

**Remarks of General James L. Jones  
U.S. Water Partnership  
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**“Importance of Elevating Water as a National Security Priority”**

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*The following remarks were delivered by General James Jones at the Global Water Security Summit at the U.S. Institute of Peace.*

**Thanks/Introduction**

Thank you Maria for allowing me to share this time with such a superb group...

My deepest gratitude to Paula Dobriansky and the U.S. Water Partnership for the very kind invitation...and to Ambassador Taylor and USIP for hosting us today...

I would also like to thank Barry Pavel and the Atlantic Council, General Gordon Sullivan, former Chief of Staff of the U.S. Army, and the Association of the United States Army which he leads so capably.....as well as Tom Harvey and Monica Ellis of “Global Water Challenges” for convening this important event

...And to each of you for your passionate service to a future-defining cause for our country and our planet.

America owes each of you an enormous debt of gratitude for such faithful service – one I strongly suspect will be amplified as current trends and realities take their course, commanding the nation’s attention...and the world’s.

Like many of us in this room, I came of age during the Cold War. During the bulk of my military service, U.S. national security was defined by the long twilight struggle against communism and the Soviet military threat.

Security was expressed in the calculus of comparative troop strength, weapons count, and nuclear throw weight.

But today’s threats are exponentially more diverse and complex than they were in the world we left behind in the 20<sup>th</sup> century...in ways I’m not sure we yet fully comprehend.....witness today’s savagery in Brussels, Belgium.

But I’m not just referring to the more obvious features of the current security landscape. **YES** we must bolster national resilience to an evolving set of kinetic threats. **ABSOLUTELY** we must come to grips with the evolution of violent non-state actors, asymmetric warfare and the vast new domain of

cyberspace. **OF COURSE** we must maintain our capability to defeat any adversary on the battlefield. Those are all givens.....at least I very much hope that they still are!

But, the modern age of WMD, universal connectivity, and global economic integration demands a far richer conception of national and international security—one less reliant on reaction and far more focused on anticipation and prevention—one that centers on disarming the root causes and major multipliers of conflict and instability.

Viewed from that lens what comes into sharp relief is that the premiere strategic threat to global security, and our own, is not a particular country, ideology, or weapon. It's **HUMAN WANTS AND NEEDS** --for the unsatisfied necessities for life-basics, to include food, energy, water, and even dignity.

It's said that "Water is life!" As we speak, 1.8 billion human beings have no access to clean water. The bulk of this population clings to life in the most unstable, violence-torn regions on earth where terrorist enterprises are working their hardest to capture operating space and followers.

Such deprivation is a tragedy. It is **NOT**, however, one of human development alone. The growing imbalance in global water supply and demand is evolving into **THE** most toxic threat to world peace, and international and U.S. national security.

This reality must be an important wake-up call for our country and nations the world over, on which inspires a far more urgent response if civilization is to achieve the hopeful world order we envisioned at the outset of this century.

That the world faces enormous water scarcity challenges capable of driving the global security dynamic — is a matter of scientific fact, not political alarmism. And it's solvable if we get moving, but we need to get moving quickly.....this is really urgent!!

The pressure to do so is building apace with the rapid growth of a global population that will reach 11 billion people by the end of the century.

The bulk of this growth will take place in the world's most arid and inherently unstable regions. Predictions are that by mid-century 40 percent of the world's population will live in a stressed water basin.

Adding to this toxic imbalance are the anticipated effects of a changing climate expected by most experts to diminish crop yields, while triggering drought and other destructive weather extremes.

Yet in the face of these obstacles, mankind must figure out a way to produce 50 percent more food and double energy production—activities requiring massive water resources—if we are to meet human needs by mid-century.

For our Intelligence Community the brutal math points to an inescapable fact. The DNI reports that major deficits in fresh water availability, “**will (emphasis on the “will”); not “maybe”**” -- will contribute to instability in states important to US national security interests.”

Amid the sweeping security implications we see the potential for nation-states clashing over access to arable land and water...of terrorists targeting water and food supply...and of water insecurity multiplying the risk of social unrest, state failure, and mass migration.

As we come to grips with the many implications, a compelling fact seems to be eluding our focus. Water scarcity’s role in weakening societies...in fomenting failed states...in catalyzing disruptive mass migration...and in ripening populations for exploitation and conflict is not some abstract, distant danger. It’s happening today...and the trends are chilling.

### **Middle East**

The phenomenon is manifesting itself across the globe. In the Middle East and North Africa, the violence and instability of the Arab Spring wasn’t simply a matter of oppressed populations finding their political voice and delivering a long-awaited come-uppance to the region’s rulers. It was the product of social and economic upheaval catalyzed by a spike in the price of wheat and food resulting from Central European drought.

The crisis and conflict that has been raging in Yemen was stoked by a severe, life-disrupting water shortage. The same is the case with Syria’s race to the abyss.

When the country’s sinking water table reached critical levels it displaced over a million and a half farmers. Environmental refugees flooded into the cities, and the resulting social turmoil burst into civil war. A Syrian observer noted “the war and the drought are the same thing.”

