

October 16, 2008

Memorandum

To: Assistant Secretaries  
Heads of Bureaus and Offices

From: Willie R. Taylor, Director /s/  
Office of Environmental Policy and Compliance

Subject: Recipient Announcement Department of the Interior's 2008 Environmental  
Achievement Awards

I am pleased to announce the recipients of the 2008 Department of the Interior Environmental Achievement Awards.

These Awards recognize departmental employees and partners who have attained exceptional achievements under Executive Order 13423, *Strengthening Federal Environmental, Energy, and Transportation Management* and for cleaning up contaminated land. The Award categories are: waste/pollution prevention and recycling, green purchasing, environmental management systems, sustainable design/green buildings, alternative fuel and fuel conservation in transportation, and environmental stewardship.

An interdisciplinary panel of judges from the Department's bureaus and offices evaluated nominations to recommend Award recipients and honorable mentions. The panel is chaired by the Office of Environmental Policy and Compliance.

The 2008 Interior Environmental Achievement Award recipients are:

**Individuals**

**Mr. Joel Kemm**, Bio-Energy and Habitat Restoration on the St. Croix Wetland Management District, Stanton Prairie Waterfowl Production Area, Fish and Wildlife Service, Minnesota

**Mr. Dan Thorington**, Comprehensive Recycling Program for Alaska Islands and Ocean Visitor Center, Alaska Maritime National Wildlife Refuge, Fish and Wildlife Service, Alaska

**Mr. Paul Gammon**, Paint Can Recovery, Re-Use and Recycling System, Coos Bay District, Bureau of Land Management, Oregon

**Teams**

**Clark Fork River Response and Restoration Team**, Grant-Kohrs Ranch National Historic Site and Bureau of Land Management Public Lands, National Park Service and Bureau of Land Management, Montana

**California Marijuana Garden Clean-up Project Team**, Ukiah Resource Area, Mendocino County, Bureau of Land Management, California

**Gosnold Laboratory Addition and Renovation Team**, U.S. Geological Survey, Woods Hole, Massachusetts

**Hybrid Solar Photovoltaic and Wind Energy System, San Andres National Wildlife Refuge**, Fish and Wildlife Service, New Mexico

**Nulhagen Basin Green Administration Building and Visitor Contact Center, Silvio O. Conte National Fish and Wildlife Refuge**, Fish and Wildlife Service, Vermont

**East Teshekpuk Legacy Well Remediation Team**, Bureau of Land Management, Alaska

**City of Poplar Well Threat Plume Capture and Remediation Team**, U.S. Geological Survey, Fort Peck Indian Reservation, Montana

Please share recipients' achievements throughout your organizations and encourage others to replicate their successes. Current and past recipients and honorable mentions create a network of professionals that are a resource for working across disciplines and locations to enable departmental sites and facilities nationwide to be strong stewards for the environment.

For more information about the recipients and to see the honorable mentions, visit the Greening Interior Web site at [www.doi.gov/greening](http://www.doi.gov/greening). If you have any questions, please contact Ms. Catherine Cesnik, Environmental Awards Coordinator, at 202-208-7877 or <Catherine\_Cesnik@ios.doi.gov>.

Please join Deputy Secretary Lynn Scarlet, Deputy Associate Secretary James E. Cason and me in recognizing these outstanding recipients at the Interior Environmental Achievement Award Presentation Ceremony on November 18, 2008 at 10:00 a.m. in the Main Interior Building Library.

Attachment

Recipients  
2008 Department of the Interior Environmental Achievement Awards  
Detailed Information and Honorable Mentions available at [www.doi.gov/greening/awards](http://www.doi.gov/greening/awards)

**Mr. Joel Kemm**, Bio-Energy and Habitat Restoration on the St. Croix Wetland Management District, Stanton Prairie Waterfowl Production Area, Fish and Wildlife Service, Minnesota

The St. Croix Wetland Management District in Wisconsin manages 7,700 acres of Waterfowl Production Areas. A District goal is to restore the prairie and oak savanna habitat for nesting waterfowl and other grassland dependent migratory birds. To do so, the District needed to remove woody brush and scrub trees from the land. Loggers view such timber stands as unmarketable. Joel Kemm, a prescribed fire specialist at the District, however, persisted in working with loggers to create a mutually beneficial partnership between the private sector and the District. The loggers chipped the wood for use at local co-generation plants and other facilities to create bio-energy production. Without this program the unmarketable timber would have been removed at a cost to the District and gone to the landfill. Organic materials, such as branches, grass clippings and food waste, are the single largest waste stream entering landfills in the U.S., so finding alternatives is crucially important to increasing the life span of U.S. landfills. Not only did these projects prevent the wood products from entering the landfill, but they also saved the Fish and Wildlife Service tens of thousands of dollars in tree removal and tipping fee costs, and accelerated the restoration of the native habitat. Joel is working with land trusts, private landowners and other Refuges to expand this restoration program.

