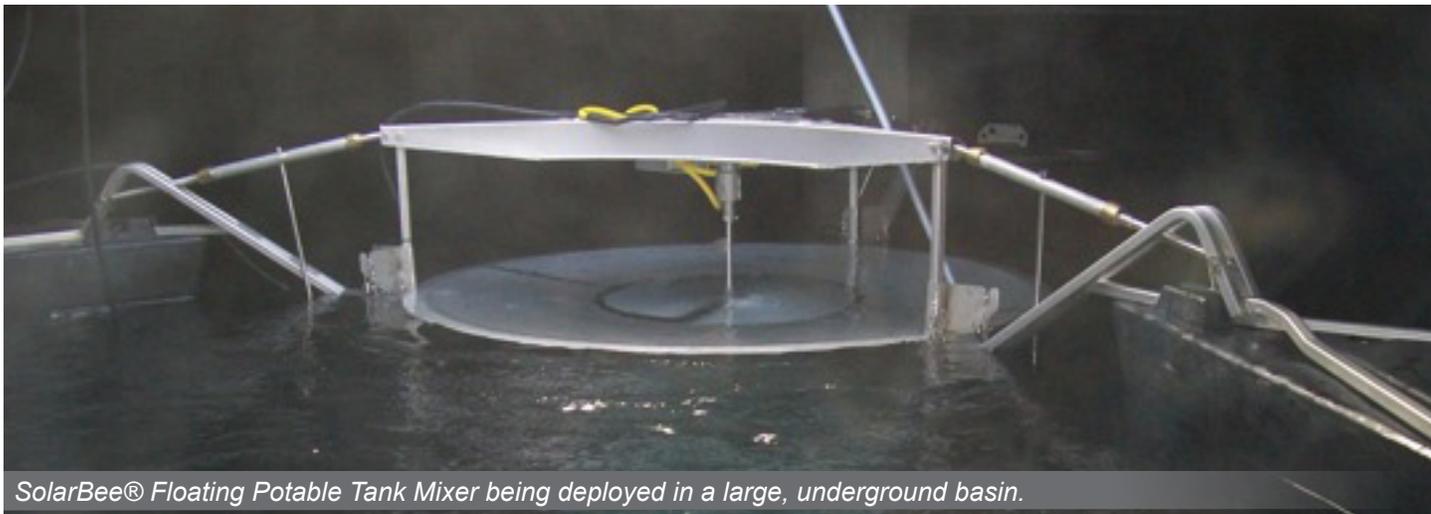


# Active Mixing In A 19MG & 27MG Storage Basin

**Topics:** potable water storage tanks, stratification/water age, short-circuiting, chlorine, treatment savings, economic



*SolarBee® Floating Potable Tank Mixer being deployed in a large, underground basin.*

## **Location & Contact Information:**

Further information may be available upon request. Please contact Medora Corporation by phone at 866-437-8076 or by e-mail, [info@medoraco.com](mailto:info@medoraco.com)

**System Overview:** This is one of 40+ underground potable water storage reservoirs in this system.

**Disinfectant Type:** Chlorine

**Reservoir Build Information:** This reservoir consists of two basins.

### **North Basin**

Volume (gallons): 27MG  
Reservoir Height (feet): 26

### **South Basin**

Volume (gallons): 19MG  
Reservoir Height (feet): 26

**Pre-Deployment Conditions:** This location had experimented with high-horsepower submersible banana-blade mixers in the past. They found them to have extensive maintenance requirements associated with corrosion through the motor housing & gearbox.

**Project Objectives:** Thoroughly mix entire volume of each basin to eliminate thermal stratification, stagnant water conditions, short-circuiting and to provide a uniform 2-3 day water age.

**Solution:** Two (2) SolarBee® Floating Potable Tank Mixers were deployed March 2004, one (1) in each basin of the reservoir.

**Results:** Complete top to bottom active mixing resulted in a significant reduction in the amount of chlorine needed for boosting from 1,000 gallons per month down to ~200. Thermal stratification has been eliminated and water age is now consistent throughout the water column.

**Update (2019):** With over 40 Medora mixers installed, the Customer continues to add Medora Corporation potable mixing equipment to their existing storage reservoirs as well as specifying “Medora mixers” in their new and future projects.

**Goldstar Safety Comment:** “[Medora Corporation] has the best installation and safety procedures in place of any vendor we have ever seen. Your crews are way above any vendor! We are very happy with the units. Your technology is ahead of everyone.” RQ