Nuveen California Municipal Value Fund 2 Form N-Q July 30, 2018

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)

Gifford R. Zimmerman

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: February 28

Date of reporting period: May 31, 2018

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

NCB				
	fornia Municipal Value Fund 2			
	nvestments as of May 31, 2018			
(Unaudited) Principal				
Amount	Description (1)	Optional Call	Ratings	Value
(000)	Description (1)	Provisions (2)	(3)	varue
(000)	LONG-TERM INVESTMENTS – 98.2% (100.0% of Total			
	Investments)			
	MUNICIPAL BONDS - 98.2% (100.0% of Total Investments)			
	Consumer Staples – 5.3% (5.4% of Total Investments)			
	Golden State Tobacco Securitization Corporation, California,			
\$ 1,025	Tobacco Settlement Asset-Backed Bonds, Series 2007A-1, 5.000%, 6/01/33	7/18 at 100.00	B+	\$1,030,125
	Silicon Valley Tobacco Securitization Authority, California,			
1,000	Tobacco Settlement Asset-Backed Bonds, Santa Clara County	8/18 at 100.00	N/R	275,900
,	Tobacco Securitization Corporation, Series 2007A, 0.000%,			,
	6/01/41 Tobacco Securitization Authority of Northern California, Tobacco			
1,500	Settlement Asset-Backed Bonds, Series 2005A-1, 5.500%, 6/01/45	8/18 at 100.00	B-	1,502,010
3,525	Total Consumer Staples			2,808,035
3,525	Education and Civic Organizations – 2.9% (2.9% of Total			2,000,000
	Investments)			
965	California Educational Facilities Authority, Revenue Bonds,	11/10 -4 100 00		007.106
865	University of the Pacific, Series 2009, 5.500%, 11/01/39	11/19 at 100.00	0AZ	907,186
	California Municipal Finance Authority, Charter School Revenue			
100	Bonds, Rocketship Education Multiple Projects, Series 2014A,	6/22 at 102.00	N/R	114,427
	7.250%, 6/01/43			
25	California School Finance Authority, School Facility Revenue	7/25 -4 100 00	DDD	27.067
35	Bonds, Alliance for College-Ready Public Schools Project, Series 2016A, 5.000%, 7/01/46, 144A	7/25 at 100.00	ввв	37,967
	California School Finance Authority, School Facility Revenue			
260	Bonds, Alliance for College-Ready Public Schools Project, Series	7/25 at 101.00	BBB	285,181
200	2016C, 5.250%, 7/01/52	7725 at 101.00	DDD	200,101
	California Statewide Communities Development Authority, School			
150	Facility Revenue Bonds, Alliance College-Ready Public Schools,	7/21 at 100.00	BBB-	163,938
	Series 2011A, 7.000%, 7/01/46			
1,410	Total Education and Civic Organizations			1,508,699
	Health Care – 5.7% (5.8% of Total Investments)			
1 000	California Health Facilities Financing Authority, Revenue Bonds,	11/10 / 100 00		1.072.610
1,000	Childrens Hospital of Orange County, Series 2009A, 6.500%, 11/01/38	11/19 at 100.00	0A+	1,072,610
70	California Health Facilities Financing Authority, Revenue Bonds,	9/24 at 100 00	A A	77.604
70	Lucile Salter Packard Children's Hospital, Series 2014A, 5.000%, 8/15/43	8/24 at 100.00	AA-	77,694
	California Health Facilities Financing Authority, Revenue Bonds,			
75	Providence Health & Services, Refunding Series 2014A, 5.000%,	10/24 at 100.00	AA-	85,527
	10/01/38	_ 5, 100.00		, ·
150	California Health Facilities Financing Authority, Revenue Bonds,	10/24 -4 100 00		167.610
150	Providence Health & Services, Series 2014B, 5.000%, 10/01/44	10/24 at 100.00	AA-	167,619