**Mr. Dan Thorington**, Comprehensive Recycling Program for Alaska Islands and Ocean Visitor Center, Alaska Maritime National Wildlife Refuge, Fish and Wildlife Service, Alaska

The sheer span of the Alaska Maritime National Wildlife Refuge is difficult to grasp. Within its boundaries are more than 2,500 islands, islets, spires, rocks, reefs, waters, and headlands. Traveling between its farthest reaches is equivalent to traveling from Georgia to California. The Refuge headquarters, the Alaska Islands and Ocean Visitor Center, in Homer plays a crucial role in helping visitors and employees recycle at this wild and remote Refuge.

Dan Thorington, Recycling Coordinator, started an outstanding recycling program for the Center in September 2003. Dan produced a creative and comprehensive Recycling Guide. Printed on both sides of 5 ½" X 8 ½" recycled-content paper, the Guide's distribution includes all Refuge staff and thousands of visitors each year. The Guide contains helpful recycling hints, describes what happens to the waste stream and notifies folks that the Refuge "*. . . diverts over 80% of its solid waste (by weight) from the local Homer Landfill. Your cooperation is appreciated.*" The Guide stresses an urgent need to recycle for many specific reasons including: *biodiversity* is preserved with reduced resource development; *energy use* is reduced when recycled materials are remanufactured; *less pollution* results with reduced extracting, refining and processing of raw materials; and *recycling creates jobs*. The maximum number of waste streams possible are recycled. Multi-stream collection bins, including compost bins, are available throughout the building. He posted detailed instructions outlining materials allowed in each collection bin. Restrooms and other rooms have bright visible signs reminding users to turn off room lights as they leave.

Dan keeps meticulous recycling records. Since 2004, headquarters recycled over 37,000 pounds of waste material, more than 80% of the total waste stream, including: 11,000 pounds of mixed paper, 5,500 pounds of cardboard, 1,800 pounds of mixed, 500 pounds of various plastics, 1,500 pounds of electronic waste, and over 5,000 pounds of compost materials.

Dan forged partnerships with Cook Inletkeeper, Kenai Peninsula Solid Waste Department, and numerous local businesses to co-sponsor an annual electronics recycling event in April of each year. Sponsors host organizational meetings, provide supplies and help out on the day of the event. Community groups/agencies contact Dan for advice on how to start their own recycling program. To date, Dan has

assisted the: Homer Police Department, Homer Hospital, Community Mental Health Center and Cook Inletkeeper with their recycling programs. Dan developed the collection, recovery, consolidation and recycling process for the headquarters to include the building's co-occupant, the Kachemak Bay Research Reserve.

**Mr. Paul Gammon**, Spray Paint Can Recovery, Re-Use and Recycling System, Coos Bay District, Bureau of Land Management, Oregon

As with most land management agencies, the Bureau of Land Management uses spray paint to mark trees for trail signage. To divert this hazardous waste stream of the "spent" aerosol cans, Mr. Paul Gammon designed and built a machine to recover the paint remaining in each can. The machine enables recycling for approximately 4,800 cans, reuse of four gallons of paint, and saves approximately \$2,000 annually. The home-grown paint recovery system eliminates the need for regulatory review of hazardous material disposal practices and saves time associated with hazardous waste management responsibilities and paperwork. The system received a favorable evaluation during the Coos Bay District's 2007 Compliance Assessment-Safety, Health, and the Environment audit. Paul also created a tandem program to ensure the use of recovered paint in the field, and as a waste reduction method ensures paint inventory does not exceed demand. This machine and tandem program can be replicated successfully at other DOI sites that use large volumes of tree marking paint. The initiative successfully reduces waste and reuses and recycles what would otherwise be hazardous waste.

**Clark Fork River Response and Restoration Team**, Grant-Kohrs Ranch National Historic Site and Bureau of Land Management Public Lands, National Park Service and Bureau of Land Management, Montana

The Clark Fork River basin includes four National Priorities List ("NPL") sites and 18 operable units making it one of the most complex Superfund cleanup sites. The "Clark Fork River Operable Unit" stretches over 120 miles near Missoula, Montana. Over a century of gold, silver, and especially copper mining produced vast quantities mining and milling waste containing arsenic, copper, cadmium, lead, zinc, and acid-generating sulfides. The waste now contaminates the Grant-Kohrs Ranch National Historic Site ("Grant-Kohrs Ranch") managed by National Park Service and additional land parcels managed by Bureau of Land Management.

