# FLOWING WELLS SCHOOLS District Administration Center

### **MEMORANDUM**

**TO:** Nic Clement, Superintendent

**FROM:** Dr. David R. Baker

Dan Scheller, Director of Facilities

**RE:** Energy Conservation Plan Recommendations

**DATE:** February 27, 2012

In reviewing the Auditor General's report finding excessive utility costs, we have identified both policy and practice opportunities to reduce energy consumption. The following list provides current practice and recommendations:

### 1. Hours of Usage

Current Practice: Individual sites have held end user flexibility in setting both the temperature and hours of usage. As a result, there are wide fluctuations in thermostat settings and a loosely organized approach to altering the hours of use for holidays, weekends and summer vacation.

Recommendation: The district should establish set points at 68 degrees for heating and 74 degrees for cooling. These are industry standards and employed in neighboring districts. When a school day is set to be in session, the heating/cooling system should be on a timer to begin at 6:30 a.m. and end at 8:00 p.m. On the last day of a work week (weekends and holidays), the system should shut down at 8:00 p.m. and restart on the first day of the work week at 6:00 a.m. During summer vacation, a consolidation of programs should be reviewed and refined to limit the space needing air conditioning. All other HVAC systems will be shut down for the duration of the summer vacation.

## 2. Physical Upgrades

Current Practice: Energy Management Systems (EMS) have been installed at \_\_\_\_\_\_ and Homer Davis is planned for a conversion to programmable thermostats to disallow individual temperature deviations from the set points. The district also supports both T-12 and T-8 lighting. The t-12 is not as efficient as the T-8 lighting.

Recommendation: Maintain EMS and following the recommended set points. EMS will need to be evaluated at Walter Douglas. Identify funding that remains in the current bond to replace the remaining T-12 lighting with T-8 lighting.

#### 3. Staff Practices

Current Practice: The district has worked to limit some electrical devices in classrooms/work areas and develop good practices for energy management. Still, there is room for more devices to be removed from classrooms and individual work areas to create a better awareness of energy management.

Recommendation: Remove personal space heaters, refrigerators, microwaves, and coffee makers from all areas except staff lounges and cafeterias. Create a public campaign to turn off lights, projectors, and computers at the end of each day. Lights should be turned off whenever vacating the area for more than five minutes and limited when the area is equipped with solo-tubes. Staff needs to be aware of opened doors when the HVAC system is in use.

YES Program: A specific recommendation and public campaign should be targeted to this program. The district funds all utility costs as in-kind contributions and the program should be aware of the district's efforts to reduce energy consumption. This would include an energy management protocol of hours of usage, closing doors and mitigating the use of additional appliances.

#### 4. Facility Rentals

Current Practice: The facilities are made available to the greatest extent possible to support the district initiatives.

Recommendation: Facility rentals should give serious thought and consideration to coordination of event dates and times. For example, asking several civic clubs to hold meetings on one night instead of multiple evenings.

All recommendations have some implications on our current environment and will need explanation based upon the findings from the Auditor General's Performance Audit.