

Kress Family Library



Energy Audit by General Energy

Brown County Library System

Table SR-1: Summary of Recommendations - Energy Audit Project #1351

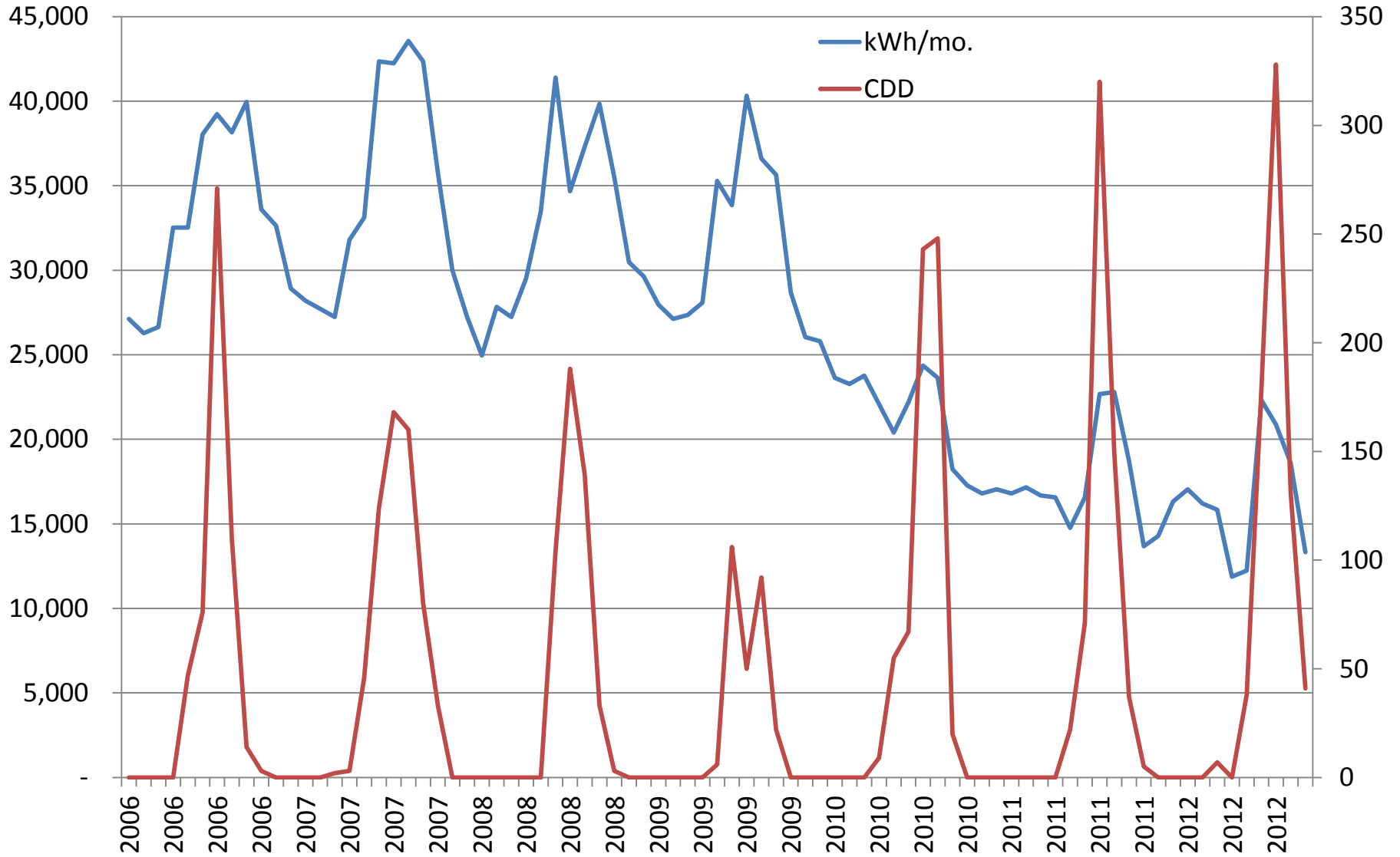
ECM No.	ECM Description	Project Cost (\$)	Electricity Savings		Natural Gas Savings		Savings/Payback		Environmental Impact			
			kWh/Year	\$/Year	Therms/Year	\$/Year	Total Savings (\$/Year)	Simple Payback (Years)	lbs of CO2	lbs of NOx	lbs of SO2	mg of Hg
K-1	Recommission Building	9,600	137,006	6,636	3,381	3,550	10,186	0.9	342,512	616	1,233	2,329
K-2	Implement Demand Controlled Ventilation	8,400	9,459	950	1,195	1,206	2,156	3.9	34,907	62	85	161
K-3	Seal Duct Leaks and Insulate Supply Duct	1,838	4,948	239	616	622	861	2.1	18,153	32	45	84
K-4	Replace PAR30 lamps with CFL	540	7,278	662			662	0.8	16,092	29	66	124
K-5	Replace 32W F32T8 to 25W F25T8 Lamps	982	5,164	469			469	2.1	11,418	21	47	88
	Total	21,360	163,855	8,956	5,192	5,378	14,334	1.5	423,082	759	1,475	2,786

