Nuveen California Municipal Value Fund 2 Form N-Q July 30, 2013

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: 5/31/13

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, 2013

Principal Amount (000)	Description (1) Consumer Staples – 5.5% (5.6% of Total	Optional Call Provisions (2)	Ratings (3) Va	ılue
\$ 3,500	Investments) Tobacco Securitization Authority of Northern California, Tobacco Settlement Asset-Backed Bonds, Series 2005A-1, 5.500%, 6/01/45 Education and Civic Organizations – 7.8%	6/15 at 100.00	В-	\$ 3,167,570
500	(7.8% 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	533,495
	California Educational Facilities Authority, Revenue Bonds, University of the Pacific,	11/19 at		
920	Series 2009, 5.500%, 11/01/39	100.00	A2	1,010,206
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	2,327,444
150	California Statewide Communities Development Authority, School Facility Revenue Bonds, Alliance College-Ready Public Schools, Series 2011A, 7.000%, 7/01/46	7/21 at 100.00	BBB-	167,940
4,000	Oceanside Unified School District, San Diego County, California, General Obligation Bonds, Election 2008 Series 2010B, 0.000%, 8/01/49 AGM Insured	•	AA-	401,640
7,535	Total Education and Civic Organizations Health Care – 24.0% (24.1% of Total			4,440,725
1,000	Investments) ABAG Finance Authority for Non-Profit Corporations, California, Cal-Mortgage	5/19 at 100.00	A	1,127,320

	Insured Health			
	Facility Revenue Bonds, Saint Rose Hospital,			
	Series 2009A, 6.000%, 5/15/29			
	California Health Facilities Financing			
	Authority, Revenue Bonds, Catholic			
1,900	Healthcare West,	7/19 at 100.00	A	2,259,499
	Series 2009A, 6.000%, 7/01/39			
	California Health Facilities Financing	4440		
1 000	Authority, Revenue Bonds, Childrens Hospital			1 207 7 10
1,000	of Orange	100.00	Α	1,207,740
	County, Series 2009A, 6.500%, 11/01/38			
	California Municipal Financing Authority,			
950	Certificates of Participation, Community	2/17 at 100 00	BBB	902.052
850	Hospitals	2/17 at 100.00	DDD	893,053
	of Central California, Series 2007, 5.250%, 2/01/27			
	California Statewide Communities			
	Development Authority, Revenue Bonds,			
700	Adventist Health System	3/18 at 100.00	AA-	738,255
700	West, Series 2007B, 5.000%, 3/01/37 – AGC	3/10 at 100.00	7 17 1	750,255
	Insured			
	California Statewide Community Developmen	t		
	Authority, Revenue Bonds, Kaiser Permanante			
	System,			
	Series 2006:			
625	5.000%, 3/01/41	3/16 at 100.00	A+	667,406
2,000	5.250%, 3/01/45	3/16 at 100.00	A+	2,157,440
	California Statewide Community Developmen	t		
	Authority, Revenue Bonds, Sutter Health,			
1,500	Series	8/18 at 100.00	AA	1,627,755
	2004D, 5.050%, 8/15/38 – AGM Insured			
	Delaware County Hospital Authority, Indiana,			
000	Hospital Revenue Bonds, Cardinal Health	0.44.6		0.40.45
800	System,	8/16 at 100.00	Baa2	849,456
	Series 2006, 5.000%, 8/01/24			
950	Illinois Finance Authority, Revenue Bonds,	0/17 -+ 100 00	DDD	010.615
850	Sherman Health Systems, Series 2007A, 5.500%, 8/01/37	8/17 at 100.00	BBB	919,615
	Palomar Pomerado Health Care District,			
	California, Certificates of Participation, Series	11/20 at		
725	2010,	100.00	Baa3	781,296
723	6.000%, 11/01/41	100.00	Dads	701,270
	San Buenaventura, California, Revenue Bonds	_		
	Community Memorial Health System, Series	, 12/21 at		
380	2011,	100.00	BB	462,939
	7.500%, 12/01/41			,
12,330	Total Health Care			13,691,774
	Housing/Multifamily – 1.0% (1.0% of Total			
	Investments)			
230	California Municipal Finance Authority,	8/20 at 100.00	BBB	250,829
	Mobile Home Park Revenue Bonds, Caritas			

