

National Park Service
2006 Environmental Achievement Awards

Winner

Gateway National Recreation Area Team

“Using Sustainable Principles to Rehabilitate the Jamaica Bay Visitor Contact Station”

Gateway National Recreation Area – Jamaica Bay Unit (GATE-JBU) teamed with the Denver Service Center, the National Renewable Energy Laboratory, the New York State Energy Research and Development Authority, and a local architectural firm to design and construct a new visitor contact station based on sustainable design/green building principles.

Planning and design for the new facility began in 2002. The Team decided to construct the new contact station as an addition to, and an adaptive re-use of, an old concrete maintenance garage located in the Jamaica Bay Wildlife Refuge. The project was designed to minimize environmental impacts, improve habitat quality, and maximize the quality of the visitor experience through sustainable principles.

Highlights of this innovative project include:

- Minimal footprint;
- Extensive use of recycled materials and sustainable building materials such as cork, bamboo and wheatboard;
- Ground source heat pumps / water heat exchange system with primary and discharge wells;
- Thermal storage wall for winter heat;
- Building integrated solar photovoltaic system to heat domestic water;
- Use of natural lighting via light shelves, skylights, and light pipes;
- Passive solar heating features and architectural overhangs to provide summertime shade;
- Installation of waterless urinals resulting in a reduction of \$1,800 in water/sewer costs;
- Water-saving fixtures translating into 25% reduction in maintenance costs and 50% in water savings;
- Green energy sources to power the facility (wind);
- Natural ventilation turbine extractors; and
- Energy savings of \$6,898 / annually.

The GATE –JBU Team’s process for designing and constructing the new visitor contact station should serve as model for other NPS units.