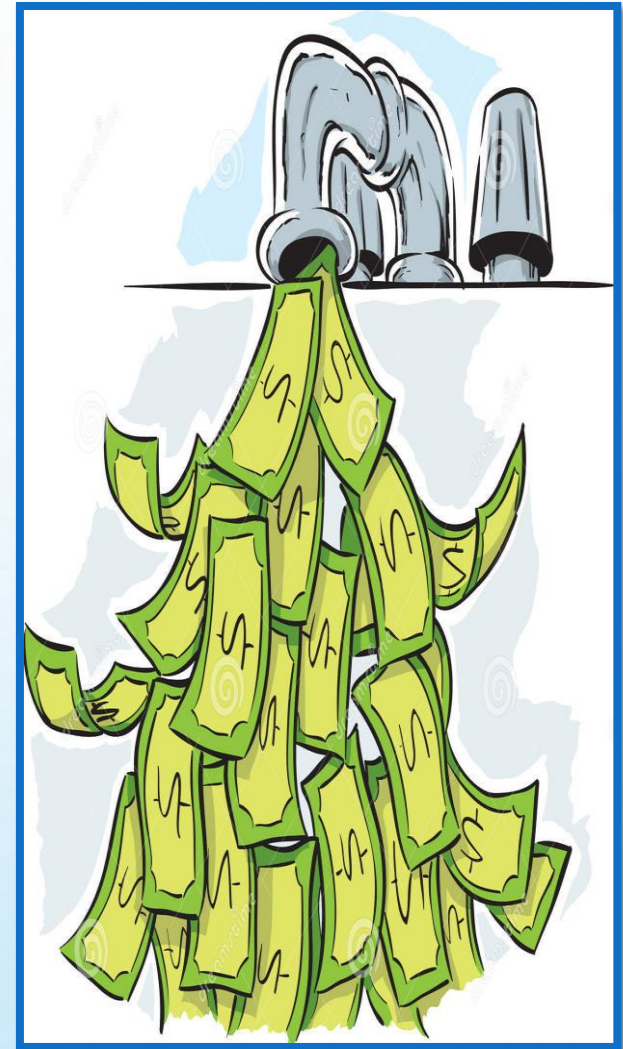




INCORPORATING WATER EFFICIENCY INTO ENERGY MANAGEMENT PLANNING

**SAVING WATER IN AFFORDABLE,
MULTIFAMILY BUILDINGS**

JANE CARBONE, Director of Development
DECEMBER 6th, 2017





HOMEOWNERS REHAB INC.

