

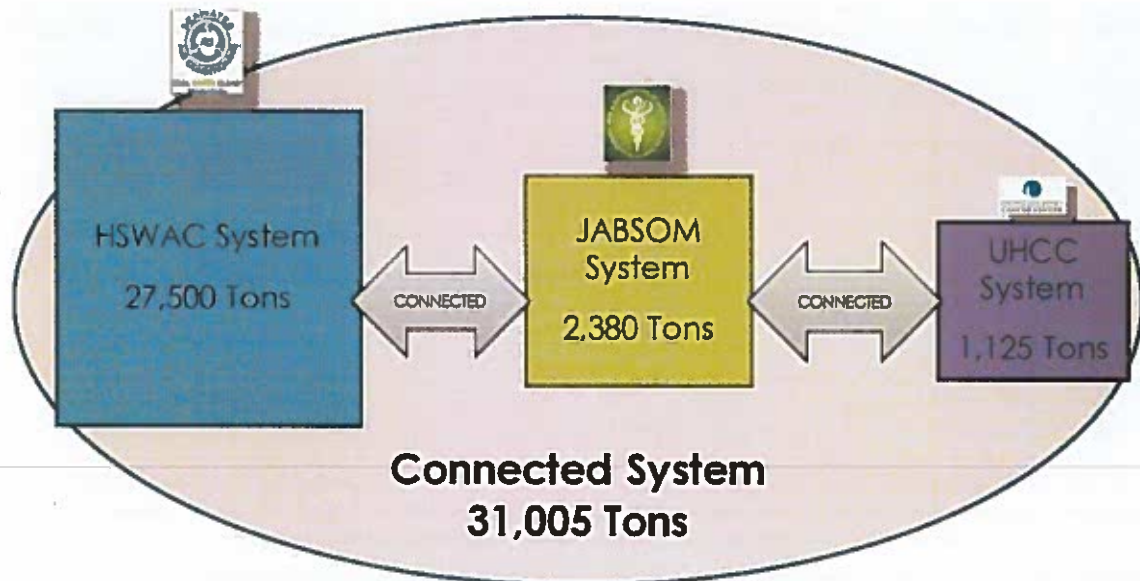
## HSWAC – UH Kaka’ako Campus Update December 2015

### Sustainability Metrics:

University of Hawaii Kaka’ako Campus	Savings	% of Total Used
Potable Water	19,608,000 gallons	47%
Sewer	1,098,000 gallons	35%
Refrigerants	7,010 pounds	100%
Electricity	8,253,100 kWh	44%
CO <sup>2</sup>	16,389,000 pounds	44%

### Reliability:

- Vastly increased reliability of entire campus with integration of all three cooling plants connected. Myriad of options available for UH to optimize increased reliability for AC systems with budget priorities.



**Feasibility Study:**

Year of Service	Year	NPV of DC Savings*		
		UHCC Option 2	JABSOM	TOTAL
1	2018	(\$282,485)	\$441,826	\$159,341
2	2019	(\$371,996)	\$897,626	\$525,630
3	2020	(\$451,425)	\$1,366,752	\$915,327
4	2021	(\$524,130)	\$1,848,581	\$1,324,451
5	2022	(\$392,295)	\$2,342,509	\$1,950,214
6	2023	(\$443,577)	\$2,858,804	\$2,415,227
7	2024	(\$486,141)	\$3,375,191	\$2,889,050
8	2025	(\$520,301)	\$3,901,976	\$3,381,675
9	2026	(\$546,363)	\$4,438,630	\$3,892,267
10	2027	(\$564,625)	\$8,334,946	\$7,770,321
11	2028	(\$575,373)	\$8,425,348	\$7,849,975
12	2029	(\$576,609)	\$8,546,651	\$7,970,042
13	2030	(\$570,940)	\$8,688,419	\$8,117,479
14	2031	(\$558,626)	\$8,849,846	\$8,291,220
15	2032	\$382,773	\$9,030,152	\$9,412,925
16	2033	\$407,629	\$9,228,582	\$9,636,211
17	2034	\$438,396	\$9,444,405	\$9,882,801
18	2035	\$474,844	\$9,676,910	\$10,151,754
19	2036	\$516,752	\$9,925,411	\$10,442,163
20	2037	\$563,902	\$10,189,242	\$10,753,144

\* NPV Discount Factor of 6%. Values from WSP Feasibility Report and HSWAC Analysis