

2010 WaterSmart Business Program
Award Recipient – Platinum Level
Alcoa Fastening Systems

Alcoa implemented its Water Management Plan with the following steps:

- ◆ Recycles water in plating process
- ◆ Uses Counter Current Cascade Rinse System
(cleanest tank is last tank; fresh water used in cleanest rinse only)
- ◆ Removed lawn and refurbished irrigation
 - ◆ Installed waterless urinals
- ◆ Replaced old toilets with 1.6 gpf models
 - ◆ Installed 1 gpm faucet aerators
 - ◆ Replaced old cooling towers
- ◆ Achieved 33% savings in water usage



Tucson Water's Conservation Office contacted Alcoa in early 2011 to get an update on how conservation practices continue as part of its operation. John Barr, Environmental, Health and Safety Manager, said that water use in 2010 versus 2009 was down some, but that may have had more to do with the overall business downturn. However, the company is still planning a number of improvements.

“The biggest planned improvement is replacement of our old reverse osmosis system which is not very efficient and accounts for approximately 16% of our total annual water use,” said Barr. “We are still in the early planning stages so it is difficult to gauge the savings. Anticipated costs are in the \$40,000 to \$50,000 range which hasn't been approved yet. Alcoa is also looking at upgrading its irrigation controller and making some other smaller improvements like dual flush handles on toilets in the facility.”