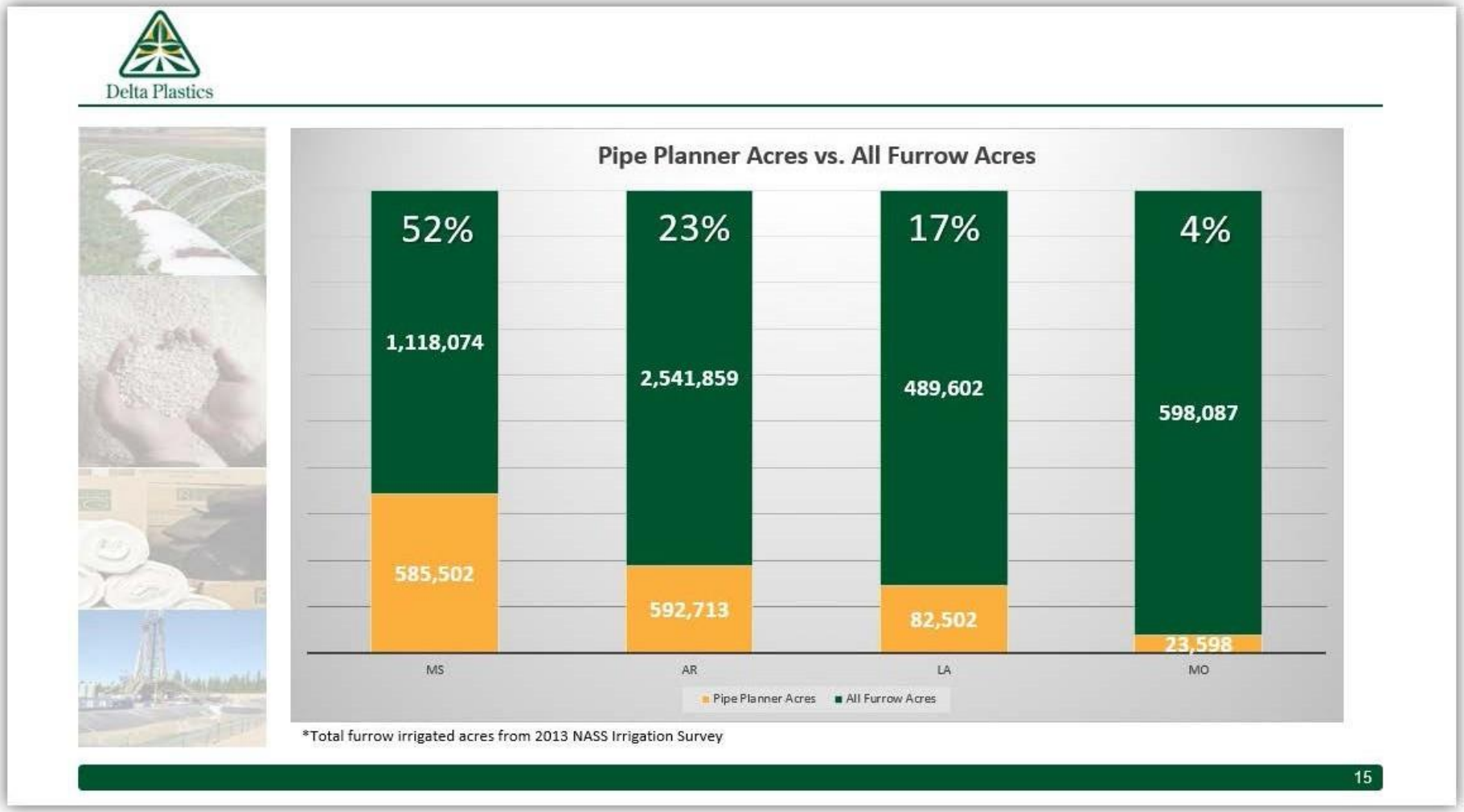
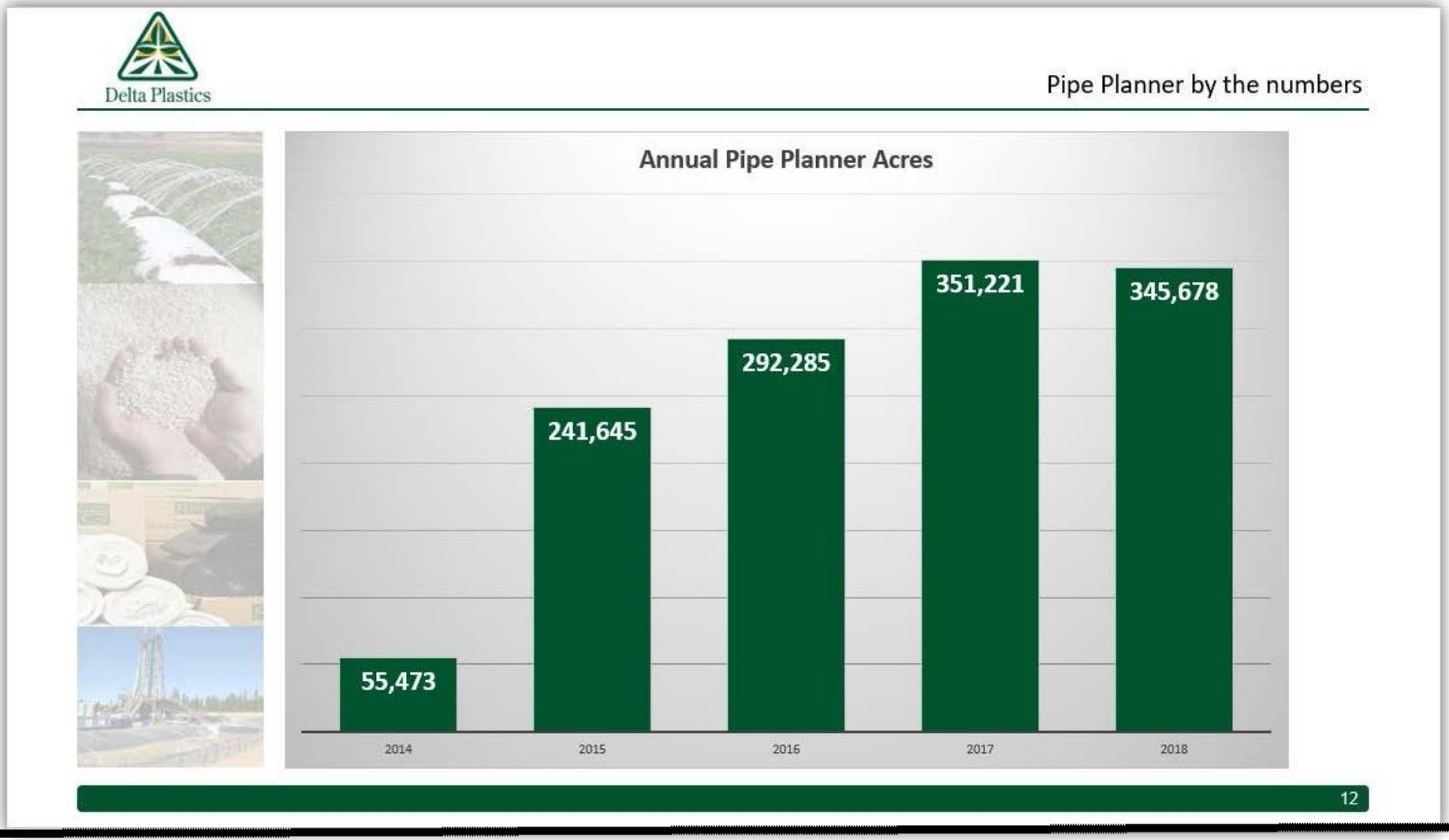
UPDATE ON PIPE PLANNER USE TO CONSERVE IRRIGATION WATER IN THE MIDSOUTH

