

# Peartree Apartments Saves Money, Energy and Water Through Fannie Mae's Green Rewards Program



© Peartree Apartments

Property Name: Peartree Apartments  
Borrower: A long-term Fannie Mae Borrower  
Property Location: Sunnyvale, CA  
Building Type: Garden Style Multifamily  
Units: 120  
Rentable Area: 90,024 square feet  
Loan Origination Date: May 25, 2018  
Installation Completion Date: August 28, 2018

ENERGY STAR® Score:	88
EPA Water Score:	74
DUS® Lender:	Walker & Dunlop
Loan Amount:	\$14,000,000
Fannie Mae Program:	Green Rewards

**Billing Overview:** Electricity is direct metered; Natural gas, water, and sewer are paid by tenants via flat fee.

**Highlights:**

- Saved 22% of total energy usage
- Saved 40% in total water usage
- Decreased owner energy costs by 15%
- Decrease owner water costs by 18%
- Payback period of under 5 years

**Energy and Water Efficiency Measure**

**Investment Amount:** \$133,453

**Energy and Water Efficiency Measures:**

- Installed low-flow 0.5 gallons per minute (GPM) bathroom faucet aerators\*
- Installed low-flow 1.0 GPM kitchen faucet aerators in 75% of apartments
- Installed low-flow 1.25 GPM showerheads
- Installed water-efficient, pressure assisted 0.8 gallons per flush toilets
- Installed weather-based controls
- Installed drip irrigation system
- Lawn xeriscaping
- Installed precision sprinkler heads
- Replaced dishwashers with ENERGY STAR® rated models in 40% of apartments

\*Note that 0.5 GPM faucet aerators are no longer an accepted efficiency measure and do not meet the current WaterSense standard.

The eligibility requirements for Green Rewards have changed since this loan was originated. For current program eligibility requirements visit [www.fanniemae.com/mfgreen](http://www.fanniemae.com/mfgreen).

**There were two reasons to reduce water consumption at Peartree Apartments. First, a severe drought in Northern California created water shortages and restrictions. Second, demonstrated water savings would help Peartree stand out to prospective tenants and the larger community. A repeat Fannie Mae Borrower decided to reduce Peartree’s energy and water consumption using Fannie Mae’s Green Rewards program by selecting efficiency measures projected to **save 25% of water usage and 29% of energy usage.****

After reviewing the High Performance Building (HPB) Report, the Borrower moved forward with more than half of the recommended energy and water improvements at Peartree. The team selected many quick and easy-to-install upgrades with immediate impacts. Installations like low-flow bathroom and kitchen faucet aerators and low-flow showerheads could happen while tenants were out of their apartments for an hour. The other in-unit energy and water improvements — such as water-efficient toilets and ENERGY STAR® rated dishwashers — were installed while tenants were out for the day.

The Borrower selected weather-based controls for a new drip irrigation system, xeriscaped the property landscape, and installed precision sprinkler heads to reduce water consumption. In addition to its watersaving irrigation system, xeriscaping is popular in California for its appealing aesthetics, which made the property even more attractive to tenants.

Post-installation, the *Fannie Mae Green Measurement and Verification Service*, offered as part of its Green Rewards program,\* allowed the Borrower to schedule the Verification site visit, confirm property information prior to the Verification site visit, and provide data access with ease, taking a large portion of the administration of fulfilling its loan agreement requirements off its hands. With improvements in place, Peartree Apartments has **saved 22% of total energy usage and 40% in total water usage.** Peartree Apartments also saw a **15% decrease in owner energy costs** and an **18% decrease in owner water costs.** Peartree will see a **return on its Energy and Water Efficiency Measure investment in under 5 years.** As an exciting bonus, the improvements will allow Peartree Apartments to seek ENERGY STAR certification. Its **ENERGY STAR Score improved from 60 to 88** (of a maximum 100), and its **EPA Water Score increased from 32 to 74** (of a maximum 100).

Owner Energy Costs (annual)	• Pre-Improvement	<b>\$46,306</b>
	• Post-Improvement	<b>\$39,542</b>
Owner Energy Usage (mmBTU/year)	• Pre-Improvement	<b>2850</b>
	• Post-Improvement	<b>2098</b>
Owner Water Costs (annual)	• Pre-Improvement	<b>\$83,660</b>
	• Post-Improvement	<b>\$68,530</b>
Owner Water Usage Index (gallons/bedroom/day)	• Pre-Improvement	<b>95</b>
	• Post-Improvement	<b>57</b>

The HPB report and the Fannie Mae Green Measurement reporting can also be used to save even more on energy and water. The HPB Report included additional EWEMs that Peartree did not install, making it easy to select future EWEMs and continue to reduce its energy and water consumption. Those potential future improvements include installing domestic hot water controllers; replacing all in-unit refrigerators and dishwashers with ENERGY STAR rated appliances; upgrading to LED lighting in the apartments, common areas, and exterior areas; replacing the original windows and sliding glass doors with ENERGY STAR certified units; and installing variable frequency pool pumps.

#### For More Information

Contact [FannieMaeGreen@brightpower.com](mailto:FannieMaeGreen@brightpower.com) or [green\\_am@fanniema.com](mailto:green_am@fanniema.com).

\*Learn more about Green Rewards loans and the Green Measurement and Verification Service at [www.fanniema.com/mfgreen](http://www.fanniema.com/mfgreen).

For program questions and future green loan eligibility, contact your DUS® Lender.