

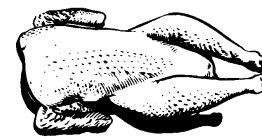


The University of Georgia

**Cooperative Extension Service**

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## **PROCESSING TIP . . .**

### **EFFICIENT USE OF WATER IN PROCESSING CAN INCREASE THE PROFITABILITY OF A PROCESSING PLANT**

The following table would be the daily water cost of a plant processing 250,000 birds per day.

	<b>GALLONS/BIRD</b>			
	5.0	6.0	7.0	8.0
<b>\$/1,000 GAL.</b>				
4.00	\$5,000*	\$6,000	\$7,000	\$8,000
5.00	\$6,250	\$7,500	\$8,750	\$10,000
6.00	\$7,500	\$9,000	\$10,500	\$12,000
7.00	\$8,750	\$10,500	\$12,250	\$14,000
* dollars per day				

This table points out that efficient water use can increase the profits. A processor using 5.0 gallons per bird in a low water cost area will have more than a \$2 million per year profit advantage over one that uses 8 gallons per bird in a high cost area.

#### **Water Reduction Tips**

1. Reduce incoming line pressure. If line pressure into your plant is in 90 psi range it can be reduced to 40-50 psi using a pressure regulator. One processing plant that reduced water pressure from 90 psi to 40 psi reduced water use by 0.6 gallons per bird. From the

#### **PUTTING KNOWLEDGE TO WORK**

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table, the high water use plant in the high cost area would save \$310,000 per year by reducing water pressure into the plant by this much.

2. Use efficient nozzles. The use of properly sized nozzles and maintaining them can save water. An assessment of water use by final bird washers in one plant showed that the annual water cost among the 5 washers varied from \$5,500 to \$23,000 per year. Worn nozzles that use excessive water should be replaced. When nozzles are broken off a piece of equipment, they should be reinstalled.
3. Repair leaks. Small leaks that run constantly can use an amazing amount of water in a year. A leak stream about one half the diameter of a lead pencil will deliver one quart per minute. Since leaks run 24/7, they cost a lot over a year. A one quart per minute leak will use 130,000 gallons of water per year, more than \$1,000 per year for a processor in a high water cost area.



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“Your local County Extension Agent is a source of more information on this subject.”