cases it can literally become a question of life and death.

### **Spending cuts will cause satellite delays and gaps in data.**

Morello 11 [Lauren Morellow, reporter for E&E publishing, Climate Wire, “Science: Climate satellite programs scarred in budget fight,” <http://www.eenews.net/climatewire/2011/05/04/archive/1>, May 4]

The protracted fight over this year's federal budget has left its mark on the nation's climate and weather satellites, experts said yesterday at a conference organized by defense trade publisher IHS Jane's. Scientists have warned for years that successive rounds of spending cuts have taken their toll on the nation's constellation of Earth-observing satellites. The National Academy of Sciences warned in 2007 that the United States' ability to monitor Earth from space was "at great risk" as the current stable of satellites aged and their replacements were delayed or shelved. The spending deal hammered out earlier this month by House Republicans, Senate Democrats and the White House adds to that pain. This year's budget chopped the National Oceanic and Atmospheric Administration's purse to $4.6 billion for fiscal 2011, $140 million less than the agency received in the 2010 budget cycle. That has forced the agency to delay the launch of Jason-3, a joint mission with the European Organisation for the Exploitation of Meteorological Satellites to monitor sea level rise, by one year. "It is impacted by the FY '11 budget decision," said Mary Kicza, NOAA's assistant administrator for satellite and information services. "The launch has slipped to 2014." The spending cuts have also scrambled launch plans for the agency's Joint Polar Satellite System, a series of probes that will supply information for weather and climate forecasts. The launch of the program's first satellite, JPSS-1, will be delayed by at least 18 months beyond the original 2016 target.

## They Say: “NPP Solves”

### The NPP can’t fill the gap — it is on life support, *too*.

Spaceflight Now 11 — Spaceflight Now—*the leading source for online space news*, 2011 (“NOAA chief sounds alarm over likely weather data gap,” Byline Stephen Clark, April 15th, Available Online at http://spaceflightnow.com/news/n1104/15jpss/, Accessed 07-31-2011)

NASA plans to launch a stopgap weather and climate research satellite named the NPOESS Preparatory Project, or NPP, into polar orbit in October. NPP has a five-year life span in space, meaning it could be lost by late 2016 or early 2017 if its operations cannot be extended.

The launch of the JPSS 1 satellite will occur in September 2016, at the earliest. And that's only if funding is doubled soon, which isn't likely in the current budget environment. It's more likely the launch could be pushed back to 2018, officials said.

Sen. Mark Begich, D-Alaska, said he and other senators attempted to raise support for more JPSS funding in the federal budget, but their efforts were shot down in the name of fiscal austerity.

"There will be a data gap," Lubchenco told Sen. Begich. "That data gap will have very serious consequences for our ability to do severe storm warnings, long-term weather forecasts, search and rescue and good weather forecasts for your state."

Alaska is best served by polar orbiting satellites like those envisioned for JPSS because the state is too far north for good coverage by NOAA's high-altitude geostationary weather satellites over the equator.

Stood up after the break-up of the behind-schedule, over-budget National Polar-orbiting Operational Environmental Satellite System in February 2010, the JPSS program is one-half of the planned U.S. weather satellite fleet in low-altitude orbits.

NPOESS was a combined program between NOAA and the U.S. Air Force, so the military started the Defense Weather Satellite System last year to continue the Pentagon-run weather observation network.

NOAA has been trying to start the JPSS program with a fraction of the money needed. The agency redirected its half of the NPOESS budget toward JPSS, but it wasn't enough to get the new program off to a healthy start.

Preston Burch, the NASA manager in charge of developing JPSS satellites, said in February that instrument and spacecraft design work was being significantly curtailed due to budget constraints. The JPSS 1 satellite is a clone of NPP with the same instruments and a nearly identical spacecraft bus built by Ball Aerospace and Technologies Corp.

Managed by NASA, NPP was originally conceived as a risk reduction and gap-filler satellite for the NPOESS program's high-tech sensor suite and NOAA's polar satellite fleet. Now, the satellite that was once an insurance policy may still not be enough to ensure weather data continuity from polar orbit.

"Our spacecraft contract we have is on life support," Burch said in Feburary. "You can envision the patient with a breathing tube, IV drips, a heart monitor and everything. It's just trickling along at a pathetically slow rate because we don't have money. We don't even have money to buy long-lead items for it. That's really what's pushing the launch date out."

## They Say: “Funding Will Come Eventually”

### Despite pushes JPSS funding will not come in 2011.

Morello 11 [Lauren Morello E&E Reporter and ClimateWire, Scientific American, “Budget Cuts Open Earth Observation Gap,” 4/14, http://www.scientificamerican.com/article.cfm?id=budget-cuts-earth-observation-gap]

The proposed 2011 budget compromise, which would fund the government through the end of September, would worsen that problem. It chops NOAA's budget to $4.6 billion, $140 million below the level enacted in fiscal 2010. The agency had sought $5.5 billion this year. Although Congress has yet to vote on the new plan, Mark Begich (D-Alaska), chairman of the Subcommittee on Oceans, Atmosphere, Fisheries and Coast Guard, said there was little chance NOAA would receive full funding for the satellite program this year -- or next. "Funding will remain tight into the future," said Begich, one of a group of Senate Democrats who participated in an unsuccessful last-ditch effort last week to secure a budget boost for JPSS. "You can pretty much assume it's not coming in for 2011. We're moving to the next stage." Lubchenco said her agency believes it has few options for averting a gap in the climate and weather data that JPSS satellites are designed to gather. The current polar-orbiting satellite now in space is slated to be replaced in September by a satellite known as the "NPOESS Preparatory Project," or NPP.