20	California Municipal Finance Authority, Revenue Bonds, Eisenhower Medical Center, Series 2017A, 5.000%, 7/01/42	7/27 at 100.00 Baa2	22,266
100	California Municipal Finance Authority, Revenue Bonds, NorthBay Healthcare Group, Series 2017A, 5.250%, 11/01/41	11/26 at 100.00 BBB-	110,729
150 1	California Statewide Communities Development Authority, California, Revenue Bonds, Loma Linda University Medical Center, Series 2014A, 5.250%, 12/01/34	12/24 at 100.00 BB+	164,214

	California Municipal Value Fund 2 (continued)			
Portfoli (Unaud	o of Investments as of May 31, 2018			
Principal	ica)			
Amount	Description (1)	Optional Call	Ratings	Value
(000)	1	Provisions (2)	(3)	· · · · · · · · ·
,	Health Care (continued)			
	California Statewide Communities Development Authority,			
\$ 785	California, Revenue Bonds, Loma Linda University Medical	6/26 at 100.00	BB+	\$851,552
	Center, Series 2016A, 5.250%, 12/01/56, 144A			
380	San Buenaventura, California, Revenue Bonds, Community	12/21 at 100.00	RR	426,892
	Memorial Health System, Series 2011, 7.500%, 12/01/41	12/21 at 100.00	DD	
2,730	Total Health Care			2,979,103
	Housing/Multifamily – 0.8% (0.8% of Total Investments)			
70	California Municipal Finance Authority, Mobile Home Park	8/22 at 100.00	BBB	75,817
	Revenue Bonds, Caritas Projects Series 2012A, 5.500%, 8/15/47			
250	California Municipal Finance Authority, Mobile Home Park Revenue Bonds, Caritas Projects Series 2012B, 7.250%, 8/15/47	8/22 at 100.00	A1	279,412
	California Municipal Finance Authority, Mobile Home Park Senior			
	Revenue Bonds, Caritas Affordable Housing, Inc. Projects, Series			
	2014A:			
15	5.250%, 8/15/39	8/24 at 100.00	BBB+	16,503
40	5.250%, 8/15/49	8/24 at 100.00		43,728
375	Total Housing/Multifamily			415,460
	Long-Term Care – 2.1% (2.2% of Total Investments)			
	California Health Facilities Financing Authority, Insured Revenue			
1,000	Bonds, Community Program for Persons with Developmental	2/21 at 100.00	AA-	1,109,190
	Disabilities, Series 2011A, 6.250%, 2/01/26			
	Tax Obligation/General – 15.9% (16.2% of Total Investments)			
2,100	Carlsbad Unified School District, San Diego County, California,	5/24 at 100.00	Aa1	2,431,023
_,- • •	General Obligation Bonds, Series 2009B, 0.000%, 5/01/34 (4)			_,,
1 000	Los Angeles Unified School District, Los Angeles County,	1/20 -+ 100 00		1 101 070
1,000	California, General Obligation Bonds, Election 2008 Series	1/28 at 100.00	AAA	1,191,970
	2018B-1, 5.000%, 7/01/38 Oceanside Unified School District, San Diego County, California,			
195	General Obligation Bonds, Election 2008 Series 2010B, 0.000%,	8/20 at 13.60	AA	25,190
173	8/01/49 – AGM Insured	0/20 at 15.00	AA	23,170
	San Benito High School District, San Benito and Santa Clara			
840	Counties, California, General Obligation Bonds, 2016 Election	8/27 at 100.00	Aa3	1,002,213
0.0	Series 2017, 5.250%, 8/01/46	or 2 7 ac 100100	1 2000	1,002,210
	San Marcos Unified School District, San Diego County, California,			
10,000	General Obligation Bonds, 2010 Election, Series 2012B, 0.000%,	No Opt. Call	AA-	2,611,000
	8/01/51	•		
	San Mateo Union High School District, San Mateo County,			
870	California, General Obligation Bonds, Election 2010 Series 2011A,	No Opt. Call	Aaa	609,948
	0.000%, 9/01/46			
	Western Riverside Water & Wastewater Financing Authority,			
500	California, Revenue Bonds, Western Municipal Water District,	8/19 at 100.00	AA+	522,605
15 505	Series 2009, 5.625%, 9/01/39 – AGC Insured			0.202.040
15,505	Total Tax Obligation/General			8,393,949