We are getting an alarming peek at the future of warfare in the tactics of Syrian factions stealing wheat reserves; employing food as a weapon against a vulnerable population.

To Syria’s south sits Jordan, a critical U.S. ally and linchpin in Middle East security. It also happens to be among the most water-insecure places on earth. From a Jordanian General, one is much more likely to hear dire warnings about the destabilizing strain created the country’s water crisis worsened by the swelling refugee population than about ISIS infiltration.

As if the regional challenges weren’t daunting enough, the Middle East is faced with a game-changing climatic coefficient. Scientists report that greenhouse effects are likely to enlarge a drought-inducing cell situated over the Eastern Mediterranean, in what could be the socio-environmental equivalent of the detonation of a nuclear weapon.

Considering these trends, our announced “pivot to Asia” is not looking quite as strategic or prescient as it may have seemed at its inception.

In articulating the pivot as a national policy, we failed to appreciate that when a national pivot towards one particular region is declared, it also signals, however unintentionally, a pivot away from other regions. For a global power, that wasn't a particularly good signal to the global flashpoint of the Middle East, among other regions who also took the news badly. We have since rephrased our intent, thankfully.

## **Africa**

Asian pivots do not square with global security realities given the central role that Africa will play in global security and economics in the decades ahead.

Africa already faces many of the world's most extreme water challenges. Nearly half of the continental population currently lives in a water-stressed environment. With that in mind, consider the following:

- Africa's population is rising nearly three times faster than the rest of civilization, and will triple or quadruple by the end of this century to somewhere between 3 billion and 6 billion people by the end of the century.
- The population of Lagos, Nigeria will rise from 11 million to 40 million; and Kinshasha, the capital of the Democratic Republic of Congo, will grow from 8.4 to 31 million people by mid-century.
- Nearly half of the continent's population are teenagers or children...
- ....And, as many as 37 percent of young adults in Sub-Saharan Africa aspire to move to another country.

The implications here are staggering!

## **India and Asia**

Equally so are trends in India—a country with nuclear weapons and population of 1.2 billion people that by mid-century it will overtake China as the world's most populated nation. Yet, India's groundwater is expected to reach critical levels within two decades. Today, 140 million people in India and other areas of Asia are consuming arsenic-laden water, drawn from deep and tainted reaches of depleting aquifers.

While the human promise and economic opportunity offered by Africa, South Asia and the entire developing world is reason for great hope; meeting the massive water challenge necessary to secure a better future is a clarion call to action for us all.

## **At Home**

To be part of the solution America needs to tackle significant water issues right here at home.

The aquifer serving California's Central Valley – a vital national breadbasket -- is collapsing from overdraft, worsened by a prolonged drought. Within the next decade at least 40 U.S. states will experience significant water shortages.

The economic drag of these shortfalls is an impediment to America's prosperity needed to maintain a strong national defense and project global leadership in a dangerous and needy world.

Our history makes quite clear that any form of American retreat from the world stage –whether security related, economic, political, or social – isn't just a blow to our international prestige and respect; but also to the prospects of a more peaceful and prosperous world order for mankind.

### **Agenda**

The challenge....at home and abroad...is enormous...and the stakes couldn't be larger.

But I confess to being an unrepentant optimist by nature. We have every reason to be. America has always demonstrated an amazing capacity to rise to the most pressing problems, often against great odds. Resilience is a defining feature of our national character, and problem-solving courses in our blood.

In the water security challenge, I see enormous opportunity for American leadership and problem solving; and for the prospects of enduring peace and prosperity by achieving food, water, and energy security.

But success is not self-actuating. It will require strategic vision, hard work, new approaches and lots of good, old-fashioned American ingenuity.

I would like to offer what I believe are five essential pillars of a national water security agenda.

### **Strategy**

First, it seems to me we need a comprehensive national energy and water security strategy...a forward-looking, detailed data-driven blueprint laying out the economic, political, commercial, and innovation lines of effort required to achieve long-term resource sufficiency at home and globally. It must be a strong, concrete, and data-based plan.

I commend the U.S. Water Partnership and the Atlantic Council for agreeing to lead an effort outside of government to engage the best private sector and public sector thinking to start the process.

### **Technology**

Two, we must have the strongest possible research and development program to promote the water abundance, resource conservation, and wise stewardship.

America has pioneered some of the greatest technological marvels known to man. I have no doubt we can revolutionize the water domain by creating and bringing to scale game-changing solutions -- from advanced water recycling and desalination technologies... to the development of drought resistant crops...and solutions to every aspect of the challenge.

We have created advanced research capacities at our world-leading national labs and through agencies such as **DARPA** that has pioneered game-changing defense solutions....**ARPA-EYE** that brings marvelous technology to the intelligence community....and **ARPA-E** working to transform the energy sector.

Perhaps it's time for an **ARPA-W** to promote water solutions building on the State Department's Global Development Laboratory; but an initiative far more robust that harnesses our national labs, leading universities, and most innovative companies.