# Internal Links

## Agriculture

### Plan key to agriculture—drought forecasting.

Conathan 11 — Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at http://www.americanprogress.org/issues/2011/02/noaa\_funding.html, Accessed 07-30-2011)

\* Farmers rely on NOAA’s drought predictions to determine planting cycles. Drought forecasts informed directly by satellite data have been valued at $6 billion to 8 billion annually.

### **Accurate forecasts are necessary to stop an impending food crisis**

Baker 11 [Marcia Merry Baker, Economics Editor, Executive Intelligence Review, “What Obama, Media Won’t Say: Storms Threaten Food Supply,” 6/3, http://www.larouchepub.com/other/2011/3822storms\_thrtn\_food.html]

May 27—Drastic food shortages and sky-high food prices are now in the making, from the combined results of the extreme weather on the continental farm belt, and the inaction by the Obama Administration. Relevant agencies—the Federal Emergency Management Agency (FEMA), the National Guard, the Coast Guard, the Army Corps of Engineers, local first-responders and volunteers—are doing what they can, but they lack authority and resources; plus, they are muzzled by the White House from getting out the truth. The U.S. Department of Agriculture (USDA) is outright lying about the storms' impact on crops, and continues to go through the motions on farm relief. The media is simply covering up. Over half of this year's national rice crop might be wiped out by the Lower Mississippi Basin flooding. A big drop in the wheat harvest is coming from the High Plains states, hit by drought in the South, and cold and wet in the North. There are threats to corn and soybeans from the widespread storms and flooding. Livestock production costs are soaring for feed, storm protection, and going-to-market. These dire prospects for food shortages can be ameliorated, even at this late time, if there is a radical policy shift for the Federal government to resume its responsibilities for the general welfare, namely for the food supply. Forcing that to happen, is one and the same issue as the current mobilization to restore the Glass-Steagall Act, resume sound credit and production in the nation, and cancel bailouts, speculation, and chaos. Farmers and agriculture community leaders would rally to this shift, and determine the particulars of what must be done, given the storms and huge damage, for replanting, planting elsewhere, rebuilding herds, capping prices (at a parity price), banning speculator/index fund activity on the exchanges, etc. The biggest disaster threat at present, is Obama remaining in the White House. All the while that the central U.S. states were hit with flooding and tornadoes—beginning with Joplin, Mo., May 22 and affecting Kansas, Oklahoma, and a vast arc of states, even bringing tornadoes along the Ohio Valley, and up to Vermont—Obama and family stuck with their suck-up-to-royalty tour of Europe. Obama arranged two statements to the press on the tornado disasters, before meeting with the Queen on May 24. In Dublin, he had himself photographed while on the phone with the Mayor of Joplin; Obama said he would visit May 29—a gap longer than President G.W. Bush's wait of five days, to see New Orleans after Hurricane Katrina. In London, Obama said, "All we can do is let them [in Missouri] know that all of America cares deeply about them, and that we are going to do absolutely everything we can, to make sure that they recover." Meantime, his budget cuts to FEMA, weather warning satellites, the Army Corps of Engineers, and other essentials, remain in effect. LaRouche: An Indictment of Obama On May 24, reviewing the Mississippi Basin flooding, and the wheat belt drought, Lyndon LaRouche said, "The weather story is an indictment of the President of the United States. And what his reaction was, to what happened in the Missouri area, saying, 'Well, we won't do anything now. I'm not coming back, it's not that urgent. And yes, we'll look into it, but we're not committed to doing anything, until I investigate this matter, or have it investigated.' "Here you have an immediate urgency in the state of Missouri, which is being wiped out, virtually. From Minnesota all the way down, that whole belt, the Mississippi belt, you have a collapse—a wipeout of the food. It means that the price of chicken is going to go soaring, to such a level that you may pay $4 a pound for chicken, and a comparable increase in price for eggs.... "But there has been no reaction, by the general press, except for the [National] Weather Service, on this! There's no reaction to the fact that the reason we're not having forecasts to warn people to stay alive, is because the President of the United States shut down a lot of the satellites!" Production Zones Hit: Rice The North American plantings, growing conditions, and harvest picture are dire for wheat, rice, corn, and other crops, and for livestock for the current season. Plus, the productive base for agriculture is itself being destroyed for near-future farm output both in the Mississippi/Ohio flood states, and in the High Plains drought region, as storage facilities, barns, sheds, transportation links, and fields are damaged or ruined. The situation can be summarized, by a brief look at the production zones for key staple crops. Begin with U.S. rice production, of which 75% is grown in the Lower Mississippi Basin. Arkansas alone accounts for half of all U.S. rice production, and the state has been hit by multiple weather disasters—the April tornadoes, the flooding of the White River and other Ozark run-off, the flooding of the Mississippi River, and then this week's tornado storms. Besides Arkansas, the other rice states are: Mississippi (16% of national rice output); Louisiana (13%) and Missouri (6%). All of these rice-growing areas are suffering from floods and torrential rains. However, the USDA, in line with Obama's do-nothing policy, has put out no interim estimates of damage to crops and land. The May 12 Rice Outlook report by the USDA Economic Research Service simply ran a CYA statement: "The full impact on the 2011/12 rice crop of this year's record or near-record flooding of the lower Mississippi River is unknown at this time." U.S. rice losses are an automatic hit for the world food supply, given that the United States has become, under cartel-rigged trade, the world's third-largest rice exporter. Farm groups are resorting to issuing their own best estimates of the scale of losses and food shortages. On May 23, the American Farm Bureau Federation released the following statement from its national office: AFBF Estimates 3.6 M Ag Acres Hit by Floods Washington, D.C. May 23—After learning firsthand from state Farm Bureaus about recent flooding devastation in the southern United States, the American Farm Bureau Federation now estimates that nearly 3.6 million acres of farmland has been impacted by the natural disaster. On a Farm Bureau nationwide call late last week, states also reported an estimated 40% of this year's rice crop has been affected. Arkansas topped the list with a million acres affected, including 300,000 acres of rice and 120,000 acres of wheat. Illinois was estimated to have 500,000 acres of farmland under water, with Mississippi and Missouri coming in at 600,000 and 570,000 acres, respectively. Tennessee reported 650,000 acres and Louisiana was pegged at 280,000 acres. "There is no doubt about it, the effect of the flooding on farmers and ranchers is being felt deeply across the south," said AFBF Chief Economist Bob