

BLACKROCK MUNIYIELD CALIFORNIA QUALITY FUND, INC.

Form N-Q

December 22, 2015

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 811-06692

Name of Fund: BlackRock MuniYield California Quality Fund, Inc. (MCA)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock MuniYield 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: 10/31/2015

Item 1 Schedule of Investments

Schedule of Investments October 31, 2015 (Unaudited)

BlackRock MuniYield California Quality Fund, Inc. (MCA)

(Percentages shown are based on Net Assets)

| | Par | |
|--|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| California 87.8% | | |
| Corporate 1.2% | | |
| California Pollution Control Financing Authority, Refunding RB, Waste Management, Inc., Series B-1, AMT, 3.00%, 11/01/25 (a) | \$ 4,025 | \$ 4,014,656 |
| City of Chula Vista California, Refunding RB, San Diego Gas & Electric, Series A, 5.88%, 2/15/34 | 2,435 | 2,787,904 |
| | | 6,802,560 |
| County/City/Special District/School District 28.9% | | |
| Centinela Valley Union High School District, GO, Refunding, Election of 2008, Series B, 6.00%, 8/01/36 | 2,250 | 2,807,168 |
| City & County of San Francisco California, COP, Port Facilities Project, Series C, AMT, 5.25%, 3/01/32 | 1,050 | 1,194,858 |
| County of Kern California, COP, Capital Improvements Projects, Series A (AGC), 6.00%, 8/01/35 | 2,000 | 2,289,920 |
| County of Orange California Sanitation District, COP, Series A, 5.00%, 2/01/35 | 2,500 | 2,780,700 |
| County of Orange California Water District, COP, Refunding, 5.25%, 8/15/34 | 9,045 | 10,336,083 |
| County of San Joaquin California Transportation Authority, Refunding RB, Limited Tax, Measure K, Series A, 6.00%, 3/01/36 | 2,755 | 3,320,133 |
| Fremont Union High School District, GO, Refunding, 4.00%, 8/01/40 | 5,000 | 5,167,800 |
| Garden Grove Unified School District, GO, Election of 2010, Series C, 5.25%, 8/01/37 | 2,725 | 3,111,759 |
| Grossmont Healthcare District, GO, Election of 2006, Series B, 6.13%, 7/15/21 (b) | 2,500 | 3,158,825 |
| Grossmont Union High School District, GO, Election of 2008, Series C, 5.50%, 8/01/33 | 1,880 | 2,164,068 |
| Kern Community College District, GO, Safety Repair & Improvements, Series C, 5.25%, 11/01/32 | 5,715 | 6,659,175 |
| | Par | |
| | (000) | Value |
| Municipal Bonds | | |
| California (continued) | | |
| County/City/Special District/School District (continued) | | |
| Los Angeles Municipal Improvement Corp., Refunding LRB, Real Property, Series B (AGC), 5.50%, 4/01/39 | \$ 2,075 | \$ 2,334,562 |
| Mount San Antonio Community College District, GO, Refunding, Election of 2008, Series 2013 A, 5.00%, 8/01/34 | 4,500 | 5,185,440 |
| Ohlone Community College District, GO, Election of 2010, Series A, 5.25%, 8/01/41 | 8,140 | 9,533,568 |
| Orchard School District, GO, Election of 2001, Series A (AGC), 5.00%, 8/01/34 | 7,490 | 8,440,032 |
| Oxnard Union High School District California, GO, Refunding, Series A (NPFGC), 6.20%, 8/01/30 | 9,645 | 10,314,267 |
| Perris Union High School District, GO, Election of 2012, Series B, 5.25%, 9/01/39 (a) | 2,715 | 3,114,214 |
| Pittsburg Unified School District, GO, Election of 2006, Series B (AGM): | | |
| 5.50%, 8/01/34 | 2,000 | 2,226,040 |
| 5.63%, 8/01/18 (b) | 4,500 | 5,097,600 |
| Placentia-Yorba Linda Unified School District, GO, Refunding, 5.00%, 8/01/32 | 3,490 | 4,066,618 |
| Redlands Unified School District California, GO, Election of 2008 (AGM), 5.25%, 7/01/33 | 5,000 | 5,507,450 |
| San Jose California Financing Authority, Series A, LRB, Convention Center Expansion & Renovation Project: | | |
| 5.75%, 5/01/36 | 2,570 | 2,636,357 |
| 5.75%, 5/01/42 | 4,500 | 5,328,855 |
| San Jose California Financing Authority, Refunding LRB: | | |
| Civic Center Project, 5.00%, 6/01/32 | 3,375 | 3,856,916 |
| Convention Center Expansion & Renovation Project, 5.00%, 6/01/39 | 5,800 | 6,506,382 |
| San Juan Unified School District, GO, Election of 2002 (AGM), 5.00%, 8/01/34 | 6,475 | 7,357,348 |
| San Leandro California Unified School District, GO, Election of 2010, Series A, 5.75%, 8/01/41 | 3,000 | 3,574,650 |

