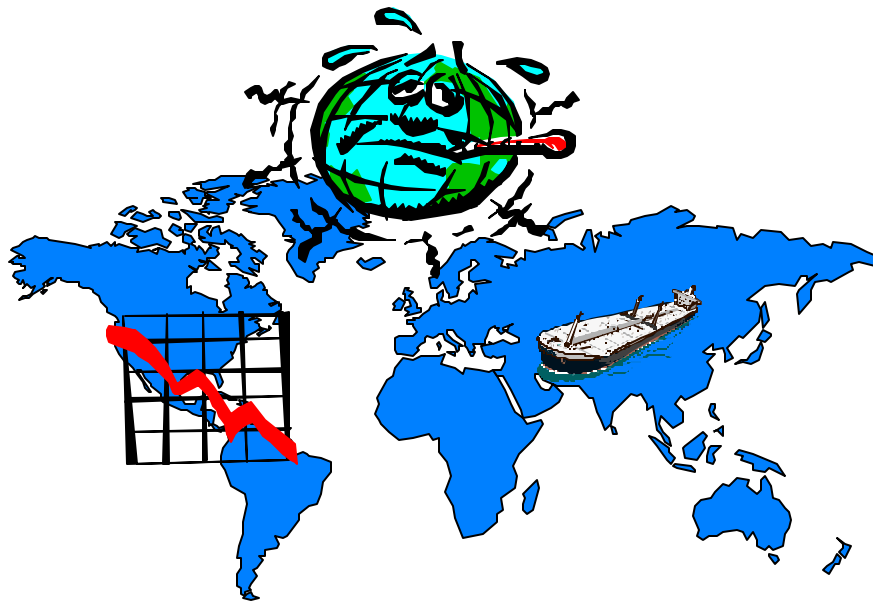


Taking on Water

Role of Federal Government	U.S. Economic Vitality	Threats to U.S. Society	Demand for Maritime Services
Substantial	Weak	High	High



Summary

It is now 2020, and the world economy is generally strong and stable with the exception of the U.S. and Latin America, which are in relative decline. Europe and the Pacific Rim have adopted the business model of increased liberalization that was previously more closely associated with the U.S., while the U.S. is muddling through with stagnant economic growth and heavy social burdens related to an aging population. With the stagnant economy and ever-ballooning entitlements, federal budgetary pressures are heavy and persistent. High levels of environmental deterioration, spread unevenly across the globe, affect economic stability. There is growing public concern about the state of the environment, but not enough to make the sacrifices in consumption required to mitigate the effects of global warming. The economic malaise here has generated even more problems to the South, resulting in increased illegal immigration from Mexico and Latin America. While the technology-driven U.S. Navy remains forward deployed in conflict areas vital to national interests, the biggest threats to our national security can be found on our own soil, in the guise of violent and erratic weather patterns, increased drug use and smuggling, crime and terrorism.

Remarks by the Secretary of Environment and Meteorology (familiarily called the “Weather Man”) before an audience of professors, students, executives and Washington insiders at Georgetown University, 2020.

Good evening, ladies and gentlemen. Thank you for giving me the opportunity to talk to you today about the effects of weather and the environment on global business and national governments. I’d also like to thank you for braving the elements to come here this evening. As we all know, the weather is a subject of great concern in our world today. However, while there is general agreement about the scientific foundation of today’s dramatic weather patterns, there is almost no consensus on what should be done to solve or at least mitigate these problems. (*Loud thunderclap and lightning flash from outside*) The weather certainly is determined to bear me out this evening. (*Laughter*)

Before I go into detail about our current problems, I would like to take a few minutes to outline for you the events of the last 20 or so years that have brought us to our current state. Many of you are aware of this recent history, but I think a brief recap would serve to strengthen and add weight to my remarks about our current situation. Some of you may wonder why the Weather Man is focusing on economic, political, social and international issues not directly related to rain, snow and hurricanes. It is my contention that all of these issues are interrelated. As a member of the President’s national security team, it is my duty to deal with macro-level events as well as meteorological phenomena.

The Wall Street crash of 2003 was an event that very few predicted would occur. Yes, there were those who said that after the huge market gains and overpriced stocks of the late 1990s, world equities markets were due for a significant correction. But no one knew when it would happen or how significant it might be. There were those who believed that a correction would never happen; remember the proliferation of bestsellers heralding a “20-year boom” and “endless prosperity”? Many in the Baby Boomer generation especially believed that they could save enough for retirement in the booming markets while spending their incomes on large houses, big cars and endless consumer goods. Not to disparage the Boomers — some of our Administration’s best friends are Boomers. (*Laughter*) They couldn’t know beforehand that the Dow Industrials would fall 4,500 points (or about a third of its value) in one week during 2003, then continue to decline for the next year. It is interesting to note that the crash occurred during Hurricane Saul, which, as you may remember, destroyed the Florida Keys and was one of four Category 5 storms that hit the East Coast in 2003 and 2004.

The Economist, Business This Week, September 16, 2003:
UH-OH: The Dow Jones Industrial Average fell 4,506 points this week, bringing down world financial markets in its wake and prompting panicked selling via the Internet, stockbrokers, and mutual fund companies. Analysts blamed the tumble, Wall Street’s biggest ever, on everything from inflated P/E ratios to excess capacity to the weather. Speculation was rampant as to whether the sell-off was merely a market correction (albeit a severe one) or the beginning of worldwide recession.

The media certainly bore part of the responsibility for the financial hysteria that followed the crash. Some of the more sensational programs reported on the financial and weather news together and suggested that they were somehow related. Many panicked and withdrew retirement and savings funds after seeing news report after news report about the crash and hearing pundits argue that it would only

get worse. Unemployment rates rose sharply at that time, as record numbers of companies and individuals filed for bankruptcy. The crash of 2003 also brought about a major banking crisis; the federal government had to bail out a number of banks, spending billions in the process and erasing much of the federal budget surplus.

Historians now insist that only a crisis of this magnitude could have precipitated the calls for political action to strengthen and enlarge the Social Security system and Medicare. As the population segment hardest hit by the crash, the Baby Boomers, with retirement in sight, saw the handwriting on the wall. They were thus easily mobilized when the AARP began its massive congressional campaign to “save our nation’s retirees.” Through the AARP and other highly influential organizations, Baby Boomers and the elderly fought for and won vastly increased benefits through entitlement programs, rallying around the idea that “it should never be allowed to happen again.” In 2007, after a year of divisive and hard-fought battles on Capitol Hill, the AARP was victorious. Now particularly sensitive to public opinion, Congress passed a new retiree benefits package that, while needs-based and means-tested, was designed to provide full social security and medical care for all but the wealthiest retirees.

On the same theme, many blamed the government for lack of oversight and regulation of the financial sector. After extensive hearings, Congress demanded that the executive branch regulate the financial sector and oversee corporate financial transactions. Publicly traded companies were soon required to file monthly reports with the SEC and the Treasury. These regulations grew over the years to become the complex system of oversight we know today, which is substantially more stringent than at the turn of the century.

