Nuveen California Municipal Value Fund 2 Form N-Q July 29, 2011

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM N-O

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-22272

Nuveen California Municipal Value Fund 2 (Exact name of registrant as specified in charter)

Nuveen Investments 333 West Wacker Drive, Chicago, Illinois 60606 (Address of principal executive offices) (Zip code)

Kevin J. McCarthy
Vice President and Secretary
333 West Wacker Drive, Chicago, Illinois 60606
(Name and address of agent for service)

Registrant's telephone number, including area code: 312-917-7700

Date of fiscal year end: 2/28

Date of reporting period: 5/31/11

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (§§ 239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after the close of the first and third fiscal quarters, pursuant to rule 30b1-5 under the Investment Company Act of 1940 (17 CFR 270.30b1-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. § 3507.

Item 1. Schedule of Investments

Portfolio of Investments (Unaudited) Nuveen California Municipal Value Fund 2 (NCB) May 31, 2011

		May 31, 2011			
A	ncipal mount		Optional Call Provisions		
(000)		Description (1)	(2) Ratings (3) Value		
\$	3,500	Consumer Staples – 4.3% (4.4% of Total Investments) Tobacco Securitization Authority of Northern California, Tobacco Settlement Asset-Backed Bonds, Series 2005A-1, 5.500%, 6/01/45	6/15 at 100.00	Baa3	\$ 2,187,185
	500	Education and Civic Organizations – 9.1% (9.2% of Total Investments) California Educational Facilities Authority, Revenue Bonds, University of Redlands, Series 2005A, 5.000%, 10/01/25	10/15 at 100.00	A3	501,220
		California Educational Facilities Authority, Revenue Bonds,	11/19 at		
	2,000	University of the Pacific, Series 2009, 5.500%, 11/01/39	100.00	A2	2,011,540
	1,965	California State Public Works Board, Lease Revenue Bonds, University of California Department of Education Riverside Campus Project, Series 2009B, 5.750%, 4/01/23	4/19 at 100.00	A2	2,094,788
	4,465	Total Education and Civic Organizations Health Care – 23.0% (23.3% of Total Investments)			4,607,548
	1,000	ABAG Finance Authority for Non-Profit Corporations, California, Cal-Mortgage Insured Health Facility Revenue Bonds, Saint Rose Hospital, Series 2009A, 6.000%, 5/15/29	5/19 at 100.00	A–	1,022,150
	1,900	California Health Facilities Financing Authority, Revenue Bonds, Catholic Healthcare West, Series 2009A, 6.000%, 7/01/39 California Health Facilities Financing Authority, Revenue Bonds,	7/19 at 100.00 11/19 at	A	1,947,519
	1,000	Childrens Hospital of Orange County, Series 2009A, 6.500%, 11/01/38	100.00	A	1,043,330
	850	California Municipal Financing Authority, Certificates of Participation, Community Hospitals of Central California, Series 2007, 5.250%, 2/01/27	2/17 at 100.00	Baa2	768,145
	1,400	California Statewide Communities Development Authority, Revenue Bonds, Adventist Health System West, Series 2007B, 5.000%, 3/01/37 – AGC Insured California Statewide Community Development Authority, Revenue Bonds, Kaiser Permanante	3/18 at 100.00	AA+	1,304,996
		System, Series 2006:			
	125	5.000%, 3/01/41		A+	111,541

