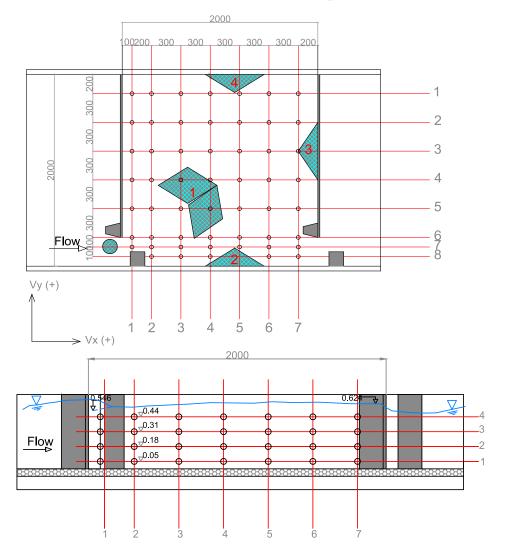


Flow and turbulence structure in a vertical slot—brush fish pass

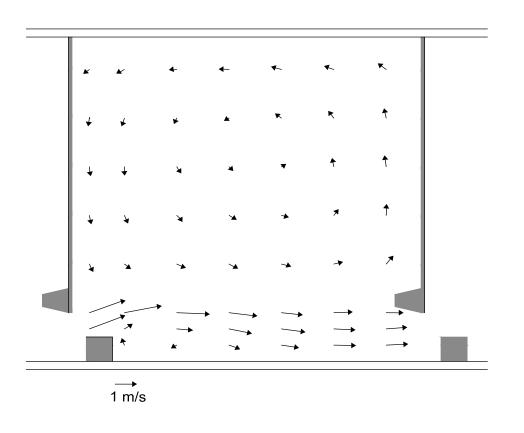


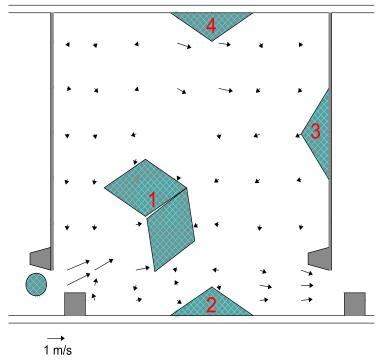
## **Physical Model**





## Flow Field at z/d=0.32



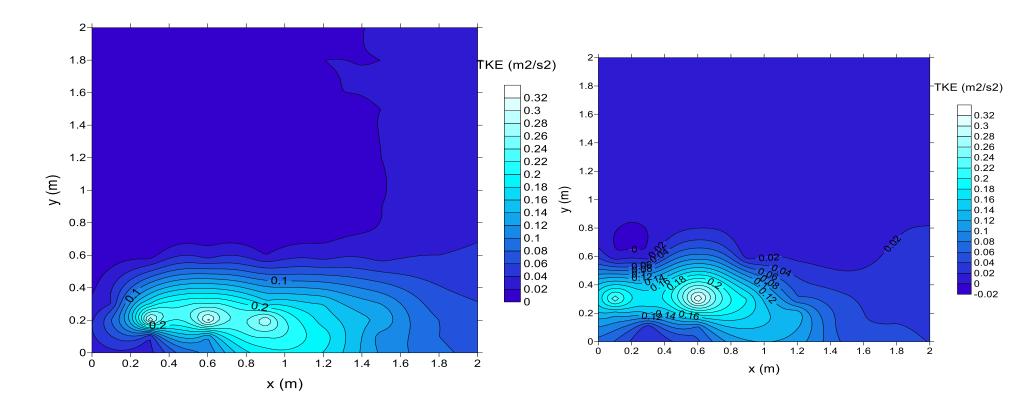


**Without Bristles** 

With Bristles

## Turbulent Kinetic Energy Distribution

The flow-bristle interaction leads 17% reduction in spatially averaged turbulence kinetic energy



**Without Brushes** 

With Brushes

## Pilot Project in Çataloluk, Turkey