Young. "One is reminded of the '93 or '95 floods in terms of scale of affected area." "But, said Young, it's critical that the government acts quickly to rebuild the levees and allow producers to make plans for the future. "In many of these areas, agriculture is the major economic driver for the region," said Young. "While some may be able to get a crop in the ground this year, we need to also think about the long-term economic health of these farms and communities." "Without the levees in place to protect homes and farms, however, it may be hard to make those investments," added Young. Wheat: Southern Drought; Northern Cold, Wet In the southern Winter wheat zone of the High Plains (where the grain is sown in the Fall, and harvested now), harvesting is underway in Texas and Oklahoma, where intense drought has reduced yields, or even destroyed the crop. A large area of western Texas, which last year produced just over 103 million bushels, will be lucky to harvest 23 million this year (based on the U.S. Department of Agriculture yield estimate, which may be high). Many acres have been opened for cattle, or plowed under for insurance purposes. In Kansas, where the harvest begins next month, the Kansas Association of Wheat Growers met last week, and compiled what they called a "mixed bag" estimate, at best, of reduced yields, widespread "abandonment" (farmers opting to file insurance claims for a failed crop). Otherwise, there are a few reports of good stands of wheat. Since then, this week's torrential storms and tornadoes hit. Wheat fields in the Mississippi Delta region have suffered huge damage from heavy rains and floods. In Arkansas, 22% of Winter wheat will likely be abandoned as too wet to harvest, on about 120,000 acres. Parts of the Georgia wheatlands have also been hit. Moreover, a yield-reducing fungus has spread in the wet conditions in the South. Known as stripe rust (Puccinia striiformis), it can reduce yields by 40% on vulnerable wheat varieties, if not caught and treated quickly. Proceed to the far northern part of the continental wheat belt, where the grain is planted in the Spring, and the sowing has been delayed by prolonged wet and cold conditions, or even floods. Grain planting in Canada is only about 53% complete, compared with a customary 75% at this time. The Canadian Wheat Board issued a statement May 24 on the situation: "Farmers in southern Saskatchewan and Manitoba are struggling to get crop in the ground. Progress in these areas was pushed further back over the weekend by moderate to heavy rain (15-65 mm) that brought seeding to a halt." The North American wheat losses are amplified as a world crisis, by major losses in other wheat-production centers, such as France, which is hard hit by drought; there is also the global impact of last Summer's drought in the Eurasian wheat belt. Last week, the Ukrainian Parliament voted up a measure to continue wheat export restrictions. A drastic wheat shortage is in the making. Earlier this year, the International Grains Council forecast a fall in world wheat output this year, to below 672 million metric tons, down from 682 mmt in 2010 and 2009, but now, the direction is going below 660 mmt or far lower. Corn: Delayed Planting, Ruined Fields In the "river states" of the Ohio Basin (Ohio, Indiana, Illinois, Kentucky, and Tennessee) and the Lower Mississippi (Missouri, Arkansas, Mississippi, Louisiana), hundreds of counties have seen their corn and soybean crops delayed, damaged, or ruined. The one piece of deceptively "good" news is that in the center of the corn belt, in Illinois and Iowa—the latter being the single largest corn state in the nation, accounting for 19% of the annual crop)—farmers report that their corn has been planted or replanted in time, and today looks good. But this can neither compensate for losses in the other states, nor is it sane to just wait and see whether the next three months bring perfect weather for Iowa and Illinois corn, and call that a national food security policy. In particular, under the Obama Royal-Green Regime, 40% of Iowa corn is now going to ethanol, not food! Iowa is also the largest pork and shell-egg producer state in the nation. Bacon and eggs will be a luxury of the past very soon. In Ohio, which ranks between being the fifth and eighth biggest corn-producing state, has been so soaked, that only 11% of the fields were planted as of May 22, compared with over 80% in a decent year. Some farmers may try to switch to soybeans, which have a shorter growing season. Others are lining up insurance claims, for "prevented planting." This situation is playing out in many other corn counties, outside the central corn belt (Nebraska, Iowa, Illinois), making for a guaranteed fall in national production. In turn, this is an international disaster, given that U.S. output represents 40% of total annual world corn production. Lies and Chiseling The latest monthly USDA crop forecast, released May 12 in the midst of the severe storm and flood damage (WASDE, World Agriculture Supply and Demand Estimates) was a travesty for understating the impact of the flooding, droughts, hail, and other hits on U.S. crops. All the grain production figures were overstated. The USDA lied. Even the low-lifes in the financial media are ridiculing the May 12 report, as presenting harvest estimates that are obviously way too high. An Australian news service, farmonline.com.au, ran quotations from various USDA critics, such as a commodity analyst for Commonwealth Bank, who said, "The USDA's estimate of US winter wheat production appears too high, as do its forecasts for Canadian and Black Sea wheat production next season...." Meanwhile, the so-called President of the United States is AWOL, concentrating on burnishing his image by appearances with the Queen, and on cutting budgets. Among these spending cuts are supports vital to weather monitoring and forewarning (a 30% cut in funding of the National Weather Service), disaster response, and emergency aid to farming to protect and assure the food supply. For more than a year, the Obama White House has waged war against the nation's leading Earth-observation and -exploration capabilities in space, including its potential collaboration with other spacefaring nations. Now, the Obama Administration has crippled some observation satellites already in space, and pushed off and cancelled others. By cuts in NASA's and the National Oceanic and Atmospheric Administration's (NOAA) budget in FY2011, and again for FY2012, three satellite arrays crucial for monitoring Sun, solar wind, and earthquake-precursor activity have been lost in the recent period: GOES 11 as of Feb. 28, when its data stopped being collected; DESDynI, which did not get launched; and the French-American Demeter, shut off in December 2010 after actually detecting precursor activity to the Haiti earthquake of February 2010. The White House Office of Management and Budget (OMB), in its FY2012 budget message, told NASA to indefinitely "defer" the Climate Absolute Radiance and Refractivity Observatory (CLARREO) constellation of four satellites. It was designed for extremely precise data collection on solar radiation's interaction with the Earth. Beyond this, the Joint Polar Satellite System (JPSS) funding was cut out of the FY 2012 budget entirely, with "very serious consequences to our ability to do severe storm warning, long-term weather forecasting, search and rescue, and good weather forecasts" for the polar regions, according to testimony of the Administrator of NOAA.

