## AMERICAN SOCIETY OF Adaptation Professionals

535 Stone Cutter Way, Montpelier, VT 05602 | (512) 585-8592 | www.adaptationprofessionals.org

January 10, 2017

President-Elect Donald J. Trump Transition Headquarters 1717 Pennsylvania Avenue, NW Washington, DC 20006

#### Dear President-Elect Trump:

As you and your team busily assemble your Administration, we write to acquaint you with the American Society of Adaptation Professionals (ASAP) and the significant expertise within our membership. During the campaign, you spoke often about the state of American infrastructure and the need for significant investments to improve commerce, quality of life, safety and welfare, and the need to reduce escalating costs to the U.S. Treasury of natural disaster recovery funding.

ASAP members contribute leadership and expertise to the resilience and preparedness fields.

Accordingly, we would be delighted to provide input regarding the urgent need to direct budget and leadership to critical resilient infrastructure policies and programs across our country. In addition to encouraging strong leadership, we offer our expertise on the implementation of resiliency programs that can enhance the security of infrastructure, improve public health, bolster local, regional and national economies, and lead to sweeping public approval and bi-partisan support.

The existing and continuing impacts from

### ASAP Members' areas of expertise include:

- Risk management and business contingency planning
- Infrastructure design, placement, and lifecycle
- Water resource management and conservation
- Economic revitalization, growth and development
- Disaster preparedness and recovery
- Community-based integrated resilience planning and implementation

climate change threaten the health and well- being of all American citizens. As the central organizing society of the adaptation field, ASAP is well-positioned to help the Trump administration connect federal programs to local action and ensure that a suite of ready-to-go programs and a cadre of policy and technical experts are available to support such efforts.



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Additionally, as a representative of private sector members from both for-profit and non-profit organizations, we are uniquely positioned to facilitate strong private-public partnerships.

Finally, ASAP members bring to adaptation the highest professional and ethical standards. The considerable years of practical experience represented by our membership has taught us the need for inclusive, authentic stakeholder engagement in concert with the best science and technical expertise. We outline some of these key insights in the attached document.

We would welcome an invitation for a member of our staff to brief the transition team on resilient infrastructure principles. Please don't hesitate to let us know how we can be of service by calling (734-291-3529) or emailing (bgibbons@iscvt.org).

Sincerely,

Elizabeth Gibbons, Managing Director

Steve Adams, President



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The American Society of Adaptation Professionals (ASAP) is the leading professional organization in the United States for resilience experts and practitioners from over 400 organizations and 48 states. Our members represent corporate, civic, academic, and public institutions, and work across all sectors of practice including emergency management, engineering, disaster preparedness, hazard mitigation, economic and strategic planning, and more.

ASAP is a professional society that is committed to helping America become better prepared and equipped for the rising challenges from extreme weather events and climate change. These risks are not faced equally, as the consequences of climate changes as well as ecological and social vulnerabilities differ across the nation. ASAP is committed to enhancing the resilience of all communities, but particularly of those most vulnerable. ASAP promotes approaches to preparedness, resilience-building and adaptation that address whole systems, considers potential trade-offs and synergies, takes a long-term perspective, and uses the best available science of past, current, and future conditions, and that emerge from processes that are just, inclusive, transparent and accessible to all that are and may be concerned and potentially impacted.

More information about ASAP is available at our website: www.adaptationprofessionals.org.

#### The challenge of adaptation

Forest fires raging across California, storm surge inundating the Gulf coast, unrelenting rain pounding Carolinas, drought-depleting agricultural production across the West Coast, algae blooms poisoning water supplies in the Great Lakes—all of climate-related disruptions destabilize communities, deteriorate public health, threaten food sovereignty, and damage our economic and cultural security.

Adaptation: Adjustment in natural or human systems to a changing climate that exploits beneficial opportunities or moderates negative effects.

Mitigation: An intervention to reduce the causes of changes in climate, such as through reducing emissions of greenhouse gases to the atmosphere.

Climate threats are unique in that they affect all sectors of society across all geographies and many

communities are already experiencing harm from these threats. This harm includes negative impacts to infrastructure, military installations, public health and emergency services, natural resources, and cultural institutions. These impacts come primarily from increasingly severe and frequent storms, floods, sea level rise, heat, droughts, and wildfire. Adaptation to these impacts is made more challenging by the fact that these events do not usually occur in isolation, but concurrently. This makes the need for Presidential leadership all the more urgent.