	Tax Obligation/Limited – 9.7% (9.9% of Total Investments) Fontana Redevelopment Agency, San Bernardino County,			
160	California, Tax Allocation Bonds, Jurupa Hills Redevelopment	No Opt. Call	A	161,978
	Project, Refunding Series 1997A, 5.500%, 10/01/27			
	Golden State Tobacco Securitization Corporation, California,			
180	Enhanced Tobacco Settlement Asset-Backed Revenue Bonds,	6/25 at 100.00	A+	203,159
	Refunding Series 2015A, 5.000%, 6/01/40			
	Los Angeles County Metropolitan Transportation Authority,			
1,000	California, Measure R Sales Tax Revenue Bonds, Senior Series	6/26 at 100.00	AAA	1,172,970
	2016A, 5.000%, 6/01/38			
2				

				-
Principal Amount (000)	Description (1)	Optional Call Provisions (2)	Ratings (3)	Value
, ,	Tax Obligation/Limited (continued)			
\$ 1,150	Los Angeles County Metropolitan Transportation Authority, California, Proposition C Sales Tax Revenue Bonds, Senior Lien Series 2017A, 5.000%, 7/01/39	7/27 at 100.00	AA+	\$1,347,466
30	Novato Redevelopment Agency, California, Tax Allocation Bonds, Hamilton Field Redevelopment Project, Series 2011, 6.750%, 9/01/40	9/21 at 100.00	A-	33,825
	Patterson Public Finance Authority, California, Revenue Bonds,			
35	Community Facilities District 2001-1, Subordinate Lien Series 2013B, 5.875%, 9/01/39	9/23 at 100.00	N/R	38,929
	Patterson Public Financing Authority, California, Revenue Bonds, Community Facilities District 2001-1, Senior Series 2013A:			
210	5.250%, 9/01/30	9/23 at 100.00		231,145
190	5.750%, 9/01/39	9/23 at 100.00	N/R	210,205
1.5	Riverside County Redevelopment Agency, California, Tax	10/01 + 100 00) A	17.000
15	Allocation Bonds, Jurupa Valley Project Area, Series 2011B, 6.500%, 10/01/25	10/21 at 100.00	JΑ	17,082
20	San Clemente, California, Special Tax Revenue Bonds, Community Facilities District 2006-1 Marblehead Coastal, Series 2015, 5.000%, 9/01/40	9/25 at 100.00	N/R	21,850
	San Francisco City and County, California, Certificates of			
1,500	Participation, Multiple Capital Improvement Projects, Series	4/19 at 100.00	Aa1	1,543,785
	2009A, 5.250%, 4/01/31			
25	Signal Hill Redevelopment Agency, California, Project 1 Tax Allocation Bonds, Series 2011, 7.000%, 10/01/26	4/21 at 100.00	N/R	28,056
	Temecula Public Financing Authority, California, Special Tax			
100	Bonds, Community Facilities District 16-01, Series 2017, 5.750%, 9/01/32, 144A	9/27 at 100.00	N/R	100,631
4,615	Total Tax Obligation/Limited			5,111,081
	Transportation – 9.3% (9.4% of Total Investments)			
395	Foothill/Eastern Transportation Corridor Agency, California, Toll Road Revenue Bonds, Refunding Junior Lien Series 2013C, 6.500%, 1/15/43	1/24 at 100.00	Baa3	463,473
	Foothill/Eastern Transportation Corridor Agency, California, Toll Road Revenue Bonds, Refunding Series 2013A:			
865	5.750%, 1/15/46	1/24 at 100.00	BBB-	986,550
865	6.000%, 1/15/53	1/24 at 100.00		1,006,376
305	Port of Oakland, California, Revenue Bonds, Refunding Series	5/22 at 100.00	Λ.	
303	2012P, 5.000%, 5/01/31 (Alternative Minimum Tax)	3/22 at 100.00	A+	332,386
	San Francisco Airports Commission, California, Revenue Bonds,			
1,820	San Francisco International Airport, Second Governmental Purpose	5/26 at 100.00	A+	2,089,706
4,250	Series 2016C, 5.000%, 5/01/46 Total Transportation			4,878,491
т,230	U.S. Guaranteed – 28.9% (29.4% of Total Investments) (5)			-1,070, 1 71
	ABAG Finance Authority for Non-Profit Corporations, California,			
1,000	Cal-Mortgage Insured Health Facility Revenue Bonds, Saint Rose Hospital, Series 2009A, 6.000%, 5/15/29 (Pre-refunded 5/15/19)	5/19 at 100.00	AA-	1,042,540