## Aviation

### Plan key to aviation industry—huge cost savings.

Conathan 11 — Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at http://www.americanprogress.org/issues/2011/02/noaa\_funding.html, Accessed 07-30-2011)

\* NOAA’s volcanic ash forecasting capabilities received international attention last spring during the eruption of the Icelandic volcano, Eyjafjallajökull. The service saves airlines upwards of $200 million per year.

## Climate Monitoring

### The plan is key to maintain accurate climate monitoring.

NOAA 11 — National Oceanic and Atmospheric Administration Satellite and Information Service, last updated in 2011 (“Frequently Asked Questions,” Available Online at http://www.nesdis.noaa.gov/jpss/faq.html, Accessed 07-31-2011)

Yes. The international climate record — used to help scientists predict potential high impact events and allow emergency managers to activate life-saving plans — would be severely impacted and lead to gaps in data. Any degradation of the current satellite coverage would also reduce NOAA's ability to monitor and predict climate trends in seasonal and longer time scales. Beyond climate research and prediction, global sea surface temperature measurements, volcanic eruption monitoring, forest fire detection, global vegetation analysis, ozone hole monitoring and other applications would be affected.

## Economy/National Security

### The status quo ensures service interruptions and massive cost increases—the plan is key to the economy and national security.

Conathan 11 — Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at http://www.americanprogress.org/issues/2011/02/noaa\_funding.html, Accessed 07-30-2011)

All of these uses will be compromised if the Republicans succeed in defunding NOAA’s satellite program. At least an 18-month gap in coverage will be unavoidable without adequate funding for new polar-orbiting satellites this year. More troubling, taking an acquisition program offline and then restarting the process at a later date would lead to cost increases of as much as three to five times the amount the government would have to spend for the same product today.

So here’s the choice: Spend $700 million this year for continuous service or $2 billion to $3.5 billion at some point in the future for the same equipment and a guaranteed service interruption.

Environmental satellites are not optional equipment. This is not a debate about whether we should splurge on the sunroof or the premium sound system or the seat warmers for our new car. Today’s environmental satellites are at the end of their projected life cycles. They will fail. When they do, we must have replacements ready or risk billions of dollars in annual losses to major sectors of our economy and weakening our national security.

That’s an ugly forecast. Tragically, it’s also 100 percent accurate.

## Weather Preparedness

### The plan is key to weather preparedness—the U.S. is uniquely vulnerable.

Hooke 11 — William Hooke, Senior Policy Fellow and Director of the Policy Program with The U.S. Climate Change Science Program, 2011 (Prepared Testimony for Senate Commerce, Science, and Transportation Committee hearing entitled “America’s Natural Disaster Preparedness: Are Federal Investments Paying Off?,” May 4th, Available Online at http://www.livingontherealworld.org/?p=267, Accessed 07-31-2011)

Because of its size and its location, the United States bears a unique degree of risk from natural hazards. We suffer as many winter storms as Russia or China. As many hurricanes as China or Japan. Our coasts are exposed not just to storms but to earthquakes and tsunamis. Dust bowls and wildfire have shaped our history. And, 70% of the world’s tornadoes, and some 90% of the truly damaging ones, occur on our soil.

In addition, because of our global reach, disasters a world away call for a U.S. response: earthquakes in Haiti and Chile, a tsunami in Japan, floods in Pakistan.

Our current disaster preparedness, though good, and though improving, remains far from ideal. Warnings are more accurate and timely, but too often are lost, or garbled, or misunderstood, in that “last mile,” where they struggle to reach those actually in harm’s way. Compromises in land use and building codes mean our homes aren’t always as safe as we might hope. 85% of the small businesses who close their doors as a result of disaster never reopen. The dollar amount of property loss and business disruption is growing faster than GDP. And virtually every disaster very quickly also becomes a public health emergency. We can do better, if we:

Maintain our essential warnings systems. That means funding for the day-to-day operations, and funding for modernization. It means funding continuity year-to-year. The biggest gap right now? We’re told some $800M in additional funding is needed for NOAA’s Joint Polar Satellite System (JPSS), in this fiscal year (FY2011), to avoid an unacceptable gap in satellite coverage beginning no later than 2017[1]. Such a gap will throwback our warning capability 20 years.

