EPA Support for US Insular Areas Briefing Prepared for the Senior Plenary Session of the Interagency Group on Insular Areas February 2013

EPA is proud of the support it has been able to provide to the US jurisdictions of American Samoa, CNMI, Guam, and the US Virgin Islands, from historic increases in infrastructure funding to improve the safety and availability of drinking water in all islands, to supporting the first LEED building between Hawaii and Australia, to supporting sustainability efforts and coral reef protection.

HISTORIC INCREASES IN FUNDING – Since 2009, EPA has provided more than \$150 million dollars in water and sewer construction funding to the jurisdictions of American Samoa, CNMI, Guam, and the US Virgin Islands – more than all prior years combined. This is a result of the American Recovery and Reinvestment Act funding in FY09, and, more importantly beginning in FY10, a new set aside for the US Insular Areas within EPA's national water and wastewater infrastructure funds. For example, in FY12, EPA provided over \$32 million in infrastructure funding to the Insular Areas. Drinking water funds are being used to improve the availability of safe drinking water in all territories. For example, funds are being used to increase water storage, improve water distribution, and enhance water treatment and disinfection. In some territories, such as American Samoa, EPA funds are helping to extend the main water system to remote villages. Wastewater construction grants are being used to protect the health of people and the marine environment in the Insular Areas. For examples, they have been used to extend the sewer system in underserved parts of the islands, upgrade sewage treatment plants, and in Guam and CNMI, to build new sewer outfalls to protect swimmers, fishers, and the coral reef. These funds are being used strategically to make systemic improvements, such as asset management and better electronic monitoring, and to develop long-term master plans as well as upgrading the existing infrastructure.

IMPROVEMENTS IN WATER QUALITY – EPA has been using all tools available – funding, enforcement, technical assistance, and partnership – to improve drinking water and nearshore water quality in the Insular Areas. A decade ago in Guam, boil water notices were common. In 2012, Guam's drinking water met EPA health-based standards. EPA continues to work closely with the Guam Waterworks Authority on further improvements. A decade ago on the island of Saipan, only about 10% of the population had access to continuous 24-hour water. Today that has increased to nearly 95%, improving the quality of life for many residents. EPA has partnered with DOI OIA, the local utilities, and the Governors' offices to prioritize and support improvements in water quality.

SUPPORT FOR LOCALLY-BASED ENVIRONMENTAL PROTECTION – In FY12, EPA provided over \$11 million to support the American Samoa EPA, CNMI DEQ, Guam EPA, and USVI DPNR/DEP. EPA has worked with local governments to strengthen the financial and technical capabilities of these agencies to oversee solid waste, monitor beach and drinking water safety, reduce land-based impacts to coral reefs, reduce fuel spills, reduce the risk from air pollution, pesticides and contaminated soil, and otherwise protect the environment and health of their communities. EPA uses the Omnibus Territories Act to improve grant efficiency at federal and local levels, and waive matching requirements.

MILITARY BUILDUP – The military buildup is bringing opportunities and challenges to Guam, even as the scope of the buildup changes. EPA, along with DOD, other federal agencies, and the Government of Guam, has been taking a leadership role in the buildup environmental review process, in quantifying the impacts to Guam's civilian infrastructure, and in formulating a framework agreement for implementing Adaptive Program Management, a key mitigation measure. EPA will continue to take a strong role in the buildup as it evolves.

EMERGENCY RESPONSE, SOLID WASTE, AND CLEANUP – EPA's Superfund program has a long history of responding to natural disaster in the Insular Areas, and will continue to do so. It has also undertaken cleanup or removal of sites contaminated by petroleum or other chemicals in all Insular Areas. In August 2011, Guam residents celebrated the long-awaited closure of the Ordot dump Superfund site, and the opening of the new, environmentally protective Lanyon Landfill to receive the island's municipal solid waste that is not recycled. The Ordot dump had continually discharged leachate into the nearby Lonfit River and sometimes polluted the air when it caught fire. The new landfill meets or exceeds federal and Guam requirements for protecting the island's environment.

REDUCING LEPTOSPIROSIS – EPA has supported the American Samoa Government's efforts to reduce the potentially fatal disease of Leptospirosis, spread through contact with animal waste, by replacing poor pig waste management with a more sustainable practice. Supported by EPA funding, and in partnership with USDA's EQUIP program, the American Samoa EPA has led an effort to decrease the number of illegal piggeries, and to promote more sustainable pig management. The results: a cumulative nutrient load reduction of 16,055 pounds of nitrogen and 63,258 pounds of phosphorous into American Samoa's water ways, a large reduction in bacterial loading into streams and onto beaches, and the removal of 5 water bodies from EPA's list of polluted water bodies.

