

BLACKROCK MUNIHOLDINGS CALIFORNIA QUALITY FUND, INC.

Form N-Q

June 22, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED

MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-08573

Name of Fund: BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock

MuniHoldings California Quality Fund, Inc., 55 East 52nd Street, New York, NY 10055

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 07/31/2016

Date of reporting period: 04/30/2016

Item 1 Schedule of Investments

Schedule of Investments April 30, 2016 (Unaudited)

BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
California 104.3%		
Corporate 2.7%		
California Pollution Control Financing Authority, Refunding RB, Waste Management, Inc., AMT:		
Series A-1, 3.38%, 7/01/25	\$ 5,000	\$ 5,394,400
Series B-1, 3.00%, 11/01/25	9,000	9,479,250
City of Chula Vista California, Refunding RB, San Diego Gas & Electric, Series A, 5.88%, 2/15/34	2,435	2,802,222
		17,675,872
County/City/Special District/School District 33.2%		
Centinela Valley Union High School District, GO:		
County of Los Angeles, California (BAM), 4.00%, 8/01/41 (a)	2,500	2,706,800
Election of 2010, Series A, 5.75%, 8/01/21 (b)	9,120	11,308,526
County of Kern California, COP, Capital Improvements Projects, Series A (AGC), 6.00%, 8/01/35	3,500	3,978,240
County of Los Angeles Public Works Financing Authority, Refunding RB, Series D:		
4.00%, 12/01/40	1,000	1,073,280
5.00%, 12/01/45	1,430	1,690,289
County of Orange California Sanitation District, COP, Series A, 5.00%, 2/01/19 (b)	2,500	2,788,950
County of Riverside California Public Financing Authority, RB, Capital Facilities Project, 5.25%, 11/01/45	10,000	11,995,300
County of San Joaquin California Transportation Authority, Refunding RB, Limited Tax, Measure K, Series A, 6.00%, 3/01/36	2,665	3,238,002
County of Ventura California Community College District, GO, Election of 2002, Series C, 5.50%, 8/01/18 (b)	4,000	4,430,120
Culver City Redevelopment Finance Authority California, Refunding, Tax Allocation Bonds, Series A (AGM), 5.60%, 11/01/25	3,750	3,765,712
	Par	
	(000)	Value
Municipal Bonds		
California (continued)		
County/City/Special District/School District (continued)		
Fremont Union High School District, GO, Refunding, 4.00%, 8/01/40	\$ 2,500	\$ 2,731,250
Garden Grove Unified School District, GO, Election of 2010, Series C, 5.25%, 8/01/40	5,500	6,651,920
Gavilan Joint Community College District, GO, Election of 2004, Series D:		
5.50%, 8/01/31	2,170	2,563,074
5.75%, 8/01/35	8,400	10,003,056
Golden Empire Schools Financing Authority, Refunding RB, Kern High School District Projects, 0.91%, 5/01/17 (c)	5,000	4,998,200
Grossmont California Healthcare District, GO, Election of 2006, Series B, 6.13%, 7/15/21 (b)	2,000	2,515,420
Imperial Irrigation District, Series A, Electric System Revenue:		
5.13%, 11/01/18 (b)	6,530	7,240,072
5.13%, 11/01/38	1,470	1,621,601
Kern Community College District, GO, Safety Repair & Improvements, Series C:		
5.25%, 11/01/32	5,715	7,116,146
5.75%, 11/01/34	12,085	15,492,366
Los Alamitos Unified School District, GO, Refunding, School Facilities Improvement, Series E, 5.25%, 8/01/39	3,700	4,480,441
Los Rios Community College District, GO, Election of 2008, Series A, 5.00%, 8/01/35	11,000	12,680,690
Merced Union High School District, GO, CAB, Refunding (AGM) (d):		
0.00%, 8/01/40	3,800	1,261,220
0.00%, 8/01/42	4,125	1,211,265
Mount San Jacinto Community College District, GO, Series A, 5.00%, 8/01/35	3,565	4,320,174
Oxnard Union High School District, GO, Refunding, Election of 2004, Series A (AGM), 5.00%, 8/01/35	10,000	11,372,100
Redlands Unified School District California, GO, Election of 2008 (AGM), 5.25%, 7/01/33	5,000	5,465,650
Rio Elementary School District, GO, Series A, 5.25%, 8/01/40	5,865	7,029,202