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc.
(MCA)

| | Par | |
|--|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| California (continued) | | |
| County/City/Special District/School District (continued) | | |
| Snowline Joint Unified School District, COP, Refunding, Refining Project (AGC), 5.75%, 9/01/38 | \$ 5,600 | \$ 6,416,200 |
| Walnut Valley Unified School District, GO, Election of 2007, Series B, 5.75%, 8/01/41 | 7,680 | 9,280,358 |
| Washington Township Health Care District, GO, Series B, 5.00%, 8/01/45 (a) | 2,500 | 2,800,350 |
| West Contra Costa California Unified School District, GO: Election of 2010, Series A (AGM), 5.25%, 8/01/41 | 6,140 | 7,223,587 |
| Election of 2010, Series B, 5.50%, 8/01/39 | 3,000 | 3,456,930 |
| Election of 2012, Series A, 5.50%, 8/01/39 | 2,500 | 2,880,775 |
| | | 160,128,988 |
| Education 4.7% | | |
| California Municipal Finance Authority, RB, Emerson College, 6.00%, 1/01/42 | 2,750 | 3,284,848 |
| California State University, Refunding RB, Series C (NPFGC), 5.00%, 11/01/15 (b) | 6,000 | 6,000,780 |
| Gavilan Joint Community College District, GO, Election of 2004, Series D: 5.50%, 8/01/31 | 2,165 | 2,548,053 |
| 5.75%, 8/01/35 | 8,400 | 9,974,076 |
| University of California, RB, 5.25%, 5/15/36 | 3,680 | 4,330,109 |
| | | 26,137,866 |
| Health 10.6% | | |
| California Health Facilities Financing Authority, RB: Children's Hospital, Series A, 5.25%, 11/01/41 | 10,000 | 11,146,200 |
| Providence Health Services, Series B, 5.50%, 10/01/39 | 4,205 | 4,779,235 |
| Sutter Health, Series A, 5.25%, 11/15/46 | 6,970 | 7,213,880 |
| Sutter Health, Series B, 6.00%, 8/15/42 | 7,715 | 9,118,127 |
| | Par | |
| Municipal Bonds | | |
| California (continued) | | |
| Health (continued) | | |
| California Health Facilities Financing Authority, Refunding RB, Catholic Healthcare West, Series A: 6.00%, 7/01/34 | \$ 2,370 | \$ 2,715,499 |
| 6.00%, 7/01/39 | 5,500 | 6,278,635 |
| California Statewide Communities Development Authority, RB: Kaiser Permanente, Series B, 5.25%, 3/01/45 | 6,000 | 6,078,480 |
| Sutter Health, Series A, 6.00%, 8/15/42 | 4,750 | 5,604,335 |
| California Statewide Communities Development Authority, Refunding RB: Catholic Healthcare West, Series D (BHAC), 5.50%, 7/01/31 | 865 | 928,301 |
| Trinity Health Credit Group Composite Issue, 5.00%, 12/01/41 | 2,860 | 3,160,872 |
| Washington Township Health Care District, GO, Series B, 5.50%, 8/01/38 | 1,625 | 1,920,522 |
| | | 58,944,086 |
| State 8.1% | | |
| State of California, GO: | | |
| Various Purposes, 6.00%, 3/01/33 | 5,500 | 6,591,475 |
| Various Purposes, 6.00%, 4/01/38 | 17,180 | 20,003,533 |
| Various Purposes, 6.00%, 11/01/39 | 3,510 | 4,172,583 |
| Refunding, 4.00%, 12/01/40 | 2,750 | 2,806,705 |
| State of California Public Works Board, LRB: | | |
| Department of Education, Riverside Campus Project, Series B, 6.50%, 4/01/34 | 3,670 | 4,337,720 |
| Various Capital Projects, Series I, 5.50%, 11/01/33 | 2,575 | 3,103,133 |

