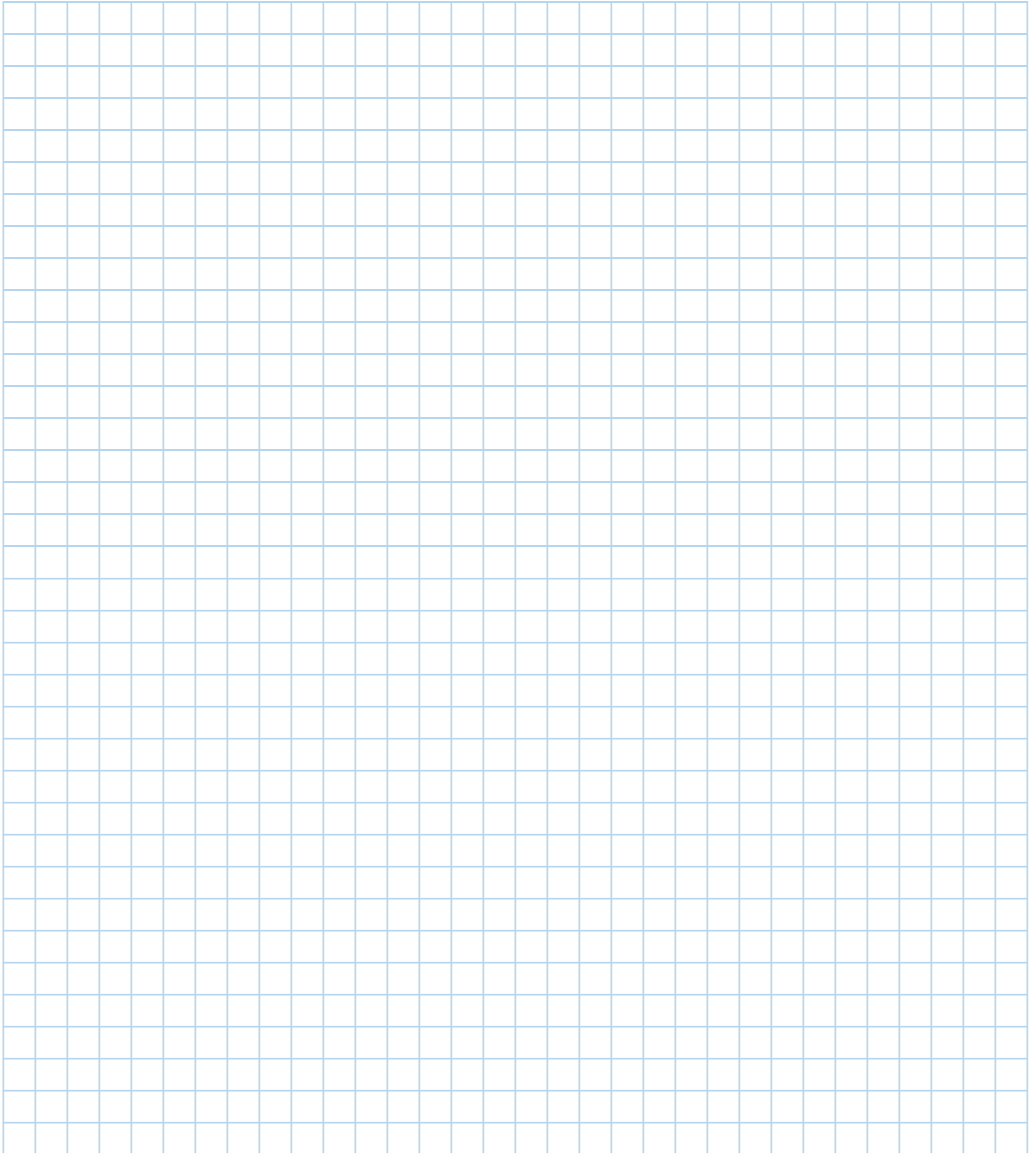




WE CONNECT
PEOPLE TO WATER
THE WAY NATURE INTENDED



CHECKLISTS

ECOSYSTEM POND

- ☐ BioFalls® Filter
- ☐ Skimmer
- ☐ BioBalls Biological Filter Media
- ☐ Pond Pump
- ☐ Flexible PVC Pipe
- ☐ Dual Union Check Valve
- ☐ Pond and Landscape Lighting
- ☐ Transformer/Smart Control Hub
- ☐ Lighting Splitters
- ☐ Lighting Extension Cables
- ☐ Automatic Dosing System
- ☐ Installation Kit
- ☐ Economy Foam Gun Applicator
- ☐ Professional Black Waterfall Foam
- ☐ 45 mil EPDM Liner
- ☐ Underlayment
- ☐ Welcome Kit