Boldt Facilities Assessment

Overall Summary - General Recommendations on Building Conditions			
Priority	Description of Item	Approx. Value	General Comments
High Priority Items			
1	<i>Emergency Lighting throughout building is not adequate</i>	\$10,000	<i>Emergency lighting is in place, however code minimums are not achieved</i>
1	<i>Emergency light and exit light required in mechanical room</i>	\$500	<i>Currently obstructed, provide another or relocate light to more visible location.</i>
1	<i>Emergency light lamp burned out in unfinished space</i>	\$50	<i>Replace lamp</i>
1	<i>Lay wiring for landscape lighting a minimum of 6 inches below grade</i>	\$3,000	<i>Wiring currently lays above grade and is unprotected</i>
1	<i>Building heating & cooling load calculations</i>	\$7,500	<i>Required for proper air balance</i>
1	<i>Air & Water Balancing</i>	\$10,000	<i>Not confident this was done properly the first time</i>
1	<i>Duct Assessment</i>	\$2,500	<i>Take pressure drop readings</i>
1	<i>Duct repairs / sealing</i>	\$5,000 - \$10,000	<i>Take pressure drop readings</i>
	<i>Commission HVAC Details</i>	\$5,000	<i>See notes in Appendix A</i>
1	<i>Change sheaves on AHU fans</i>	\$500	<i>See notes in Appendix A</i>
Moderate Priority Items			
2	<i>Relocate exterior receptacle located behind gas meter</i>	\$500	<i>Receptacle is currently not accessible</i>
2	<i>Modify ballasts and electrical connection at in-ground lighting fixtures</i>	\$750	<i>Ballasts burn out regularly due to water buildup in ground fixtures</i>
2	<i>Reprogram lighting system / modify lighting layout to reduce amount of light on main floor</i>	\$10,000	<i>Lighting on main floor is over 100 fc through center core and computer area - 50 fc would be sufficient amount of lighting</i>
2	<i>Replace humidifier</i>	\$15,000	<i>When old unit fails - oversized</i>
2			

