



Fast Facts

Customer

National Center for
Mariculture (NMC) in Israel

Application

Custom-engineered waste
water treatment plant for fish
farm water recycling and
discharge to the sea

Capacity

100 tons fish production/yr
12 inland ponds

Fish Farm Water Treatment Solutions

Background

Inland fisheries have proven to be the most cost effective and environmentally friendly method for growing large volumes of fish for human consumption. It is of the utmost importance to ensure that these fish ponds are not polluting local water sources with high nitrogen and nutrient loads as well as solids. Around the world, discharge regulations are becoming more stringent as environmental awareness increases. Recycling the water from the fish ponds is another critical issue for the industry. Atlanta Pure Water has risen to the challenge with innovative, low energy consumption, and cost-effective water filtration solutions designed to meet even the most stringent discharge requirements with advanced water recycling capabilities.

Problem

The National Center for Mariculture (NMC) in Israel focuses on developing technologies for rearing marine fish and other marine species having substantial economic value. NMC set up a pilot project of 12 inland ponds on a semi-commercial scale of 100 tons of fish per year in southern Israel near the Red Sea. This method of growing fish will substantially reduce the environmental impact in comparison with fish farms located in the sea. In order to protect the local coral reefs, it is critical to properly filter the excessive nutrients and solids in the discharge water from these ponds before returning the water to the sea. In this case, the local codes would only allow permitting if a filtration solution is installed that meets their stringent discharge requirements.

Solution

Atlanta Pure Water worked in conjunction with NMC in order to custom design a water filtration solution for this fish farm which allows the sea water to be recycled and the discharge water to meet and exceed all local requirements. This environmentally-friendly solution filters the solids and removes the nitrogen and other nutrients using patented technology. Additionally, the Mega-Flow system of fish growing used for this project in conjunction with Atlanta Pure Water filter technology allows for larger fish size in a smaller space and a reduced production cost. The filtration solution recycles much of the water which dramatically reduces the volume of water required and discharge to the sea. The installation is a great success, a low energy consumption system with a small footprint that solves a major industry challenge.



Atlanta Pure Water

Case Study: Fish Farm Aquarecycle and Discharge Filtration