The Departmental case team, representing NPS, BLM, the Natural Resource Damages Assessment and Restoration Fund, the Central Hazardous Materials Fund, and the Solicitor's Office, worked effectively to collaborate with the State of Montana, the U.S. Department of Justice, and the Environmental Protection Agency. Together, these government partners forged an alliance to secure funding for all necessary response and restoration activities. Under the terms of the consent decree, the responsible party will pay more than \$180 million to reimburse the State and the United States for all past and future costs needed to restore the Site, including costs to fund a NPS project manager to oversee restoration activities and response action on Departmental land. This Interior/EPA/State partnership offers a model for other mixed-ownership Superfund sites where there is an opportunity to integrate natural resource restoration with remedial action.

**California Marijuana Garden Clean-up Project Team**, Ukiah Resource Area, Mendocino County, Bureau of Land Management, California

Instances of marijuana growth and harvesting on remote and inaccessible public lands continue to increase. Not only a problem for the law enforcement community, the growers damage ecosystems by contaminating

soil and water and making creeks run dry. Growers divert creeks, apply fertilizers and pesticides in inappropriate ways, damage native Manzanita trees to shade marijuana plants, and live on site to protect the marijuana plants creating campsite waste and latrines. Growers living on site pose a direct threat to the safety of visitors and employees.

Without site clean-ups, growers can easily replant “busted” marijuana gardens. This Bureau of Land Management pilot project used mustangs adopted through the Wild Horse and Burrow Program to pack out contaminants and debris from two illegal marijuana gardens on BLM managed land. The success of these two marijuana garden clean-ups will be used as a model for future clean ups.

**Gosnold Laboratory Addition and Renovation Team, U.S. Geological Survey, Woods Hole, Massachusetts**

The U.S. Geological Survey Woods Hole Science Center recently completed a 4,400 square foot laboratory addition designed and constructed using the sustainable design principles and technologies including: a vegetated roof, native landscaping, a rain garden, use of low emitting and non-toxic materials, natural ventilation and lighting, and an increased connection with the outdoor surroundings. The sustainable facility, completed in December 2007, increased the size of the existing building by 44 percent and achieved an energy savings of 61 percent through the use of active and passive solar technologies, natural ventilation and lighting strategies, increased insulating standards, and optimization of automated controls. They incorporated extensive passive solar design strategies in the entire building. For example, the “Nice Day Switch,” allows occupants to turn off the heating or cooling system and to open windows for natural ventilation. The simple payback period of the energy conservation measures is nine years. Additionally, they realized an energy savings of \$20,000 per year from the elimination of freezers located outside to an appropriate indoor storage facility.

**Hybrid Solar Photovoltaic and Wind Energy System, San Andres National Wildlife Refuge, Fish and Wildlife Service, New Mexico**

Using a tiered approach to install on-site renewable energy generation, the San Andres National Wildlife Refuge is able to supply 100% of it’s own power for several months of the year and decreased energy intensity by 80% from the FY 2003 baseline. First, the Refuge installed 1,800-Watts of grid-tied solar photo voltaic panels to reduce electric consumption at the Refuge headquarters complex in November 2006. They installed two solar PV-powered parking lights for the Refuge compound at the same time. Second, in late June 2007, they boosted the output of the grid-tied solar PV panels by 2,400 Watts. Third, in July 2007, they installed a 1,800-Watt grid-tied wind generator to supply renewable wind power, making the total output of the hybrid solar PV/wind energy system 6,000 Watts.

Outreach opportunities are challenging since the entire Refuge lies within the 2.2 million-acre U.S. Army’s White Sands Missile Range, which is closed to public entry. However, the refuge office lies near U.S. Highway 70, a major east-west artery in the area, and the wind generator’s spinning blades have become a landmark in the area. The Refuge Manager has people come up to him in town and talk about how they watch the generator every day to see if it is spinning as they drive by. While difficult to attain permission to enter the Missile Range, the wind generator created so much interest that the Refuge has had more visitors in the last seven months than in the past 10 years combined.

Their successful tiered approach to installing on site renewable energy systems and the high output of the energy systems are a model for the Department’s many small remote facilities.

**Nulhegan Basin Sustainable Administration Building and Visitor Contact Center, Silvio O. Conte National Fish and Wildlife Refuge, Fish and Wildlife Service, Vermont**

The Nulhegan Basin Administration Building and Visitor Contact Center at the Silvio O. Conte National Fish and Wildlife Refuge is the first *Energy Star* Building for the U.S. Fish and Wildlife Service and achieved a Silver designation under the Leadership in Energy and Environmental Design for Existing Buildings version 2.0 rating standard. The building:

- Prevented disturbance of existing ecosystem resources by using a previously altered building site.
- Uses daylighting, energy-efficient lighting and occupancy sensors throughout, operable windows, and a high-efficiency furnace to optimize energy performance.
- Saved 23,390 BTUs, \$4,242 per year compared to similar buildings, and 4,700 gallons of water in FY 2007.
- Use of 200 million BTUs of renewable energy in FY 2007.
- Made extensive use of local building materials such as Vermont slate flooring and local quarter-sawn clapboards for exterior siding.
- Used rapidly renewable resources such as glue-laminated columns and beams for structural members reduced the need to harvest old growth trees.
- Salvaged wood counters from the site's previous building for use in the lobby.
- Used high recycled content materials in the carpet, ceiling tiles and gypsum wallboard.
- Avoided use of materials that produce toxins during their manufacture, use, and disposal to ensure the health of building occupants.
- Used paint systems and formaldehyde-free products that guarantee excellent indoor air quality and do not emit harmful gases.
- Landscaping uses native plant species and low-flow fixtures conserves water.