And what happened in the rest of the world after the crash? Latin America, in the midst of increased integration between NAFTA, MERCOSUR (the South American free trade organization), and CARICOM (the Caribbean trading bloc), suffered serious setbacks in its financial and export markets. Countries in the Caribbean and Central America were also hit hard by the hurricane cycle and looked to the U.S. both for financial help and as an outlet for immigration. Like the U.S., European economies were severely affected by the financial market meltdown. In contrast, the EU bounced back from the recession relatively quickly by liberalizing its member economies, deregulating key corporate sectors, and embarking on a more aggressive harmonization plan based on the successfully implemented Euro. The first expansion of the EU into Central Europe was postponed as the Euro economies reconsolidated, but it eventually did occur in 2008. In Russia, a military coup put an end to the corrupt and crime-ridden “democracy” of Boris Yeltsin and his successor, Yuri Luzhkov.

It was an even happier story in Asia. The economies of Japan and Southeast Asia, in 2003 just beginning to recover from the financial crisis of the late 90s, were again swept by the market meltdown. Those countries with the most corrupt regimes and fewest reform measures were hit hardest. Asian leaders saw the handwriting on the wall and decided to truly reform their governments and economies. Recalcitrant autocrats at first resisted, but they were forced to go along with reform efforts when other economies began recovering and their citizens began demonstrating. The Japanese began an ambitious reform of the banking system. China, while suffering a blow in 2003, quickly rebounded and its population ratcheted up its demand for quality consumer goods from at home and overseas.

It is worth noting at this juncture that many of these international events passed with little notice by most Americans. After the crash and during the tumultuous years that followed, the U.S. turned inward, increasingly absorbed with its own political and economic problems. It participated less in international organizations, and by 2007 had altogether stopped paying its dues to the United Nations. As we all know, the UN moved its headquarters to Geneva five years later.

In the months following the crash, people all over the world felt the effects of extreme weather and temperature patterns. However, the global meteorological records of 2006 to 2013 indicate a serious (and, to most scientists, puzzling) mitigation of those extreme effects. There were no major hurricanes during that period and only two really destructive monsoons. Temperatures were “normal” for most regions — in Massachusetts, my home state, it was cold and snowy in winter, moderate in spring and fall, and warm in summer. The one significant exception to this pattern was the Middle East, which suffered a prolonged hot spell in 2006 and 2007. This led to an even more serious water shortage in the region than usual and thus to increased political and economic tensions. These tensions helped pave the way for the Middle East War of 2009.

Although tensions had been brewing in the Middle East for quite some time, and indeed there have always been tensions in that region, the extent of the Middle East War of 2009 still came as a surprise to much of the world. Part of the problem was the election of a hard right-wing leader in Israel who was ready to repudiate all previous peace agreements with the Palestinians and return to a harsher regime. Arafat had died in the early 2000s, and the new Palestinian leader was rumored to have close ties with Hamas. A new *intifadah* began, with a barrage of terrorist attacks on Tel Aviv, Jerusalem and several West Bank settlements. The Israelis responded by re-occupying Palestinian areas in Gaza and the West Bank, and then the real war started, pulling in Jordan and Syria with arms supplied by Iran. World oil prices skyrocketed and the international community stepped in. The U.S. economy, just recovering from the recession caused by the 2003 financial crisis, suffered a major oil shock and was tipped back into recession.

Toward the end of the war, the hard-right Israeli government fell, brought down by its brutal war and occupation tactics, which had been condemned by human rights groups worldwide. It took the newly elected liberal Israeli government to realize that although it was winning the war, it would lose the peace if a truce was not called, peace was not negotiated with all warring parties, and concessions were not made to the Palestinians.

With the advent of armed conflict in the Holy Land, the Caspian oilfields suddenly took on an increasingly important strategic dimension. The Azerbaijan-Turkey pipeline had been bombed by terrorists in 2002 and the enormous task of reconstruction had been abandoned with the advent of worldwide recession in 2003. With the Middle East war, the major powers realized (again) that the world’s primary oil supply was in a notoriously unstable region and alternative sources were needed. After the initial clamor surrounding the reopening of the Caspian route, the bidders on the pipeline were narrowed to two: a U.S. oil conglomerate backed by the U.S. government, and an EU-Russia

partnership. The EU group won the bid with support from Russia, Turkey and Georgia, and stringent security guarantees the U.S. group had not been able to provide.

So the fighting was over in the Middle East in 2010. Unfortunately, on the diplomatic front we all were back to Square One. You may remember all the U.S.-brokered meetings, bombings, recriminations, and the huge amount of mistrust that had to be overcome. What was surprising about this peace process was the larger role played by the EU. The EU offered both sides economic incentives to come to an agreement, and started educational and guest worker programs for young Palestinians, while at the same time helping to negotiate security assurances for the Israelis. In 2016, both sides signed an agreement giving full statehood to Palestine while maintaining stringent security measures for the Israelis. And so, Palestine became an independent and recognized state in 2018.

By that time, the U.S. was dealing with a situation closer to home. Having outlived his brother Raul, Fidel Castro finally died in 2013, leaving a power vacuum in Cuba. Communist Party leaders continued to rule the country for the next 18 months, but none had the charisma and popular support needed to sustain the regime. Economic hardship throughout the region only worsened the situation, leaving the regime unable to shore up Cuba's crumbling institutions and infrastructure. In early 2015, the Party relinquished its hold on power and elections were called. U.S. sanctions were lifted and rightist Cuban émigrés from Miami began returning. Despite large amounts of money from the U.S. for democratic state-building and economic development, stable political and financial structures did not take hold. The émigrés did not improve the situation by demanding special economic and political treatment, buying property at cut-rate prices (or demanding its return for free 50 years after its nationalization), and treating those who'd never left with disdain.

Observers noted that Cuba during this time was eerily similar to newly unified Germany in the early 1990s, but without the established democratic system and wealth of the West Germans to ensure stability. The country is now subject to power struggles between right-wing émigré groups, stalwart communists and the more moderate, pro-democracy parties. Political repression and persecution of citizens are the norm and are only compounded by economic stagnation, widespread poverty and hurricane damage to the island. Is it any wonder that we hear almost daily of attempts at migration from Cuba to the U.S.? Many of these attempts are successful; it was estimated that more than 9,000 illegal Cuban immigrants reached here last year.

And now we come to the recent events that have such a critical bearing on my talk this evening. Unless you've been living under a rock for the last six years — and there are probably many in the U.S. who wish they had been living under a rock (*Laughter*) — you know about the devastating impact of weather on our country and on other parts of the world. After that long and still unexplained respite from violent weather patterns from 2006 to 2013, the world got a loud wake-up call in 2014, which was the first of the five worst years on record for violent weather. That year alone saw four Category 5, five Category 4 and eight Category 3 hurricanes in the Atlantic and Caribbean, three Pacific storms of note and three devastating monsoons in Asia. These storms resulted in billions of dollars in damage and thousands of lives lost.