	California Educational Facilities Authority, Revenue Bonds,		
	University of the Pacific, Series 2009:		
55	5.500%, 11/01/39 (Pre-refunded 11/01/19)	11/19 at 100.00 N/R	58,022
80	5.500%, 11/01/39 (Pre-refunded 11/01/19)	11/19 at 100.00 A2	84,395
3			

	en California Municipal Value Fund 2 (continued) dio of Investments as of May 31, 2018			
•	dited)			
Principal Amount (000)	Description (1)	Optional Call Provisions (2)	Ratings (3)	Value
()	U.S. Guaranteed (5) (continued)			
	California Health Facilities Financing Authority, Revenue Bonds,			
\$ 1,900	Catholic Healthcare West, Series 2009A, 6.000%, 7/01/39	7/19 at 100.00	A	\$1,992,074
	(Pre-refunded 7/01/19)			
	California Municipal Finance Authority, Mobile Home Park			
215	Revenue Bonds, Caritas Projects Series 2010A, 6.400%, 8/15/45	8/20 at 100.00	BBB	233,853
	(Pre-refunded 8/15/20)			
	California State Public Works Board, Lease Revenue Bonds,			
1,965	Department of Education Riverside Campus Project, Series 2009B,	4/19 at 100.00	Aaa	2,035,151
	5.750%, 4/01/23 (Pre-refunded 4/01/19)			
	California State Public Works Board, Lease Revenue Bonds,			
500	Various Capital Projects, Series 2010A-1, 6.000%, 3/01/35	3/20 at 100.00	Aaa	538,075
	(Pre-refunded 3/01/20)			
0.1.0	Golden State Tobacco Securitization Corporation, California,	- 40000	-	011.770
910	Tobacco Settlement Asset-Backed Bonds, Series 2007A-1,	7/18 at 100.00	В3	914,550
	5.750%, 6/01/47 (Pre-refunded 7/05/18)			
	Lancaster Redevelopment Agency, California, Tax Allocation			
	Bonds, Combined Redevelopment Project Areas Housing			
575	Programs, Series 2009:	8/19 at 100.00	NI/D	609,655
425	6.875%, 8/01/39 (Pre-refunded 8/01/19) 6.875%, 8/01/39 (Pre-refunded 8/01/19)	8/19 at 100.00		450,615
423	National City Community Development Commission, California,	6/19 at 100.00	ррр	450,015
80	Tax Allocation Bonds, National City Redevelopment Project,	8/21 at 100.00	Δ	91,607
00	Series 2011, 6.500%, 8/01/24 (Pre-refunded 8/01/21)	0/21 41 100.00	7.1	71,007
	Oakland, California, General Obligation Bonds, Measure DD			
1,120	Series 2009B, 5.250%, 1/15/29 (Pre-refunded 1/15/19)	1/19 at 100.00	Aa2	1,146,734
	Oceanside Unified School District, San Diego County, California,			
3,805	General Obligation Bonds, Election 2008 Series 2010B, 0.000%,	8/20 at 13.60	AA	499,026
	8/01/49 (Pre-refunded 8/01/20) – AGM Insured			
	Orange County Sanitation District, California, Certificates of			
1,750	Participation, Tender Option Bond Trust 2017-XF2452, 14.879%,	2/19 at 100.00	AAA	1,916,530
	2/01/35 (Pre-refunded 2/01/19), 144A (IF) (6)			
	Palomar Pomerado Health Care District, California, Certificates of			
250	Participation, Series 2009, 6.625%, 11/01/29 (Pre-refunded	11/19 at 100.00) N/R	267,458
	11/01/19)			
	Palomar Pomerado Health Care District, California, Certificates of			
725	Participation, Series 2010, 6.000%, 11/01/41 (Pre-refunded	11/20 at 100.00)BBB-	799,878
	11/01/20)			
240	Pittsburg Redevelopment Agency, California, Tax Allocation	0/10 + 100 00	NI/D	2.12.022
240	Bonds, Los Medanos Community Development Project, Refunding	9/18 at 100.00	N/K	242,923
	Series 2008A, 6.500%, 9/01/28 (Pre-refunded 9/01/18)			
95	Rancho Santa Fe CSD Financing Authority, California, Revenue	0/21 at 100 00	٨	106 900
7 .0	Bonds, Superior Lien Series 2011A, 5.750%, 9/01/30 (Pre-refunded 9/01/21)	9/21 at 100.00	Α-	106,890
	(110-161uiiucu 3/01/41)			