WHO WE ARE

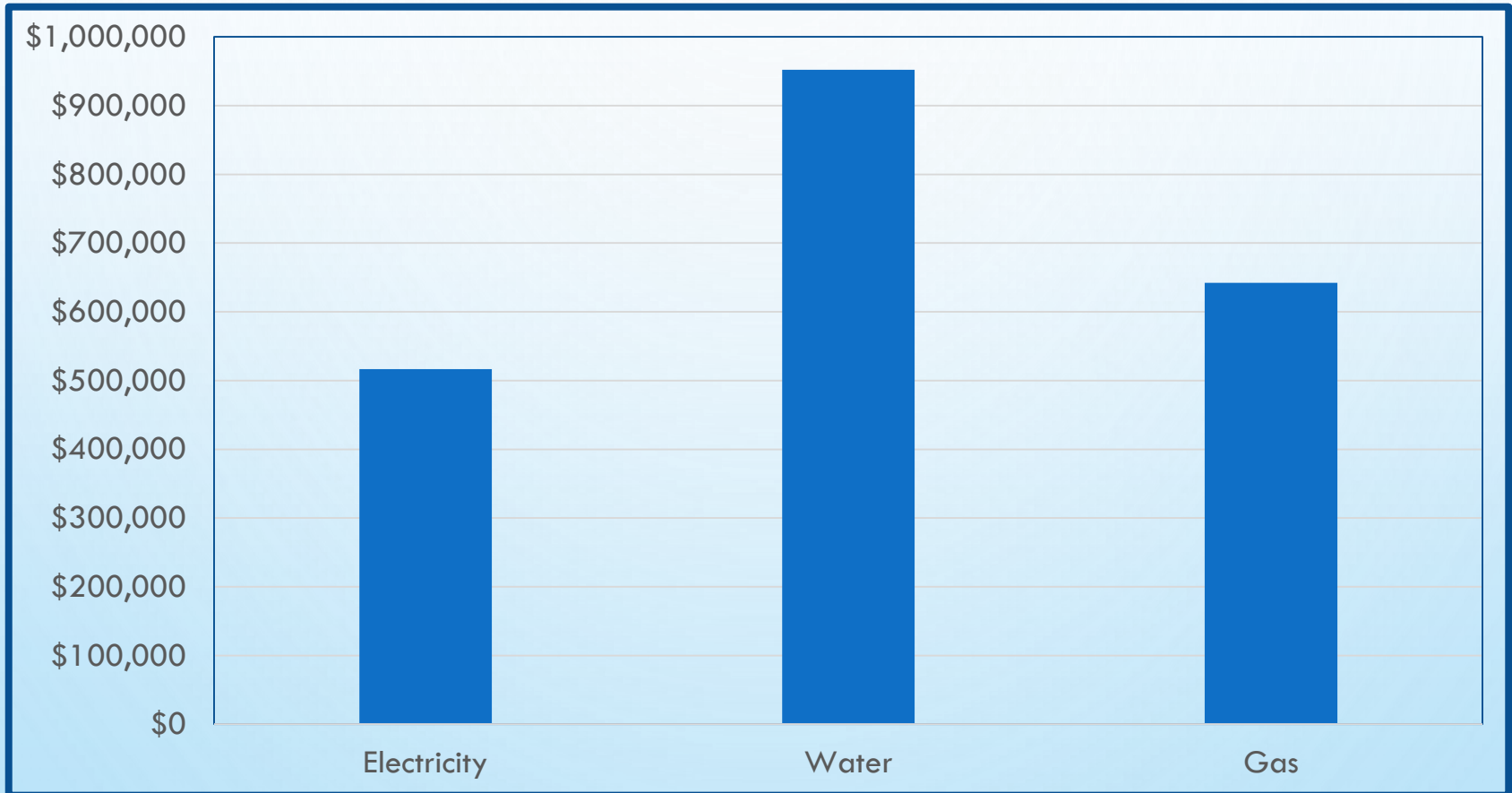


- LARGEST PRIVATE PROVIDER OF AFFORDABLE HOUSING IN CAMBRIDGE
- 1,338 AFFORDABLE RENTAL UNITS
- 40 BUILDINGS
- DIVERSE PORTFOLIO RANGING FROM 3-300 UNIT BUILDINGS
- NATIONAL LEADER IN SUSTAINABLE MULTIFAMILY DEVELOPMENT & REHAB
- 5 LEED CERTIFIED PROJECTS
- 14 RENEWABLE ENERGY LOCATIONS



SPENDING COSTS ON WATER UTILITIES

- \$2.11 million in annual utility costs
- Water and Sewer cost is an owner paid utility



FUN FACT: GUESS THE NUMBER OF POOLS



808-812 Memorial Drive

Built in 1974

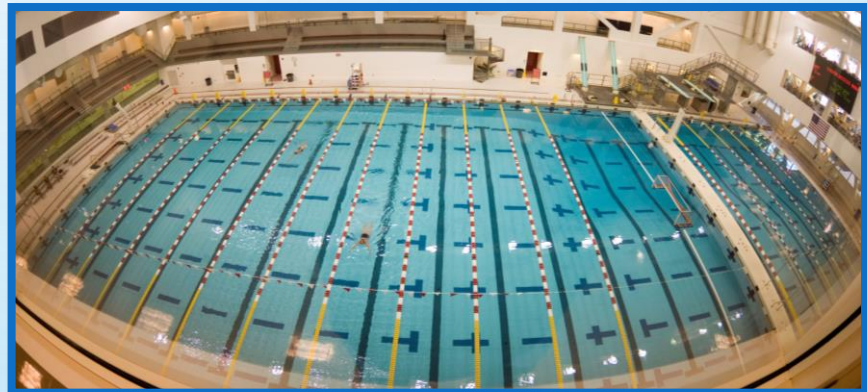
300 residential units, primarily family sized apartments

38,000 sqft commercial space

Water usage typical to similar buildings

In 2016, how many Olympic pools could we have filled with the building's total water usage?

