# Two Shades of Green Spotlight

### Water Conservation

WEST SIDE FEDERATION FOR SENIOR AND SUPPORTIVE HOUSING





## Water Upgrades

- Replace toilets, faucet aerators, showerheads and washing machines.
- Identify & repair water leaks.

### The Benefits

- Used 45% less water.
- Saved \$50,000 annually, 17-month payback.
- Fewer leaks and moisture, reducing asthma triggers.
- Engaged tenants in a successful green initiative.

## Borinquen Court

Working with **Two Shades of Green**, a collaboration to help affordable housing owners and managers create cost-effective green and healthy property management practices, West Side Federation for Senior and Supportive Housing, Inc. (WSFSSH) has undertaken water conservation projects in several buildings in its 1,875 unit portfolio. WSFSSH was formed in 1976, by a coalition of social service agencies, religious institutions and community organizations to create a new form of housing – meeting the diverse needs of older people and persons living with special needs.

In 2011, WSFSSH acquired Borinquen Court, a 145-unit low-income senior housing complex in the South Bronx, and undertook an ambitious \$13 million building renovation. The Local Initiatives Support Corporation (LISC) provided active support, originating a \$4 million acquisition loan, securing over \$250,000 of predevelopment financing and obtaining grant funds for energy and water retrofits.

Due to concerns about high water costs, water-conserving equipment was installed during kitchen and bathroom renovations. The project also upgraded water pumps to more efficiently get hot water to tenant apartments and replaced old existing copper piping, the source of numerous water leaks.

"Our project succeeded because residents and staff worked together to fix water leaks, install water conserving equipment and modify water usage behavior."

Laura Jervis, WSFSSH Executive Director



"Reading the water meters at 12 am and then again at 4 am showed us that we had big water leaks. It's a great way to quickly see problems."

Joann Vargas, Building Manager and Hugo Meneses, Assistant Building Manager



"Simple water conservation upgrades in NYC — toilet repairs, faucet aerators and showerheads — typically pay for themselves within a year."

Colleen Flynn, Green and Healthy Neighborhoods Coordinator LISC New York City







### The Project

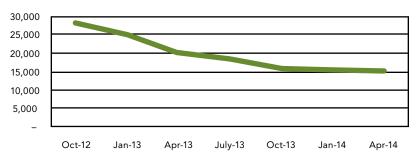
#### **Project Actions and Results**

Water-conserving equipment installed during renovation:

- Toilets 1.1 gallon per flush (gpf) toilets replaced apartment 3 gpf and public areas 1.28 gpf
- Showerheads 1.5 gallons per minutes (gpm)
- Kitchen and bathroom faucet 1.5 gpm
- Washing machines front loading and energy efficient

The cost of the direct water conservation work listed above was \$80,000 (excluding washing machines), resulting in a 17-month payback. Water use dropped from 29,000 gallons/day to 15,300, despite increased occupancy (26 more residents). Average water use declined from 180 to 84 gallons/person/day. WSFSSH continues to work to reduce water use, with a 75 gallon/person/day target.

#### WATER USE (GALLONS/DAY)



#### **Tenant Engagement**

Resident engagement helped occupants stop wasteful water habits, such as: running sink water to defrost meat or frozen goods and boiling water to increase humidity and room temperature. New boilers, windows, and better insulation improved comfort.

### Two Shades of Green Project Team

The New York City Department of Health and Mental Hygiene, The Local Initiatives Support Corporation (LISC), and the NYC Coalition for a Smoke-Free City, partnered to assist affordable housing owners in New York City adopt green and healthy property management practices that both reduce operating expenses and create healthier living environments for residents and staff. Two Shades of Green focuses on water conservation, smoke-free housing, integrated pest management, green cleaning, and active design. For more information contact: Colleen Flynn at <a href="mailto:cflynn@lisc.org">cflynn@lisc.org</a> or go to <a href="http://www.lisc.org/nyc/programs/green">http://www.lisc.org/nyc/programs/green</a> and healthy neighborhoods/

#### Prepared by:

Ellen Tohn, Tohn Environmental Strategies, LLC Colleen Flynn, Green and Healthy Neighborhoods Coordinator at LISC New York City