In addition, violent and unseasonable weather began to cause significant agricultural damage in the U.S. and other regions around the world. The year 2014 was the first year of the drought in Oklahoma, Texas, Arkansas and the Southwest that continues today and, according to scientists, may continue for another two decades. Other areas faced the opposite problem as they suffered heavy, prolonged rainstorms and massive flooding. And these phenomena were not limited to the U.S.; every continent in the world suffered from some form of extreme weather that year. The six years of violent weather have engendered vast amounts of new climate and environmental research, and the general scientific consensus is that the primary cause is global warming from the overuse of fossil fuels.

The last six years of environmental devastation—and I don't think that "devastation" is too strong a word to use—could not have come at a worse time for the U.S. economy. While the other economies I spoke of a few minutes ago were in a position of strength in 2014, the U.S. was highly vulnerable. Just as we were pulling ourselves out of the Middle East War recession, the 2014 hurricane season struck. And while only two of the four Category 5 storms that year hit the U.S. mainland, they hit Palm Beach and New Orleans dead on. Several major insurance companies were forced to declare bankruptcy, leaving thousands without homes and forcing the federal government to step in with low-interest loans and "hurricane grants." Unemployment began to rise again, especially in the southeastern part of the country.

Two years ago, the weather became such a serious issue in the U.S. that the Administration decided to combine NOAA, the EPA and several other agencies into the Department of Environment and Meteorology and raise it to the cabinet level. That's when I, as former NOAA Administrator and Undersecretary of Commerce, became the "Weather Man." Our esteemed colleagues across the aisle have criticized this decision as just "more government," and our new IEP (Independent Environment Party) Senators and Representatives say it didn't go far enough. Nevertheless, we think it is a positive and significant step forward in addressing our most critical meteorological and environmental issues.

Today, in 2020, despite a few changes in administration, the regulatory environment of 2007 persists and has actually grown. Businesses still must deal with a laundry list of reporting and oversight requirements, such as filing quarterly with the SEC and Treasury, hiring at least 90% of their new workers from the U.S.-born workforce, providing office space and perks to federal security workers in their buildings, and paying fees to support U.S. shipping if they import products from overseas. Many of them are looking overseas when contemplating new investment. In 2016, Intel announced that its newest ultrachip plant and testing facility would

Time Magazine, End of Year Issue, December 29, 2014

2014: The Year of Devastation

It was the worst year for natural disasters on record. Hurricanes killed thousands in the Caribbean and the Southeastern U.S. and destroyed much of Palm Beach, New Orleans and Kingston, Jamaica. Crop damage in Florida was extensive and the Gulf fishing industry was all but ruined. Flooding along the Mississippi and Ohio Rivers left thousands homeless, destroyed two industrial plants and rendered significant acreage useless. Tropical storms in Asia are thought to have killed as many as 13,000. Record cold temperatures throughout Europe killed hundreds and dropped agriculture yields from Spain to Central Asia. Why? Scientists think they know: 60 years of unchecked fossil fuel use and global warming. See full story, p. 24.

be built in Bangalore. A year later, Ford International announced that its new super fuel-efficient compact would be built in Hiroshima, Japan and Cork, Ireland, and targeted specifically at markets in Asia and Europe. Many other companies have followed suit.

The EU and Asia provide viable site alternatives to companies interested in investing outside the U.S., with their strong political institutions, effective and pro-business incentive programs and stable corporate laws. China is not a democracy, but its government is communist only in name and has not interfered with the growth of businesses in the country. The military government in Russia was successful in either rooting out or co-opting the *mafiyas* and other corrupt officials. It stabilized the economy and rebuilt relations with its neighbors. Russia now enjoys a special economic and security relationship with the EU. Latin America never really recovered from the 2003 crash and is now in even worse shape than the U.S. The future of NAFTA, and indeed the whole impetus for economic integration in the Western Hemisphere, is now in doubt. This economic turmoil, combined with the devastation caused by hurricanes over the last six years, has led to a significant increase in illegal immigration, over sea and land, from Latin America and the Caribbean.

In the U.S., the new system of retirement benefits is now firmly in place, and a slew of service industries has sprung up to cater to the needs of those supported by Social Security and Medicare. The growth of retirement communities has seen a huge increase over the past decade. Many of these are not the “old folks’ homes” of the past, but are instead aimed at younger and wealthier retirees in relatively good health with money to spend and the time to spend it. The best (and most expensive) communities boast golf courses, lakes, movie theaters and restaurants. Of course there are other, more modest, retirement centers for the less affluent. The richest communities are highly secure and tend to be physically distant from crime-ridden urban areas. They feature all the latest electronic security protection and their own security details. The Baby Boomers continue to be one of the most powerful voices in Washington, and any suggestion of cutting back entitlements, or even curbing their growth, is immediately and soundly drowned out by the cries of the AARP.

The political climate in the U.S. is generally murky. The administration has changed every four years and there is high turnover in Congress. Politicians have become highly pragmatic and poll driven, and everyone is very careful not to profess strong or ideological beliefs. Those who do are often voted out of office in the next election. Underneath the layer of political appointees like myself lies a large and usually effective bureaucracy that is concentrated in several very powerful departments, such as Justice, DOD, Treasury, Social Security and, I would argue, Environment & Meteorology. For the most part, people see the government as necessary to providing security for all (against crime, terrorism and environmental crises) and financial security for those in the latter years of their lives. Needless to say, not all people feel this way.

Working Americans, while resentful of the tax burden they must bear to support the government and its programs, are resigned to it. They don’t have the time to lobby Congress or even write letters, since everyone works long hours and many must work two or three jobs to make ends meet. After the crash of 2003 and the ensuing recession, many companies laid off workers and cut benefits for those workers they kept. Just as the economy was beginning to improve, many firms were hit hard by the violent

storms and weather patterns that began six years ago. Today, the average private sector worker in the U.S. must pay for a significant portion of his or her own health care coverage. Very few companies have 401(k) programs these days and, of those that do, very few contribute to their employees' accounts. With all of their other expenses, a significant percentage of workers don't have their own retirement savings accounts. They count on the government to take care of them in their old age, but also wonder if the system will last that long. We live in an era of uncertainty and belt-tightening.

This uncertainty carries over into daily life. Because most people have less disposable income they focus on the essentials, concentrating their spending on housing, basic food items and simple clothing. Even among retirees, all but the wealthiest are forced to make do with less, especially since they are on fixed incomes. People indulge in fewer luxuries like eating at fancy restaurants or going to nice hotels — they generally rely on convenience stores, fast food joints and ready-made food from the grocery to feed their families. While the government is a big investor in technology, especially for environmental, military and security purposes, most U.S. households can't afford the latest in computers and software. People often rely on older machines, sometimes “jacked up” with extra RAM or a new processor to make them a bit faster. Many of the new consumer electronics products are now sold primarily in Asia and Europe.