- A. 5 Pools
- B. 10 Pools
- C. 15 Pools
- D. 20 Pools



FUN FACT: GUESS THE NUMBER OF POOLS



808-812 Memorial Drive

Built in 1974

300 residential units, primarily family sized apartments

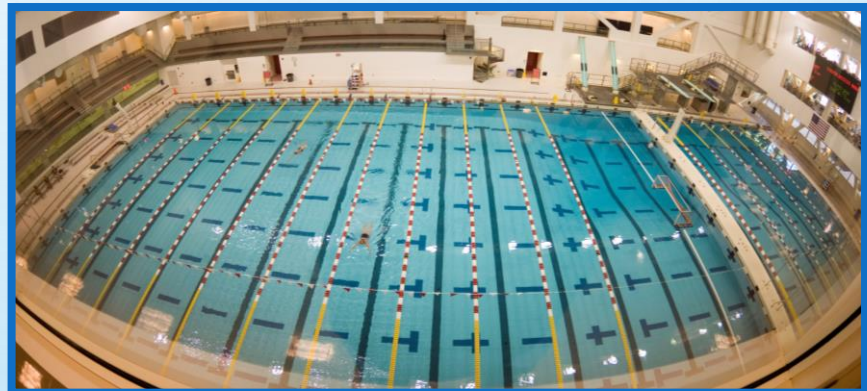
38,000 sqft commercial space

Water usage typical to similar buildings

In 2016, how many Olympic pools could we have filled with the building's total water usage?