This Nulhegan Center demonstrates the feasibility of sustainable building design for small visitor facilities. Subsequent to this project's success, several more Refuges are contemplating similar designs.

**East Teshekpuk Legacy Well Remediation Team, Bureau of Land Management, Alaska**

Teshekpuk Lake and its surrounding lakes and coastal wetlands are widely recognized as the most productive, diverse and sensitive wetlands ecosystem in the American Arctic. For example, 20,000 to 60,000 geese migrate there to molt each summer. Caribou calving occurs there by the thousands. The area provides subsistence resources for residents of seven North Slope villages.

The accelerated shoreline erosion of the East Teshekpuk Legacy Well site threatened to harm the Teshekpuk Lake ecosystem. Solid waste, heavily contaminated drilling mud, and diesel fuel were about to start discharging into the lake. Exposed metallic debris posed navigational hazards.

The first challenge was to secure \$16 million dollars to remediate the site and avert an environmental disaster. BLM-Alaska worked closely with the budget office to justify and secure the necessary funding to complete this project. The second challenge was to design a contract package that allowed multi-year funding and the flexibility to accomplish the project in either one or two seasons. The flexible contract resulted in a savings to the government of over \$3 million and can be used as a model for upcoming winter remediation operations.

Once work was underway, extremely cold temperatures, often 45 degrees below zero, caused continual equipment breakdowns. Then an unseasonable warming trend started closing access to the remote ice-accessible site. By working closely with the contractor, the team adjusted work schedules and project work plan tasks, working around the clock at times, to deal with weather-related problems. The team included Native communities and governments in meetings to provide updates. Despite unexpected setbacks, the cleanup project successfully finished on time and under budget with zero safety incidents or injuries. Together the BLM team and their Alaska Native-owned small business contractor, Marsh Creek, LLC, removed and recycled over 9,000 gallons of diesel and 225,000 pounds of scrap metal. They removed over 1,500 cubic yards of contaminated drilling mud and 2,300 cubic yards of commingled material.

**City of Poplar Well Threat Plume Capture and Remediation Team, U.S. Geological Survey, Fort Peck Indian Reservation, Montana**

The City of Poplar—headquarters for the Assiniboine and Sioux tribes of the Fort Peck Indian Reservation—provides water to nearly 3,000 residents most of whom are tribal members. The only source of potable ground water for these residents is a shallow sand and gravel aquifer. As early as the 1970's, billions of barrels of brine began infiltrating the aquifer, privately owned wells, and the nearby Poplar River. The brine is produced as a by-product of the nearby oil fields in operation since 1952 and is seven times saltier than ocean water. In one area, a lens of crude oil was also encroaching on the aquifer.

After a series of U.S. Geological Survey studies from 1980s – 2000, and short term solutions mandated by EPA, the project took an innovative leap forward in 2003 when a team of scientists from the U.S. Geological Survey, Fort Peck Tribes Office of Environmental Protection, Pioneer Natural Resources USA, Inc. (the potentially responsible party), U.S. Bureau of Land Management, U.S. Environmental Protection Agency, and U.S. Bureau of Reclamation worked together on an expanded remediation study. They successfully combined geophysical, hydrological, and geological methods to create a “snapshot” of the plume configuration prior to remediation. Subsequent geophysical data “snapshots” along with water chemistry data from monitoring wells during brine remediation document the remediation's progress. The unique combination of methods and collaboration used to document remediation progress is unprecedented, and these techniques will likely supplement future industry standards for monitoring remediation.

Open communication and data sharing are the hallmarks of this team project. Numerous meetings with scientific agencies, regulatory agencies, and the oil company conducted in a spirit of cooperation enabled all to meet the common goal of capturing and remediating the imminent threat to the City of Poplar. Strong support from the team of scientists resulted in project funding of more than \$1.5 million since 2003 to delineate the brine contamination. In addition to the EPA-ordered work, the potentially responsible party has proactively and voluntarily committed more than \$6 million during the past 6 years to design and build a plume capture and remediation system. The remediation system and a project to plug a contamination source has and will continue to improve water quality in the aquifer. This project improves a valuable natural and cultural resource in relation to the traditional ways of the Assiniboine and Sioux Tribes' way of life and the City of Poplar's water supply.