The impact that these threats are having on our economy is of particular importance. Escalating natural disasters contribute to the national debt and destabilize local and national economies. Anticipated costs of these impacts in the next fifteen years include:



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- \$35 billion annually in damages from coastal storms across the East and Gulf Coast.
- An anticipated potential 20% drop in crop yields in the Midwest and Southeast.
- An over \$700 million increase in wildfire control costs by 2025.

While a changing climate is creating challenges in many areas of American life, we draw your attention to three topics representing areas of alignment between the administration's platform and ASAP's expertise: Infrastructure, security, and agriculture/natural resources.

#### Resilient infrastructure

We are pleased by the President-elect's commitment to rebuilding our nation's infrastructure. We believe there is much common ground to be found if the implementation of the Administration's infrastructure program is informed by a commitment to resilience and disaster preparedness so as to save lives and money in the long run. The enhancement and rebuilding of America's infrastructure is an opportunity to generate billions of dollars in short-term job creation and longterm workforce modernization. Enhanced infrastructure and a modernized workforce will demonstrate U.S. global leadership and strength.

ASAP can assist the Trump Administration as it forges partnerships between private sector companies and state and local governments to deliver these infrastructure programs by identifying innovative technologies and private sector firms that are leading innovation in the resilience field. In fact, major U.S. corporations are already investing in making their plants and supply chains resilient to the disruptions caused by escalating natural disasters, such as severe storms and fires. The time is ripe to develop public-private partnerships with Fortune 500 companies already committed to resilience efforts, including Apple, Goldman Sachs, Wal-Mart, Coca Cola, and others.

We can also help the Administration capitalize on existing federal partnerships such as the Partnership for Resilience and Preparedness (PREP) that brings together federal agencies with partners like Amazon, Google, and ESRI to leverage the power of private data management with the deep data resources of the federal government.

Another opportunity for private sector partnership around resilient infrastructure lies with the financial sector. Recognizing that public sector funding alone cannot meet the challenges of climate change adaptation, the market is shifting to support resilience and preparedness. The investment community is expected to distribute over \$100 billion in Green Bonds in 2017. In the insurance industry, catastrophe bonds are experiencing a surge in popularity. Reinsurers, traditional insurers, banks, and other investors are developing metrics and standards that promote resilient credit planning. We recommend the Trump Administration embrace these trends and integrate them into policy that encourages private-public partnerships to enhance resilient infrastructure.



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Encouraging resilient infrastructure also addresses the systemic issue of repetitive loss in our most vulnerable communities. These losses are especially pronounced in households exposed to escalating and ongoing natural disasters that cannot afford to move out of harm's way. As more jurisdictions make policies and procedures that address resilience and preparedness, fewer people will be impacted by flooding, sea level rise, and forest fire, reducing the costs of National Flood Insurance Program (NFIP) and other programs through modernizing the program and thus reducing disaster-related claims.

Through our own membership and strong partnerships with academic, corporate and policy think tanks, ASAP members are prepared to help the Administration consider how to encourage these local policies, reducing the cost to federal programs and leading to safer and healthier communities for all Americans.

#### Security

Over the past decade, our security agencies, including The Department of Defense (DoD) and The Department of Homeland Security (DHS) have identified serious threats to national security and missions from increasing storm activity, intensifying extreme weather events, and natural disasters (including heat waves, drought, water scarcity, and coastal inundation). To address these threats, each agency is implementing resilience objectives that will improve natural and built infrastructure systems, secure acquisition and supply chain lines, and improve operational capabilities.

We believe the Trump Administration can advance our nation's security by supporting the DoD and DHS objectives to increase resilience across these critical areas. Both agencies have economic analyses and well-researched plans of action. DHS Mission 5 to Strengthen National Preparedness and Resilience calls for assisting federal entities, reducing vulnerabilities and supporting stronger, safer, and smarter communities through investing in resilience efforts. ASAP's member network can facilitate connections to local communities and to technical experts in various sectors, and we would be pleased to assist with identifying both information resources and practitioner best practices to help the Administration advance this DHS Mission.

Resilient infrastructure plays an important role in national security (in addition to the other areas addressed above). The National Infrastructure Advisory Council (operating out of the office of the Secretary of the Department of Homeland Security) recommends increasing infrastructure resilience to support national security. A 2009 report from the Council emphasizes the important role of public-private enterprises in meeting the nation's infrastructure security goals. Research taking place across academic institutions and in national labs, such as Argonne and National Renewable Energy Lab (NREL) are critical nodes of innovation and technology advancement. ASAP members situated in academic institutions are uniquely positioned to bring these emerging technologies to market and assist with implementation of the latest innovations.