- A. 5 Pools
- B. 10 Pools
- C. 15 Pools
- D. 20 Pools

**E. 25 Pools
(16.7 million gallons)**



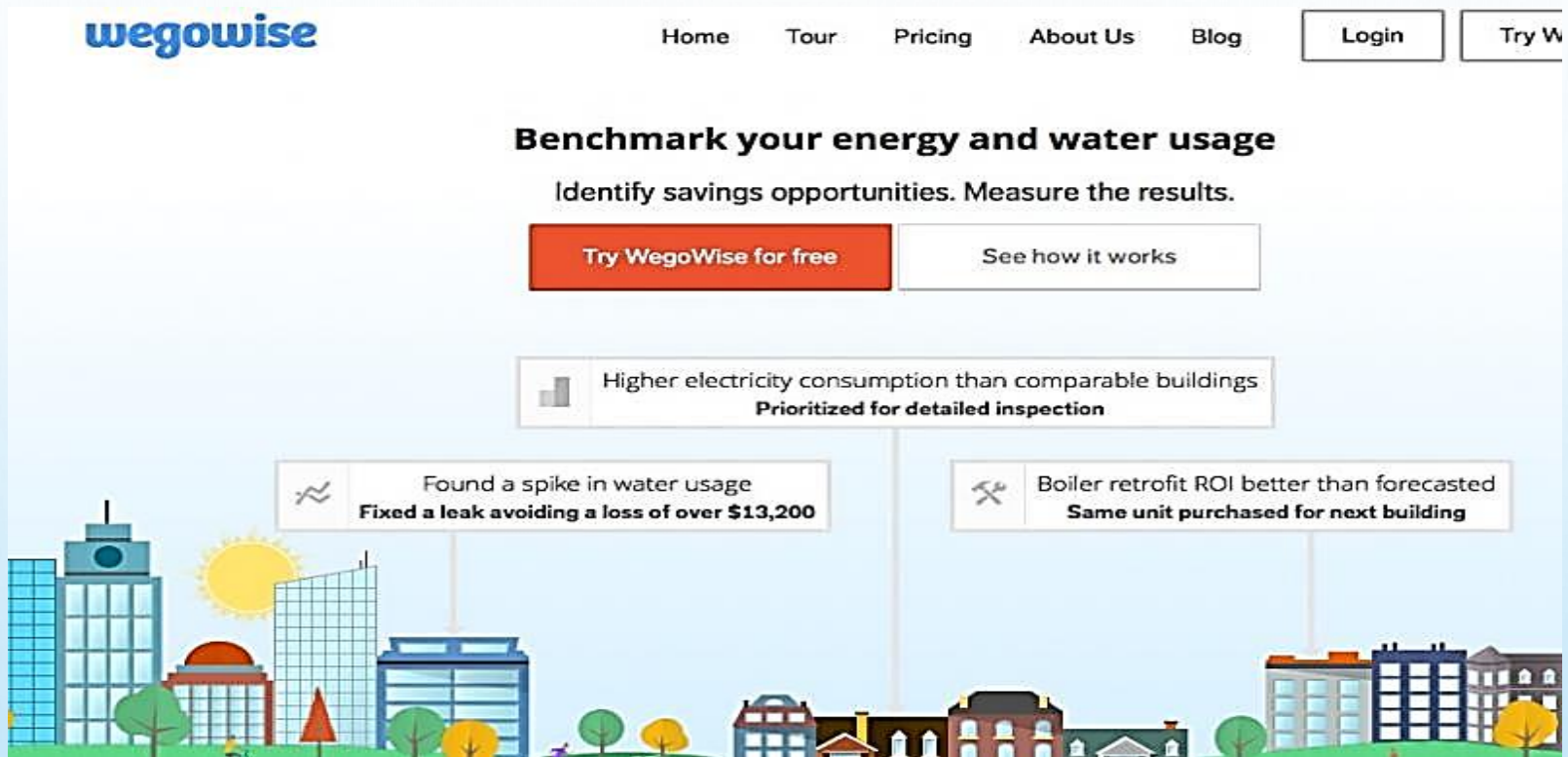
Low Hanging Fruit Measures

- 1.1-1.3 GPF TOILETS
- 1.5 GPM SHOWERHEADS
- KITCHEN 1.5 GPF/
BATH AERATORS .5 GPF
- HIGH EFFICIENCY APPLIANCES

THESE STEPS CAN REDUCE WATER
USAGE BY MORE THAN 1/3



WEGOWISE DATA TRACKING



WHY MEASURE:

- Benchmark in WEGOWISE to track progress over time
- Measure results of retrofits to see savings
- Recognize problems such as leaks

BEST PRACTICES



- ADD FIELD TURF/DROUGHT TOLERANT PLANTING IN LANDSCAPING
- GROUND COVER PLANTINGS VS. GRASS
- ASK MAINTENANCE STAFF TO CHECK FOR WATER LEAKS DURING ROUTINE WORK ORDERS
- SEPARATE METERING WHEREVER POSSIBLE
- DRIP IRRIGATION VS TRADITIONAL IRRIGATION
- RAINWATER RETENTION TANK