	Projects Series 2010A, 6.400%, 8/15/45 California Municipal Finance Authority,			
70	Mobile Home Park Revenue Bonds, Caritas Projects Series 2012A, 5.500%, 8/15/47 California Municipal Finance Authority,	8/22 at 100.00	ВВВ	74,248
250	Mobile Home Park Revenue Bonds, Caritas Projects	8/22 at 100.00	A1	262,890
550	Series 2012B, 7.250%, 8/15/47 Total Housing/Multifamily Housing/Single Family – 6.0% (6.1% of Total Investments) California Housing Finance Agency,			587,967
955	California, Home Mortgage Revenue Bonds, Series 2008L, 5.500%, 8/01/38 California Housing Finance Agency, Home	2/18 at 100.00	ВВВ	970,815
2,500	Mortgage Revenue Bonds, Series 2006K, 4.625%, 8/01/26 (Alternative Minimum Tax)	2/16 at 100.00	BBB	2,465,900
3,455	Total Housing/Single Family Long-Term Care – 2.1% (2.1% of Total Investments) California Health Facilities Financing			3,436,715
1,000	Authority, Insured Revenue Bonds, Community Program for Persons with Developmental Disabilities, Series 2011A, 6.250%, 2/01/26 Materials – 1.1% (1.1% of Total Investments) Courtland Industrial Development Board, Alabama, Solid Waste Revenue Bonds,	2/21 at 100.00	A	1,208,240
585	International Paper Company Project, Series 2005A, 5.200%, 6/01/25 (Alternative Minimum Tax) Tax Obligation/General – 9.0% (9.1% of Total Investments) California State, General Obligation Bonds, Various Purpose Series 2007, 5.000%, 6/01/37	6/15 at 100.00	BBB	612,472
2,000	– NPFG Insured	6/17 at 100.00	A1	2,153,240
2,100	Carlsbad Unified School District, San Diego County, California, General Obligation Bonds, Series 2009B, 0.000%, 5/01/34 Oakland, California, General Obligation Bonds, Measure DD Series 2009B, 5.250%,	5/24 at 100.00	AA	1,739,031
1,120 5,220	1/15/29 Total Tax Obligation/General Tax Obligation/Limited – 17.9% (18.1% of Total Investments)	1/19 at 100.00	Aa2	1,250,984 5,143,255
500	Total Investments)	3/20 at 100.00	A2	595,625

	California State Public Works Board, Lease Revenue Bonds, Various Capital Projects,			
	Series			
	2010A-1, 6.000%, 3/01/35			
	Fontana Redevelopment Agancy, California,	10/10		
160	Jurupa Hills Redevelopment Project, Tax	10/13 at		160 610
160	Allocation	100.00	A–	160,610
	Refunding Bonds, 1997 Series A, 5.500%, 10/01/27			
	Inglewood Redevelopment Agency, California			
	Tax Allocation Bonds, Merged	••		
145	Redevelopment	5/17 at 100.00	BB+	148,251
	Project, Subordinate Lien Series 2007A-1,			- 10,-0
	5.000%, 5/01/25 – AMBAC Insured			
	Lancaster Redevelopment Agency, California,			
	Tax Allocation Bonds, Combined			
1,000	Redevelopment	8/19 at 100.00	BBB	1,138,350
	Project Areas Housing Programs, Series 2009,			
	6.875%, 8/01/39			
	National City Community Development			
	Commission, California, Tax Allocation			
	Bonds, National			
1 125	City Redevelopment Project, Series 2011:	No Ont Call	A	1 240 567
1,135 80	5.000%, 8/01/16 6.500%, 8/01/24	No Opt. Call 8/21 at 100.00	A– A–	1,249,567 99,048
80	Novato Redevelopment Agency, California,	6/21 at 100.00	A-	99,040
	Tax Allocation Bonds, Hamilton Field			
30	Redevelopment	9/21 at 100.00	BBB+	34,763
	Project, Series 2011, 6.750%, 9/01/40	,,		2 1,1 22
	Perris Union High School District Financing			
	Authority, Riverside County, California,			
	Revenue			
	Bonds, Series 2011:			
30	6.000%, 9/01/33	9/13 at 100.00	N/R	30,978
60	6.125%, 9/01/41	9/13 at 100.00	N/R	61,938
	Pittsburg Redevelopment Agency, California,			
240	Tax Allocation Bonds, Los Medanos	0/10 / 100 00	DDD	260 450
240	Community Description Project Profession Series	9/18 at 100.00	BBB-	260,450
	Development Project, Refunding Series			
	2008A, 6.500%, 9/01/28 Rancho Santa Fe CSD Financing Authority,			
	California, Revenue Bonds, Superior Lien			
95	Series	9/21 at 100.00	BBB+	108,442
75	2011A, 5.750%, 9/01/30	7/21 at 100.00	BBB .	100,112
	Riverside County Redevelopment Agency,			
	California, Tax Allocation Bonds, Jurupa	10/21 at		
15	Valley Project	100.00	A-	17,031
	Area, Series 2011B, 6.500%, 10/01/25			
	San Francisco City and County Redevelopmen	t		
	Financing Authority, California, Tax			
1,000	Allocation	8/19 at 100.00	A	1,141,250

