

2015 IHS Green Champion Award Winners

Environmental Stewardship Award

LTJG Melissa de Vera

LTJG De Vera has taken the initiative to work with the tribes in an area of passion for her: Environmental Stewardship and Sustainability. In Grand Portage, she worked closely with staff to finalize an integrated solid waste management plan with goals outlined for waste reduction and recycling. She also managed a project to complete a study titled, “Using Community-Based Social Marketing to Effectively Increase Student Recycling at the Fond du Lac Tribal and Community College.” This study identified barriers and solutions to increase recycling on the tribal campus. In addition, LTJG De Vera is a member of the Bemidji Area Office’s “Green Team,” which was formed to reduce office waste and GHG emissions; and work toward a more sustainable workplace.

Change Agents Award

Alaska Native Tribal Health Consortium’s Rural Energy Initiative – CDR Eric Hanssen, P.E., Gavin Dixon, Tashina Duttler, Kevin Ulrich, Sharnel Vale, Chong Park

The cost of basic sanitation, clean water, heating fuel and energy can easily consume half or more of a family’s income in rural Alaska, creating barriers to economic development. The Alaska Native Tribal Health Consortium’s (ANTHC) Rural Energy Initiative (REI) works specifically to reduce that cost by identifying and implementing energy efficiency and renewable solutions. Through partnerships with rural communities, funding agencies and utility companies, ANTHC’s REI developed community wide biomass boiler projects that utilize cordwood boiler systems to provide heat to public water systems, washeterias/water treatment plants, clinics, and community buildings. In 2015, three biomass projects were constructed in the communities of Hughes, Kobuk and Koyukuk with another biomass system in Anvik currently in the design phase. ANTHC’s REI is also actively working with a biomass boiler manufacturer on a module that may making energy saving benefits a reality for many more rural communities, where the economics of constructing the system are currently not feasible.

Sustainable Design Award

CDR Frank Chua

Frank Chua was assigned to replace the demolished housekeeping storage room and current housekeeping office with a more efficient building at the Sells Hospital. The Sells Hospital Housekeeping building has been designed and constructed to use approximately one-third the energy of a typical building of its size in a desert climate. The Housekeeping building will use an energy efficient design and products for all building components to ensure the lowest electricity use possible in the hot and dry climate. The super-efficient building will serve as a dummy to see how the design would increase typical costs, and to demonstrate efficient building design for future projects.

Water Use Efficiency Award

Phoenix Area – Darren Ausdemore, Juliane Junes-Harvey, Kenneth J. Fitzgerald, Eric Matson

A comprehensive water master plan completed by Phoenix Area Engineers proposed combining two separate public water systems separated by a major river, both with high arsenic levels into a single public water system. One of the systems had nearly three times the amount of arsenic levels than the other. The proposed solution accepted by the Nation involves construction of an encased High-Density Polyethylene (HDPE) line underneath a major river that connects the two systems together. The completed project will eliminate operation of a high level arsenic water well and an adsorptive arsenic removal treatment plant, resulting in Operation and Maintenance (O&M) savings to the Nation of about \$150,000 per year. The construction of the project started in October 2015 with a completion date of spring 2016. This combined water system will reduce electricity usage, provide for a single point of entry for easier utility management, a smaller land blueprint, and provide a more sustainable system for the Nation.

Water Use Efficiency Award

CDR Hugo Gonzalez

CDR Hugo Gonzalez helped successfully implement energy cost saving projects at the 106,708 GSF Claremore Indian Hospital built in 1977. The new tankless water heater now delivers instantaneous hot water for the Claremore Indian Hospital without the need to store hot water in two 500 gallon tanks that were heated by continuous steam. This implementation has contributed to lowering operating costs, shedding off 25% capacity of the 40 year old steam boiler system with a gas energy consumption reduction of 18% (161 MMBtu/yr) based on calculations of the two 19MM BTU steam boiler system during a yearly consumption period for a cost saving of \$6,291/yr.