Schedule of Investments (continued)

BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

	Par	
	(000)	Value
Municipal Bonds		
California (continued)		
County/City/Special District/School District (continued)		
Riverside Community College District Foundation, GO, Election of 2004 (b):		
Series C (AGM), 5.00%, 8/01/17	\$ 8,750	\$ 9,232,300
Series C (NPFGC), 5.00%, 8/01/17	8,910	9,401,119
San Diego Regional Building Authority, RB, County Operations Center & Annex, Series A, 5.50%, 2/01/19 (b)	905	1,020,062
San Diego Unified School District, GO, CAB, Series C (d):		
Election of 2008, 0.00%, 7/01/42	3,605	1,356,381
Election of 2008, 0.00%, 7/01/43	1,310	473,552
Election of 2008, 0.00%, 7/01/45	1,575	526,759
0.00%, 7/01/47	1,000	307,790
San Jose California Financing Authority, LRB, Convention Center Expansion & Renovation Project, Series A:		
5.75%, 5/01/36	2,560	2,571,341
5.75%, 5/01/42	4,500	5,340,105
San Jose California Financing Authority, Refunding LRB, Civic Center Project, Series A, 5.00%, 6/01/39	5,800	6,761,060
San Marcos Redevelopment Agency Successor Agency, Refunding, Tax Allocation Bonds, Series A:		
5.00%, 10/01/32	1,700	2,059,550
5.00%, 10/01/33	1,125	1,357,684
Snowline Joint Unified School District, COP, Refunding, Refining Project (AGC), 5.75%, 9/01/19 (b)	5,635	6,544,602
Sweetwater Union High School District, GO, Refunding, 4.00%, 8/01/42	5,000	5,389,250
West Contra Costa California Unified School District, GO:		
Election of 2010, Series A (AGM), 5.25%, 8/01/41	5,390	6,379,281
Election of 2010, Series B, 5.50%, 8/01/39	3,195	3,924,834

Par

	(000)	Value
Municipal Bonds		
California (continued)		
County/City/Special District/School District (continued)		
West Contra Costa California Unified School District, GO (continued):		
Election of 2012, Series A, 5.50%, 8/01/39	\$ 2,500	\$ 3,071,075
		221,445,811
Education 2.5%		
California Municipal Finance Authority, RB, Emerson College, 6.00%, 1/01/42	2,750	3,296,177
University of California, Refunding RB:		
Series AO, 5.00%, 5/15/40	5,430	6,483,909
Series AR, 5.00%, 5/15/41	2,360	2,864,828
Series AR, 5.00%, 5/15/46	3,600	4,348,800
		16,993,714
Health 13.4%		
ABAG Finance Authority for Nonprofit Corps., Refunding RB, Sharp Healthcare, Series B, 6.25%, 8/01/39	6,305	7,303,081
California Health Facilities Financing Authority, RB:		
Children's Hospital, Series A, 5.25%, 11/01/41	8,000	9,213,840
Providence Health Services, Series B, 5.50%, 10/01/39	4,130	4,699,775
Sutter Health, Series A, 5.00%, 11/15/41	2,275	2,695,807
Sutter Health, Series A, 5.25%, 11/15/46	7,500	7,679,325
Sutter Health, Series B, 6.00%, 8/15/42	9,655	11,597,972
California Health Facilities Financing Authority, Refunding RB:		
Dignity Health, Series A, 6.00%, 7/01/34	3,700	4,249,857
Lucile Salter Packard Children's Hospital at Stanford, Series B, 5.00%, 8/15/55	4,500	5,300,100
Providence Health and Services, Series A, 5.00%, 10/01/38	10,970	12,859,144
St. Joseph Health System, Series A, 5.00%, 7/01/37	10,000	11,681,900

Schedule of Investments (continued)

BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

	Par	
	(000)	Value
Municipal Bonds		
California (continued)		
Health (continued)		
California Statewide Communities Development Authority, Refunding RB:		
CHF Irvine LLC, 5.00%, 5/15/40	\$ 750	\$ 879,248
Kaiser Permanente, Series C, 5.25%, 8/01/31	2,500	2,526,125
Trinity Health Credit Group Composite Issue, 5.00%, 12/01/41	6,235	7,064,068
Washington Township Health Care District, GO, Election of 2004, Series B, 5.50%, 8/01/38	1,625	1,986,546
		89,736,788
State 7.6%		
State of California, GO:		
Various Purposes, 6.00%, 3/01/33	5,000	5,943,300
Various Purposes, 6.00%, 4/01/38	27,765	31,830,907
Refunding, Veterans Bond, 4.00%, 12/01/40	4,000	4,351,360
State of California Public Works Board, LRB:		
Department of Education, Riverside Campus Project, Series B, 6.50%, 4/01/34	3,670	4,295,441
Various Capital Projects, Series I, 5.50%, 11/01/33	2,015	2,501,079
State of California Public Works Board, RB, California State Prisons, Series C, 5.75%, 10/01/31	1,205	1,482,017
		50,404,104
Transportation 20.7%		
City & County of San Francisco California Airports Commission, ARB, Series E, 6.00%, 5/01/39	9,650	11,103,193
City & County of San Francisco California Airports Commission, Refunding ARB, AMT:		
2nd Series 34E (AGM), 5.75%, 5/01/22	4,950	5,438,615
2nd Series 34E (AGM), 5.75%, 5/01/24	5,000	5,488,800
2nd Series A, 5.00%, 5/01/29	6,435	7,459,259
	Par	
Municipal Bonds		
California (continued)		
Transportation (continued)		
City of Los Angeles California Department of Airports, ARB:		
AMT, Senior Series A, 5.00%, 5/15/40	\$ 3,830	\$ 4,442,647
AMT, Series D, 5.00%, 5/15/35	2,000	2,347,640
AMT, Series D, 5.00%, 5/15/36	1,500	1,755,510
Los Angeles International Airport, Senior Series D, 5.25%, 5/15/29	2,590	3,015,744
City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Series A:		
Senior, 5.00%, 5/15/40	5,000	5,680,950
5.25%, 5/15/39	5,845	6,551,485
City of San Jose California, ARB, AMT, Series A (AMBAC), 5.00%, 3/01/37	8,000	8,257,520
City of San Jose California, Refunding ARB, Series A-1, AMT:		
5.25%, 3/01/23	3,785	4,418,155
6.25%, 3/01/34	1,400	1,680,966
County of Orange California, ARB, Series B, 5.75%, 7/01/34	6,345	6,719,545
County of Sacramento California, ARB:		
Senior Series A (AGC), 5.50%, 7/01/41	8,200	8,977,852
Senior Series B, 5.75%, 7/01/39	2,650	2,913,755
Senior Series B, AMT (AGM), 5.75%, 7/01/28	13,275	14,629,448
Senior Series B, AMT (AGM), 5.25%, 7/01/33	18,000	19,473,300
Senior Series B, AMT (AGM), 5.25%, 7/01/39	4,995	5,379,265
County of San Bernardino California Transportation Authority, RB, Series A, 5.25%, 3/01/40	4,545	5,465,408
Port of Los Angeles California Harbor Department, RB, Series B, 5.25%, 8/01/34	5,530	6,250,946

Schedule of Investments (continued)

BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

	Par	
	(000)	Value
Municipal Bonds		
California (continued)		
Transportation (continued)		
Port of Los Angeles California Harbor Department, Refunding RB, Series A, AMT, 5.00%, 8/01/44	\$ 500	\$ 573,805
		138,023,808
Utilities 24.2%		
Anaheim Public Financing Authority, RB, Electric System Distribution Facilities, Series A, 5.38%, 10/01/36	2,200	2,585,330
Antelope Valley-East Kern Water Agency, Refunding RB, 5.00%, 6/01/34	1,075	1,312,242
City of Los Angeles California Department of Water & Power, RB:		
Series A, 5.38%, 7/01/38	9,375	10,435,312
Series A, 5.00%, 7/01/41	1,705	2,057,764
Series A, 5.00%, 7/01/46	2,845	3,417,414
Sub-Series A-2 (AGM), 5.00%, 7/01/35	5,000	5,040,750
City of Los Angeles California Department of Water & Power, Refunding RB, Series A, 5.25%, 7/01/39	16,000	18,509,280
City of Los Angeles California Wastewater System, Refunding RB, Sub-Series A, 5.00%, 6/01/28	2,000	2,312,180
City of San Francisco California Public Utilities Commission Water Revenue, RB:		
Series A, 5.00%, 11/01/39	5,245	6,226,759
Series B, 5.00%, 11/01/30	10,000	11,361,500
County of Kern California Water Agency Improvement District No. 4, Refunding RB, Series A (AGM):		
4.00%, 5/01/35	1,460	1,594,626
4.00%, 5/01/36	1,430	1,555,397
4.00%, 5/01/38	880	948,473
County of Sacramento California Sanitation Districts Financing Authority, RB (NPFGC), 5.00%, 12/01/36	1,010	1,014,101
Dublin-San Ramon Services District Water Revenue, Refunding RB, 6.00%, 8/01/41	4,000	4,765,280
	Par	
	(000)	Value
Municipal Bonds		
California (continued)		
Utilities (continued)		
East Bay California Municipal Utility District Wastewater System Revenue, Refunding RB, Sub-Series A, 5.00%, 6/01/17 (AMBAC) (b)	\$ 17,015	\$ 17,831,890
East Bay California Municipal Utility District Water System Revenue, Refunding RB (b):		
Series A (NPFGC), 5.00%, 6/01/17	6,670	6,990,227
Sub-Series A (AGM), 5.00%, 6/01/17	10,000	10,480,100
Eastern Municipal Water District, COP, Series H, 5.00%, 7/01/33	2,505	2,724,839
El Dorado Irrigation District / El Dorado County Water Agency, Refunding RB, Series A (AGM), 5.25%, 3/01/39	10,000	11,930,600
San Diego Public Facilities Financing Authority Sewer, Refunding RB, Senior Series A, 5.25%, 5/15/19 (b)	11,060	12,549,893
San Diego Public Facilities Financing Authority Water, Refunding RB, Series B, 5.50%, 8/01/39	8,000	9,128,720
San Juan Water District, Refunding RB, San Juan & Citrus Heights, 5.25%, 2/01/33	7,325	8,696,093
Santa Clara Valley Water District, Refunding RB, Series A, 5.00%, 6/01/46	5,000	5,979,700
Upper Santa Clara Valley Joint Powers Authority, Refunding RB, Series A (a):		
5.00%, 8/01/41	875	1,062,364
5.00%, 8/01/46	1,000	1,209,140
		161,719,974
Total Municipal Bonds 104.3%		696,000,071

Schedule of Investments (continued)

BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

Municipal Bonds Transferred to	Par	
Tender Option Bond Trusts (e)	(000)	Value
California 57.3%		
County/City/Special District/School District 28.0%		
County of Alameda California Joint Powers Authority, Refunding LRB (AGM), 5.00%, 12/01/34	\$ 13,180	\$ 14,025,233
County of San Luis Obispo Community College District, GO, Refunding, Election of 2014, Series A, 4.00%, 8/01/40	6,585	7,219,516
Desert Community College District California, GO, Series C (AGM), 5.00%, 8/01/17 (b)	16,530	17,441,134
Foothill-De Anza Community College District, GO, Series C, 5.00%, 8/01/40	40,000	46,357,600
Los Angeles Community College District California, GO (b):		
Election of 2001, Series A (NPFGC), 5.00%, 8/01/17	6,647	7,013,842
Election of 2001, Series E-1, 5.00%, 8/01/18	11,770	12,904,157
Election of 2003, Series F-1, 5.00%, 8/01/18	10,000	10,963,600
Los Angeles Community College District California, GO, Refunding, Election of 2008, Series A, 6.00%, 8/01/19 (b)	9,596	11,196,490
Palomar California Community College District, GO, Election of 2006, Series C, 5.00%, 8/01/44	15,140	18,015,389
Poway Unified School District, GO, Election of 2002, Improvement District 02, Series 1-B (AGM), 5.00%, 8/01/16 (b)	10,000	10,116,600
Southwestern Community College District, GO, Election of 2008, Series D, 5.00%, 8/01/44	10,820	12,855,350
West Valley-Mission Community College District, GO, Election of 2012, Series B, 4.00%, 8/01/40	17,000	18,740,120
		186,849,031
Education 5.7%		
University of California, RB:		
Series AM, 5.25%, 5/15/44	10,210	12,236,277
Series O, 5.75%, 5/15/19 (b)	11,190	12,865,814
University of California, Refunding RB:		
Series A, 5.00%, 11/01/43	6,001	7,173,327
Municipal Bonds Transferred to	Par	
Tender Option Bond Trusts (e)	(000)	Value
California (continued)		
Education (continued)		
University of California, Refunding RB (continued):		
Series AF, 5.00%, 5/15/39	\$ 5,000	\$ 5,919,700
		38,195,118
Health 9.2%		
California Health Facilities Financing Authority, RB, Sutter Health, Series A, 5.00%, 8/15/52	14,520	16,978,672
California Health Facilities Financing Authority, Refunding RB, Sutter Health, Series A, 5.00%, 8/15/43	19,425	22,726,779
California Statewide Communities Development Authority, RB, Kaiser Permanente, Series A, 5.00%, 4/01/42	19,070	22,019,366
		61,724,817
Transportation 3.3%		
City of Los Angeles California Department of Airports, RB, Senior Revenue, Series A, AMT, 5.00%, 5/15/40	5,500	6,379,780
City of Los Angeles California Department of Airports, Series D, AMT, 5.00%, 5/15/41	13,331	15,452,469
		21,832,249
Utilities 11.1%		
City of Los Angeles California Wastewater System, RB, Green Bonds, Series A, 5.00%, 6/01/44	13,790	16,478,085
County of San Diego California Water Authority Financing Corp., COP, Refunding, Series A (AGM):		
5.00%, 5/01/18 (b)	2,778	3,006,629
5.00%, 5/01/33	13,962	15,112,077
County of San Mateo California Community College District, GO, Series A, 5.00%, 9/01/45	17,615	21,035,295
East Bay California Municipal Utility District Water System Revenue, RB, Series C, 5.00%, 6/01/44	11,000	13,073,280

Schedule of Investments (continued)

BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

Municipal Bonds Transferred to	Par	Value
	(000)	
Tender Option Bond Trusts (e)		
California (continued)		
Utilities (continued)		
Rancho Water District Financing Authority, Refunding RB, Series A (AGM), 5.00%, 8/01/34	\$ 5,008	\$ 5,463,881
		74,169,247
Total Municipal Bonds Transferred to		
Tender Option Bond Trusts 57.3%		382,770,462
Total Long-Term Investments		
(Cost \$994,889,487) 161.6%		1,078,770,533
Short-Term Securities	Shares	Value
BIF California Municipal Money Fund, 0.00% (f)(g)	6,488,003	\$ 6,488,003
Total Short-Term Securities		6,488,003
(Cost \$6,488,003) 1.0%		
Total Investments		1,085,258,536
(Cost \$1,001,377,490*) 162.6%		
Other Assets Less Liabilities 0.9%		5,877,203
Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (25.4)%		(169,781,060)
VMTP Shares, at Liquidation Value (38.1)%		(254,000,000)
Net Assets Applicable to Common Shares 100.0%		\$ 667,354,679

* As of period end, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

Tax cost	\$ 832,231,092
Gross unrealized appreciation	\$ 83,893,271
Gross unrealized depreciation	(564,556)
Net unrealized appreciation	\$ 83,328,715

Notes to Schedule of Investments

- (a) When-issued security.
- (b) U.S. Government securities, held in escrow, are used to pay interest on this security, as well as to retire the bond in full at the date indicated, typically at a premium to par.
- (c) Variable rate security. Rate as of period end.
- (d) Zero-coupon bond.

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(e) Represent bonds transferred to a TOB Trust in exchange of cash and residual certificates received by the Fund. These bonds serve as collateral in a secured borrowing.

(f) During the period ended April 30, 2016, investments in issuers considered to be affiliates of the Fund for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at July 31, 2015	Net Activity	Shares Held at April 30, 2016	Income
BIF California Municipal Money Fund	505,447	5,982,556	6,488,003	\$ 9

(g) Current yield as of period end.

For Fund compliance purposes, the Fund's sector classifications refer to any one or more of the sector sub-classifications used by one or more widely recognized market indexes or rating group indexes, and/or as defined by the investment advisor. These definitions may not apply for purposes of this report, which may combine such sector sub-classifications for reporting ease.

