



District Energy System Overview



December 14, 2015



- JEA's District Energy System ("DES") provides chilled water to customers for air-conditioning.
- The facilities for the chilled water business consist of chilled water plants and underground piping to distribute the chilled water to buildings located within the respective districts served by the plants and certain ancillary equipment.
- DES was established as a separate utility system. JEA also operates electric and water & sewer businesses.
- In March 2003, JEA's first chilled water facility commenced operation and now operates four facilities.
- DES provides chilled water to 17 locations.
- Total DES sales revenues for the Fiscal Year ended September 30, 2015 were approximately \$8.8 million.

System Overview

Hogan's Creek

777 East Church Street

- Hogan's Creek was the first DES facility built in 2002 and was put into operation in 2003.
- The plant currently serves the Baseball Grounds (280 tons) and Arena (2,350 tons), and has capacity to serve other customers, such as EverBank Field.
- This facility contains three 2,100 ton chillers, 3,400 ton cooling tower and a million gallon chilled water storage tank for peak demand capacity.



Downtown

521 West Duval Street

- The Downtown Facility was built in 2003 and was put into operation in 2005.
- It serves the new Duval County Courthouse, Main Library, Library Parking Garage, City Hall Annex, State Attorney's Office Building, the JEA Tower and Customer Center Building.
- This facility includes three 2,500 ton chillers and one 800 ton standby chiller and a 7,200 ton cooling tower.



- The Springfield Plant was built in 2005 and was put into operation that same year.
- It serves The University of Florida College of Medicine, the Proton Beam Facility, and the Shands Healthcare campus.
- Currently has five 1,500 ton chillers and a 6,100 ton cooling tower with chiller demand ranging from one to four chillers at any one time. A new 1,500 ton chiller is scheduled to be added in 2016, bringing the total chiller count to six.



- The San Marco Facility was built in 2006 and was put into operation in 2007.
- It has no fixed facilities and only provides service to one customer, the San Marco Place Condominiums.
- Consists of two 400 ton air cooled chillers.