1,000	San Francisco City and County Redevelopment Financing Authority, California, Tax Allocation Revenue Bonds, San Francisco Redevelopment Projects, Series 2009B, 6.625%, 8/01/39 (Pre-refunded 8/01/19)	8/19 at 100.00	AA	1,058,610
	San Francisco Redevelopment Finance Authority, California, Tax			
15	Allocation Revenue Bonds, Mission Bay North Redevelopment	2/21 at 100.00	A-	16,964
	Project, Series 2011C, 6.750%, 8/01/41 (Pre-refunded 2/01/21)			
	San Francisco Redevelopment Financing Authority, California,			
	Tax Allocation Revenue Bonds, Mission Bay South			
	Redevelopment Project, Series 2011D:			
15	7.000%, 8/01/33 (Pre-refunded 2/01/21)	2/21 at 100.00	BBB+	17,062
15	7.000%, 8/01/41 (Pre-refunded 2/01/21)	2/21 at 100.00	BBB+	17,061
	Tuolumne Wind Project Authority, California, Revenue Bonds,			
1,000	Tuolumne Company Project, Series 2009A, 5.625%, 1/01/29	1/19 at 100.00	AA-	1,024,220
	(Pre-refunded 1/01/19)			
4				

Description (1)	Provisions (2)	Ratings (3)	Value
U.S. Guaranteed (5) (continued) Yorba Linda Redevelopment Agency, Orange County, California, Tax Allocation Revenue Bonds, Yorba Linda Redevelopment Project, Subordinate Lien Series 2011A, 6.000%, 9/01/26 (Pre-refunded 9/01/21)	9/21 at 100.00	N/R	\$ 45,320
Total U.S. Guaranteed			15,209,213
Los Angeles Department of Water and Power, California, Power	1/26 at 100.00	AA	481,836
Los Angeles Department of Water and Power, California, Power System Revenue Bonds, Series 2017A, 5.000%, 7/01/47	1/27 at 100.00	AA	1,447,337
M-S-R Energy Authority, California, Gas Revenue Bonds, Citigroup Prepay Contracts, Series 2009C, 6.500%, 11/01/39	No Opt. Call	A	1,420,820
Southern California Public Power Authority, Natural Gas Project 1 Revenue Bonds, Series 2007A, 5.250%, 11/01/24	No Opt. Call	A	2,744,208
Total Utilities Water and Sewer – 6.0% (6.2% of Total Investments)			6,094,201
California Infrastructure and Economic Development Bank. Clean Water State Revolving Fund Revenue Bonds, Green Series 2018, 5.000%, 10/01/43	4/28 at 100.00	AAA	1,195,380
Furnishing Revenue Bonds, Poseidon Resources Channelside LP Desalination Project, Series 2012, 5.000%, 11/21/45 (Alternative	7/22 at 100.00	Baa3	1,146,659
Los Angeles, California, Wastewater System Revenue Bonds, Green Subordinate Lien Series 2017A, 5.250%, 6/01/47	6/27 at 100.00	AA	447,915
Water Utility Revenue Bonds, Refunding Subordinate Lien Series	8/26 at 100.00	Aa3	396,724
Total Water and Sewer Total Long-Term Investments (cost \$46,313,640) Other Assets Less Liabilities – 1.8% Net Asset Applicable to Common Shares – 100%			3,186,678 51,694,100 968,283 \$ 52,662,383
	Yorba Linda Redevelopment Agency, Orange County, California, Tax Allocation Revenue Bonds, Yorba Linda Redevelopment Project, Subordinate Lien Series 2011A, 6.000%, 9/01/26 (Pre-refunded 9/01/21) Total U.S. Guaranteed Utilities — 11.6% (11.8% of Total Investments) Los Angeles Department of Water and Power, California, Power System Revenue Bonds, Series 2016B, 5.000%, 7/01/37 Los Angeles Department of Water and Power, California, Power System Revenue Bonds, Series 2017A, 5.000%, 7/01/47 M-S-R Energy Authority, California, Gas Revenue Bonds, Citigroup Prepay Contracts, Series 2009C, 6.500%, 11/01/39 Southern California Public Power Authority, Natural Gas Project 1 Revenue Bonds, Series 2007A, 5.250%, 11/01/24 Total Utilities Water and Sewer — 6.0% (6.2% of Total Investments) California Infrastructure and Economic Development Bank. Clean Water State Revolving Fund Revenue Bonds, Green Series 2018, 5.000%, 10/01/43 California Pollution Control Financing