		3/16 at 100.00 3/16 at		
2,000	5.250%, 3/01/45 California Statewide Community Development Authority, Revenue	100.00 8/18 at	A+	1,837,700
1,500	Bonds, Sutter Health,	100.00	AA+	1,402,185
800	Series 2004D, 5.050%, 8/15/38 – AGM Insured Hospital Authority of Delaware County, Indiana, Hospital Revenue Bonds, Cardinal Health System, Series 2006, 5.000%, 8/01/24	8/16 at 100.00	Baa3	753,584
850	Illinois Finance Authority, Revenue Bonds, Sherman Health Systems, Series 2007A, 5.500%, 8/1/37	8/17 at 100.00	BBB	757,316
725	Palomar Pomerado Health Care District, California, Certificates of Participation, Series 2010, 6.000%, 11/01/41	11/20 at 100.00	Baa3	648,273
12,150	Total Health Care			11,596,739
230	Housing/Multifamily – 0.5% (0.4% of Total Investments) California Municipal Finance Authority, Mobile Home Park Revenue Bonds, Caritas Projects Series 2010A, 6.400%, 8/15/45	8/20 at 100.00	BBB-	215,453
1,485	Housing/Single Family – 10.9% (11.0% of Total Investments) California Housing Finance Agency, California, Home Mortgage Revenue Bonds, Series 2008L, 5.500%, 8/01/38	2/18 at 100.00	A3	1,345,514
2,500	California Housing Finance Agency, Home Mortgage Revenue Bonds, Series 2006K, 4.625%, 8/01/26 (Alternative Minimum Tax)	2/16 at 100.00	A3	2,167,375
2,000	California State Department of Veteran Affairs, Home Purchase Revenue Bonds, Series 2007B, 5.150%, 12/01/27 (Alternative Minimum Tax)	12/16 at 100.00	AA	1,970,520
5,985	Total Housing/Single Family			5,483,409
900	Industrials – 1.8% (1.8% of Total Investments) California Enterprise Development Authority, Sewer Facilities Revenue, Anheuser-Busch Project, Senior Lien Series 2007, 5.300%, 9/01/47 (Alternative Minimum Tax)	9/12 at 100.00	A–	889,911
1,000	Long-Term Care – 2.1% (2.1% of Total Investments) California Health Facilities Financing Authority, Insured Revenue Bonds, Community Program for Persons with Developmental Disabilities, Series 2011A, 6.250%, 2/01/26	No Opt. Call	A-	1,054,790
585	Materials – 1.2% (1.1% of Total Investments) Courtland Industrial Development Board, Alabama, Solid Waste Revenue Bonds, International Paper Company Project, Series 2005A, 5.200%, 6/01/25 (Alternative Minimum Tax)	6/15 at 100.00	BBB	553,755
2,000	Tax Obligation/General – 8.7% (8.8% of Total Investments) California State, Various Purpose General Obligation Bonds, Series 2007, 5.000%, 6/01/37 – NPFG Insured	6/17 at 100.00	A1	1,939,160

2,100	Carlsbad Unified School District, San Diego County, California, General Obligation Bonds, Series 2009B, 0.000%, 5/01/34	5/24 at 100.00	AA	1,308,048
	Oakland, California, General Obligation Bonds, Measure DD Series 2009B, 5.250%, 1/15/29 Total Tax Obligation/General Tax Obligation/Limited – 15.8% (16.0% of Total Investments)	1/19 at 100.00	Aa2	1,154,317 4,401,525
500	California State Public Works Board, Lease Revenue Bonds, Various Capital Projects, Series 2010A-1, 6.000%, 3/01/35	3/20 at 100.00	A2	514,855
1,000	Allocation Revenue Bonds, San Francisco Redevelopment Projects,	8/19 at 100.00	A1	1,025,840
1,000	Series 2009B, 6.625%, 8/01/39 Lancaster Redevelopment Agency, California, Combined Project Areas Housing Programs, Tax Allocation Bonds, Series 2009, 6.875%, 8/01/39 National City Community Development Commission, San Diego County, California, Redevelopment Project Tax Allocation Bonds, Series 2011:	8/19 at 100.00	BBB+	985,070
	J	No Opt.		
1,135	5.000%, 8/01/16	Call	A-	1,195,564
		8/21 at		
80	6.500%, 8/01/24	100.00	A-	83,997
	Novato Redevelopment Agency, California, Tax Allocation Bonds,	9/21 at		,
30	Hamilton Field Redevelopment	100.00	A-	30,506
	Project, Series 2011, 6.750%, 9/01/40			,
	Riverside County Redevelopment Agency, California, Jurupa Valley	10/21 at		
15	Project Area 2011 Tax Allocation	100.00	A-	15,167
13	Bonds Series B, 6.500%, 10/01/25	100.00	7.1	13,107
	San Francisco City and County, California, Certificates of	4/19 at		
1,500	· · · · · · · · · · · · · · · · · · ·	100.00	A A_	1,511,865
1,500	Improvement Projects, Series 2009A, 5.250%, 4/01/31	100.00	7171	1,511,005
	San Francisco Redevelopment Finance Authority, California, Tax	2/21 at		
15	Allocation Revenue Bonds,	100.00	A-	15,568
13	Mission Bay North Redevelopment Project, Series 2011C, 6.750%,	100.00	7.1	13,300
	8/01/41			
	San Francisco Redevelopment Financing Authority, California, Tax			
	Allocation Revenue Bonds,			
	Mission Bay South Redevelopment Project, Series 2011D:			
		2/21 at		
15	7.000%, 8/01/33	100.00	BBB	15,411
		2/21 at		- ,
15	7.000%, 8/01/41	100.00	BBB	15,357
	Signal Hill Redevelopment Agency, California, Project 1 Tax	4/21 at	222	10,00.
25	Allocation Bonds, Series 2011, 7.000%, 10/01/26	100.00	N/R	24,742
	Val Verde Unified School District Financing Authority, California,	10/13 at		
500	Special Tax Revenue, Junior	102.00	N/R	478,060
	Lien Refunding Series 2003, 6.250%, 10/01/28			•
2,000			AA+	2,013,880