Schedule of Investments (continued)

BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

Derivative Financial Instruments Outstanding as of Period End

Futures Contracts

Contracts			Notional	Unrealized
Short	Issue	Expiration	Value	Appreciation
(29)	5-Year U.S. Treasury Note	June 2016	\$ 3,506,508	\$ 12,198
(96)	10-Year U.S. Treasury Note	June 2016	\$12,486,000	65,915
(33)	Long U.S. Treasury Bond	June 2016	\$ 5,389,312	80,330
(12)	Ultra U.S. Treasury Bond	June 2016	\$ 2,056,125	34,294
Total				\$ 192,737

Portfolio Abbreviations

AGC	Assured Guarantee Corp.	ARB	Airport Revenue Bonds	GO	General Obligation Bonds
AGM	Assured Guaranty Municipal Corp.	BAM	Build America Mutual Assurance Co.	LRB	Lease Revenue Bonds
AMBAC	American Municipal Bond Assurance Corp.	CAB	Capital Appreciation Bonds	NPFGC	National Public Finance Guarantee Corp.
AMT	Alternative Minimum Tax (subject to)	COP	Certificates of Participation	RB	Revenue Bonds

BLACKROCK MUNIHOLDINGS CALIFORNIA QUALITY FUND, INC.

APRIL 30, 2016

7

Schedule of Investments (continued)

BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

Fair Value Hierarchy as of Period End

Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a fair value hierarchy consisting of three broad levels for financial reporting purposes as follows:

Level 1 unadjusted price quotations in active markets/exchanges for identical assets or liabilities that Fund has the ability to access

Level 2 other observable inputs (including, but not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including Fund's own assumptions used in determining the fair value of investments and derivative financial instruments)

The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety. The significant unobservable inputs used by the Global Valuation Committee in determining the price for Fair Valued Investments are typically categorized as level 3.

Changes in valuation techniques may result in transfers into or out of an assigned level within the hierarchy. In accordance with the Fund's policy, transfers between different levels of the fair value hierarchy are deemed to have occurred as of the beginning of the reporting period. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investments and derivative financial instruments and is not necessarily an indication of the risks associated with investing in those securities. For information about the Fund's policy regarding valuation of investments, refer to the Fund's most recent financial statements as contained in its semi-annual report.

The following tables summarize the Fund's investments and derivative financial instruments categorized in the disclosure hierarchy:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments ¹		\$ 1,078,770,533		\$ 1,078,770,533
Short-Term Securities	\$ 6,488,003			6,488,003
Total Investments	\$ 6,488,003	\$ 1,078,770,533		\$ 1,085,258,536

	Level 1	Level 2	Level 3	Total
Derivative Financial Instruments ²				
Assets:				
Interest rate contracts	\$ 192,737			\$ 192,737

¹ See above Schedule of Investments for values in each sector.

² Derivative financial instruments are futures contracts. Futures contracts are valued at the unrealized appreciation (depreciation) on the instrument.

Schedule of Investments (concluded)

BlackRock MuniHoldings California Quality Fund, Inc. (MUC)

The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial reporting purposes. As of period end, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Assets:				
Cash pledged for financial futures contracts	\$ 455,500			\$ 455,500
Liabilities:				
Bank overdraft		\$ (275,027)		(275,027)
TOB Trust Certificates		(169,698,729)		(169,698,729)
VMTP Shares		(254,000,000)		(254,000,000)
Total	\$ 455,500	\$ (423,973,756)		\$ (423,518,256)

During the period ended April 30, 2016, there were no transfers between levels.

BLACKROCK MUNIHOLDINGS CALIFORNIA QUALITY FUND, INC.

APRIL 30, 2016

9

Item 2 Controls and Procedures

- 2(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")) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended.
- 2(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) 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

Certifications Attached hereto

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.

BlackRock MuniHoldings California Quality Fund, Inc.

By: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock MuniHoldings California Quality Fund, Inc.

Date: June 22, 2016

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: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock MuniHoldings California Quality Fund, Inc.

Date: June 22, 2016

By: /s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock MuniHoldings California Quality Fund, Inc.

Date: June 22, 2016