Authority, Water Furnishing Revenue Bonds, Poseidon Resources Channelside LP Desalination Project, Series 2012, 5.000%, 11/21/45 (Alternative Minimum Tax), 144A Los Angeles, California, Wastewater System Revenue Bonds, Green Subordinate Lien Series 2017A, 5.250%, 6/01/47 San Diego Public Facilities Financing Authority, California, Water Utility Revenue Bonds, Refunding Subordinate Lien Series 2016B, 5.000%, 8/01/32 Total Water and Sewer Total Long-Term Investments (cost \$46,313,640) Other Assets Less Liabilities — 1.8%	U.S. Guaranteed (5) (continued) Yorba Linda Redevelopment Agency, Orange County, California, Tax Allocation Revenue Bonds, Yorba Linda Redevelopment Project, Subordinate Lien Series 2011A, 6.000%, 9/01/26 (Pre-refunded 9/01/21) Total U.S. Guaranteed Utilities — 11.6% (11.8% of Total Investments) Los Angeles Department of Water and Power, California, Power System Revenue Bonds, Series 2016B, 5.000%, 7/01/37 Los Angeles Department of Water and Power, California, Power System Revenue Bonds, Series 2017A, 5.000%, 7/01/47 M-S-R Energy Authority, California, Gas Revenue Bonds, Citigroup Prepay Contracts, Series 2009C, 6.500%, 11/01/39 Southern California Public Power Authority, Natural Gas Project 1 Revenue Bonds, Series 2007A, 5.250%, 11/01/24 Total Utilities Water and Sewer — 6.0% (6.2% of Total Investments) California Infrastructure and Economic Development Bank. Clean Water State Revolving Fund Revenue Bonds, Green Series 2018, 5.000%, 10/01/43 California Pollution Control Financing Authority, Water Furnishing Revenue Bonds, Poseidon Resources Channelside LP Desalination Project, Series 2012, 5.000%, 11/21/45 (Alternative Minimum Tax), 144A Los Angeles, California, Wastewater System Revenue Bonds, Green Subordinate Lien Series 2017A, 5.250%, 6/01/47 San Diego Public Facilities Financing Authority, California, Water Utility Revenue Bonds, Refunding Subordinate Lien Series 2016B, 5.000%, 8/01/32 Total Water and Sewer Total Long-Term Investments (cost \$46,313,640) Other Assets Less Liabilities — 1.8%	U.S. Guaranteed (5) (continued) Yorba Linda Redevelopment Agency, Orange County, California, Tax Allocation Revenue Bonds, Yorba Linda Redevelopment Project, Subordinate Lien Series 2011A, 6.000%, 9/01/26 (Pre-refunded 9/01/21) Total U.S. Guaranteed Utilities — 11.6% (11.8% of Total Investments) Los Angeles Department of Water and Power, California, Power System Revenue Bonds, Series 2016B, 5.000%, 7/01/37 Los Angeles Department of Water and Power, California, Power System Revenue Bonds, Series 2017A, 5.000%, 7/01/47 M-S-R Energy Authority, California, Gas Revenue Bonds, Citigroup Prepay Contracts, Series 2009C, 6.500%, 11/01/39 Southern California Public Power Authority, Natural Gas Project 1 Revenue Bonds, Series 2007A, 5.250%, 11/01/24 Total Utilities Water and Sewer — 6.0% (6.2% of Total Investments) California Infrastructure and Economic Development Bank. Clean Water State Revolving Fund Revenue Bonds, Green Series 2018, 5.000%, 10/01/43 California Pollution Control Financing Authority, Water Furnishing Revenue Bonds, Poseidon Resources Channelside LP Desalination Project, Series 2012, 5.000%, 11/21/45 (Alternative Minimum Tax), 144A Los Angeles, California, Wastewater System Revenue Bonds, Green Subordinate Lien Series 2017A, 5.250%, 6/01/47 San Diego Public Facilities Financing Authority, California, Water Utility Revenue Bonds, Refunding Subordinate Lien Series 2016B, 5.000%, 8/01/32 Total Water and Sewer Total Long-Term Investments (cost \$46,313,640) Other Assets Less Liabilities — 1.8%

