

Farm for Breeding Sturgeon Fish for Caviar

Project Description

- Design and construction of advanced systems for water recirculation and treatment
- Design and construction of water heating and temperature control systems. Design of a hatchery-breeding complex
- Design and construction of a system for removal and treatment of organic matter
- Design and construction of systems for introducing atmospheric oxygen in the water

Design of a fish farm on the shores of the Caspian Sea using an open Flow Through system.

Design of a hatchery-breeding complex based a closed RAS (Recirculation Aquaculture System) for super-intensive growing of sturgeon fish.

The farm is designed to produce about 200 tons of fish meat and 10 tons of caviar annually.

The farm includes a breeding complex producing fingerlings throughout the year as well as intensive aquaculture facilities with high densities in 60 grow-out ponds operating year round.

Among other things, the following components were designed and constructed:

- Advanced systems for treatment and recirculation of water using innovative mechanical and biological filters
- Systems for dissolving atmospheric oxygen in the water
- Systems for removal and treatment of organic matter
- Heating systems
- Systems for control of optimal water temperature throughout the year

All systems, including electrical and control systems, were designed in full by Palgey Maim's Aquaculture Department. All aquaculture facilities were designed and built to suit the culture of different varieties of cultivable fish (universal facilities).

The project is bureaucratically complex, requiring many local permits and regulations. Palgey Maim, in partnership with Almag Ltd., ensured that all approvals – construction, regulatory and environmental – were obtained in accordance with the stringent demands of local standards.

Additional solutions provided by us include:

- A complex installation consisting of a pumping station on the shore of the Caspian Sea. We designed and installed a seawater intake about one kilometre offshore delivering clear, cool water to the farm on the shore.
- Supply of modern equipment for collecting, sorting and transferring the fish inside the farm
- Biological treatment of effluent water by means of wetlands

Project details:

Country: Azerbaijan

Start date: March 2018

Location: Neftchala

Completion date: December 2019

Principal project activities:

- Design and construction of a fish farm
- Design of a hatchery-breeding complex
- Training in farm operation and fish culture management
- Adaptation of aquaculture biotechnology to sturgeon fish production

Name of the client: Lu Mun

Contact person: Ramy Alon

Photos

Start of work

Laying the fishpond lining

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