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc.
(MCA)

| | Par | |
|--|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| California (continued) | | |
| State (continued) | | |
| State of California Public Works Board, LRB (continued): | | |
| Various Capital Projects, Sub-Series I-1, 6.13%, 11/01/29 | \$ 3,365 | \$ 4,027,770 |
| | | 45,042,919 |
| Transportation 15.8% | | |
| City & County of San Francisco Airports Commission-San Francisco International Airport, Refunding RB, Series A, AMT, 5.00%, 5/01/40 | 3,785 | 4,126,748 |
| City & County of San Francisco California Airports Commission, ARB: | | |
| Series E, 6.00%, 5/01/39 | 9,650 | 11,173,156 |
| Special Facility Lease, SFO Fuel, Series A, AMT (AGM), 6.10%, 1/01/20 | 860 | 864,119 |
| Special Facility Lease, SFO Fuel, Series A, AMT (AGM), 6.13%, 1/01/27 | 985 | 989,570 |
| City & County of San Francisco California Airports Commission, Refunding ARB, AMT: | | |
| 2nd Series 34E (AGM), 5.75%, 5/01/24 | 5,000 | 5,518,500 |
| 2nd Series 34E (AGM), 5.75%, 5/01/25 | 3,500 | 3,852,065 |
| 2nd Series A, 5.25%, 5/01/33 | 1,900 | 2,153,916 |
| Series A, 5.00%, 5/01/39 | 6,175 | 6,741,927 |
| City of Los Angeles California Department of Airports, ARB, Los Angeles International Airport, Sub-Series B, 5.00%, 5/15/40 | 2,500 | 2,820,525 |
| City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Senior Series A, 5.25%, 5/15/29 | 4,760 | 5,405,742 |
| City of San Jose California, Refunding ARB, Series A-1, AMT, 6.25%, 3/01/34 | 1,400 | 1,649,592 |
| County of Orange California, ARB, Series B, 5.75%, 7/01/34 | 5,000 | 5,392,200 |
| County of Sacramento California, ARB: | | |
| Senior Series B, AMT (AGM), 5.25%, 7/01/33 | 8,250 | 8,953,560 |
| | Par | |
| Municipal Bonds | | |
| California (continued) | | |
| Transportation (continued) | | |
| County of Sacramento California, ARB (continued): | | |
| Subordinated & Passenger Facility Charges/Grant, Series C (AGC), 5.75%, 7/01/39 | \$ 5,555 | \$ 6,178,937 |
| County of San Bernardino California Transportation Authority, RB, Series A, 5.25%, 3/01/40 | 4,500 | 5,234,490 |
| County of San Diego California Regional Airport Authority, Refunding ARB, Series B, 5.00%, 7/01/40 | 6,350 | 7,125,335 |
| Los Angeles Harbor Department, RB, Series B: | | |
| 5.25%, 8/01/34 | 5,530 | 6,251,997 |
| 5.25%, 8/01/39 | 2,760 | 3,120,346 |
| | | 87,552,725 |
| Utilities 18.5% | | |
| Anaheim Public Financing Authority, RB, Electric System Distribution Facilities, Series A, 5.38%, 10/01/36 | 5,000 | 5,863,250 |
| City of Los Angeles California Department of Water & Power, Refunding RB, Series A, 5.25%, 7/01/39 | 8,000 | 9,160,160 |
| City of Los Angeles California Wastewater System, Refunding RB, Sub-Series A, 5.00%, 6/01/28 | 2,000 | 2,314,860 |
| City of San Francisco California Public Utilities Commission Water Revenue, RB, Sub-Series A, 5.00%, 11/01/37 | 10,000 | 11,582,400 |
| City of San Francisco California Public Utilities Commission Water Revenue, Refunding RB, Series A: | | |
| 5.25%, 11/01/31 | 6,280 | 7,169,625 |
| 5.00%, 11/01/36 | 5,335 | 6,168,594 |
| County of Riverside California Public Financing Authority, RB, Capital Facility Project, 5.25%, 11/01/45 | 10,000 | 11,548,400 |
| County of San Diego California Water Authority, COP, Refunding, Series A (AGM), 5.00%, 5/01/38 | 4,895 | 5,334,130 |

