

## **Loading Terminal for Manavgat River Water Export**

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### **Abstract**

The Turkish Government State Hydraulic Works (DSI - Devlet Su İşleri Genel Müdürlüğü) have decided the construction of a facility, called Manavgat River Water Supply Project, for export of fresh and purified water by ships. The water is taken from the Manavgat River and transported overland by pipelines to the shore of the Mediterranean Sea near the town of Manavgat.

The water is then transported through four 48" pipelines for about 2.5 to 3.0 kms offshore and loaded through two Single Point Mooring Systems (Buoys) onto water tanker for export. This is the first project in the world where water is forwarded to 80 m below sea surface, transferred through subsea hoses and loaded via CALM-Buoys to ships for export to countries in the Mediterranean Sea area and possible elsewhere.

This paper will also describe the difficult site conditions where seabed slopes in excess of 35° were measured during the site investigations.

The future development of such economical solution for water loading and offloading is given as a conclusion.