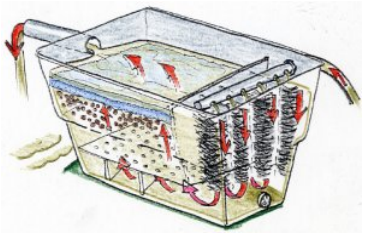
Recirculation and filtering water are not necessary in a "balanced" garden pond. If you do decide to move water, you will need to choose a pump for one or both of two reasons:

For Aesthetics: to see and/or hear a waterfall, stream or fountain. It is a general rule of thumb, to move twice the number of gallons in your pond per hour. This tends to keep the waterfall in scale, minimizes suspended particles, and leaves a quiet space for water lilies.

For filtration: to reduce algae, waste and decaying debris, and provide for higher fish stocking levels. It is still necessary to circulate the number of gallons twice per hour.



To choose your pump size, you should make your decision in this order. What size is the pond? How many gallons of water does it hold? What do you want your moving water to do? Be a bubbling rock, waterfall, or a fountain? What type of filtration will you use?
When in doubt, use a pump more powerful than you think you will need.

Other Considerations: There are usually several options for a pump in a given rage. Initial purchase price, projected monthly electrical usage, length of electric cord, physical dimensions, performance, style of inlet/outlet and warranty periods should all be considered.

Mechanical Filtration: Physically removes particulates from the water usually at the pump intake, preventing damage to the pump. The surface area and density through which water is filtered directly affects the cleaning frequency of the filter.

Biological Filtration: Converts toxic ammonia and nitrites generated by fish waste and decaying debris to non-toxic nitrates, by passing water through filter media that contains beneficial bacteria. The amount of biological activity taking place is directly related to the flow-rate of water and the amount of surface area provided by the media.

Plant Filtration: Minimizes nitrate buildup in the pond by use of plants. Nutrient rich water passes over, around, and through the roots of the plants causing a rapid uptake of nitrates which starves single-cell algae out of existence.

Ultraviolet Sterilizers: Water is pumped through a sealed chamber where waterborne micro-organisms and free-floating algae are exposed to radiation emitted by a UV lamp. This kills all the micro-organisms and algae. Proper flow rate is essential for success.