

## Reverse Q Pond Outlet

### *Product Note*

#### Description

The Lane Reverse Q (RQ) Pond Outlet provides the Design Engineer with the ability to draw the discharge from the best quality of water in the settling pond (the upper zone). In addition, by use of the unique Outlet Lever Arm, the discharge quantity is directly proportional to the inverse of the depth of the pond instead of being proportional to the depth. This allows the designer to delay the larger flows from the pond—until the majority of the other sources feeding downstream waterways have subsided. The RQ Pond Outlet improves downstream water quality by managing both the quantity and the quality of the pond discharge.



#### General Notes

- The RQ Pond Outlet is available in seven different sizes. The sizes are representative of the diameter of the PVC discharge pipe. In order to minimize the potential for clogging, the PVC discharge line should never be smaller than the orifice.
- The RQ Pond Outlet is designed to be used with either a straight pipe through the berm of the pond or attached to a riser structure. In either case, the RQ is supplied with the necessary flexible coupling that will allow for the connection to a smooth wall pipe outlet. The flexible couplings that are supplied for each of the various RQ sizes are as follow: 1.5" to 1.5", 2" to 2", 2.5" to 3", 3" to 3", 4" to 4", 5" to 5", 6" to 6" and 8" to 8".
- If an outlet other than the sizes listed above is used, field adaptation will be necessary. This can normally be done with flexible adapters or PVC adapters.
- The RQ Pond Outlet is designed to operate with the Outlet Lever Arm ranging from level (pond empty) to a 45° angle (pond full). The appropriate length of Schedule 40 PVC pipe should be used to accomplish the necessary outlet length.
- The Outlet Lever Arm is constructed from Schedule 40 PVC pipe and fittings.
- Long lengths of PVC pipe in the lever arm assembly can result in additional buoyancy. The RQ Pond Outlet is designed to function with the minimum and maximum depths as designed. If excessive buoyancy is an issue, extra weight can be added or new pivot holes can be drilled into the sides of the float body. Allowing the designer to correctly position the lever arm.
- A flexible hose near the bottom of the lever arm allows the RQ float body to rise and fall with the level of the water in the pond.
- A complete list of lever arm parts is available for each size of RQ Pond Outlet.
- Each RQ Pond Outlet is supplied with three ¼" HDPE orifice plates. A plug cutter (included) is to be used to size the orifice, as indicated by the RQ sizing program. The extra orifice plates can be used if the RQ Pond Outlet is moved to a different location.