Given the uncertainty and heavy costs associated with working in the U.S., along with the increase in overseas investment by U.S. companies, it is not surprising that a small though significant portion of our best and brightest are choosing to relocate to Asia (particularly Australia and New Zealand) and Europe. This is especially true if those top-knowledge workers are not able to get jobs in the high-performing sectors of the U.S. economy, or if they opt to work for commercial IT companies or multinational manufacturers or marketers of consumer goods. Many of these workers don't believe the current U.S. system can last, and would prefer to make more money now to spend and invest around the world as they see fit.

The environmental devastation and worsening economy have increased the underclass in the U.S. to its largest percentage of the population in decades. Survival crime rates and drug use are at all-time highs, and are most serious in the inner cities and ring suburbs, which have been largely abandoned in recent years by professionals and working people in favor of more remote communities. Some of these communities are “gated,” similar to those communities now inhabited by most senior citizens. Despite the increase in these gated communities, homelessness is a growing problem in this country, particularly across the southern United States.

Even with the weather damage and increases in crime, drug smuggling and illegal immigration, law enforcement at all levels was prepared to mobilize and deal with these problems. However, in 2015 an interagency intelligence team, acting on information from the armed forces, found bombs in seven federal office buildings and in the headquarters of three major government contractors. In the ensuing investigation, federal agents raided the houses of ten known anti-government leaders and found detailed plans for numerous other terrorist acts and arsenals of traditional and biological weapons. Although security was raised in all office buildings and factories, bombs exploded a year later in a Denver federal building and at a major paper mill in Idaho, killing or wounding over 1,100 people. Congress, acting on

widespread public demand, abolished *posse comitatus*. Many of these terrorist groups are radical environmentalists acting against companies they believe are responsible for today's pollution and resource problems, and against the federal government, which they believe is not doing enough to save the environment.

Today in federal buildings, corporate complexes and manufacturing plants, there are now security details consisting of FBI, law enforcement and armed forces teams. These teams make regular sweeps of the premises for suspicious packages and check the electronic and ventilation systems hourly for damage or dangerous substances. The companies pay for this themselves, although there are some small subsidies from the federal government.

Once entitlements have been settled, Justice and the DOD get priority in the federal budget process these days, since the demands for law enforcement and security have risen so markedly. My Department's budget has also significantly increased, especially since we are in the process of designing and building a new early warning system capable of detecting and tracking violent storms weeks before they become a threat to coastal and inland areas. Drugs have become a major problem in society, and they seem to be coming to the U.S. from all over the world, especially Colombia, the Caribbean and Southeast Asia. Law enforcement agencies and the armed forces have the best information and surveillance technology available, but they still only intercept a fraction of what comes in. This is also true of illegal immigrants; while every few months the interception of a boat carrying hundreds of illegal migrants from Cuba or China makes big headlines, it is well known that many thousands more are not caught.

An interesting phenomenon also has occurred within the biennial federal budget process. In an effort to eliminate over capacity and duplication among federal agencies in all federal Departments, appropriations subcommittees in Congress now allow *any* federal agency to "bid" for the right to manage programs within the subcommittee's jurisdiction. As a result, the Defense Department's R&D centers have begun taking over many projects that used to be done by the Energy Department; similarly, the Agriculture Department is now managing many programs formerly run in foreign countries by the Agency for International Development. This has engendered quite a competitive spirit in Washington—and a lot of bureaucratic hand wringing—but we felt it increasingly necessary in this era of shrinking federal budgets and ballooning deficits. We hope it has strengthened the overall quality of the government as well, by forcing agencies to improve their operations or get out of marginal business lines.

While violent weather and environmental crises have been a problem worldwide, they have been particularly prevalent in the U.S. and the Western Hemisphere. Europe has had its share of damage, especially along the coastlines of Great Britain, Ireland and other Atlantic nations. The Asian countries have tended to downplay their environmental problems in the face of booming economic growth, unless some major catastrophe occurs. A recent environmental problem has surfaced in the guise of ocean dumping. In 2017 an old Chinese tanker was caught in the act of dumping thousands of gallons of industrial waste and sewage into the Pacific about 300 miles off the coast of Japan. Inquiries were made, and it was discovered that China had been dumping waste on the high seas for at least five years in an effort to preserve its own rivers, waterways and growing coastal aquaculture system. Scientific

studies have shown that this practice has led to the decimation and contamination of Pacific Ocean fisheries.

The U.S. and Europe have made an effort to convince rapidly developing countries in Asia to accept and implement higher environmental standards that would lower the levels of greenhouse gases in the atmosphere. To a limited extent, they have succeeded; China agreed to end its practice of ocean dumping in a 2018 international treaty. In 2019, China also agreed to use the latest American scrubbing technology in all of its new power plants. However, there is no agreement on retrofitting older Chinese factories and power plants with this same technology, and it is believed that Chinese companies still secretly dump large amounts of waste into the Pacific. Other countries in Southeast Asia will not agree to the new standards. They have noted the relative decline of the U.S. within international organizations and, they argue: "How can the U.S. demand higher environmental standards from other nations when its own people are not willing to make sacrifices to the same end?"

All this leads to a discussion of our current situation. We all know it is serious and that something must be done. The problem is, what? How can we realign our society and economy so that they are not only less devastated by violent weather patterns, but also contribute less to the fundamental cause of those weather patterns? In some ways all of issues I spoke about tonight are linked: environmental degradation, economic decline, terrorism, crime...and all of them need to be addressed in that context.

Let me briefly outline some proposals that Environment and Meteorology has put forward to resolve some of today's most pressing environmental issues. These issues, I would argue, significantly impact our national security and urgently require effective and efficient solutions... *(Flash of lightning and deafening thunderclap. Lights go out. Commotion, as people look for exits and alternative light sources. Presentation is cut short.)*

Global Maritime Environment, 2020

As mentioned above, the economies of Europe and Asia are doing pretty well right now. Trade between China and Europe is booming, and the bulk of global maritime commerce traffic plies the seas of the Eastern Hemisphere. There is a good deal of trade among the countries of Southeast Asia, and between North Africa and Southern Europe through the Mediterranean. In these regions, a number of shipping companies run mega-ships and smaller vessels between modernized mega-ports. There is some trend toward consolidation in the European and Asian shipping industries. The port infrastructure in these regions is the most advanced in the world, with mega-ports established at Shanghai, Hong Kong, Singapore, Inchon, Barcelona, Liverpool and Rotterdam, among others.