System Map

★ **Hogan's Creek**

▲ Customer's Served by
Hogan's Creek

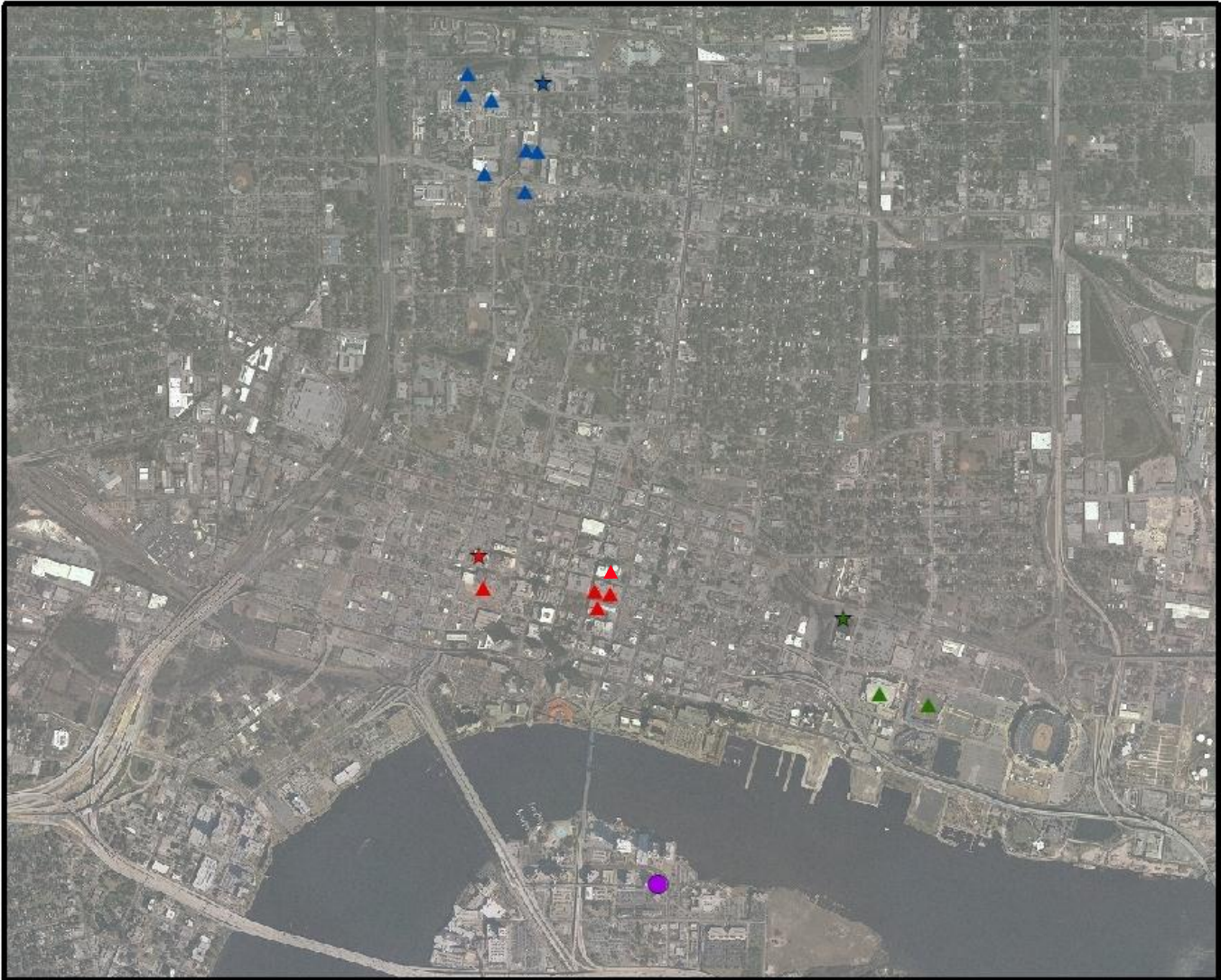
★ **Downtown**

▲ Customers Served by
Downtown

★ **Springfield**

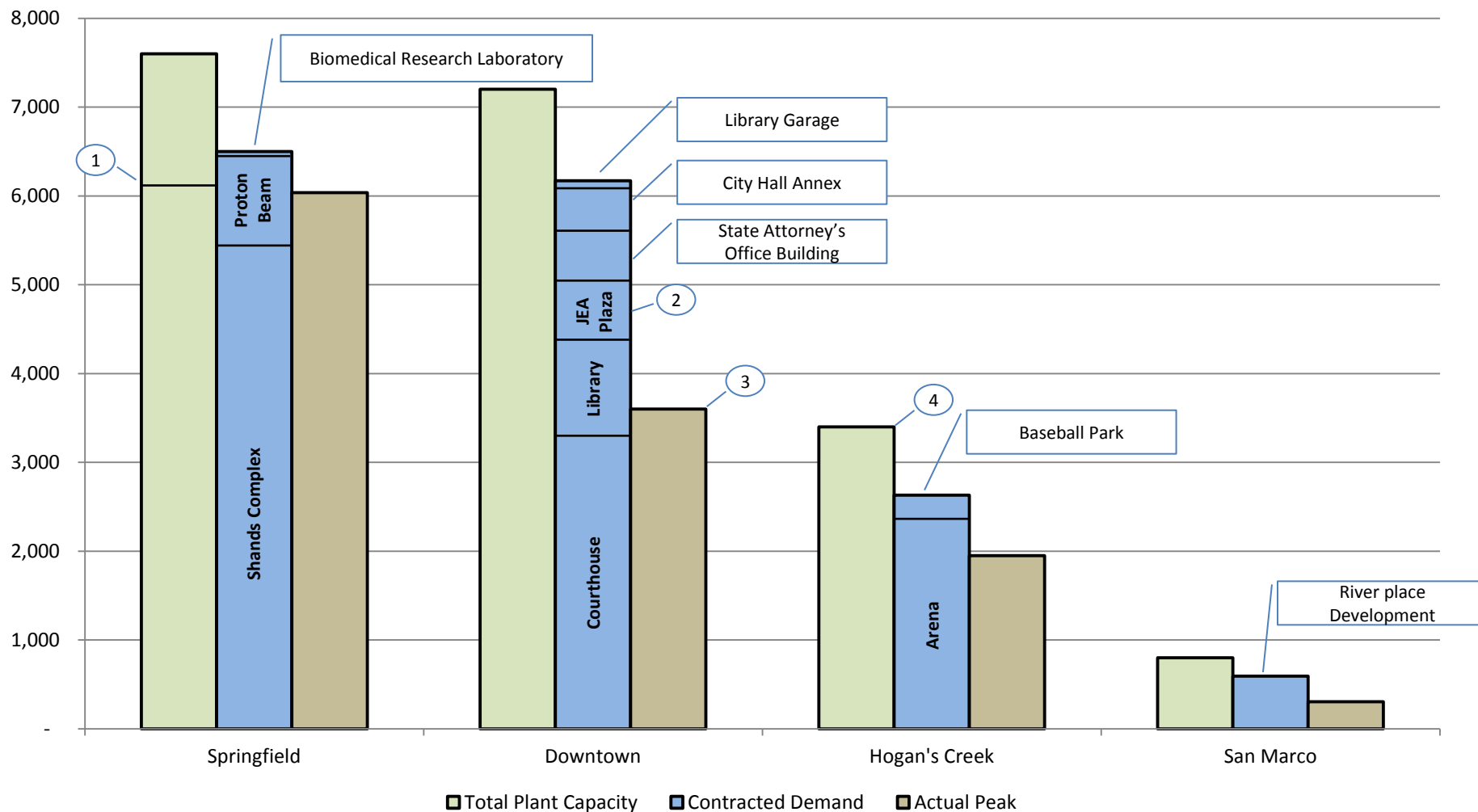
▲ Customers Served by
Springfield

● **San Marco¹**



¹ The San Marco facility is attached to the San Marco Place Condominiums

Comparison Between Total Plant Capacity, Contracted Demand, and Actual Peak



¹ Springfield's capacity is currently at 6,100 tons with four cells currently in operation on the tower. A sixth 1,500 ton chiller is scheduled for FY16.

² JEA Plaza is being billed for 700 tons of demand.

³ The Downtown Plant has added the JEA Plaza and the new State Attorney's Office Building, thus increasing load demand for a second chiller to operate.

⁴ The Hogan's Creek plant has three chillers with a total capacity of 6,300 tons as well as a million gallon storage tank for peak demand greater than the 3,400 ton capacity of the cooling tower.

Financial Analysis

- DES revenues are derived from two basic types of charges.
 - Demand Charge is based on the contract amount of cooling tons or the monthly measured tons whichever is greater.
 - Consumption Charge based upon the actual amount of chilled water used by the customer.