I understand that this is an idea strongly endorsed by the impressive group of Chief Technology Officers and other thought leaders who assembled in San Francisco several weeks ago. Let's make it happen!

### **Policy**

Three, we must adopt forward-leaning national water policies, rules, norms, and practices that promote efficient water management and resource protection. At the same time we must leverage our influence in international institutions to make water security a global priority...and international security imperative.

Our top companies are finding out that natural resource stewardship is no longer just a corporate social responsibility but a competitive necessity. The concept of "sustainability" has graduated from being a vogue environmental buzzword. It's now the center link in the integrated supply chain of human prosperity and international security.

Thought leaders tell of an emerging "circular economy" built on resource efficiency, closed systems, and zero waste. I submit to you that America must lead this transition with our innovations, policies and example.

Taking up this challenge will not only help save the world, it will be a fertile platform for American competitiveness and economic growth in the decades ahead. Success will require unequalled levels of public-private sector cooperation.

### **Population Trends**

Four, we must lead a global dialogue on surging populations in the least developed areas of the world, which poses a severe threat to regional security and to natural resource management. The fertility rate in Africa remains at nearly five children per woman, over double the average in developed countries.

More than 220 million women worldwide, a great number of whom live in Africa, lack access to modern maternal health and family planning services. This is a significant barrier to economic growth and opportunity, particularly among women, and it also intensifies water scarcity. The international

community, civil society, and religious leaders need to form stronger partnerships to tackle family planning at national, regional, and global levels.

Extreme poverty, extreme population, and extreme heat is a recipe for extreme ideology and conflict.

### **Modernize U.S. global engagement**

Finally, the “chapeau” is a long-needed modernization of how the United States engages with the world, particularly developing countries. The quality of our future depends upon accomplishing this.

We gather here today because of a deep concern about a major threat to modernity. In doing so, let’s not allow present regional strife, problems at home and abroad, or the dire threats inherent in water, food, and energy insecurity to obscure the broader picture. The truth is that despite the many major challenges, the human condition is decidedly on the ascent. And every one of the challenges we face is solvable.

Global poverty has been reduced more in the last 50 years than in the previous 500. Most of the improvement has been achieved in the last two decades alone.

Hundreds of millions of people are rising up and taking their rightful place in the great enterprise of human advancement--creating new markets and new opportunities for themselves and for America; and that’s good news because we need them to succeed if we are to prosper.

American innovation and systems have much to with the global progress that has been made...

...Our job is to keep the momentum going!!!

To do that we must come to grips with the reality I mentioned at the beginning of my remarks and bears repeating: national security is a far deeper and broader concept than it was during the last half of the 20<sup>th</sup> century.

Anachronistically, many of today’s challenges and events are measured against the backdrop of the last century. Too often our policy approaches remain mired in the past as well.

It’s time to acknowledge that global stability is no longer defined solely by the ability of nations to deploy and defeat; but rather by our capacity to engage and endow -- to meet human needs, sustain economic growth, and turn promise and opportunity into jobs and a higher quality of life.

Yes, our armed forces will remain a central pillar of our national security portfolio, but they must be part of a more sophisticated tool kit. More than ever our government, our firms, and our NGOs must work together in harmony.

We need a contemporary “whole of government,” “whole of society,” and “whole of alliance” global engagement strategy—one that synchronizes the complementary advance of economic development, security, and good governance rooted in rule of law – the pillars of sustainable peace and prosperity.

This is what’s required to nurture developing societies and build stronger markets. In other words it means doing the work of preventing instability rather than having to respond to it – work that will cost far fewer lives and taxpayer dollars.

In the long run, this will cause the lasting defeat of radical fundamentalism and other blights on humanity—but it must be a proactive vice reactive campaign...and it is deeply rooted in global resource sufficiency – energy, food, and water -- that will require modernized global engagement to accomplish.

### **Conclusion**

Ladies and gentlemen, let me conclude by reemphasizing that achieving the better future requires we overcome an implacable adversary.

Again, it’s not so much retrograde ideologies or the marshal ambitions of Russia, China, Al Qaeda or ISIS. The enemy is human wants and needs for basic necessities...and it is the most formidable adversary we will ever face.

Though the risks and threats inherent in the water challenge of our time are enormous; so are the opportunities...and that is what should inspire us.

As it was in the last century, American leadership will be the indispensable element.

That’s why the country groans when instead of addressing these life-defining challenges our Presidential candidates debate one another’s physical features and engage in other silliness that diminishes us on the world stage; antics that I believe are totally unworthy of our great nation.

The fact is that the shared challenge of achieving water abundance can be a new and powerful basis for international cooperation—a unifying rather than divisive force against a common foe.

In defeating that foe we have a chance to make the decades ahead a period of unprecedented peace, prosperity, and human development. But, victory will take American leadership, commitment, and know-how at its best.

With America in the lead, we **can**, we **must**...and I believe we **will** rise to that challenge....and seize this truly monumental opportunity.

Thank you for listening...and for all that you have done and all you continue to do in service to that cause—a cause for the ages.