Fair Value Measurements

Fair value is defined as the price that would be received 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).

 5

13

NCB Nuveen California Municipal Value Fund 2 (continued)

Portfolio of Investments as of May 31, 2018

(Unaudited)

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 \$ — \$51,694,100\$ — \$51,694,100

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. The table below presents the cost and unrealized appreciation (depreciation) of the Fund's investment portfolio, as determined on a federal income tax basis, as of May 31, 2018.

Tax cost of investments \$46,074,876

Gross unrealized:

Appreciation \$ 5,638,628

Depreciation (19,404)

Net unrealized appreciation (depreciation) of investments \$ 5,619,224

- (1) All percentages shown in the Portfolio of Investments are based on net assets applicable to common shares unless otherwise noted.
 - Optional Call Provisions: Dates (month and year) and prices of the earliest optional call or redemption. There
- (2) may be other call provisions at varying prices at later dates. Certain mortgage-backed securities may be subject to periodic principal paydowns.
 - For financial reporting purposes, the ratings disclosed are the highest of Standard & Poor's Group ("Standard & Poor's"), Moody's Investors Service, Inc. ("Moody's") or Fitch, Inc. ("Fitch") rating. This treatment of split-rated
- (3) securities may differ from that used for other purposes, such as for Fund investment policies. 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.
- (4) Step-up coupon bond, a bond with a coupon that increases ("steps up"), usually at regular intervals, while the bond is outstanding. The rate shown is the coupon as of the end of the reporting period.
- (5) Backed by an escrow or trust containing sufficient U.S. Government or U.S. Government agency securities, which ensure the timely payment of principal and interest.
- (6) Investment, or portion of investment, has been pledged to collateralize the net payment obligations for investments in inverse floating rate transactions.

Investment is exempt from registration under Rule 144A of the Securities Act of 1933, as amended. These 144A investments may only be resold in transactions exempt from registration, which are normally those transactions with qualified institutional buyers.

Inverse floating rate security issued by a tender option bond ("TOB") trust, the interest rate on which varies

IF inversely with the Securities Industry Financial Markets Association (SIFMA) short-term rate, which resets weekly, or a similar short-term rate, and is reduced by the expenses related to the TOB trust.

6

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/ Gifford R. Zimmerman

Gifford R. Zimmerman Vice President and Secretary

Date: July 30, 2018

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/ Cedric H. Antosiewicz

Cedric H. Antosiewicz

Chief Administrative Officer (principal executive

officer)

Date: July 30, 2018

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

Stephen D. Foy

Vice President and Controller (principal financial

officer)

Date: July 30, 2018