Island Food Pantry Nitrogen calculations

10/3/23

Proposed project is in the Farm Pond Watershed, which is an impaired watershed.

The Adjusted Nitrogen Load Limit for Farm Pond is 2.95 kg/acre/yr

The project is 0.269 acres, the **load limit for the property is 0.79kg/yr** (2.95 kg/acre/yr x 0.269 acres)

Apartment

WW load from septic (26.25mg/l) 1.21 kg/yr

WW load if on sewer (3mg/l) 0.13 kg yr

Building

WW load on sewer 0.2 kg/yr

Roof runoff .13

Impervious .33

If the project is completely on sewer they will exactly meet the load limit

Apt .13kg/yr

Building .2 kg/yr

Roof .13 kg/yr

Impervious <u>.33 kg/yr</u>

Total 0.79 kg/yr

If apt stays on septic, the project will be over the load limit

Apt 1.21 kg/yr

Building .2 kg/yr

Roof .13 kg/yr

Impervious <u>.33 kg/yr</u>

Total 1.87 kg/yr

Recommendation:

Entire property connected to sewer in order to meet Water Quality Policy load limit.