All new ships carry advanced weather sensing equipment that enables them to either steer clear of or wait out storms in the Atlantic and Pacific. In order to pinpoint ships' locations on the high seas, they are required to file sail plans, similar to flight plans of the 90's, and to carry the latest precision navigation technology and VMS, with data bursts transmitted every hour. This technology is required in order to track ships through violent weather patterns and in an attempt to stem the flow of illegal drugs and immigrants.

The Suez Canal, almost unused during the Middle East War a decade ago, has become the primary gateway for ships carrying cargo from Asia to the Mediterranean and vice-versa. After the Middle East War, the Egyptian Government, aided by loans and subsidies from European banks, took on a massive infrastructure project to modernize and widen the canal in order to accommodate the mega-ships being built. Some in Europe and China have called for the modernization and expansion of the Trans-Siberian Railway as a less expensive (and safer, given the meteorological risks of shipping) alternative to the Canal. There has been preliminary progress in this endeavor, but the Russians and Chinese are wrangling over the location of the new rail lines.

U.S. maritime commerce is not so strong and robust as it once was, despite continued demand for overseas products and oil. Port infrastructure has suffered for quite some time from a lack of adequate funding, with the result that foreign mega-ships are not able to dock in U.S. ports and must be lightered offshore within 12 nautical miles of the U.S. coast. To achieve this, a number of offshore platforms, similar to LOOP, have been built along the Pacific and Atlantic coasts. Congress opted for these platforms over massive port infrastructure development on the grounds that they were less dangerous for the U.S. than having "substandard" foreign-flagged ships endanger our ports.

Los Angeles Times, November 3, 2020: Chinese **Caught in Ocean Dumping. 2018 Treaty Violated**
November 2, 2020: A 30-year-old Chinese tanker was caught dumping what were thought to be chemical pollutants and petroleum by-products into the Pacific today. The tanker's erratic movement was detected by satellite as it zigzagged through the water and failed to emit the hourly VMS bursts required by international maritime standards. The ocean dumping is in direct violation of the International Ocean Dumping Treaty, signed by the U.S., the European Union, Japan and China in 2018 and ratified only last year. President McMillan strongly condemned the act and demanded that the UN take punitive measures against China, but Security Council members, with the notable exception of Japan, received the idea with at best lukewarm enthusiasm.

The government has subsidized the construction of a number of smaller U.S.-flag ships that take foreign goods from the offshore platforms to U.S. ports. Government regulation requires that all of these smaller ships carry at least one security officer and up-to-date sensing equipment to ensure the legality and safety of the lightered cargo. Despite these safety precautions, the risk of spills and ocean/coastal pollution is high and, indeed, there are at least three or four major accidents at offshore lightering facilities every year. Offshore platforms and ports are at risk not only from severe weather, but also from terrorist attack, and stringent security measures are in place to protect them.

U.S. leisure boating activity has dropped significantly. Many people in the U.S. who might otherwise own boats are put off by the high luxury taxes and stringent safety equipment and technology required by the government. Many others who owned boats in the past were forced to sell or simply abandon them when money got too tight. Everyone is concerned about the effects of storm systems off the Atlantic and Pacific coasts, and about the impact of erratic weather patterns on inland rivers and waterways. As gambling has become more popular in the U.S., more riverboat casinos have been built along the nation's waterways. However, they too are subject to damage from storms and flooding. Cruise ships from Europe and Asia still visit popular U.S. tourist spots, but hurricane and storm damage in the Caribbean and Florida and along the California coast have slowed foreign tourism somewhat over the last several years.

U.S. commercial fishing has been propped up by federal subsidies and restrictions on foreign fishing in areas in and around the EEZ. However, it must contend with decreasing fish stocks in both the Pacific and Atlantic, and with the ever-increasing risk of being caught in a violent offshore storm. Commercial fishing interests must also deal with growing competition from onshore fish farms, which provide a viable alternative to increasingly expensive sea catches. These fish farms have their own challenges, which are mostly weather-based. In sum, while global shipping continues at high levels despite environmental threats, U.S. shipping is struggling with economic, security and resource issues in addition to the weather.

Scenario Characteristics Matrix

Scenario Mission Drivers	Taking on Water
Role of Federal Government	Substantial
U.S. Economic Vitality	Weak
Threats to U.S. Society	High
Demand for Maritime Services	High
Global Economic Health and Stability	<p>The world economy is strong and stable except for U.S. and Latin America, which are in relative decline. Europe and the Pacific Rim have adopted the U.S. business model of increased liberalization, while the U.S. is mired in high entitlement payments and shifting political priorities. High levels of environmental deterioration, spread unevenly across the globe, affect economic stability.</p>
U.S. Society and Economy	<p>U.S. society overall is lethargic. The American Dream is perceived as unattainable by many. The financial crisis and the effects of global warming have hit the U.S. economy hard. Although losing ground, it is still the largest and most powerful economy in the world. Chronic unemployment is a problem, forcing people with jobs to work hard, with long hours. In an effort to keep those jobs, many are forced to work several jobs to make ends meet — these people are time-impooverished and must deal with heavy taxation. There is a social chasm between the unemployed and those working hard to survive.</p> <p>The economy focuses on low-end retail and services, some heavy industry (although much of this has moved to Asia) and government-subsidized technology, especially for security and environmental cleanup. The agriculture sector is struggling with violent weather patterns and increased Asian demand. New agricultural technologies are being developed to smooth out weather effects and boost crop yield without harmful environmental effects. The insurance industry is simply struggling. Storms, coastal erosion and port damage have also adversely affected tourism. The healthcare industry is strong due to increasing elderly population and government support of Medicare.</p>
NAFTA/Latin America	<p>The economy is unpredictable throughout the Americas, and there is a general trend toward slowdown/decline. Latin America and the Caribbean are even worse off than the U.S. due to significant environmental devastation. This devastation has resulted in massive human, agricultural and economic losses and in a huge increase in attempted emigration to the U.S. The state of NAFTA is precarious. Canada is experiencing similar malaise to that of the U.S., though its environmental problems are not as acute.</p>

