

## Firm Raw Water Rates

The firm raw water rate is designed to cover the operating and capital costs associated with LCRA's various river management responsibilities, and it does not include any costs attributable to LCRA's operations of water and wastewater utilities, hydroelectric or agricultural irrigation systems. The river management responsibilities supported by the firm raw water rate include the control, sale, and preservation of the waters of the lower Colorado River and its tributaries. Specifically, included in the firm raw water rate are the direct operating and overhead expenses of Water Resource Management and other services that support river management responsibilities, as well as capital related expenditures attributable to this operating unit. The firm raw water rate funds three primary goals for LCRA's water customers: manage and protect the water resources to meet the needs of communities and the environment in the Colorado River basin; reduce the risk of loss of life and property caused by flooding in the lower Colorado River basin; and protect the water quality of the Colorado River. Below is the schedule of firm water rates:

### Schedule of Firm Water Rates

Year	Use Rate	Reservation Rate	Inverted Block Rate
2000	\$105/af	\$52.50/af	\$199.50/af
2005	\$115/af	\$57.50/af	\$218.50/af
2007	\$126/af	\$63.00/af	\$239.40/af
2009	\$138/af	\$69.00/af	\$262.20/af
2011	\$151/af	\$75.50/af	\$302.00/af

For more information on firm water rates see the "Firm Raw Water Rate Study FY2011" at [http://www.lcra.org/library/media/public/docs/water/water\\_rate\\_study-final.pdf](http://www.lcra.org/library/media/public/docs/water/water_rate_study-final.pdf).

LCRA has a few firm water customers who are not subject to these standard rates. The City of Austin has pre-paid reservation and use fees for the LCRA water it currently diverts for municipal purposes. When Austin resumes payments for additional use under the terms of its contract with LCRA, it will be subject to LCRA's standard rates. In addition, the South Texas Project Nuclear Operating Company currently diverts water from a water right jointly owned by LCRA and STPNOC, backed up by firm water from LCRA. STPNOC pays a different rate for water it diverts, pursuant to a contract that dates back to the mid-1970s, but has never taken stored water to date.

## Irrigation Water Rates

### Background

LCRA's customers in the Lakeside and Gulf Coast Irrigation Divisions pay LCRA for water that is released from storage in the Highland Lakes on an interruptible basis, and is referred to as "interruptible stored water". Water that is diverted under LCRA's water rights related to that or "run-of-river" water is not charged to the customer. The customers receive the benefit of the water right associated with each irrigation division. The amount of stored water made available from the Highland Lakes varies from year-to-year. Prior to 1989, irrigation customers were not charged for water released from storage. The terms of the 1999 Garwood purchase contract prohibits LCRA from charging for water that is released from storage in the Highland Lakes.

In addition to any charges for water, customers in the Irrigation Divisions pay for the operating costs of running the canal system that makes delivery of all of the water, both interruptible stored water and run-of-river water. Customers in the Lakeside and Gulf Coast divisions pay a base charge and a volume charge while the Garwood customers pay only a base charge. Under the Pierce Ranch water right purchase agreement, LCRA provides Pierce Ranch water without charge up to an annual amount of 20,000 acre-feet of water based on a five-year rolling average with a 30,000 acre-feet maximum in any one year. Water diverted above these amounts is charged at the interruptible water rate.

### Rate Design

The basic rate design of the Lakeside and Gulf Coast Divisions for rice includes a base rate (based on the number of acres irrigated) and a diversion rate (based on volumetric measurements) of actual water diverted from the LCRA canal system near the tract where water is used. The base rate is designed to cover fixed costs, primarily labor, materials, outside services, overheads, debt service, reserve requirements and cash-funded capital. The diversion rate is designed to cover variable costs, primarily the substantial electric costs of operating the pumps, as well as transportation and other costs. The charge for stored water is included in the diversion rate based on an historical analysis of the amount of water used from storage as compared to “run of the river” water. The rate is higher for second crop because historically more water is used from storage during second crop. This rate design was developed in the early 1990’s and each rate component has been incrementally increased by certain percentages since that time. For Garwood, because volumetric measurement has not yet been implemented, only a flat rate per acre irrigated is paid. This rate design is based on the rates in place when LCRA acquired the system and will be modified once water measurement is implemented in Garwood in 2012.