- Standard rates for chilled water services are based on the customer's demand and consumption of chilled water and a standard 2,400 Equivalent Full Load Hour ("EFLH") profile.
- EFLH is defined as the annual ton-hours of chilled water required divided by the chiller's design capacity in tons.

DES Rates for Chilled Water
As of July 1, 2012

Contract Size	Demand Charge	Consumption Charge
Greater than 200 tons and less than 2,400 EFLH	\$20/ton	\$0.11754
Greater than 200 tons and greater than 2,400 EFLH	\$20/ton	\$0.10054
Less than 200 tons and less than 2,400 EFLH	\$0	\$0.20754
Less than 200 tons and greater than 2,400 EFLH	\$0	\$0.10054

Historic and Projected Funding Plan

- Discussions with EverBank Field to provide service would require approximately \$1.5m of expenditures.
- Capital Plan values include both R&R and large projects.
- DES funding includes maintenance of its physical building facilities.

DES Historic and Projected Funding Plan
Fiscal Years Ended September 30

	Historic			Projected				
(\$ in thousands)	2013	2014	2015	2016	2017	2018	2019	2020
Capital Plan	\$836	\$526	\$904	\$3,657	\$971	\$1,324	\$1,342	\$1,250
Internal Funds	836	526	841	760	726	705	680	655
Construction Fund			63	2,897	245	619	662	595
Debt Financing								