	Westlake Village, California, Certificates of Participation, Financign Project, Series 2009, 5.000%, 6/01/39	6/16 at 100.00		
40	Yorba Linda Redevelopment Agency, Orange County, California,	9/21 at 100.00	A–	40,500
7,870	Total Tax Obligation/Limited			7,966,382
,,,,,	Transportation – 2.1% (2.1% of Total Investments)			.,,
1,000	Airport, Second Series 2002, Issue 32G, 5.000%, 5/01/24 – FGIC	5/16 at 100.00	A1	1,037,960
	Insured Utilities – 14.1% (14.3% of Total Investments)			
	M-S-R Energy Authority, California, Gas Revenue Bonds, Series	No Opt.		
1.000	2009C, 6.500%, 11/01/39	Call	A	1,086,530
-,	Roseville Natural Gas Financing Authority, California, Gas Revenue	No Opt.		-,000,000
2,495	Bonds, Series 2007,	Call	A	2,579,581
	5.000%, 2/15/17			
	Southern California Public Power Authority, Natural Gas Project 1	No Opt.		
2,400	Revenue Bonds, Series 2007A,	Call	Baa1	2,366,952
	5.250%, 11/01/24	1/10		
1 000	Tuolumne Wind Project Authority, California, Revenue Bonds,	1/19 at	۸.	1 072 220
1,000	Tuolumne Company Project, Series	100.00	A+	1,073,220
6,895	2009A, 5.625%, 1/01/29 Total Utilities			7,106,283
0,073	Water and Sewer – 5.4% (5.5% of Total Investments)			7,100,203
	Orange County Sanitation District, California, Certificates of	2/19 at		
2,000	Participation, Tender Option	100.00	AAA	2,227,680
	Bond Trust 3020, 17.702%, 2/01/35 (IF)			
	Western Riverside Water & Wastewater Financing Authority,	8/19 at		
500	California, Revenue Bonds, Western	100.00	AA+	514,570
	Municipal Water District, Series 2009, 5.625%, 9/01/39 – AGC			
2.500	Insured			2.742.250
2,500 \$ 52,300	Total Water and Sewer Total Investments (cost \$46,502,599) – 99.0%			2,742,250 49,843,190
\$ 52,500	Other Assets Less Liabilities – 1.0% (4)			513,074
	One: 1.5505 Dess Diamines 1.0 // (T)			\$15,074
	Net Assets Applicable to Common Shares – 100%			50,356,264

Investments in Derivatives

Forward Swaps outstanding at May 31, 2011:

		Fund			Fixed Rate			Unrealized
	Notional	Pay/Receive	Floating Rate	Fixed Rate	Payment	Effective	Termination	Appreciation
		Floating						
Counterparty	Amount	Rate	Index	(Annualized)	Frequency	Date (5)	Date	(Depreciation)
Barclays			3-Month					
Bank PLC	\$2,000,000	Receive	USD-LIBOR	4.746%	Semi-Annually	3/30/12	3/30/35	\$(197,313)

Fair Value Measurements

Fair value is defined as the price that the Fund would receive upon selling an investment or transferring a liability in an orderly transaction to an independent buyer in the principal or most advantageous market of the investment. A three-tier hierarchy is used to maximize the use of observable market data and minimize the use of unobservable inputs and to establish classification of fair value measurements for disclosure purposes. Observable inputs reflect the assumptions market participants would use in pricing the asset or liability. Observable inputs are based on market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability. Unobservable inputs are based on the best information available in the circumstances. The three-tier hierarchy of inputs is summarized in the three broad levels listed below:

Level 1 – Quoted prices in active markets for identical securities.

Level 2 – Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

Level 3 – Significant unobservable inputs (including management's assumptions in determining the fair value of investments).

The inputs or methodologies used for valuing securities are not an indication of the risk associated with investing in those securities. The following is a summary of the Fund's fair value measurements as of May 31, 2011:

	Level 1	Level 2	Level 3	Total
Investments:				
Municipal Bonds	\$ 	\$49,843,190	\$ —	\$49,843,190
Derivatives:				

Forward Swaps* — (197,313) — (197,313)
Total \$— \$49,645,877 \$— \$49,645,877

During the period ended May 31, 2011, the Fund recognized no significant transfers to/from Level 1, Level 2 or Level 3.