In 2008, the Board approved a five year rate plan to increase irrigation rates 4 percent per year. This plan ends in 2013. The stored water rate charged to irrigation customers increases at the same percentage as firm water customers. The last increase being a 9.5 percent increase in 2009. Below is the current schedule of irrigation rates.

## Schedule of LCRA Irrigation Rates

<u>Calendar Year</u>	<u>Units</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
<b>Lakeside District</b>										
Rice Base	acre	\$47.60	\$50.46	\$53.48	\$56.69	\$58.96	\$61.31	\$63.77	\$66.32	\$68.97
Diversion	acre-feet	\$10.36	\$10.98	\$11.64	\$12.34	\$12.83	\$13.35	\$13.88	\$14.43	\$15.01
*First Crop Stored Water	acre-feet	\$1.04	\$1.04	\$1.14	\$1.14	\$1.25	\$1.25	\$1.37	\$1.37	\$1.50
*Second Crop Stored Water	acre-feet	\$3.39	\$3.39	\$3.72	\$3.72	\$4.07	\$4.07	\$4.46	\$4.46	\$4.88
<b>Gulf Coast District</b>										
Rice Base	acre	\$39.20	\$41.55	\$44.05	\$46.69	\$48.56	\$50.50	\$52.52	\$54.62	\$56.81
Diversion	acre-feet	\$8.96	\$9.50	\$10.07	\$10.67	\$11.10	\$11.55	\$12.01	\$12.49	\$12.99
*First Crop Stored Water	acre-feet	\$0.99	\$0.99	\$1.00	\$1.00	\$1.18	\$1.18	\$1.29	\$1.29	\$1.42
*Second Crop Stored Water	acre-feet	\$2.19	\$2.19	\$2.40	\$2.40	\$2.63	\$2.63	\$2.88	\$2.88	\$3.15
<b>Garwood District</b>										
First Crop One Lift	acre	\$69.00	\$73.14	\$77.53	\$82.18	\$85.47	\$88.89	\$92.44	\$96.14	\$99.99
First Crop Two Lift	acre	\$72.00	\$76.32	\$80.90	\$85.75	\$89.18	\$92.75	\$96.46	\$100.32	\$104.33
Second Crop One Lift	acre	\$19.00	\$20.14	\$21.35	\$22.63	\$23.54	\$24.48	\$25.46	\$26.48	\$27.53
Second Crop Two Lift	acre	\$21.00	\$22.26	\$23.60	\$25.01	\$26.02	\$27.06	\$28.14	\$29.27	\$30.44
One Lift Flush	acre	\$5.50	\$5.83	\$6.18	\$6.55	\$6.81	\$7.09	\$7.37	\$7.66	\$7.97
Two Lift Flush	acre	\$6.00	\$6.36	\$6.74	\$7.15	\$7.43	\$7.73	\$8.04	\$8.36	\$8.69

## LAKESIDE IRRIGATION CUSTOMER REVENUE EXAMPLE

### Assumptions:

Acreage = 100

First Crop Water Use = 2.4 acre-ft per acre

Second Crop Water Use = 1.2 acre-ft per acre

### 2010 Rates

Rice Base Charge per acre = \$61.31

Diversion Volume Charge per acre-ft = \$13.35

First Crop Stored Water Charge per acre-ft = \$1.25

Second Crop Stored Water Charge per acre-ft = \$4.07

### Revenue Calculation

Base Charge:  $100 * \$61.31$  = \$6,131.00

Diversion Volume Charge:  $100 * 3.6 * \$13.35$  = \$4,806.00

First Crop Stored Water Charge:  $100 * 2.4 * \$1.25$  = \$300.00

Second Crop Stored Water Charge:  $100 * 1.2 * \$4.07$  = \$488.40

TOTAL REVENUE = \$11,725.40

PER ACRE = \$117.25

PER ACRE-FT = \$32.37

Note 1: The Stored Water Charges are applied to the Stored Water cost of service.

Note 2: Farmers pay only for water released from storage. The first Crop stored water charge calculation assumes on average 21% of water used is from storage. The interruptible stored water rate is \$5.91 therefore the first crop stored water calculation is:  $\$5.91 * 21\% = \$1.25$ . For second crop the assumption is that 69% of water is from storage therefore the second crop stored water calculation is:  $\$5.91 * 69\% = \$4.07$ .