<p>Scenario</p> <p>Mission Drivers</p>	<p>Taking on Water</p>
<p>Cuba/ Caribbean Nations</p>	<p>Cuba after Castro is suffering from a power vacuum, with regular coups and power struggles. There are also serious social problems in Cuba as the rightist Miami Cubans return and try to reassert control and ownership of property. This results in more mass-attempted migration to U.S.</p> <p>Haiti is suffering from acute economic problems and hurricane devastation. Other Caribbean nations also face serious storm damage and declining tourism from the U.S. as a result. The Caribbean remains a center for drug smuggling.</p>
<p>European Union</p>	<p>Stable economic growth based on liberalization via the EU program, a unified currency (the Euro was successfully implemented), technological competitiveness, and a stable Russia. The U.S. is providing intellectual capital as a significant portion of its educated and highly skilled workers emigrate. Eastern Europe and North Africa are providing a competitive labor force. Higher growth means people can make it without such an extensive system of state handouts. The traditional European subsidized income system has been replaced by privatized pensions fueled by relatively healthy, Euro-based equities markets. However, global warming has made its presence known in Europe as well as in the U.S., and there is widespread pressure on the EU governments for stricter environmental regulations. Green Parties are better represented in most EU parliaments.</p> <p>The EU has expanded since 2007 to include most of Europe between the Atlantic and the former Soviet border. Generally non-members either are Associates or have special agreements with the EU. The EU's joint political and security mechanisms have been significantly strengthened.</p>
<p>Japan</p>	<p>Steady growth: liberalization and technological growth are higher due to the Asian boom. Payments to the older generation slow growth a bit. Japan is rebuilding its financial system and starting to compete again with newer financial centers in the region. Japanese industry continues to use old, air-polluting technologies, and the Japanese fishing fleet continues aggressive fishing all over Pacific, but their fishing is affected by Chinese ocean dumping.</p>
<p>China</p>	<p>China is booming — it is a provider of goods to the U.S., the EU and Asia. Coastal provinces are now producing high-end goods, while inland regions and poorer Asian nations focus on low-value-added manufacturing. There are large trade surpluses. The economy needs to be booming to accommodate a growing population and to support the ever-increasing older population. The one-child policy has become a two-child policy to ease the shortage of younger workers. There is significant corporate investment in China from outside the country. China continues to accentuate labor- and energy-intensive industries, to the documented detriment of the environment. It has also been caught dumping millions of gallons of industrial waste on the high seas of the Pacific, in an effort to prevent further deterioration of its own rivers. It is believed that this practice is destroying the fish population as much as over fishing.</p> <p>Port infrastructure is well developed due to increased trade and corporate investment, but infrastructure on land still needs development. Coastal/inland disparity is accentuated and has begun to cause some internal social unrest. China is the dominant regional</p>

<p style="text-align: center;">Scenario</p> <p>Mission Drivers</p>	<p style="text-align: center;">Taking on Water</p>
	<p>military power, with a long-range strategic missile system and improving naval capabilities. China imports most of its agriculture and food from Russia and the U.S., giving the U.S. some leverage in demanding cleaner industry and restrictions on ocean dumping.</p>
<p>India</p>	<p>Steadily improving — India provides an investment alternative to China. Pockets of educated population and some economic liberalization mean that India provides multinationals with investment opportunities. The economy is not as good as China’s — population growth is higher, pollution is even more of a problem, and support for the poor, significant agricultural imports and massive infrastructure development is required.</p>
<p>Southeast Asia</p>	<p>Recovered from late 1990’s crisis, most countries are doing well, especially Those with legitimate democratic governments or less corrupt authoritarian regimes. Fueled by money from Japan and markets in Europe, China, India. Economies generally have a high-tech emphasis, but there is still a concentration of air-polluting industries across the region. There is little regard for environmental regulation, given the emphasis on economic growth. ASEAN is strengthened as an economic and strategic alliance to counterbalance China’s dominance. The region has re-emerged as a major drug-producing center (rivaling Latin America), targeting the U.S. and, to a lesser extent, Europe.</p>
<p>Russia</p>	<p>Stable, peaceful, decidedly pro-West government with a strong, almost authoritarian executive, in the process of incremental democratization. Limited autonomy has been given to republics and regions within Federation. This brings in more investment from abroad, especially from the EU and Eastern Europe. System modernization is fueled in part by youth from Central Asia. Russia is increasingly the breadbasket of Europe and China, providing strong competition to U.S. agriculture. However, Russia must also cope with the effects of global warming and the residue of Soviet environmental degradation on its economy, industries and agricultural sector. It is under some pressure from the EU to comply with stricter environmental regulations. Russia has strengthened its military and has a security cooperation agreement with the EU.</p>
<p>Middle East</p>	<p>A Middle East war was sparked in 2009 by a right-wing Israeli government and a new Palestinian <i>intifadah</i>. Other countries in the region became involved, and a new liberal Israeli government signed a peace agreement. The situation in the region is stabilizing after the war, but there are still Arab and Israeli splinter groups that refuse to accept the newly established Palestinian state (or the associated peace with Israel). There is an economic boom in the Gulf states as oil prices rise, due to an increase in demand from China and SE Asia, a decline in the region’s reserves, and the joint political will to raise prices. The emigration of the youth population helps fuel growth in Europe. The U.S. supports Israel and the new Palestinian state, and attempts to control oil prices. These actions trigger random terrorism and new military threats from some angry Gulf states.</p>
<p>Africa</p>	<p>Sub-Saharan Africa remains in political disarray and is a highly volatile region. But, because of the abundance of natural resources, multinational corporations have pumped large sums of money into regional pockets of the economy. This has resulted in an exacerbation of the region’s volatility. North Africa receives some spillover growth from Europe, especially through the establishment of “maquiladora” type assembly plants by European and other multinational corporations. Economic growth in North Africa helps</p>

<p>Scenario</p> <p>Mission Drivers</p>	<p>Taking on Water</p>
	<p>ease the religion/state conflict there.</p> <p>NOTE: Maquiladoras are plants set up by multinational companies (mostly from the U.S.) just over the U.S.-Mexico border, to take advantage of cheaper labor and less stringent environmental regulations.</p>
<p>Philosophy of U.S. Government in Society</p>	<p>The government is plagued by confused policy direction. The party in power changes frequently and with no broad mandate from a largely apathetic population. Every few years the specific political philosophy changes when the party in power does, but this is generally more poll-driven than ideological. No matter what party is in power, there is always the recognized need for a strong, interventionist government, and the need to assuage the dominant Baby Boomers with outlays.</p> <p>As the effects of global warming become more widespread and more people are directly affected, there is an increasing demand from the public for the government to DO SOMETHING. However, this SOMETHING falls short of asking Americans to cut consumption, as some politicians find out the hard way when they are booted from office for suggesting higher taxes on fuel and gas-guzzling SUVs. New radical environmental groups are putting pressure on the government to take drastic measures to save the environment.</p>
<p>Global Economic Integration</p>	<p>Europe is integrating well — the Euro has been successfully implemented and there is a good deal of interaction with Russia and those countries in eastern Europe that are not already members. Poland, the Czech Republic, Hungary, the Baltic states, Slovenia, Norway, Cyprus, Romania and Malta are full members of the EU. ASEAN integrates in an effort to stand up to China economically. Tariff barriers are falling everywhere but in U.S. and Latin America.</p>
<p>Maritime Commerce</p>	<p>Maritime commerce is concentrated between economic centers of Europe and Asia. Foreign ships are now too large to get into U.S. ports, driving all mega-ship trade offshore. Foreign mega-ships must stop within 12 nm of the coast for lightering. Cargo is offloaded for transfer to U.S. ports by U.S. flagships at offshore facilities. This activity increases the risk of cargo spills and pollution. A complex system of user fees for ports and offshore platforms has been implemented, further discouraging foreign ships from docking regularly at U.S. facilities.</p> <p>In a program initiated and subsidized by the federal government (to control foreign trade and boost U.S. shipbuilding), the U.S. is building numbers of small U.S.-flagships. These ships prove quite vulnerable in freak storms that sporadically hit the coasts. The Jones Act is retained and protected. The U.S. trade deficit continues.</p> <p>The U.S. commercial fishing industry has been propped up by subsidies and government restrictions on foreign fishing, but is subject to heavy regulation. This industry must contend with a rapidly decreasing fish supply and thus ever-smaller catches.</p>