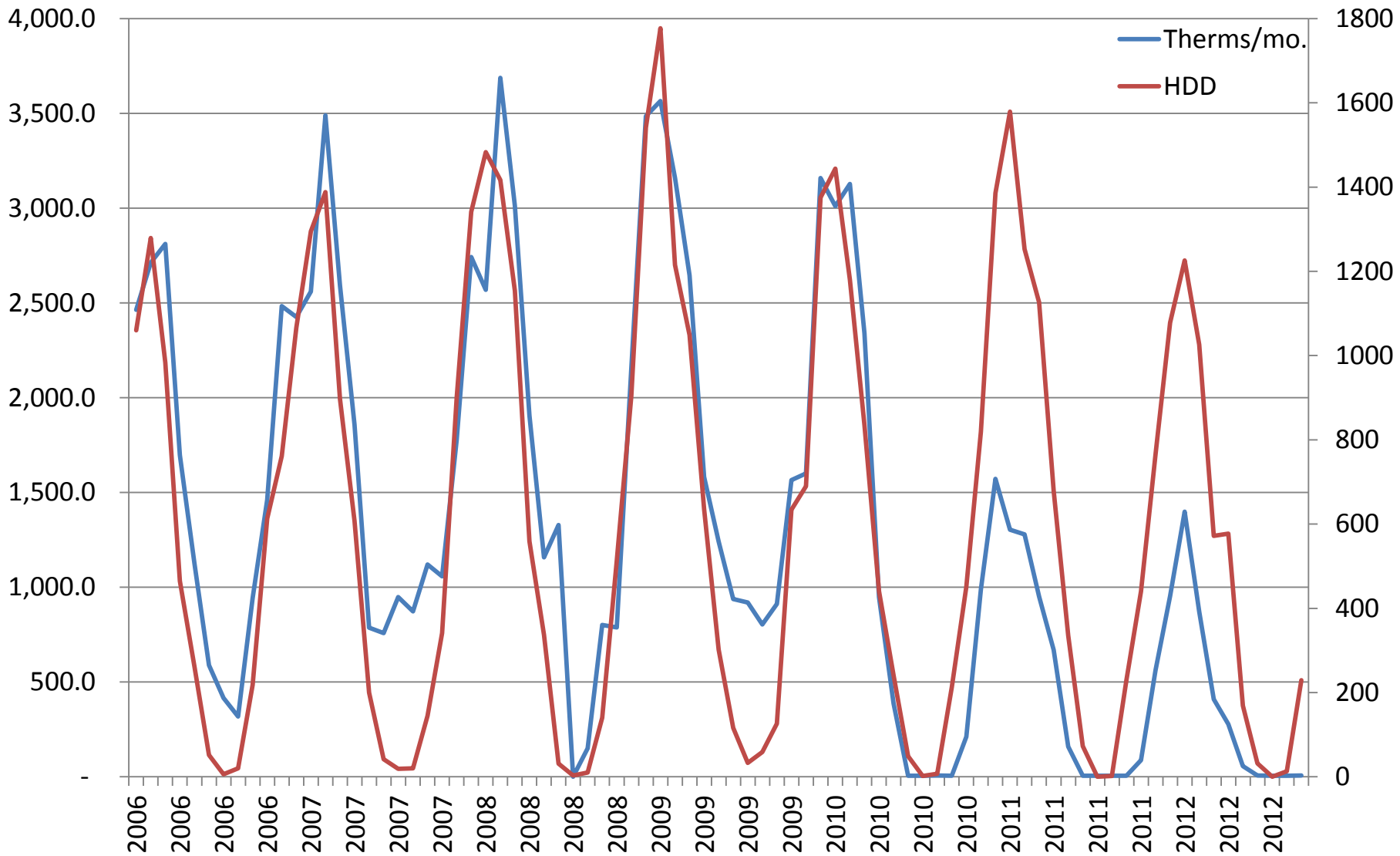
Kress Family Library

kWh & CDD per month



