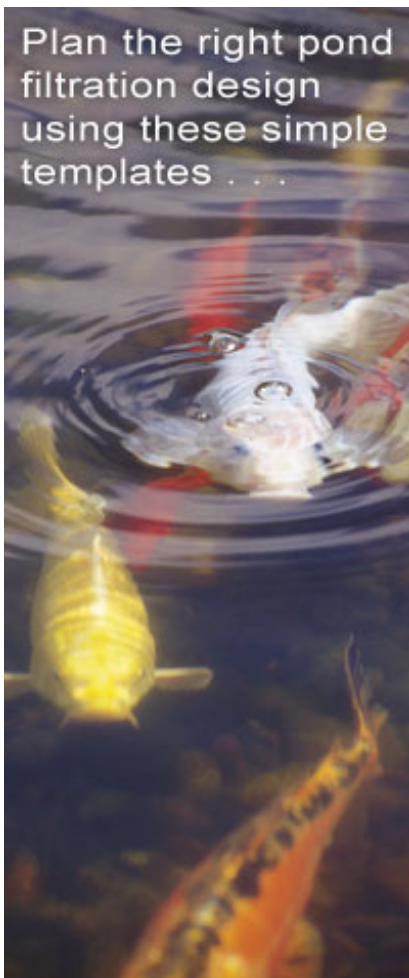


# Pond Filtration Systems Explained

Drs. Foster & Smith Educational Staff

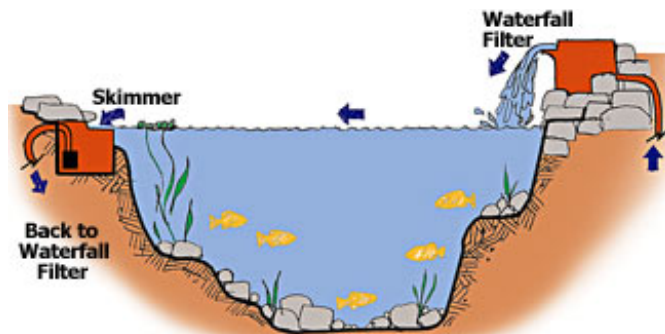


## THE 3 BASIC TYPES OF

# POND FILTRATION

Every pond water garden, whether plants-only or stocked, benefits by some form of water circulation system to stay clean, healthy, and algae free. At the heart of this system is the pump which moves the water. From there, your options are limitless. Do you want the water to circulate through a filter? Over a waterfall? Or be launched into the air by a decorative fountain? While there are dozens of pump, filter, and skimmer models available, planning your pond's circulation system is easier when you consider that all pond designs are built upon three basic filtration configurations:

### 1. Skimmer/Waterfall External Pond Filtration >

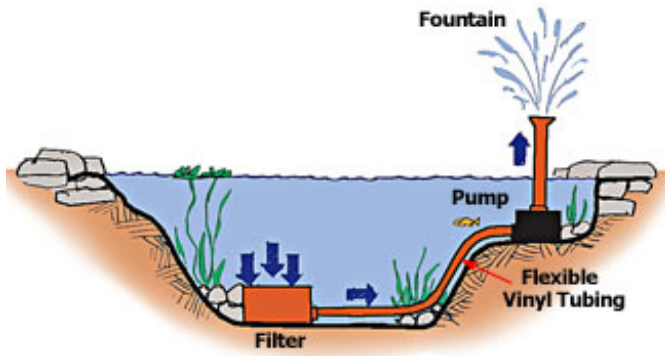


Similar to swimming pool overflow filters, this design skims debris from the surface as your pond "overflows" into a recessed skimmer basket. Water is then pumped to the opposite side of the pond, where it cascades back into your pond through a waterfall bio-filter. Landscaping hides the entire system so your guests see only a beautiful water feature.

**Ideal for:** Medium to large ponds with fish. **Budget:** \$468-\$1200 for filter and pump. **Assembly:** Moderate. **Maintenance:** Minimal. **Benefits:** Low maintenance with high degree of easy debris removal. Well hidden filtration.

### 2. Submersible Pond Filtration >





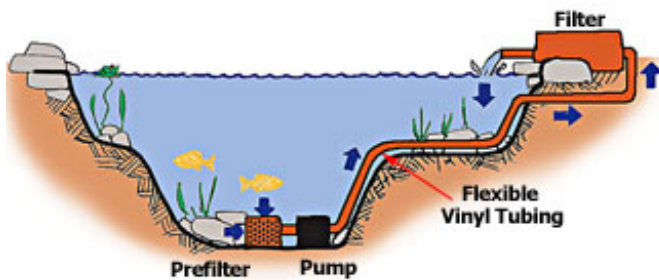
### TIP

For best results, choose a higher flow rate for koi ponds, turning your pond 1-2 times an hour.

In this system, a filter sits at the bottom of your pond. A submersible pump creates the suction to draw water through your filter, then pushes the filtered water to a fountain or waterfall where it re-circulates back into your pond.

**Ideal for:** Small to medium ponds with few or no fish. **Budget:** \$82-\$300 for complete filtration system. **Assembly:** Easy. **Maintenance:** Moderate (depending on filter location access). **Benefits:** System is virtually invisible hidden underwater.

### 3. External Pond Filtration >



If you need life-supporting filtration for koi in nearly any size pond, consider external filtration. In this design, a pump with optional pre-filter or skimmer draws water from your pond to a chambered "flowthrough" filter on land at a higher elevation. Filtered water then pours out of the filter plumbing downhill to your pond. This flow can be directed over a waterfall or streambed.

**Ideal for:** Small to large ponds with or without fish. **Budget:** \$91-\$2160 for filter and pump. **Assembly:** Moderate, simple plumbing. Landscaping may be required to hide filter. **Maintenance:** Easy access. Filter accessible on land, amount of time to clean depends on filter design. Some pressure filters only require you flip a switch. **Benefits:** Most flexible configuration. Largest choice of equipment and design options.

### IMPROVEMENT IDEAS

**External Filtration:** Satisfaction is greater when you use one size bigger than recommended for your pond. Consider an [external filter with built-in UV sterilizer](#) to help defend your pond against nuisance algae.