### Weather preparedness is key to the economy—the risk is increasing.

Sullivan 11 — Dr. Kathryn D. Sullivan, Assistant Secretary of Commerce for Environmental Observation and Prediction, Deputy Administrator of the National Oceanic and Atmospheric Administration, 2011 (Written Statement to the U.S. Senate Committee on Appropriation’s Subcommittee on Financial Services and General Government hearing “Federal Disaster Assistance Budgeting: Are We Weather-ready?,” July 28th, Available Online at http://www.noaanews.noaa.gov/stories2011/20110728\_sullivan.html, Accessed 07-31-2011)

Nearly 90 percent of all Presidentially-declared disasters are weather and water-related, and our vulnerability to the impacts is increasing as our population grows. As shown in the chart below, the, the number of these events is trending upward, with 2011's numbers on track to surpass last year's record. [Chart Omitted]

Over the past thirty-plus years, the United States has seen a total of 107 weather-related disasters each totaling over $1 billion dollars in damage. Total standardized losses since 1980 exceed $750 billion.

Demographic trends and population growth and an increased reliance on technology, coupled with this trend in extreme weather events, have made our society more vulnerable to high impact events. As a result, many agricultural, business and urban planners are looking for ways to increase community resilience now. For example, the City of Chicago is taking steps to prepare for the likelihood of intense storms striking more often, of rainfall events causing more flooding, and of warmer temperatures. Local climate studies, along with recent trends such as an increase in the frequency of heavy rainfall events, have led them to conclude that this is the soundest action to take in order to mitigate the cost and impact of these events. New York City is also engaged in adaptation planning, with particular focus on the risk of flooding from rising sea level. The Navy's Task Force on Climate Change has advised that the Navy should prepare to police the equivalent of an extra sea as the Arctic ice melts. These cities and organizations, among many others, recognize the need to understand changes and trends in weather patterns, and to apply this to planning that may reduce vulnerability to high-impact weather and water events. Their recognition for the need to reduce their vulnerability to weather and water extremes is an important first step. However, there is much more that needs to be done in other sectors of our economy and with the general public to increase our resiliency to the impacts of these events.

There is more that can be done, and that communities and businesses are mobilizing to do. This is why NOAA's mission to understand and predict changes in climate, weather, oceans, and coasts, to share that knowledge and information with others, and to conserve and manage coastal and marine resources is so vital. Our vision for healthy ecosystems, communities, and economies, that are resilient in the face of change, can lead to improved economic viability of weather-dependent sectors like agriculture and other businesses, as well as more lives saved.

### Extreme weather is *the new normal*—effective preparedness is key to the U.S. economy over the short- and long-term.

Weiss et al. 11 — Daniel J. Weiss, Senior Fellow and Director of Climate Strategy at the Center for American Progress, holds a Master of Public Policy from the University of Michigan, with Valeri Vasquez, Special Assistant for Energy Policy at the Center for American Progress, and Ben Kaldunski, former intern with the Energy Team at the Center for American Progress, 2011 (“The Year of Living Dangerously: 2010 Extreme Weather Cost Lives, Health, Economy,” Center for American Progress, April 29th, Available Online at http://www.americanprogress.org/issues/2011/04/extreme\_weather.html, Accessed 07-31-2011)

April 2011 has been a cruel month indeed for Americans due to extreme weather. The Weather Channel observed that:

It's been a truly awful, record-setting, tornadic April. We've had eleven major severe weather events, some lasting multiple days.

These extreme events included “supercell thunderstorms” in Iowa, severe drought and record wildfires in Texas, and heavy rains across the United States. The recent southeastern storms and tornados took at least 297 lives across eight states. And heavy rains in the Mississippi River valley could cause the most severe, damaging floods there in nearly a century.

This extreme weather, though record setting in some places, may be the new normal. Last year, unprecedented extreme weather led to a record number of disaster declarations by the Federal Emergency Management Agency. The United States and the world were swept by flooding, severe winter storms, heat waves, droughts, hurricanes, and tornadoes.

The extreme weather of 2010 exacted a huge human and economic toll as well. More than 380 people died and 1,700 were injured due to weather events in the United States throughout the year. And the magnitude of these events forced the Federal Emergency Management Agency, or FEMA, to declare 81 disasters last year. For nearly 60 years, the annual average has been 33. In 2010, total damages exceeded a whopping $6.7 billion. As of April 2011, FEMA had dedicated more than $2 billion in financial assistance to those harmed by extreme weather in 2010.

A February 2011 special report from Reuters noted that it’s been rough going for the $500 billion U.S. property insurance business, explaining that “storms are happening in places they never happened before, at intensities they have never reached before and at times of year when they didn't used to happen.”

It is precisely this uncertainty “associated with climate change that substantiates the risks to the economy and society,” says George Backus, D.Engr., of the Discrete Mathematics and Complex Systems Department at Sandia National Laboratories. This is bad news for a nation just emerging from the grips of the Great Recession. Per Backus, a 2010 report from Sandia estimates that “the climate uncertainty as it pertains to rainfall alone [puts] the U.S. economy is at risk of losing between $600 billion and $2 trillion, and between 4 million and 13 million U.S. jobs over the next 40 years.”

Dr. Evan Mills, a scientist in the Environmental Energy Technologies Division at the Lawrence Berkeley National Laboratory confirms that in the United States, “insured weather-related losses in recent years have been trending upward much faster than population, inflation, or insurance penetration, and far outpace losses for non-weather-related events.”

### Funding cuts decimate weather preparedness—key to the economy.

Delta Farm Press 11 — Delta Farm Press—*provides growers and agribusiness with in-depth coverage of the region's major crops plus the legislative, environmental and regulatory issues that affect their businesses*, 2011 (“Funding cut may jeopardize satellite for weather, flood, drought forecasts,” Byline Hembree Brandon, May 5th, Available Online at http://deltafarmpress.com/blog/funding-cut-may-jeopardize-satellite-weather-flood-drought-forecasts, Accessed 07-31-2011)

The $1 billion funding cut in the fiscal 2011 budget would, at best, delay launch of the first satellite in the $12 billion Joint Polar Satellite System (JPSS) from 2016 to 2018, but even longer if funds aren’t restored in the fiscal 2012 budget. Costs would be pushed far beyond original estimates.