Derivative Instruments and Hedging Activities

The Fund records derivative instruments at fair value, with changes in fair value recognized on the Statement of Operations, when applicable. Even though the Fund's investments in derivatives may represent economic hedges, they are not considered to be hedge transactions for financial reporting purposes.

The following table presents the fair value of all derivative instruments held by the Fund as of May 31, 2011, the location of these instruments on the Statement of Assets and Liablilities, and the primary underlying risk exposure.

Location on the Statement of Assets and Liabilities					
Underlying	Derivative	Asset Derivatives		Liability Derivatives	
Risk Exposure	Instrument	Location	Value	Location	Value
	Forward	Unrealized		Unrealized	
Interest Rate	Swaps	appreciation	\$ —	depreciation	\$197,313
		on forward swaps*		on forward swaps*	

^{*} Represents cumulative unrealized appreciation (depreciation) of forward swap contracts as reported in the Portfolio of Investments.

Income Tax Information

The following information is presented on an income tax basis. Differences between amounts for financial statement and federal income tax purposes are primarily due to timing differences in recognizing taxable market discount, timing differences in recognizing certain gains and losses on investment transactions and the treatment of investments in inverse floating rate securities reflected as financing transactions, if any. To the extent that differences arise that are permanent in nature, such amounts are reclassified within the capital accounts on the Statement of Assets and Liabilities presented in the annual report, based on their federal tax basis treatment; temporary differences do not require reclassification. Temporary and permanent differences do not impact the net asset value of the Fund.

At May 31, 2011, the cost of investments (excluding investments in derivatives) was \$46,277,255.

Gross unrealized appreciation and gross unrealized depreciation of investments (excluding investments in derivatives) at May 31, 2011, were as follows:

Gross unrealized:

^{*} Represents net unrealized appreciation (depreciation).

Appreciation \$3,771,315

Depreciation (205,380)

Net unrealized appreciation (depreciation) of investments \$3,565,935

All percentages shown in the Portfolio of Investments are based on net assets applicable to

(1) Common

shares unless otherwise noted.

Optional Call Provisions: Dates (month and year) and prices of the earliest optional call or

(2) redemption.

There may be other call provisions at varying prices at later dates. Certain mortgage-backed securities

may be subject to periodic principal paydowns.

Ratings: Using the highest of Standard & Poor's Group ("Standard & Poor's"), Moody's Investor

(3) Service,

Inc. ("Moody's") or Fitch, Inc. ("Fitch") rating. Ratings below BBB by Standard & Poor's, Baa by Moody's

or BBB by Fitch are considered to be below investment grade. Holdings designated N/R are not rated

by any of these national rating agencies.

Other Assets Less Liabilities includes the Value and/or the Unrealized Appreciation (Depreciation)

(4) of

derivative instruments as listed within Investments in Derivatives.

Effective date represents the date on which both the Fund and Counterparty commence interest

(5) payment

accruals on each forward swap contract.

N/R Not rated.

(IF) Inverse floating rate investment.

USD-LIBOR United States Dollar-London Inter-Bank Offered Rate.

Item 2. Controls and Procedures.

- a. The registrant's principal executive and principal financial officers, or persons performing similar functions, have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "1940 Act") (17 CFR 270.30a-3(c))) are effective, as of a date within 90 days of the filing date of this report that includes the disclosure required by this paragraph, based on their evaluation of the controls and procedures required by Rule 30a-3(b) under the 1940 Act (17 CFR 270.30a-3(b)) and Rule 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934 (17 CFR 240.13a-15(b) or 240.15d-15(b)).
- b. There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act (17 CFR 270.30a-3(d)) that occurred during the registrant's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 3. Exhibits.

File as exhibits as part of this Form a separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the 1940 Act (17 CFR 270.30a-2(a)), exactly as set forth below: See EX-99 CERT attached hereto.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant) Nuveen California Municipal Value Fund 2

By (Signature and Title) /s/ Kevin J. McCarthy

Kevin J. McCarthy

Vice President and Secretary

Date July 29, 2011

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By (Signature and Title) /s/ Gifford R. Zimmerman

Gifford R. Zimmerman

Chief Administrative Officer (principal executive officer)

Date July 29, 2011

By (Signature and Title) /s/ Stephen D. Foy

Stephen D. Foy

Vice President and Controller (principal financial officer)

Date July 29, 2011