

# Water Feature Pump Data Worksheet

This worksheet will help you calculate the flow rate and total dynamic head in feet (TDH), to find the performance requirements for your water feature pump.

Complete worksheet then fax to 970.263.2277 or email to technicalsupport@munropump.com.

|          |          |                 |
|----------|----------|-----------------|
| Name:    | Company: | Phone:          |
| Address: |          | City/State/Zip: |

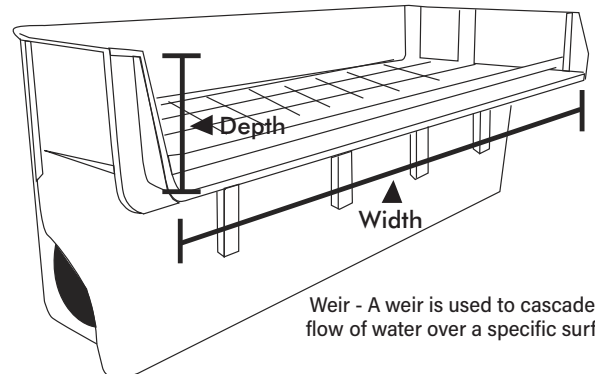
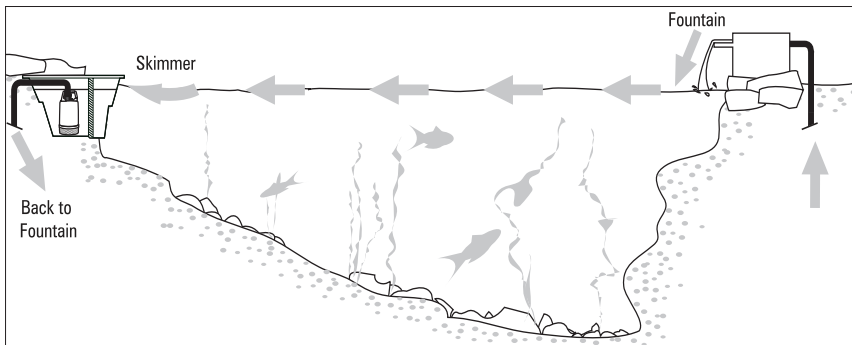
|                  |   |                        |
|------------------|---|------------------------|
| <b>Flow Rate</b> | <p><b>Pumping Requirements</b><br/>                 Determine flow rate required. Using the chart below, determine the discharge rate per foot based on the desired water flow depth. Multiply that number by the width of the weir.<br/>                 Desired flow depth _____ = Discharge rate per ft _____<br/>                 Discharge rate per ft _____ x weir width (in feet) _____ = _____ GPM x 60 = _____ GPH</p> | _____ GPM<br>_____ GPH |
|------------------|---|------------------------|

| <b>Water Flow Estimate Over A Weir</b> |                     |                                       |                     |                                       |                     |                                       |
|--|---------------------|---------------------------------------|---------------------|---------------------------------------|---------------------|---------------------------------------|
| Weir Chart                             | Flow Depth (inches) | Discharge Rate per foot of Weir Width | Flow Depth (inches) | Discharge Rate per foot of Weir Width | Flow Depth (inches) | Discharge Rate per foot of Weir Width |
|  | 1/2                 | 13                                    | 3                   | 187                                   | 6                   | 528                                   |
|  | 3/4                 | 24                                    | 3 1/2               | 236                                   | 6 1/2               | 596                                   |
|  | 1                   | 36                                    | 4                   | 287                                   | 7                   | 605                                   |
|  | 1 1/2               | 66                                    | 4 1/2               | 343                                   | 7 1/2               | 738                                   |
|  | 2                   | 102                                   | 5                   | 402                                   | 8                   | 814                                   |
|  | 2 1/2               | 142                                   | 5 1/2               | 463                                   | 8 1/2               | 890                                   |

|                                 |   |                                      |
|---------------------------------|---|--------------------------------------|
| <b>Total Dynamic Head (TDH)</b> | <p><b>Elevation</b><br/>                 a. Suction Lift<br/>                 When using a submersible pump, suction lift should be "0". When using a non-submersible pump, measure vertical distance from water level to pump inlet. (Total measurement in feet)<br/>                 b. Elevation Change<br/>                 To figure elevation, measure the vertical distance from the surface of water to the highest point of discharge. (Total measurement in feet)</p> | (a) _____ FEET<br><br>(a) _____ FEET |
|                                 | <p><b>Friction Loss</b><br/>                 Using GPM from above, consult friction loss chart (available on the Munro website or from your pipe manufacturer) to determine ideal pipe size (5' +/- 1'). Multiply loss per foot by (length of pipe/100).</p>  | _____ FEET                           |
|                                 | <p><b>PSI - Pounds Per Square Inch</b><br/>                 Determine the pressure required to run both the fountain head and/or pressure filters (refer to the manufacturer's specifications). PSI x 2.31 = HEAD IN FEET</p>   | _____ FEET                           |
|                                 | <p><b>Total Dynamic Head (TDH)</b><br/>                 Total the sum of elevation, friction loss and PSI. This total equals TDH in feet.</p>   | _____ TDH                            |

|              |   |   |   |
|--------------|---|---|---|
| <b>Misc.</b> | <p><b>Electrical</b><br/>                 Voltage: <input type="checkbox"/> 110 Volt <input type="checkbox"/> 220 Volt <input type="checkbox"/> 440 Volt<br/>                 Phase: <input type="checkbox"/> Single Phase <input type="checkbox"/> Three Phase</p> | <p><b>Filtration</b><br/>                 Gravity: <input type="checkbox"/> Waterfall <input type="checkbox"/> Skimmer<br/>                 Pressure: <input type="checkbox"/> Pressure <input type="checkbox"/> Sand</p> | Check manufacturer's specifications to determine PSI for filters. |
|--------------|---|---|---|

|                |                               |                                   |                                    |
|----------------|-------------------------------|-----------------------------------|------------------------------------|
| <b>Feature</b> | <input type="checkbox"/> Pond | <input type="checkbox"/> Fountain | <input type="checkbox"/> Pond-less |
|----------------|-------------------------------|-----------------------------------|------------------------------------|



Weir - A weir is used to cascade the flow of water over a specific surface.



1-800-942-4270  
 www.munropump.com