	Revenue Bonds, San Francisco Redevelopment Projects, Series 2009B, 6.625%, 8/01/39 San Francisco City and County, California,	t		
1,500	Certificates of Participation, Multiple Capital Improvement Projects, Series 2009A, 5.250%, 4/01/31	4/19 at 100.00	AA-	1,688,295
	San Francisco Redevelopment Finance Authority, California, Tax Allocation Revenue			
15	Bonds, Mission Bay North Redevelopment Project, Series 2011C, 6.750%, 8/01/41 San Francisco Redevelopment Financing	2/21 at 100.00	A–	17,781
	Authority, California, Tax Allocation Revenue Bonds, Mission Bay South Redevelopment Project,			
	Series 2011D:			
15	7.000%, 8/01/33	2/21 at 100.00	BBB	17,444
15	7.000%, 8/01/41	2/21 at 100.00	BBB	17,198
	San Jose Redevelopment Agency, California,			
105	Tax Allocation Bonds, Merged Area	0/17 / 100 00	A	120,020
125	Redevelopment	8/17 at 100.00	A	129,020
	Project, Series 2006C, 5.000%, 8/01/25 – NPFO Insured	J		
	San Jose Redevelopment Agency, California,			
	Tax Allocation Bonds, Merged Area			
635	Redevelopment	8/17 at 100.00	BBB	659,117
000	Project, Series 2006D, 5.000%, 8/01/22 –	0,1, 40 100.00	222	303,117
	AMBAC Insured			
	Signal Hill Redevelopment Agency, California	,		
25	Project 1 Tax Allocation Bonds, Series 2011,		N/R	27,710
	7.000%, 10/01/26			
	Val Verde Unified School District Financing			
	Authority, California, Special Tax Revenue,	10/13 at		
500	Junior	102.00	N/R	511,900
	Lien Refunding Series 2003, 6.250%,			
	10/01/28			
2 000	Westlake Village, California, Certificates of	646 . 100.00		2 00 6 0 6 0
2,000	Participation, Financign Project, Series 2009,	6/16 at 100.00	AA+	2,096,060
	5.000%, 6/01/39			
	Yorba Linda Redevelopment Agency, Orange County, California, Tax Allocation Revenue			
40	Bonds,	9/21 at 100.00	A-	46,195
-10	Yorba Linda Redevelopment Project,	7/21 dt 100.00	71	40,173
	Subordinate Lien Series 2011A, 6.000%,			
9,360	9/01/26 Total Tax Obligation/Limited			10,257,023
9,300	Transportation – 0.9% (1.0% of Total			10,237,023
	Investments)			
	San Francisco Airports Commission,			
	California, Revenue Bonds, San Francisco			
500	International	5/16 at 100.00	A+	549,735
				*