Most entities in the Midsouth promote three main tools (PHAUCET/Pipe Planner, soil moisture sensors, surge valves) to reduce the amount of water withdrawn from the Mississippi River Valler Alluvial Aquifer (MRVAA) to irrigate crops in the region. The following is a report on the adoption of Pipe Planner in the region over the last five years (data provided by Matt Lindsey of Delta Plastics).

Mississippi State University studies show Pipe Planner Saves $10/acre on square or regular fields and twice that on irregular shaped fields. There is no charge for the program and farmers can create their own account at www.pipeplanner.com. Instructional information is available on the internet through www.h20initiative.com and www.Youtube.com (search Pipe Planner). Subscribe to receive notifications of updates.



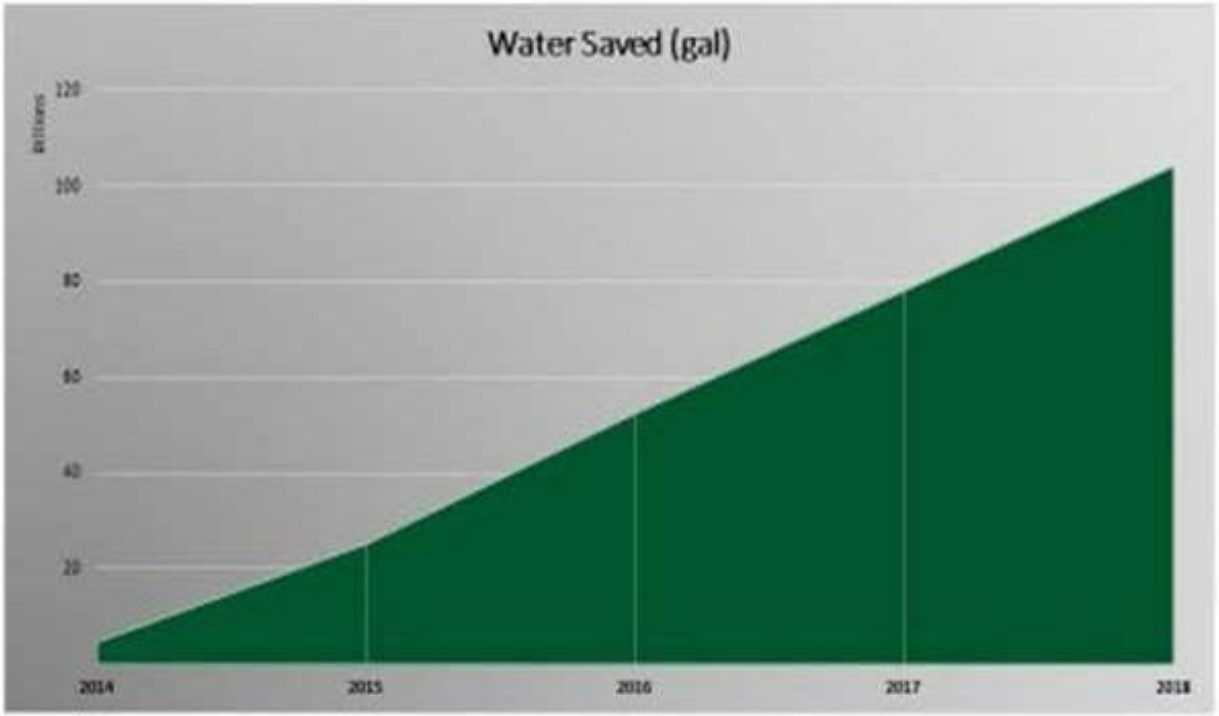
Recent data from Delta Plastics, the proprietor of Pipe Planner (the free irrigation software), shows a slightly downward tick in acres in 2018. Does this mean irrigators are less concerned about preserving water for the next generations? Or does it mean that all parties, both public and private, must increase their efforts to educate producers that this tool should be adopted on a majority of irrigated acres to assist in the conservation of water needed to curtail the overdraft from the MRVAA?



No matter the concern, use of Pipe Planner has done some good…a lot of good. But the above numbers show there is much left to be done if the amount of water withdrawn from the MRVAA is curtailed in an amount that will be required to prevent its overdraft in the coming years.

Delta Plastics

Pipe Planner by the numbers



Assumptions:

*Weighted-mean irrigation use for rice, soybean, corn, and cotton = 4,200 m^3/ha = 449,248 gallons irrigation water per acre (Massey et al., 2017).

*Average irrigation savings associated with Pipe Planner = 20% (Krutz and Roach, 2016).

Example, annual water savings attributable to Pipe Planner use for 2014:

449,248 gallons irrigation/acre x 0.2 (irrigation savings) = 89,850 gallons irrigation water saved per acre.

53,373 acres x 89,850 gallons saved/acre = 4,795,564,050 gallons saved in 2014.

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