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc.
(MCA)

| | Par | |
|---|----------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| California (continued) | | |
| Utilities (continued) | | |
| Dublin-San Ramon Services District, Refunding RB, 6.00%, 8/01/41 | \$ 4,000 | \$ 4,762,520 |
| East Bay California Municipal Utility District, Refunding RB, Sub-Series A, 5.00%, 6/01/30 | 5,000 | 5,762,950 |
| East Bay California Municipal Utility District Water System Revenue, Refunding RB, Series A (NPFGC), 5.00%, 6/01/17 (b) | 3,000 | 3,214,560 |
| El Dorado Irrigation District / El Dorado County Water Agency, Refunding RB, Series A (AGM), 5.25%, 3/01/39 | 5,000 | 5,748,500 |
| Imperial Irrigation District, Refunding RB, Electric System, 5.13%, 11/01/38 | 5,000 | 5,490,200 |
| Metropolitan Water District of Southern California, RB, Series A, 5.00%, 7/01/37 | 15,000 | 15,985,650 |
| San Diego Public Facilities Financing Authority Sewer, Refunding RB, Senior Series A, 5.25%, 5/15/34 | 2,000 | 2,266,980 |
| | | 102,372,779 |
| Total Municipal Bonds 87.8% | | 486,981,923 |

Municipal Bonds Transferred to**Tender Option Bond Trusts (c)****California 70.8%****County/City/Special District/School District 29.9%**

| | | |
|---|--------|------------|
| Arcadia Unified School District California, GO, Election of 2006, Series A (AGM), 5.00%, 8/01/37 | 7,925 | 8,315,905 |
| California Health Facilities Financing Authority, RB, Sutter Health, Series A, 5.00%, 8/15/52 | 10,000 | 10,929,100 |
| County of San Luis Obispo Community College District, GO, Refunding, Election of 2014, Series A, 4.00%, 8/01/40 | 6,585 | 6,707,342 |
| Desert Community College District California, GO, Series C (AGM), 5.00%, 8/01/37 | 12,150 | 12,914,356 |

Municipal Bonds Transferred to**Tender Option Bond Trusts (c)****California (continued)****County/City/Special District/School District (continued)**

| | (000) | Value |
|--|-----------|---------------|
| Los Angeles Community College District California, GO, Series A (b): | | |
| Election of 2001 (AGM), 5.00%, 8/01/17 | \$ 12,000 | \$ 12,943,560 |
| Election of 2001 (NPFGC), 5.00%, 8/01/17 | 26,438 | 28,516,292 |
| Election of 2003, Series F-1, 5.00%, 8/01/18 | 12,000 | 13,385,520 |
| Los Angeles Community College District California, GO, Refunding, Election of 2008, 6.00%, 8/01/19 (b) | 9,596 | 11,384,458 |
| Los Angeles Unified School District California, GO, Series I, 5.00%, 1/01/34 | 5,000 | 5,633,000 |
| Palomar California Community College District, GO, Election of 2006, Series C, 5.00%, 8/01/44 | 15,140 | 17,270,652 |
| Poway Unified School District, GO, Election of 2002, Improvement District 02, Series I-B (AGM), 5.00%, 8/01/16 (b) | 10,000 | 10,357,500 |
| San Diego County Water Authority Financing Corp., Refunding, Series A: | | |
| 5.00%, 5/01/18 (b) | 1,412 | 1,567,933 |
| 5.00%, 5/01/33 | 7,098 | 7,716,562 |
| West Valley-Mission Community College District, GO, Election of 2012, Series A, 4.00%, 8/01/40 | 17,000 | 17,825,520 |
| | | 165,467,700 |

