Energy Conservation Initiative (ECI) Project Summary
Comstock, Facility 1081

What We Did: We replaced outdated pneumatic space and central system controls with new digital controls with occupancy sensors. Minimum and maximum airflows were adjusted to current standards on hoods and laboratory spaces. The "auxiliary air" hoods were converted to two position variable volume. All labs and offices throughout the facility were recommissioned.

What It Cost: 650,000

How Long It Took: 8 months Completed march 2012.

What We Saved: $108,000 and 270 tons/per year carbon equivalent annually.

Benefits: Air flows and temperatures are now accurately controlled and minimized to reduce energy use and improve comfort and safety. Heat recovery systems are now all fully controlled and monitored digitally. Deferred maintenance issues were addressed while minimizing energy usage.

> This project jumped our building forward from 1984 to 2014 in many areas while improving safety and reducing energy usage. We can now see all new controls via the web with ease!
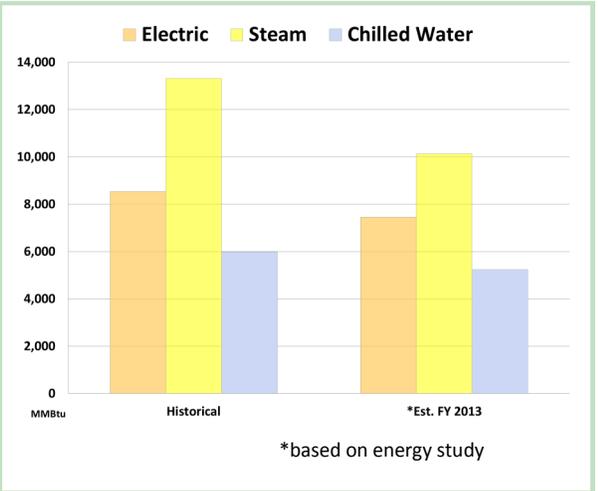>
> **Ken Ayers,**
> **CALS Building Coordinator**

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Map
Utilities Costs and Use

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Total Energy Use - Pre & Post ECI

*based on energy study

Comstock: ECI Savings Table

Utility	Historical Energy Use (MMBtu)	2013 Energy Use (MMBtu)	Energy Savings (MMBtu)	% REDUCTION	Historical Cost (billed rates)	*FY 2013 Cost (billed)	Annual Savings $	Equivalent # Homes
Electric	8,500	7,500	1,000	12%	$175,000	$152,900	$22,000	25
Steam	13,300	10,100	3,200	24%	$300,900	$229,200	$72,000	36
Chilled Water	6,000	5,200	800	13%	$109,600	$96,100	$14,000	16
Totals	27,800	22,800	5,000	**18%**	$585,500	$478,200	$108,000	**77**

Energy use based on project scope

Equivalent # Homes Savings based on average home use: 40 MMBtu Electric ▪ 90 MMBtu Heat ▪ 50 MMBtu Cooling