ASHES TO **GREEN** 58 7TH STREET



BEFORE

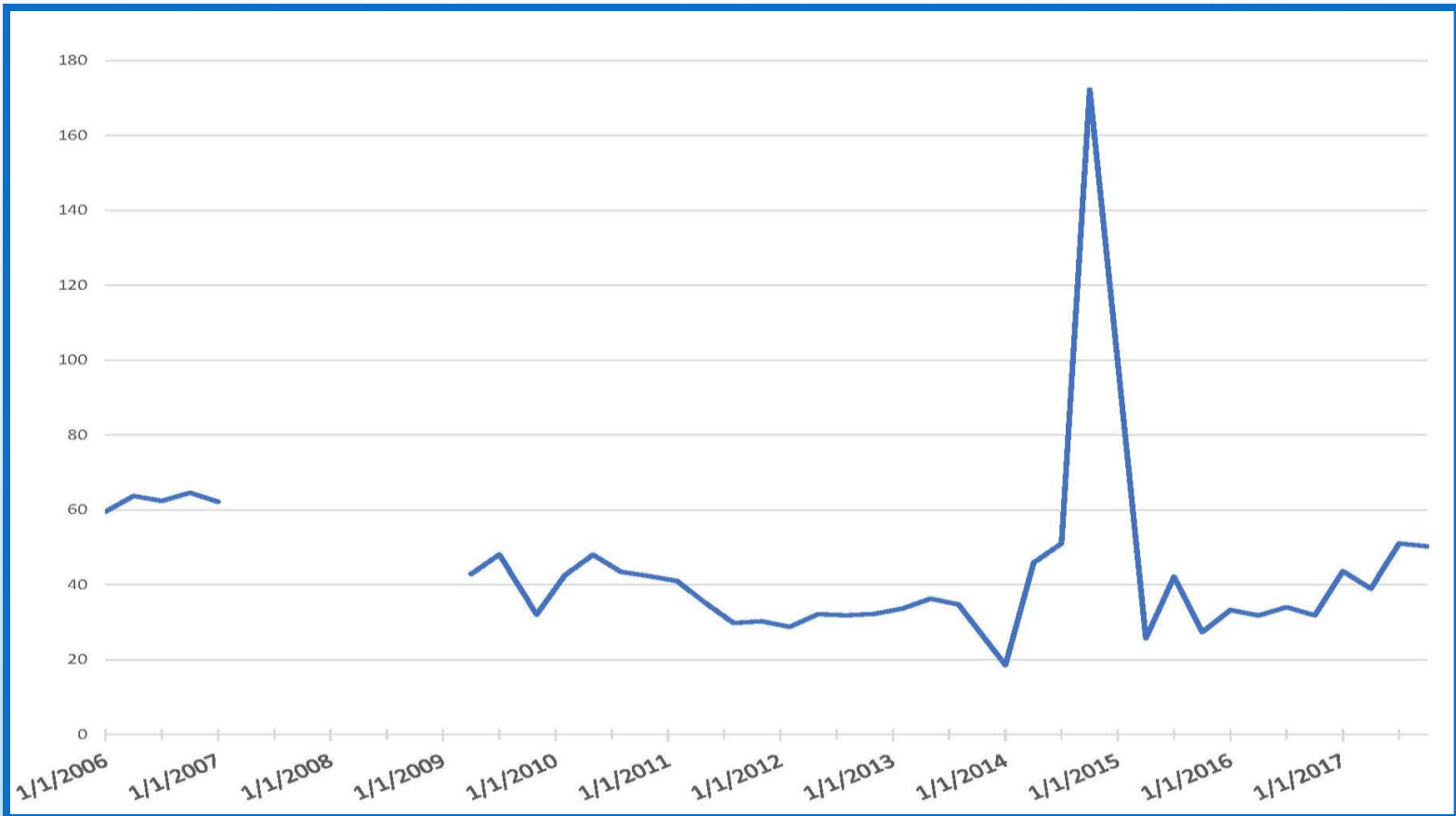


AFTER

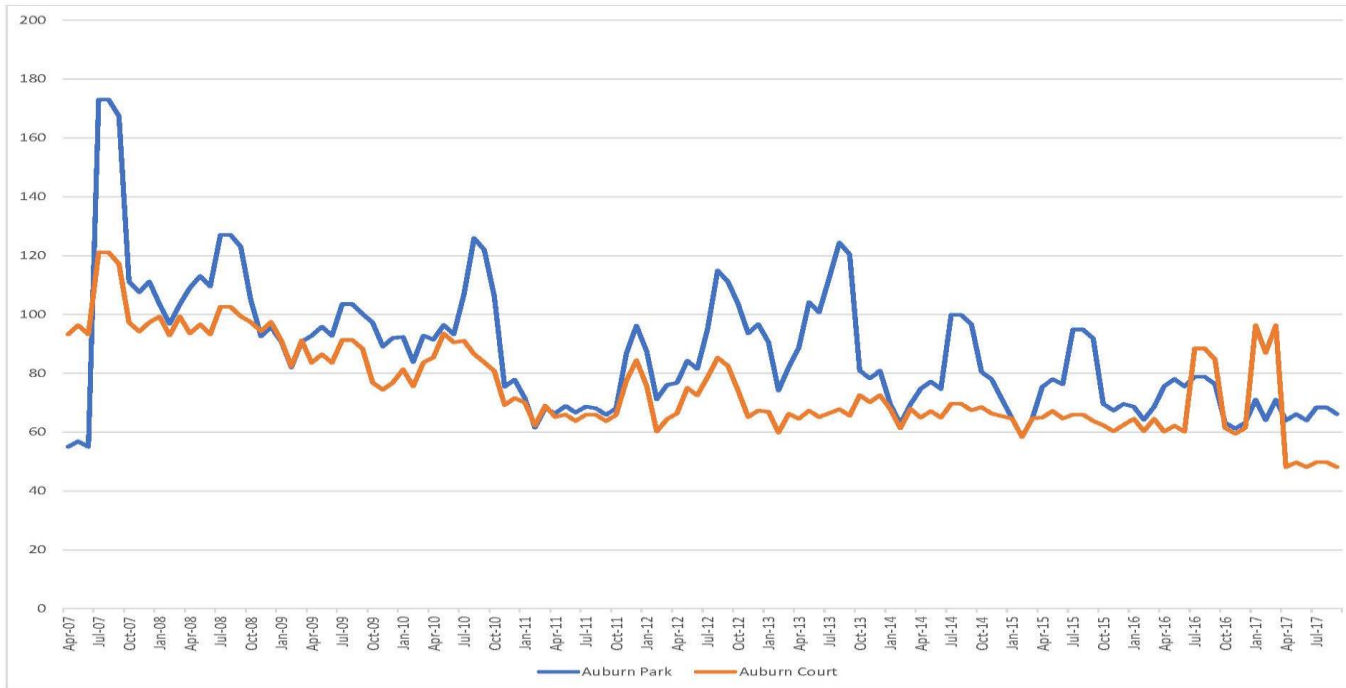
Deep energy retrofit including water conservation measures



58 7th STREET (11 Bedrooms) WATER USE REDUCTION 60 GALLONS/BDRM/DAY TO 35



AUBURN COURT & AUBURN PARK (155 and 129 Bedrooms) Decreasing Water Consumption Overtime



CHALLENGES

- RESIDENT EDUCATION & PARTICIPATION
- MAINTENANCE STAFF TRAINING
- DATA LIMITATIONS -TIMING





THANK YOU!



JANE CARBONE, DIRECTOR OF DEVELOPMENT

JCARBONE@HOMEOWNERSREHAB.ORG