Without the new “bird” to replace older, less sophisticated satellites that are expected to fail over the next several years, the National Oceanic and Atmospheric Administration’s forecasts for the southern U.S. could lose as much as 50 percent of their accuracy, says Jane Lubchenco, NOAA administrator.

This would “almost certainly” cause gaps in weather forecasting that has become increasingly accurate in the past decade as computers have become more powerful and accumulated data from satellites and ground/sea stations have allowed more detailed modeling of weather patterns.

Polar satellites, which are in lower orbit than geostationary satellites, provide a much closer, sharper resolution of Earth and are extremely important to a huge contingent of users, from the military to general aviation, maritime transportation, emergency responders, to agriculture.

Farmers rely on polar satellites for drought, extreme temperature, and length of growing season information to plan their plantings and determine which type of crop to grow.

Droughts are among the greatest natural hazards — estimated to be $6 billion to $8 billion annually in the U.S., affecting not only agriculture, but transportation, recreation and tourism, forestry, and energy sectors. The 1999 drought, for example, led to farm net income losses of approximately $1.35 billion, according to USDA estimates.

There are only three polar satellites systems covering the globe: NOAA’s, the Department of Defense DMSP satellite, and Europe’s EUMETSAT. All three pool their data to give scientists a full view of the globe — including the poles. There are approximately six passes over any particular spot on the globe each day, which is particularly important for changing situations such as fast-moving hurricanes and wildfires, as well as for major flooding.

“There is no other polar orbiting satellite that will be flying in the orbit that JPSS was intended to fly,” Lubchenco told a Senate Commerce subcommittee. “There is no redundancy — there will be a data gap. I can tell you that for every dollar we didn’t spend this year on JPSS, we will need to spend $3 to $5 down the road.”

And while the anti-government crowd retorts, “Who cares? Let ‘em watch the Weather Channel,” the reality is, Lubchenco says, that NOAA satellites provide “98 percent of the information that goes into our weather forecasts. These satellites do a wide variety of things that are very important to saving lives and property and enabling commerce in our country.”

### Weather preparedness is key to the economy—NOAA predictions are vital.

Sullivan 11 — Dr. Kathryn D. Sullivan, Assistant Secretary of Commerce for Environmental Observation and Prediction, Deputy Administrator of the National Oceanic and Atmospheric Administration, 2011 (Written Statement to the U.S. Senate Committee on Appropriation’s Subcommittee on Financial Services and General Government hearing “Federal Disaster Assistance Budgeting: Are We Weather-ready?,” July 28th, Available Online at http://www.noaanews.noaa.gov/stories2011/20110728\_sullivan.html, Accessed 07-31-2011)

NOAA scientists have been at the forefront of weather and climate science, forecasting and public preparedness for decades—our science helps save lives and livelihoods. NOAA has a leading role in understanding changes in weather and climate extremes, such as trends in severe local storms and extremes in precipitation—too little or too much, too often or too infrequent.

Longer lead-time forecasts for droughts, seasonal flooding, heavy rainfall events, heat waves and cold spells provide tremendous economic value for the Nation. NOAA provides a spectrum of critical information across a range of time and space scales, which is used by government, business, emergency managers, planners, and the public. That information's value increased when businesses, farmers, energy producers and utilities, as well as the general public, are prepared and have effective plans of action to mitigate impacts.

## Evacuations

### Plan makes hurricane evacuations more efficient—huge cost savings.

Conathan 11 — Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at http://www.americanprogress.org/issues/2011/02/noaa\_funding.html, Accessed 07-30-2011)

\* When a hurricane makes landfall, evacuations cost as much as $1 million per mile. Over the past decade, NOAA has halved the average margin of error in its three-day forecasts from 250 miles to 125 miles, saving up to $125 million per storm.

## Readiness

### Plan key to military readiness—only source of weather and climate data.

Conathan 11 — Michael Conathan, Director of Ocean Policy at the Center for American Progress, former staff member on the Senate Committee on Commerce, Science, and Transportation’s Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard, holds an M.A. in Marine Affairs from the University of Rhode Island, 2011 (“A Forecast for Disaster: Stormy Conditions Await if NOAA Funding Is Cut,” Center for American Progress, February 18th, Available Online at http://www.americanprogress.org/issues/2011/02/noaa\_funding.html, Accessed 07-30-2011)

\* NOAA’s polar-orbiting satellites are America’s only source of weather and climate data for vast areas of the globe, including areas key to overseas military operations. Their data are integral to planning deployments of troops and aircraft—certain high-atmosphere wind conditions, for example, can prohibit mid-air refueling operations.

## Impact Framing

### We should prepare for the worst-case scenario environmental events

Clague 6 [John J. Clague, Earth Sciences professor Simon Fraser University, “Earth Science, Disasters, and the Precautionary Principle, http://gsa.confex.com/gsa/2006AM/finalprogram/abstract\_111542.htm]

