## Friends of the Manchester Library: typical Annual Budget & Solar Electric Savings since August 2021 <u>updated Feb 1</u>

With income from:

Fundraisers like the Plant Sales, Father's Day Salmon Bake, Sales of Books, raffles, other special events & Donations

FOML pays typical operating expenses
Building and grounds maintenance and repairs, insurance \$6,000

Utilities: \$8,500+

Library programs: \$6,000

Miscellaneous (volunteer and staff recognition, postage, fundraiser costs and advertising, cost of goods to sell, supplies) **\$5,000** 

Every year FOML needs to raise \$25,000 to \$30,000 to keep the library open

The new Library Addition includes Solar panels:

\$ saved since original installation on Aug 4, 2021: \$2,923

Kilowatt hours produced since 8/4/21: 24,357 kWh

Tons of CO<sub>2</sub> production avoided since 8/4/21: 38,478 lbs

Our 25 solar panels, rated at 8.75 kW d/c output, manufactured by Sun Power, installed by Power Trip Energy, and funded 100% by a generous Green Power grant from Puget Sound Energy.

Another interesting set of data revealed that our best hour of solar in 2023 was 12-1PM on 6/21 (the summer solstice!) when we produced 7.58 kWh and the lowest daily peak (on the best day of the month) was on 12/26 at 11AM-12PM when we only produced 3.69 kWh. Those points show the impact of how high the sun is from the horizon and its effect on the angle of solar incidence.