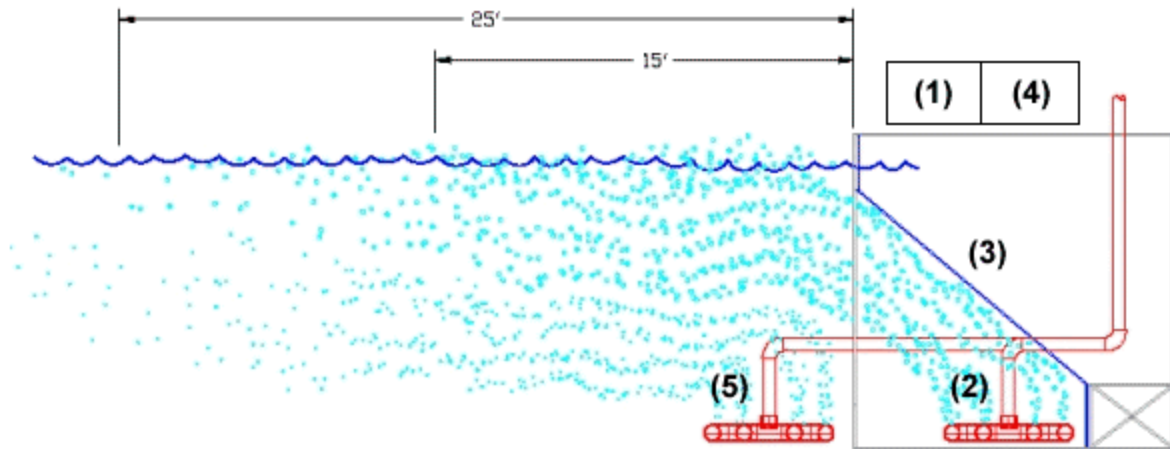


The **RELIANT** Systems Model WQA De-stratification and Aeration System

HOW DOES IT DELIVER DISSOLVED OXYGEN TO THE FISH?



The key, and patented, elements of the WQA is its two regenerative blowers, each connected to a set of bubble forming diffuser grids. The Phase 1 blower **(1)** runs 24 hours per day and feeds the rear-most diffuser grid **(2)** which allows large 1-2 cm. bubbles to rise quickly into a 45° baffle **(3)**, pushing water at a velocity capable of moving over 9 million gallons of water per day. These large bubbles stay on the surface for up to 25' in front of the WQA. When the Phase 2 blower **(4)** is initiated, either manually or automatically, it feeds air to the industrial diffuser grid **(5)** located forward of the base of the WQA. The bubbles emitted out of the diffusers are approximately 1 mm in diameter. These small bubbles are kept underwater for up to 20' due to their inability to rise above the larger, faster and horizontally moving bubbles. The 20' of residence time for the small bubbles at, 1 atmosphere of pressure, allows for diffusion into the water, providing the fish with fresh dissolved oxygen.