<p style="text-align: center;">Scenario</p> <p>Mission Drivers</p>	<p style="text-align: center;">Taking on Water</p>
<p>Nature of and Changes in Maritime Jurisdiction</p>	<p>On the global level, <i>de jure</i> laws are frozen at 2005 standards, but if you have the naval power, you can enforce your own rules. There is little protection of endangered species. Fisheries laws are not being enforced well, despite new U.S. regulations protecting them. The U.S. signed the UN Convention on the Law of the Sea (UNCLOS), but most Asian nations have not. The seabed mining provisions within UNCLOS are generally ignored worldwide. The U.S. has declared a 24 nm contiguous zone to enforce fiscal, immigration and customs laws, and to prevent illegal lightering outside the 12 nm. coastal zone.</p>
<p>Traditional Military Threats</p>	<p>There is some U.S. conflict with the Gulf states over oil supply after Middle East War. Some low-level tensions exist between the EU and China over Caspian oil routes, since China wants a Caspian pipeline and Russia and EU are unwilling. Low-level tensions also exist between EU and China over environmental regulation.</p> <p>It's a SLEP (Service Life Extension Program) world for the U.S. Navy — it has fewer platforms and fewer people, but it improves its capability to achieve complete battle space knowledge through enhanced C4ISR. The Navy/Marine Corps mission focuses on forward deployment in those global hotspots vital to U.S. interests. The Army now has few heavy forces and is focusing on targeted urban warfare skills. The Army and Air Force are active in homeland defense, especially in urban areas, now that <i>posse comitatus</i> has been abolished. For the third year in a row, CNO has redirected its budget away from homeland defense to fund technology development and modernization of the Navy's blue water fleet. There is little cooperation and a clear return to inter-service rivalry for money and missions.</p> <p>NATO is now NAT. It is not much more than a formal treaty, with little U.S. involvement. The EU has added a viable strategic/security dimension to its economic union, with less reluctance to engage in out-of-area missions. Militarily, the U.S. is still a significant power, but it now has capable military challengers in China, the EU and Russia.</p>
<p>Weapons of Mass Destruction (WMD)</p>	<p>Nukes are prevalent in the EU, China, Russia and U.S. — they present a cost-effective method of defense and deterrence. Nukes in the EU are kept within the current nuclear powers by agreement. There are no nukes remaining in former Soviet republics. Terrorists have the capability to build chemical and biological agents, and have begun to use them in limited but strategic situations. Pakistan and India maintain a nuclear capability, but they are less focused on each other than on an increasingly powerful China.</p>
<p>Weapons of Mass Disruption (WMD)</p>	<p>IT warfare is primarily perpetrated by disaffected groups within the U.S., such as militias. Younger hacker groups regularly threaten the AARP, Social Security and Medicare systems. Radical environmental groups have begun trying to disrupt industrial operations by hacking into web sites, databases, and financial systems. This necessitates the development and implementation of stronger and more sophisticated electronic security systems in government and the private sector.</p>
<p>Terrorism</p>	<p>There is traditional terrorism from Middle East splinter groups, both in Middle East and on U.S. soil. Both traditional and IT terrorism are carried out by militias and other disaffected groups within the U.S. There is widespread fear of terrorist activity based on a</p>

<p>Scenario</p> <p>Mission Drivers</p>	<p>Taking on Water</p>
	<p>few successful bombings and security forces' regular uncovering of impending terrorist plots.</p>
<p>Criminal Activity</p>	<p>Criminal activity centers on drugs and terrorism. The huge U.S. drug market (mainly marijuana, cocaine, crack and heroin) is fed by Latin American and Asian drug cartels. There is an increase in gang activity, as disaffected, chronically unemployed youths see no future for themselves. Illegal immigration from Latin America, Cuba and Asia fuels criminal activity and anti-immigration militia acts. The explosion in crime, terrorism and drugs has led to an increase in gated communities for the retired and affluent.</p> <p>Regular Army and Army Reserve troops supplement local law enforcement in cities and ring suburbs now that <i>posse comitatus</i> has been abolished. This support is focused primarily in intelligence gathering and behind-the-scenes security and is coordinated with the FBI and other ODCI agencies. Drug cartels are using increasingly sophisticated technology in response to better law enforcement technology in the U.S. There is some increase in criminal activity in Europe, mainly centered on the drug trade.</p>
<p>Illegal Immigration into the U.S. (from where, how (land/sea))</p>	<p>Immigration increases in the U.S. as even worse off Latin Americans come north via land and sea. Many come by sea (Pacific and Caribbean). There is pressure on Pacific coast by Chinese crime recruits. Cuba, now integrated into the economy of the Americas, sees a rise in emigration as economic and environmental situations worsen. The continuing economic and political problems in Haiti are only exacerbated by a decline in the U.S. economy, a tenuous NAFTA and environmental devastation.</p>
<p>Power & Influence of international organizations</p>	<p>The UN is more important as the world becomes multipolar again. Its headquarters moves to Geneva after the U.S. refuses to pay its dues for five consecutive years. The U.S. is now only one of many in International Organizations, and although it is no longer a preeminent member, it continues to try to exert its influence. Europe and China more heavily influence the WTO and IMO, and tensions between those two powers over water and air pollution are played out internationally.</p>
<p>State of U.S. Education</p>	<p>U.S. education quality is poor overall. Money for public schools is reduced in the budget with shifting federal tax priorities and a declining economy. There are few good teacher recruits; the well educated are increasingly going overseas with corporations, and public school infrastructure is in decline. The states can't take up the slack since they have a smaller tax base. If you can pay for it, good education is still available at private secondary and post-secondary institutions. Public universities are struggling due to serious budget cutbacks. Private schools have access to the latest technology, but poorer public schools must make do with older equipment.</p>
<p>Global Information Infrastructure</p>	<p>Generational and political conflict play out over the Internet — there are now many more politically motivated sites. There is faster IT development abroad than in U.S. — state-of-the-art IT is generally not available in schools or government, except in specialized national security and environmental applications. IT companies are focused either overseas or on the U.S. military. Companies highly dependent on IT are increasingly investing overseas in China, SE Asia, Europe and certain regions of India, where the factors stimulating private sector industrial growth are more favorable.</p>