Earth science is arguably unique among sciences in its grounding in time, the fourth dimension. Today, however, nearly all societies operate almost exclusively in the present; most people's perception of “deep time” is at most a few decades. This view of time leads to reactive responses rather than proactive planning and contributes to many of the fundamental problems that beset humanity. Earth scientists must inform the public of the dangers of seeing the world only in the present. No one can foresee the future, but earth scientists can posit plausible natural events that are very low risk on short timescales, but extraordinarily high risk on timescales of centuries. Examples of such plausible worst-case scenarios include a global pandemic, sea-level rise of several metres, eruption of Vesuvius comparable to that in AD 79, a Category 4 hurricane making landfall in New York, and a great earthquake in Tokyo or Los Angeles. An appreciation of the inevitability of worst-case events plays on earth science strengths, because it demands that governments view their actions on timescales much longer than they have in the past. It further demands that we embrace the precautionary principle by preparing for natural disasters and catastrophes. Earth scientists will have to counter two arguments that delay proper consideration of catastrophic events in serious long-term planning – first, catastrophic events like the 2004 South Asian tsunami are so rare that we need not worry about them; and second, catastrophes are acts of God over which humans have no control. An example of an important issue to which earth scientists must contribute is the question of what, if anything, to do about global warming. We cannot predict exactly how increasing atmospheric CO2 concentrations will play out during this century, but the worst-case scenario, which is not ruled out by recent research, involves temperature increases of many degrees, sea-level rise of several metres, and catastrophic ecosystem damage. Earth scientists should not be fear mongers, but they must use their knowledge and skills to convince the public to at least consider what may seem unimaginable, worst-case scenarios.

# Solvency

## JPSS is key

### The JPSS is key—no substitutes.

NOAA 11 — National Oceanic and Atmospheric Administration Satellite and Information Service, last updated in 2011 (“Frequently Asked Questions,” Available Online at http://www.nesdis.noaa.gov/jpss/faq.html, Accessed 07-31-2011)

There is no substitute for the important role that polar satellites play in the United States alone, from hurricane forecasting to aiding in evacuations and wildfires, to helping troop deployment operations overseas. The satellites also maintain continuity of the 40+ years of space-based earth observations to monitor and predict climate variability. JPSS will have advanced technologies to improve our current capabilities, further advancing weather and climate science and services.

### **The JPSS will provide 98% of weather monitoring data**

Morello 11 [Lauren Morello, E&E reporter, ClimateWire, “Science: NOAA chief says House budget cuts would be ‘devastating’,” 3/11, http://www.eenews.net/cw/sample/print/2]

Science panel Republicans also took aim at NOAA's plans for its collection of weather and climate satellites. The White House's fiscal 2012 budget request seeks $2 billion for NOAA's environmental satellite division. Just over $1 billion of that would be set aside for the Joint Polar Satellite System (JPSS), a weather and environmental satellite program formed out of the scraps of a defunct joint effort between NOAA and the Air Force. According to NOAA, JPSS will provide 98 percent of the raw data for the agency's weather model and is crucial to the agency's hurricane forecasts, climate predictions and ability to assist with search-and-rescue operations. But the satellite program's progress has been threatened by the series of continuing budget resolutions that have kept the federal government's lights on since October. NOAA needs -- but has not received -- $910 million for JPSS during the current fiscal year, Lubchenco told lawmakers. She said: "I fully appreciate what a large number that is, but the consequences of not having it are very severe. For every dollar we do not spend this year on this program, it will cost us three to five dollars in the future to build this program back up." Operating under temporary spending measures for the last five months has already delayed JPSS by at least a year, Lubchenco said. "What that means is that down the road, we will inevitably have a gap where we will not have the ability to do severe storm warnings as we do them today," she added. "It is highly likely we will have a gap. The longer we wait, the longer that gap gets." Hall questioned why NOAA was spending money to developing JASON-3, a joint mission with the European Organization for the Exploitation of Meteorological Satellites to monitor sea level rise, while its JPSS coffers were running dry. "You know that you can't have both," Hall told Lubchenco. "Don't you need to prioritize in this economy? I think weather is, by any reasonable person, more important than sea-level change. We can't have everything we want."

## Polar Satellites Key

### Polar-orbiting satellites are key.

NOAA 11 — National Oceanic and Atmospheric Administration Satellite and Information Service, last updated in 2011 (“Frequently Asked Questions,” Available Online at http://www.nesdis.noaa.gov/jpss/faq.html, Accessed 07-31-2011)

Polar satellites provide the only weather/climate information for large swaths of the planet. Polar satellites also provide critical information for long-term forecasts. Without NOAA's JPSS satellites on-orbit, the lost data will lead to less accurate and timely numerical weather prediction models that are needed to support weather forecasting, thereby placing lives, property, and critical infrastructure in danger. Without polar observations, 2-3 days' advance warning of extreme events would be significantly diminished, as would the understanding of storm surge and flood potential – making it more difficult to conduct safe and strategic evacuations of coastal residents. Response time to emergency beacons from distressed mariners, aircraft personnel and others could double if there are no or reduced polar satellites receiving such signals. In 2010 alone, 295 lives were saved through NOAA's Search and Rescue beacon program. In the U.S., over 6,500 people have been rescued since 1982.

### **Only polar orbiting satellites can provide accurate and advance weather readings**

Jansen 11 [Bart Jansen, reporter, Gannett Washington Bureau, USA Today, “Looming gap in weather satellites threatens forecasting,” 6/17, http://www.usatoday.com/weather/news/2011-06-17-weather-satellite-budget-cuts\_n.htm]

