

# RECLAMATION

*Managing Water in the West*

**Central Valley Project**

**Improvement Act –**

**Restoration Fund (CVPRF)**

**Forecasting**



U.S. Department of the Interior  
Bureau of Reclamation

# Determining Power Forecast

## Components -

- **Restoration charge for Irrigation & M&I**
- **Project acre-feet for water deliveries**
- **Project receipts for Irrigation & M&I**
- **Calculate amount due from WAPA**

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# Restoration Charge for Irrigation & M&I

Determine charge amount for Irrigation and Municipal & Industrial water:  
(example using FY 2012)

CPIU – Oct 1992 (FY 1993)	141.8	Actual figure
CPIU – Oct 2010 (FY 2012)	223.417	Projected figure
Index rate *	1.5756	Projected figure

\* Index rate is used with 1992 figures to compute current restoration charge.

		FY 1992 Actual Charge	FY 2012		FY 2012 Projected Charge
Restoration charge per acre-feet:	IRR	\$ 6.00	9.4536	Round to 9.45	\$ 9.45
	M&I	\$ 12.00	18.9072	Round to 18.91	\$ 18.91

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# Project acre-feet for Water Deliveries

Fiscal Year	Irrigation Acre-Feet	M&I Acre-Feet	TOTAL Acre-Feet
2002	2,362,643	399,914	2,762,557
2003	2,519,830	317,882	2,837,712
2004	2,623,670	388,436	3,012,106
2005	2,765,968	342,698	3,108,666
2006	2,864,883	413,771	3,278,654
2007	2,529,170	337,894	2,867,064
2008	1,388,444	438,154	1,826,598
2009	1,343,104	330,043	1,673,147
Mean	2,299,714	371,099	
Std Dev (-1)	1,703,016	326,578	
Std Dev (+1)	2,896,412	415,620	

**Calculate acre-feet based on actual restoration receipts for fiscal year 2002 through 2009. Calculate standard deviation for acre-feet.**

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# Project Receipts for Irrigation & M&I

With the charge amount calculated and the projected acre-feet determined, projected receipts can be determined for water contractors.

Irrigation example (low acre-feet, increased power payment) –

$$((1,703,016 \times \$9.29) \times 28\%) + ((1,703,016 \times \$9.45) \times 72\%) = \$16,017,206$$

Municipal & Industrial example (low acre-feet, increased power payment) –

$$((326,578 \times \$18.59) \times 28\%) + ((326,578 \times \$18.91) \times 72\%) = \$ 6,146,329$$

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# Calculate Amount due from WAPA

Fiscal Year	Range of possible receipts for Restoration Charge						Total Restoration Receipts
	Irrigation Receipts		M&I Receipts		Power Receipts		
2012	\$ 16,017,206	\$ 27,241,334	\$ 6,146,329	\$ 7,822,135	\$ 32,803,465	\$ 19,903,531	\$ 54,967,000
2013	\$ 16,326,474	\$ 27,767,323	\$ 6,264,942	\$ 7,973,088	\$ 14,500,584	\$ 1,351,590	\$ 37,092,000
2014	\$ 16,662,309	\$ 28,338,495	\$ 6,389,041	\$ 8,131,023	\$ 29,457,650	\$ 16,039,482	\$ 52,509,000
2015	\$ 16,990,650	\$ 28,896,923	\$ 6,515,492	\$ 8,291,951	\$ 34,825,858	\$ 21,143,125	\$ 58,332,000
2016	\$ 17,326,485	\$ 29,468,096	\$ 6,647,561	\$ 8,460,028	\$ 15,387,955	\$ 1,433,876	\$ 39,362,000

**Power receipts = Total Restoration Receipts less IRR & M&I receipts**

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