Aqua Systems 2000 has developed a floating dock trash deflector that can be a cost-effective addition to tools for managing and disposal of water weeds, algae and other debris that floats down canals and interferes with water management. A large percentage of the debris in a canal is floating on the surface or suspended in the top two or three feet of depth. The floating dock and screen positioned at an angle across the canal effectively redirects this debris with virtually no effect on the normal water flow in the canal. Removing or diverting this debris from the canal can have major benefits to other downstream screening devices and water users.

Plan A: SMRID East Lateral

Over the past years, Aqua Systems 2000, with assistance from St. Mary River Irrigation District and Scottco Marine, has been testing a prototype of the floating dock and screen to collect and/or direct floating debris in a canal. Multiple docks can be linked together if necessary to increase the length of the deflector. The deflector, when used in conjunction with one of our In-Line Trash racks, can be used to remove debris from the canal.

Plan B: Deflecting trash towards In-Line Trash Rack

Initial testing has shown that a relatively fine screen of wedge wire stays cleaner than any other surface tested. Water weeds and large “islands” of algae and debris tend to deflect with very little material stopping on the screen. Smaller formations of algae tend to adhere loosely to the screen and require periodic sweeping with a simple lawn grass rake. Alternatively, a solid plate deflector may be used if there is sufficient area under the deflector for minimal flow disturbance. Solid plate deflectors require less maintenance as cleaning is not required.