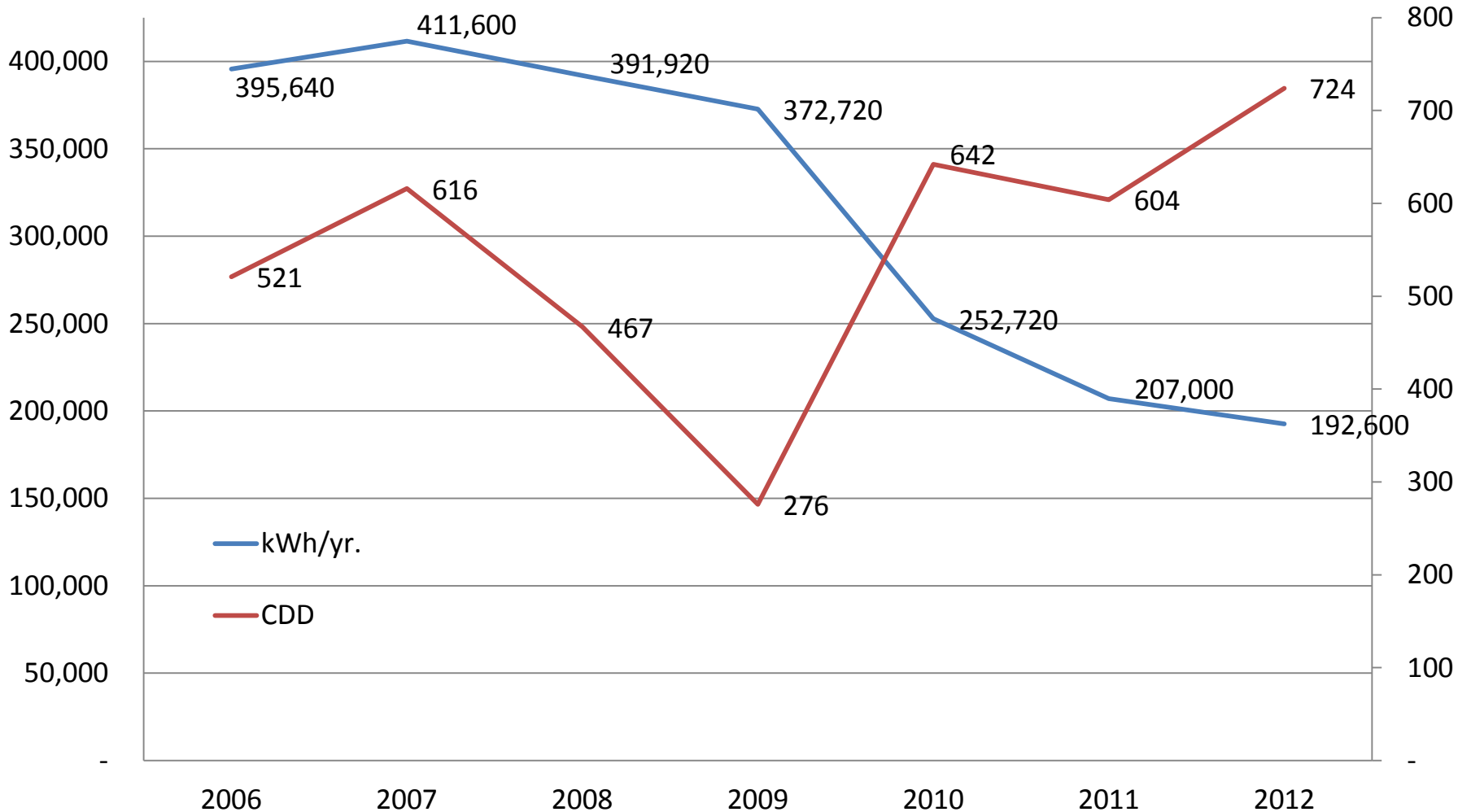
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Therms & HDD per month