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#### Agriculture, natural resources, fire and water

Alongside infrastructure and security, we believe the Trump Administration can build a better future for our country by addressing threats to our agricultural sector and natural resources.

Agricultural enterprises are principally managed by private enterprises; natural resources, unlike

agriculture, are managed jointly by public and private partnerships and Despite this difference, interests. consideration of agricultural natural resource issues cannot be easily food security separated: environmental quality both depend on the ecological processes that provide nutrition, clean water, and waste recycling for all living things. The

"Conservation is inherent in conservatism. As the pioneer of environmentalism a century ago. the Republican Party reaffirms the moral obligation to be good stewards of the God-given natural beauty and resources of our country. We believe that people are the most valuable resources and that human health and safety are the proper measurements of a policy's success." Republican Party 2016: 20.

Administration could improve our nation's agriculture and natural resource outcomes with policy that takes into account the uncertain effects of rapid increases in global population coupled with increasing climate disruption and weather volatility exacerbating issues of food and water security. These challenges are present globally and locally across rural and urban communities alike. Policy that does not reflect this may result in households facing a scarcity of critical goods and difficulties meeting basic needs, with devastating economic and health consequences. Poor air quality, for example, harms all people and reduces productivity across many sectors. Water quality crises and shortages threatened communities from West Virginia to Michigan to California over the past year alone leading to acute impacts on community health and long-term impacts on the development of our nation's children that remain to be fully understood. The American Society of Civil Engineers has noted that \$3.6 trillion in infrastructure investment is needed by 2020, largely in water infrastructure.

We bring your attention in particular to the importance of the vulnerability of the agricultural sector. Agriculture provides roughly one-fifth of the nation's economic activity. As climate change exacerbates drought, crop productivity declines, resulting in farmers selling unproductive land for suburban development. The next Farm Bill will be a chance for the Administration to introduce policies that offset these trends. Incentives for our farmers to remain on the land, engaging in practices that replenish soils and protect water resources is critical. Training and resources for good management practices is critical due to the drastic decline in soil quality, especially across our Corn Belt. Soil quality decline is leading to decreased crop yield as well as increased need for fertilizer. Decreased soil quality also leads to erosion and flooding impacts. ASAP members from across the Midwest and California can bring expertise to bear on resilient farming approaches for both commodity and specialty crops, each of which face unique challenges.



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ASAP members are working on the boundaries of multiple sectors, and along these boundaries we have identified the risks of increased fire danger and decreased water supply and quality as issues profoundly important for the Administration to address. Fire and water management both need improvements to respond adequately to these challenges. Wildfires are on the rise partly due to how forests have been managed, as well as climate change-related problems. One recommendation to address this challenge is for the Administration to prioritize funding for forest management approaches that will reduce the risk and impacts of forest fires to homes and lives in the future. Prevention, along with response and climate-adaptive reforestation practices, will reduce direct loss of life and property and limit the rise of fire-fighting expenses in the future. This approach, as with many of our recommendations hinges on developing proactive policies that build greater resilience and preparedness into our systems, whether they be health, water, infrastructure or forests. When we seek resilient, preparedness-driven programs, the local and national costs are decreased and investments are returned.

ASAP's membership includes experts working in agriculture and natural resources, including specialists in fire and water issues. These ASAP resources are available to assist the new administration in framing policy to address these critical and compounding problems.

#### Conclusion

The existing and continuing impacts from climate change threaten the health and well-being of all American citizens. We hope that the Trump Administration will take a strong position on developing policies and programs that enhance resilience across the country through investments in resilient infrastructure, local engagement, and sensible private public partnerships. Our membership hosts a cadre of technical and policy experts who can assist the Administration as it seeks to secure of domestic and global resources, maintain supply lines for U.S. goods, strengthen agriculture, protect natural resources, including air and water quality, and be an ally to both rural and urban at-risk, low-income, and vulnerable communities.

As the professional society of the adaptation field, ASAP is well-positioned to help the Trump administration connect federal programs to local action and ensure that a suite of shovel-ready programs and a cadre of policy and technical experts are available to support the administration efforts. Additionally, as representative of private sector members from both for-profit and nonprofit organizations we are uniquely positioned to facilitate strong private-public partnerships.

Where our values and vision for a resilient and inclusive society align, our members are prepared to assist your transition team and incoming administration leaders as you design and deliver policies and programs over the first 100 days and beyond. We look forward to the opportunity to discuss the implementation of programs and policies that enhance our nation's natural and built resources, bolster national security, and ensure resilient futures for all communities.