	Airport, Second Series 2002, Issue 32G, 5.000%, 5/01/24 – FGIC Insured U.S. Guaranteed – 0.2% (0.2% of Total Investments) (4) California Educational Facilities Authority,			
80	Revenue Bonds, University of the Pacific, Series 2009, 5.500%, 11/01/39 (Pre-refunded 11/01/19)	11/19 at 100.00	A2 (4)	98,952
265	Utilities – 14.7% (14.8% of Total Investments) Los Angeles Department of Water and Power, California, Power System Revenue Bonds, Series 2013B, 5.000%, 7/01/29 (WI/DD, Settling	7/23 at 100.00	AA-	308,184
1,000	6/04/13) M-S-R Energy Authority, California, Gas Revenue Bonds, Series 2009C, 6.500%, 11/01/39	No Opt Coll	A	1 225 700
1,000	Roseville Natural Gas Financing Authority,	No Opt. Call	A	1,325,700
2,495	California, Gas Revenue Bonds, Series 2007,	No Opt. Call	A	2,789,285
	5.000%, 2/15/17 Southern California Public Power Authority, Natural Gas Project 1 Revenue Bonds, Series			
2,400	2007A, 5.250%, 11/01/24 Tuolumne Wind Project Authority, California,	No Opt. Call	A–	2,786,856
1,000	Revenue Bonds, Tuolumne Company Project, Series 2009A, 5.625%, 1/01/29	1/19 at 100.00	A+	1,169,550
7,160	Total Utilities Water and Sewer – 9.0% (9.0% of Total Investments)			8,379,575
575	California Pollution Control Financing Authority, Water Furnishing Revenue Bonds, Poseidon	No Opt. Call	Baa3	576,685
	Resources Channelside Desalination Project, Series 2012, 5.000%, 11/21/45 (Alternative Minimum Tax)	-		
2,000	Orange County Sanitation District, California, Certificates of Participation, Tender Option Bond Trust 3020-1, 17.882%, 2/01/35 (IF) (5) San Francisco City and County Public Utilities	2/19 at 100.00	AAA	3,098,980
	Commission, California, Water Revenue			
800	Bonds, Series 2011A, 5.000%, 11/01/41 Western Riverside Water & Wastewater	No Opt. Call	AA-	891,432
500	Financing Authority, California, Revenue Bonds, Western Municipal Water District, Series 2009,	8/19 at 100.00	AA	555,745
3,875	5.625%, 9/01/39 – AGC Insured Total Water and Sewer			5,122,842

\$ 55,150	Total Investments (cost \$46,837,511) – 99.2%	56,696,845
	Other Assets Less Liabilities – 0.8%	441,517
	Net Assets Applicable to Common Shares –	
	100%	\$ 57,138,362

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 for 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 following is a summary of the three-tiered hierarchy of valuation input levels.

Level 1 – Inputs are unadjusted and prices are determined using quoted prices in active markets for identical securities.

Level 2 – Prices are determined using other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

Level 3 – Prices are determined using 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 risks associated with investing in those securities. The following is a summary of the Fund's fair value measurements as of the end of the reporting period:

	Level 1	Level 2	Level 3	Total
Long-Term Investments:				
Municipal Bonds	\$ —	\$56,696,845	\$ —	\$56,696,845

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.

As of May 31, 2013, the cost of investments was \$46,391,544.

Gross unrealized appreciation and gross unrealized depreciation of investments as of May 31, 2013, were as follows:

Gross unrealized:

Appreciation \$10,366,669

Depreciation (61,368)

Net unrealized appreciation (depreciation) of investments \$10,305,301

- All percentages shown in the Portfolio of Investments are based on net assets applicable to Common
- (1) shares unless otherwise noted.
- (2) Optional Call Provisions: Dates (month and year) and prices of the earliest optional call or redemption. There may be other call provisions at varying prices at later dates. Certain mortgage-backed securities may
 - be subject to periodic principal paydowns.
- (3) Ratings: Using the highest of Standard & Poor's Group ("Standard & Poor's"), Moody's Investors 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.
 - Backed by an escrow or trust containing sufficient U.S. Government or U.S. Government agency
- (4) securities, which ensure the timely payment of principal and interest. Certain bonds backed by U.S. Government or agency securities are regarded as having an implied rating equal to the rating of such securities.
- (5) Investment, or portion of investment, has been pledged to collateralize the net payment obligations for investments in inverse floating rate transactions.
- N/R Not rated.
- WI/DD Investment, or portion of investment, purchased on a when-issued or delayed delivery basis.
 - (IF) Inverse floating rate investment.

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 30, 2013

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 30, 2013

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

Stephen D. Foy

Vice President and Controller (principal financial officer)

Date: July 30, 2013