



Drought-stricken Lake Arrowhead in Texas was coated with a film that reduced evaporation by up to 15%.

LARRY SMITH/EPA/CORBIS

Water Development Board suggested that the results were promising, but not conclusive (see go.nature.com/zrcozd). Compared with a similar reservoir nearby, the treated reservoir lost an estimated 15% less water to evaporation. But the analysis could not attribute all of that difference to the coating, because it did not account for variables such as stream inflows and seepage outflows. The coating probably helped, says Mark Wentzel, a hydrologist for the Texas Water Development Board and co-author of the report, but "I wouldn't stake my life on it."

Alamaro suggests that a more aggressive technological approach is needed. Radar

instruments carried on a blimp or drone could reveal where the reservoir's coating has broken up, he says, by sensing the way that it dampens ripples on the water. More coating can be added when and where it is needed, potentially cutting evaporation by 70%, he estimates.

Alamaro has founded a company, More Aqua in Cambridge, Massachusetts, that is trying to develop a system of diffusers and skimmers to keep a body of water thoroughly and continuously covered.

The company is planning its own pilot test near Palo Alto, California, this summer using its own coating. It plans to offer its services in exchange for owning the water that it saves, and to sell that on the open market in the state, where the cost of water for irrigation can exceed \$1,000 per acre-foot (1,233 cubic metres).

Assuming evaporation savings of 15%, says Daniel O'Brien, president of Flexible Solutions, the \$160 cost of saving one acre-foot of water with the coating compares favourably with a Texas market price of \$345–700 per acre-foot of water.

Water consultant William Mullican of Lubbock, Texas, who is retired from the Texas water board, says that although the Lake Arrowhead results were unclear, this is also often the case in field tests of other watersparing techniques such as cloud seeding and cutting back brush to keep it from sucking moisture from the soil.

Given the Texas test's promising result and the fact that the ongoing drought in the state is severe, he says, there is every reason to try the technique out again, "unless it starts raining".

## **CORRECTION**

The News Feature 'The painful truth' (*Nature* **518**, 474–476; 2015) omitted Marks' first name and affiliation. Donald Marks is the co-founder and chief science officer of Millennium Magnetic Technologies.