



Memo

To: Haines Borough Energy & Sustainability Commissioners
From: Stephanie Scott, Energy & Sustainability Coordinator
Date: January 15, 2009
Re: New Business (a) Energy & Efficiency Commendation for the Sheldon Museum & Cultural Center

The Sheldon Museum and Cultural Center has steadily reduced kilowatt-hour consumption 2006 through 2008, with a big jump in reduction in 2008. Kilowatt-hour consumption was reduced in 2008 by 13% compared to a 2% reduction 2006 to 2007.

As a staff, they have collectively and systematically adopted conservation and efficiency measures. These measures, simple though they are, are making a significant difference in power costs for the Museum.

Efficiency Measures. Using staff and volunteer labor, the Museum replaced 42 incandescent bulbs with compact fluorescent bulbs (CFLs). The new bulbs provide the same amount of light but with significantly reduced wattage. Replacement with CFLs reduced 3,325 watts to 716 watts. At winter usage rates, the Museum can expect to save an estimated \$30 a month. At summer usage rates, savings can be expected to increase to \$50/month. The 42 Energy Star qualified CFL bulbs cost \$69.32. At winter usage levels, savings will pay for that expense in 2.3 months. By the time summer season is in full-swing, the Museum will be able to fully benefit from the savings.

CFL replacement also represents a savings in supplies and maintenance. According to Museum staff, the incandescent bulbs required replacement every 18 months. The CFLs are rated for 8000-10,000 hours. Additionally, the relatively inexpensive CFLs replaced a relatively expensive incandescent. Each 60-watt flood carried an estimated price of \$4; the cost of a 100-watt flood was \$5-\$6.00

Conservation Measures. Throughout 2008, staff agreed to deliberately practice the following conservation measures with respect to electricity:

- Lights are turned on only in areas being used.
- Lights are turned off when use is concluded.
- When two fluorescent tube fixtures are available to light a space, use only one fixture.
- Use daylighting whenever available.
- During the winter season, light the gallery only when visitors are present.