PONDLESS® WATERFALL

- ☐ Waterfall Spillway
- ☐ Pondless® Waterfall Vault
- ☐ Vault Extension if needed
- ☐ AquaBlox® (Small/Large)
- ☐ Waterfall Pump
- ☐ Flexible PVC Pipe
- ☐ Dual Union Check Valve
- ☐ Pond and Landscape Lighting
- ☐ Transformer/Smart Control Hub
- ☐ Lighting Splitters
- ☐ Lighting Extension Cables
- ☐ Automatic Dosing System
- ☐ Installation Kit
- ☐ Economy Foam Gun Applicator
- ☐ Professional Black Waterfall Foam
- ☐ 45 mil EPDM Liner
- ☐ Underlayment
- ☐ Welcome Kit

OPTIONS AND ADD-ONS

- ☐ Rapid Clear Fine Filter Pads
- ☐ Water Fill Valve
- ☐ Faux Driftwood 30"/35"
- ☐ Faux Oak Stump Cover
- ☐ Faux Log Fish Cave
- ☐ Faux Stone Fire Pit
- ☐ IonGen™ System G2
- ☐ Color-Changing Lights
- ☐ Path & Area Landscape Lights
- ☐ Smart Control Plug
- ☐ Smart Pond Thermometer
- ☐ Pond Powerhead
- ☐ Koi Krunchies
- ☐ Premium Fish Food Pellets
- ☐ Pond Shark Pro Net
- ☐ Predator Control for Ponds
- ☐ Additional Underlayment

Pump Model	Max Head Height	Application Head Height												
		0'	5'	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'	
SLD 2000-5000 Adjustable Flow	16.7'	5144	3769	2484	1256 GPH									
SLD 4000-7000 Adjustable Flow	25'	7126	6148	5044	3802	1957	GPH							
SLD 5000-9000 Adjustable Flow	33'	9574	8808	7742	6412	5069	3576	1355	GPH					
3-PL 3000 Solids-Handling	14'	3000		1700	0	GPH								
5-PL 5000 Solids-Handling	23'	5300		4500	3500	1800	0	GPH						
9-PL 7000 Solids-Handling	35'	7300		6400	5600	4900	4100	3000	0	GPH				
8-PN 5500 Solids-Handling	56'	5500			5200	4800	4300	3600	2800	2000	1200	600	0	
12-PN 10000 Solids-Handling	23'	10000	7600	4600	1500	0	GPH							

BEST Operating Zone

MAXIMUM Operating Zone

DO NOT Operate Zone

BEST Operating Zone

MAXIMUM Operating Zone

DO NOT Operate Zone

CALCULATIONS FOR A TYPICAL BACKYARD INSTALLATION

- **LINER** needed for **POND**: Max depth x 2 added to the max length and width of pond
- **LINER** needed for **STREAM**: 20' Stream or less, add 5'. If 20' or more, add 10'.
- Gallons per hour needed for waterfall width: **SHEET WATERFALL** = 1,500 gph/foot **HEAVY WHITE-WATER FLOW** = 3,000 gph/foot
- Total dynamic head for selecting proper **PUMP**: (Plumbing length ÷ 10) + number of 90° fittings + elevation = application head height
- Approximate flow through **FLEX PIPE**: 1.5" Flex = 2,200 gph 2" Flex = 4,800 gph 3" Flex = 11,500 gph
- Quantity of **BOULDERS** used in **POND**: Length x width ÷ 40 = tons of boulders. Use a 1:2:1 ratio when selecting different sizes: 1 Ton small 6"-12" \ 2 Ton med 12"-18" \ 1 Ton large 18"- 24". Repeat ratio until required tonnage is met for a 750 sq. ft. (or less) pond.
- Quantity of **GRAVEL** used in **POND**: Tons of pond boulders x .30 (or 30%) of ½" to 3" washed river gravel
- Quantity of **BOULDERS** used in **STREAM**: Every 10' of stream = 1 ½ ton using 1:2:1 ratio
- Quantity of **BOULDERS** used to frame the **BIOFALLS FILTER**: ¾ Ton for the 2500 model and 1 ton for the 6000 model
- Quantity of **GRAVEL** used in **STREAM**: Tons of stream boulders x .30 (or 30%) of ½" to 3" washed river gravel
- Quantity of **BOULDERS** for perimeter of **PONDLESS BASIN**: 1 Ton 6"-12" = 25' linear 1 Ton 12"-18" = 10' linear 1 Ton 18"-24" = 5' linear
- Approximate gallons of water in **POND**: (Length x width x average depth x 7.48) x 0.8 = approximate gallons
- Approximate gallons of water in **STREAM**: Length x width x .25 depth x 7.48 = approximate gallons
- Approximate gallons needed for **PONDLESS BASIN**: Store 2x the water in basin that's running through stream (see calculation above)
- To determine # of AquaBlox needed in **BASIN**: Stream gallons ÷ 17 if using small AquaBlox or 32 if using large AquaBlox
- AquaBlox Small Water Storage Module = 17 Gallons (dimensions 26.5"L x 16"W x 9.5"H)
- AquaBlox Large Water Storage Module = 32 Gallons (dimensions 26.5"L x 16"W x 17.5"H)
- Electrical Consumption: (Amps x volts ÷ 1000) x 24 hours x 30.4 days x kw per hour electrical rate = monthly cost