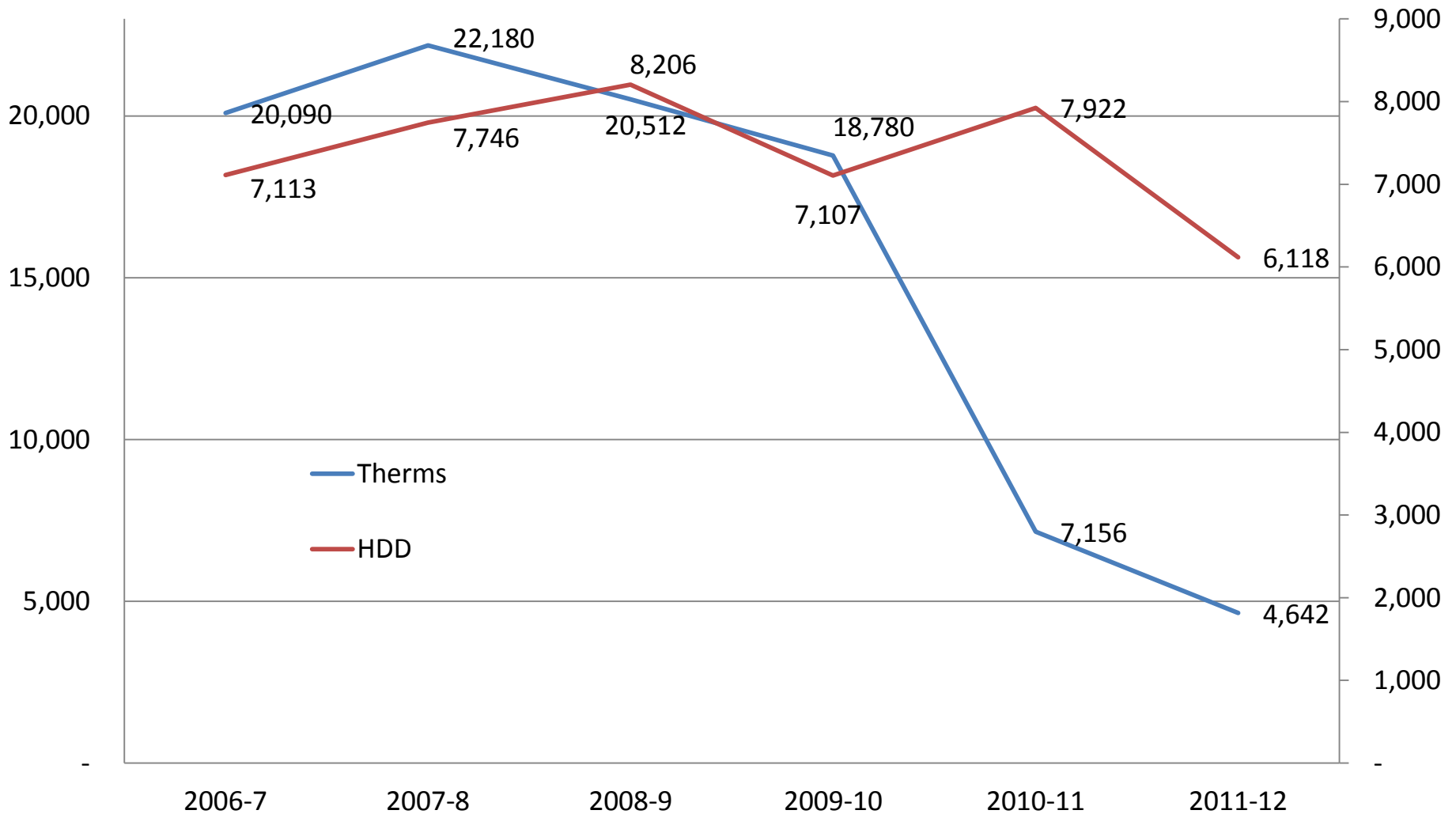
Kress Family Library

kWh & CDD per year



Kress Family Library

Therms & HDD per year



Owned Libraries 4 Year Annual Utility Totals

Electric

Gas

Central

	Electric	Gas
2011	110,126.18	13,546.06
2010	\$113,553.26	\$20,625.51
2009	\$115,531.10	\$37,388.71
2008	\$116,107.81	\$48,468.62

Electric

Gas

Weyers Hilliard

	Electric	Gas
2011	\$21,786.81	\$6,389.26
2010	\$24,313.23	\$8,123.99
2009	\$28,074.15	\$10,523.05
2008	\$27,814.82	\$12,681.80

Ashwaubenon

	Electric	Gas
2011	\$9,417.34	\$3,219.80
2010	\$8,778.64	\$3,155.04
2009	\$9,044.48	\$3,993.28
2008	\$10,583.29	\$7,352.46

Southwest

	Electric	Gas
2011	\$4,602.84	\$1,486.85
2010	\$4,637.16	\$1,764.76
2009	\$4,987.66	\$2,256.09
2008	\$5,077.10	\$2,543.93

Kress

	Electric	Gas
2011	\$21,686.30	\$4,785.66
2010	\$24,350.72	\$10,429.95
2009	\$31,896.30	\$16,704.26
2008	\$33,704.16	\$21,221.79