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	<p>Global private sector and government technologies enable total real-time surveillance of all maritime regions. As a result of an international effort to stem the flow of illegal drugs and to stimulate maritime commerce, all maritime traffic is required to file sail plans (similar to flight plans of the 1990's). This information is widely available and can be easily cross-referenced to real time data displays. This technology, coupled with precision navigational technology, enables surface traffic to traverse navigable waters without traditional ATON.</p>
<p>Environment-alism (state of environment, government policies, global warming, etc.)</p>	<p>The environment has seriously deteriorated. With Chinese/Asian economic dominance, little attention is paid to the environment worldwide, unless a breaking point is reached. Various world regions are subject to volatile weather patterns, severe storms, coastal erosion and seasonal extremes that pose a serious threat to agriculture. There is consensus in the scientific community that this is a direct effect of global warming. The policy response to this is confused and often contradictory. A largely apathetic U.S. populace is starting to see the consequences, but is still generally unwilling to make sacrifices, especially given Asia's truculence. Water and air quality has also deteriorated worldwide, with deleterious effects on health and the survival of species. The Green movement in Europe and radical environmental groups in the U.S. are picking up steam.</p>
<p>Availability of Natural Resources —Fish Stocks and Seabed Resources (not environment)</p>	<p>Fish stocks are under serious strain due to overfishing and ocean dumping of chemicals and sewage, even with increased U.S. government regulation. Across the globe, access to natural resources is unconstrained. Multinationals exploit resources with few regulatory constraints. Extensive seabed mining offers a potentially catastrophic threat to the marine ecosystem. Lightering of foreign ships within 12 nm of U.S. coasts increases the risk of spills and pollution and, indeed, there are at least a few significant spills every year.</p>
<p>Workforce Demographics</p>	<p>There is larger pool of uneducated, unskilled workers in U.S. due to a decline in educational funding and standards. Many of these people work 2 or 3 low-end jobs. A small pool of highly skilled workers in high demand is following multinationals overseas. Other highly skilled workers are going to work for the government or government contractors. Those skilled workers who for some reason can't follow multinationals take 2 or 3 low-end jobs to make ends meet, pushing out unskilled workers. A good deal of economic/class friction results.</p> <p>High immigration to the U.S. exacerbates the problem of too many unskilled workers (Latin America is even worse off), and anti-immigrant racism is on the rise. Unions are strengthened, with a focus on job protection instead of huge salary and benefit gains. Contrary to historical trends, the armed services have not absorbed significant portions of the unskilled workforce, since they are reliant on high-tech innovations.</p>
<p>Volunteerism</p>	<p>There is little volunteerism at the state and national levels. What volunteerism and charity there is can be found at the local level and tends to be religiously or environmentally based. Lines are drawn along ethnicity due to increased illegal immigration.</p>
<p>Energy Availability and Alternatives</p>	<p>The U.S. bet on a Caspian oil route that didn't pan out. The Caspian routes go to Russia and the EU instead. The U.S. is dependent on uncertain oil supplies from Latin America, SE Asia and the Middle East, resulting in somewhat volatile and higher oil prices. A</p>

Scenario Mission Drivers	Taking on Water
	<p>higher reliance in the U.S. on coal and nuclear power, combined with crumbling physical infrastructure and heavy regulation but spotty enforcement, means a higher probability of accidents. The U.S. government is starting to push for, and subsidize, R&D for fossil fuel alternatives and high-tech environmental cleanup devices.</p>
U.S. Fiscal Health and Priorities	<p>Fiscal health is poor compared to most other OECD (Organization for Economic Cooperation and Development) countries and many Asian nations, including China. Deficits and trade imbalances are becoming the norm. Federal debt is growing without the requisite foreign investment. The only given in government spending is entitlements — no political party can stay in power long enough to implement more long-term programs. However, the party in power tends to embark on costly, uncoordinated programs that founder in the short term and are used as political ammunition by the opposing party. There is no agreement, even within the two parties, about how much priority should be given to environment spending. A third party, focusing primarily on the environment and sustaining natural resources, has won 12 seats in the House and 2 in the Senate.</p>
State of Technology Investment	<p>Technology investment is low — corporations are not investing in U.S., choosing instead to invest in hotter markets overseas. DOD is still funding R&D for military development and new security technologies, but only select contractor corporations are benefiting. New technologies being developed in the area of seabed mining pose significant threats to the environment. The U.S. and European governments are beginning to invest in R&D for environmental protection and cleanup.</p>
Changes in Government Decision-Making Processes	<p>Competition for scarce government resources (the non-entitlement budget portion) means more cutthroat budget process. The agencies that win, win big. Those that lose tend to shrink and ultimately dissolve unless they are able to justify their existence to a future legislature. The appropriations process now allows any agency to bid for programs formerly done by others, and the Approps subcommittees fund the most efficient, with the hope of shutting down duplicative and redundant federal capabilities that are marbled throughout government. This makes competition among agencies, even in different departments, cutthroat. “Re-inventing Government” is stalled or reversed in this world.</p>
Government Restructuring	<p>With the increase in crime and drugs, DOD and Justice often get priority in the budget process (once entitlements have been settled). Other agencies form and break coalitions in an effort to get budget scraps. The Washington game is figuring out priorities of shifting Congressional coalitions. However, with increased damage due to weather patterns, NOAA is gaining prominence and larger budgets each year. It was recently elevated to the cabinet level, with a Secretary of Environment and Meteorology. . The budget appropriations process is generally cutthroat and highly politicized, especially as the discretionary budget shrinks from year to year.</p>
Global Standards; Regulatory Harmonization	<p>Global environmental standards are frozen at 2005. Very few new standards, if any, are adopted. Europe is pursuing its own minimal, self-serving environmental standards. China/Asia are pursuing their economic growth at the expense of the environment. The U.S. is trying to convince other countries to adhere to stricter environmental standards, but without much success, especially since it is having trouble adhering to these standards itself.</p>

Scenario Mission Drivers	Taking on Water
Leisure Time and Activities	<p>High unemployment means some leisure time but few discretionary funds. Those working multiple, low-wage jobs have no time and very little disposable income. Drugs provide a major source of escape for depressed people, and a source of energy for overworked people. Crime increases as those people scramble to pay for drugs. Tourism has been hurt significantly by coastal damage and property loss along the U.S. coasts and throughout Florida and the Caribbean. Gambling and lotteries abound, both on land and on riverboats. These boats, however, are often damaged by storms and flooding of riverbeds. There is very little recreational boating — luxury taxes are too high, even for those with disposable income. More frequent storms and violent weather patterns have also caused a significant decrease in pleasure boating.</p>
Privatization	<p>The high level of government involvement in certain areas and the exodus of multinationals mean lower levels of privatization in U.S. overall. Health care (except Medicare) and education are outsourced, but healthcare companies must deal with a high level of federal oversight and regulation. There is a higher level of privatization in EU and China — government functions in these regions are also increasingly privatized.</p>