## **2015 Key Findings**

Total Water Use (gallons)	
Total Water Cost	
Total Unaccounted for Use (gallons)	
Unaccounted for Use as % of Total	24%
Cost of Unaccounted for Use	

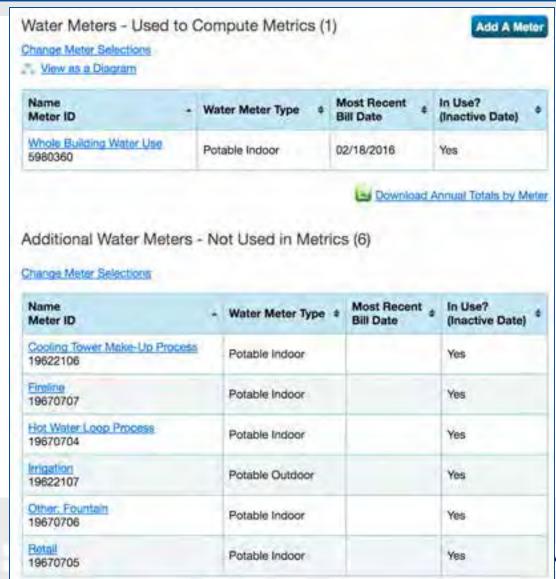


### **Project Details**

- ✓ Inventoried current water meter configuration for all properties
- ✓ Identified additional meter needs by property
- ✓ Reconfigured metering in new Portfolio Manager "Water Tab"
- ✓ Prepared a tracking tool for chiefs to log water meter readings
- ✓ Updated management standards and procedures
- ✓ Created the Shorenstein Water Analysis Tool
- ✓ Analyzed property and portfolio consumption
- ✓ Identified high opportunity properties



### **Example Portfolio Manager Dashboard**

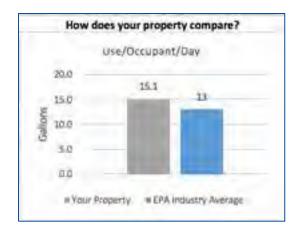




nalysis Tool

Next Steps

### **Water Analysis Tool**



#### Shorenstein Realty Services, L.P.



\$0.01 16.51 Gallon/Sq. Ft./Year

\$536.22

7.89 Gallon/Sq. Ft./Year

15.1 Gallon/Occupant/Oay

7.2 Gallon/Occupant/Day 199.0 Gallon/Sq. Ft./Year

#### Directions:

- On your property's summary tab in ENERGY STAR Portfolio Manager, click "Download Property to Excel" in the bottom right corner of the page. Save this workbook to your computer.
- 2) Right click the "Water Analaysis Tool" Lab in this workbook -> Move or Copy
- 3) Chose your property's workbook -> Click DK
- 4) File > Edit Links -> Change Source -> Choose your property's workbook
- 5) Input yellow cells

Enter Start Date here:		1/1/15	
Enter End Date here:		1/1/16	
Enter Number of Occupants here:		1500	
Enter Landscape Area (Sq. Ft.) here (optional):		500	
Property Name		Example	
Property Address			
Gross Floor Area		500,000	Sq. Ft.
Meter Type	included in Property	Consumption	Units
Whole Building	Yes	11,035	ccf (hundred cubic feet)
Domestic (whole building - submoters)	No.	5,273	ccf (hundred cubic feet)
Process	No	4,952	oof (hundred subis feet)
irrigation	No	133	ccf (hundred cubic feet)
Retail	No	500	ccf (hundred cubic feet)
Fire	No		
Other	No	177	ccf (hundred cubic feet)
Total Water Cost lover spec	thail time make hads	-	\$44,490.08

Cost/Gallon

Total Water Intensity Domestic Water Intensity

Comestic Use per Occupant

Irrigation Cost (over specified time period)

Use per Occupant

irrigation intensity

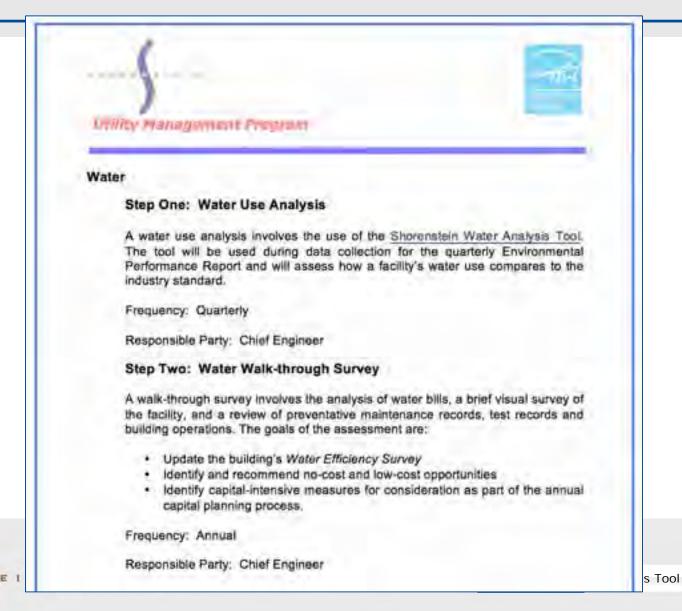




The Issue

Shorens

### **Utility Management Program Update**



Next Steps

### **ENERGY STAR Policy Update**

- (3) Water Data Monthly water use for each of the following water end uses must be separately metered and each meter separately recorded in ENERGY STAR Portfolio Manager, including main supply meters that count toward the whole-building total use and submeters that do not count toward total use. Each meter must be labeled with its respective end use category. Water cost must be recorded for main building utility meters that contribute to whole-building water use (submeters only need water use, not water cost). Water cost must be recorded as the total billed amount including water charges, sewer charges, stormwater charges, taxes, surcharges, etc. (i.e., the total amount that is payable to the utility company).
  - (a) Whole Building Water Use
  - **(b)** Domestic: restrooms, kitchens, breakrooms, janitorial closets, etc (Domestic use can be calculated by subtracting all submeters from Whole Building Water Use)
  - (c) Process: cooling tower make-up, chilled water loop make-up, heating water loop make-up
  - **(d)** Irrigation: all outdoor water use for landscaping, hardscape washing, and/or water features

Project

- (e) Retail: all retail tenant uses
- **(f)** Fire: all dedicated fire service meters
- (g) Other



### What's Next for Water at Shorenstein?

- Presenting new tracking program and analysis tool to chief engineers
- Installing additional submeters at each property
- Update ENERGY STAR Portfolio Manager meter readings monthly
- Analyze property consumption using Shorenstein Water Analysis Tool
- > Implement water efficiency projects
- Hiring summer fellow to continue project



# Thank You