SUPPORTING THE FIRST LEED BUILDING BETWEEN HAWAII AND AUSTRALIA – In October 2012, construction was completed on a new "green" building to house the American Samoa EPA, designed to be LEED platinum. The new building has a green roof and is expected to generate 60 kW of energy through photovoltaic solar panels. The building's power bill was lowered from over \$2000.00 per month to just \$5.00 in the first full month of use. The data indicate the building is capable of achieving a net zero energy performance standard, meaning the building will produce as much or more energy through renewable power generation than it will consume annually. The American Samoa EPA's former building was damaged in the 2009 tsunami. The new building was funded by EPA, DOE, NOAA, and FEMA.

RENEWABLE ENERGY – EPA has partnered with DOI OIA, DOE NREL, and local government in the development and ongoing activities of the territorial energy task forces. Additionally in CNMI, EPA helped establish a wind turbine and photovoltaic system at Saipan Southern High School, the first such system on the island, by allowing a hazardous waste violator to build a renewable energy system in lieu of a fine paid to the US Treasury.

ULTRA LOW SULFUR DIESEL (ULSD) – EPA worked with the Guam EPA, the Guam Legislature, and interested private sector partners to introduce ULSD to Guam's gas stations in 2011, replacing what had been very high sulfur fuel. In American Samoa, EPA worked with FEMA to use ULSD in the diesel

generators which replaced the power plant destroyed in the 2009 tsunami. There are significant health benefits associated with replacing high sulfur fuel with ULSD. In 2011, EPA made territories eligible for the first time for grants under the Diesel Emissions Reduction Act.

SUSTAINABILITY – EPA continues to support local efforts to improve sustainability in the Insular Areas from the bottle bill in Guam, to improving recycling rates. EPA has provided technical assistance to Guam in implementing a bottle bill, which will require beverage container recycling and divert a significant waste stream. Additionally, EPA has worked closely with the Guam EPA, DOD, and local Guam recycling and disposal companies to establish a recycling measurement system that will be used to track Guam's progress toward Zero Waste. In November 2012, the Guam EPA announced its first-ever calculated island-wide recycling rate of 17.85%. Over 29,000 tons of material were recycled during calendar year 2011, according to recycling measurement data. Guam used the recycling data announcement to celebrate America Recycles Day (ARD), a national celebration of recycling for the first time. Also on ARD 2012, the University of Guam joined EPA's National Food Recovery Challenge, a voluntary program aiming to limit food waste through charity donations, reducing unnecessary consumption, and composting.

CORAL REEFS – EPA works with local governments and other federal agencies to protect coral reefs in the Insular Areas. EPA is a member of the US Coral Reef Task Force and its Steering Committee, and partners with others to prevent land-based sources of pollution, such as stormwater, sediment, or sewage from impacting coral reefs. For example in 2011 in Guam, EPA worked in partnership with DOD, NOAA, and the Guam EPA to host stormwater design training for private developers, consultants, and government in preparation for the military buildup. In addition, EPA has developed coral reef biocriteria to aid resource managers, and has supported research on coral resilience to climate change impacts. EPA is in the process of drafting a coral reef strategy to improve the protection of coral reefs in Hawaii and the US-affiliated Pacific Islands. The strategy aims to increase the visibility of coral reef protection efforts, highlight the impacts of climate change on coral reefs, and utilize the Clean Water Act and other authorities to improve the protection of coral reefs in the Pacific. Additionally, in January 2013, EPA announced the formation of the Caribbean Coral Reef Protection Group, an interagency effort to protect coral reefs off the shores of Puerto Rico and USVI. In addition to EPA, the Caribbean Coral Reef Protection Group will include USVI DPNR, NOAA, and FWS, among others, and will work to coordinate more effective government strategies in protecting coral reefs.

CARE GRANT TO USVI – Through an EPA \$300,000 CARE award, the Coral Bay Community in St. John, USVI was able to leverage over an additional \$1.5 million in other federal and private funding sources for continued environmental sustainability. The CARE project focused on minimization of toxics, including loading of sediments transported via storm runoff, related to rapid development of the area, in order to protect the coral ecosystem within the 3000 sq acres watershed community of Coral Bay.

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