Congressional budget cutting will delay the launch of a key weather satellite and hinder tracking of killer hurricanes, tornadoes and other severe weather, officials warn. The satellite, which had been scheduled to launch in 2016, will be postponed 18 months because of spending cuts and delays. The threat during that gap is that National Weather Service forecasts will become fuzzier, with the paths of hurricanes and tornadoes even less predictable. With more budget cuts looming, further delays are possible — something President Barack Obama alluded to this week. In an interview with NBC's "Today" show Tuesday, the president acknowledged the need to reduce federal debt but said "really important" priorities include ensuring "government functions like food safety or weather satellites are still up there." The satellite at stake is part of the National Oceanic and Atmospheric Administration's Joint Polar Satellite System. The program is crucial for weather forecasting because polar satellites circle Earth every 90 minutes, scanning the entire planet twice every day. By flying only 517 miles above the surface, polar satellites give a sharper view than stationary satellites that float 22,300 miles above a specific place. The problem is that expensive polar satellites are built to last five years, although they have fuel for seven. The looming gap would occur after a satellite scheduled for launch in September ends its useful life. NOAA satellites share weather duties with the Defense Department and European satellites. But the one at stake in the current budget debate is responsible for the afternoon orbit, which is more important for weather, while Defense focuses on the morning orbit, which is more important for the military. "There will be a data gap. That data gap will have very serious consequences to our ability to do severe storm warnings, long-term weather forecasts, search and rescue and good weather forecasts," Jane Lubchenco, NOAA administrator, told members of a Senate Appropriations subcommittee April 13. A polar satellite detects when ingredients such as moisture and winds look ripe for storms. The weather service then posts "outlooks" warning five to eight days ahead of possible violent storms. On storm day, the service's Storm Prediction Center posts "watches" several hours ahead. Forecasters issued warnings five days ahead of tornadoes that struck Tuscaloosa, Ala., and five other states in April. A barrage of 312 tornadoes swept across the Southeast, killing 321 people. On storm day, forecasters gave warnings averaging 27 minutes before actual touchdowns. Likewise, when a tornado struck Joplin, Mo., killing 151 on May 22, forecasters gave warnings averaging 24 minutes before strikes. "The satellites are an important part of that early warning process," said Christopher Vaccaro, a spokesman for the service. Without the replacement polar satellite, forecasters would have half the information to track the moisture and wind patterns that percolate into violent storms. Lubchenco said without information from the polar satellite, forecasts for a massive storm nicknamed "snowmageddon," which hit Washington in February 2010, would have had the location wrong by 200 to 300 miles and would have underestimated the snowfall by 10 inches. Hurricane tracking would also suffer, she said. "Our severe storm warnings will be seriously degraded," Lubchenco testified April 1 before the House Appropriations subcommittee governing the agency. Lawmakers and scientists lauded the value of the program, which provides forecasts for military troop deployments, ocean search-and-rescue missions and farmers tending crops. "It's important for public safety," said Christine McEntee, executive director of the American Geophysical Union. Cutting the funding "would be penny-wise and pound-foolish." Lubchenco credited the satellites with helping save 295 people in 2010 by helping track rescue beacons aboard ships. "That's saving lives, that's saving money," said Rep. Chaka Fattah of Pennsylvania, the top Democrat on the House panel that oversees NOAA funding. But reduced federal spending threatens all domestic programs. Congress cut spending $38.5 billion in the fiscal year that ends Sept. 30. House Republicans propose to cut another $30 billion next year. Obama has proposed $5.5 billion for NOAA in the fiscal year starting Oct. 1, including a $688 million boost for the polar satellite. But the agency received $4.6 billion this year — $947 million less than requested — and lawmakers warned that a hefty increase was unlikely. The House Appropriations subcommittee is to vote on its budget July 7. "The fiscal crisis facing the nation is real and will require a level of austerity that goes beyond the present budget," said Rep. Frank Wolf, R-Va., who heads the panel. Another appropriator, Sen. Mary Landrieu, D-La., said she would fight Republicans for a funding freeze — rather than cuts — to avoid harming programs such as weather satellites. "There are serious cuts being implemented now," Landrieu said. "This senator from Louisiana is willing to try to balance the budget, but I am not willing to do any more reductions without revenues being put on the table."

### **Polar orbiting satellites are key – their movement and positioning detects crucial changes in severe weather**

LaRouche 11 [LaRouche, Political Action Committee, letters from experts within NOAA, “NOAA Internal Letter: Lack of funding for satellites will mean ‘A significant decline . . . in weather forecasting’,” 6/3, http://www.larouchepac.com/node/18336]

An internal letter of June 1, from an administrator to staff in the National Oceanic and Atmospheric Administration (NOAA), warns of the great danger that will result from cutting funding for weather satellites, in particular for tracking severe storms, especially hurricanes. Excerpts: "When it comes to saving lives and protecting property, there should be no mistake about the high value of NOAA polar-orbiting environmental satellites (POES) and geostationary operational environmental satellites (GOES)." "A World Without POES? "For more than 50 years, environmental satellites have helped our forecasters see the development of dangerous weather conditions up to several days in advance. But now, the ability to maintain this continuity it threatened. "The lack of funding for the next generation of NOAA's polar-orbitting satellites—the Joint Polar Satellite System or JPSS—will jeopardize the timeliness and accuracy of NOAA weather forecasts because there would be no polar satellite flying in the afternoon orbit beginning 2016-17. This is the projected 'end of life' for the NASA National Polar-orbiting Operational Environmental Satellite System Preparatory Project (NPP) weather and climate spacecraft. Thanks to the dedicated work of our joint NOAA-NASA team, NPP is scheduled for launch October 25, 2011. "After the end of NPP, however, there will be a significant decline in the accuracy of NOAA's longer-range weather forecasting, most notably our hurricane track prediction two days out and beyond. "Because they fly about 540 miles above the Earth's surface and orbit the globe every 102 minutes, NOAA's POES are able to detect changes in the atmosphere that lead to severe weather several days later. For hurricanes, that means POES monitor sea-surface temperatures that fuel the development of tropical storms, while the GOES closely track the movement of the storms once they form. "While GOES does the space-based heavy-lifting for hurricane forecasters, providing continuous imagery over active and developing tropical storms, POES collects a unique set of data, including information for input into weather forecasting models. It's a 'one-two' punch meteorologists and the public can't live without. "As this year's above-normal hurricane season unfolds, each storm will be a stark reminder that the life of NOAA's satellite program is absolutely critical to NOAA meeting its mission today and tomorrow."