Education 15.1%

| | | |
|---|--------|------------|
| Los Rios Community College District, GO, Election of 2008, Series A, 5.00%, 8/01/35 | 11,000 | 12,617,440 |
| University of California, RB: | | |
| Limited Project, Series D (AGM), 5.00%, 5/15/16 (b) | 8,000 | 8,285,360 |
| Series AM, 5.25%, 5/15/44 | 9,210 | 10,648,418 |
| Series O, 5.75%, 5/15/19 (b) | 11,190 | 13,060,222 |
| University of California, Refunding RB: | | |
| Series A, 5.00%, 11/01/43 | 13,001 | 14,871,174 |
| Series I, 5.00%, 5/15/40 | 21,105 | 24,113,911 |

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc.
(MCA)

| Municipal Bonds Transferred to | Par | |
|--|---------------|----------------|
| | (000) | Value |
| Tender Option Bond Trusts (c) | | |
| California (continued) | | |
| Health 8.0% | | |
| California Health Facilities Financing Authority, Refunding RB, Sutter Health, Series A, 5.00%, 8/15/43 (a) | \$ 20,000 | \$ 22,513,600 |
| California Statewide Communities Development Authority, RB, Kaiser Permanente, Series A, 5.00%, 4/01/42 | 19,860 | 21,955,627 |
| | | 44,469,227 |
| Transportation 1.1% | | |
| City of Los Angeles California Department of Airports, RB, Senior Revenue, Series A, AMT, 5.00%, 5/15/40 | 5,500 | 6,131,180 |
| Utilities 16.7% | | |
| Anaheim Public Financing Authority, RB, Refunding, Series A: | | |
| 5.00%, 5/01/39 | 6,000 | 6,731,940 |
| 5.00%, 5/01/46 | 13,500 | 15,060,465 |
| City & County of San Francisco California Public Utilities Commission, RB, Water Revenue, Series B, 5.00%, 11/01/39 | 4,380 | 4,927,018 |
| City of Los Angeles California Department of Water & Power, RB, Power System, Sub-Series A-1 (AMBAC), 5.00%, 7/01/37 | 5,029 | 5,361,485 |
| City of Los Angeles California Wastewater System, RB, Green Bonds, Series A, 5.00%, 6/01/44 | 6,290 | 7,201,421 |
| Country of San Mateo Community College District, GO, Series A, 5.00%, 9/01/45 | 17,615 | 20,336,090 |
| East Bay Municipal Utility District, Refunding RB, Sub-Series A (AMBAC), 5.00%, 6/01/17 (b) | 7,990 | 8,564,321 |
| Municipal Bonds Transferred to | Par | |
| | (000) | Value |
| Tender Option Bond Trusts (c) | | |
| California (continued) | | |
| Utilities (continued) | | |
| Los Angeles Department of Water & Power, RB, Power System, Sub-Series A-1 (AGM), 5.00%, 7/01/37 | \$ 13,525 | \$ 14,418,312 |
| Rancho Water District Financing Authority, Refunding RB, Series A (AGM), 5.00%, 8/01/34 | 9,277 | 10,182,016 |
| | | 92,783,068 |
| Total Municipal Bonds Transferred to | | |
| | | 392,447,700 |
| Tender Option Bond Trusts 70.8% | | |
| Total Long-Term Investments | | |
| (Cost \$820,123,108) 158.6% | | 879,429,623 |
| Short-Term Securities 3.9% | Shares | |
| BIF California Municipal Money Fund, 0.00% (d)(e) | 21,662,840 | 21,662,840 |
| Total Short-Term Securities | | |
| (Cost \$21,662,840) 3.9% | | 21,662,840 |
| Total Investments | | |
| (Cost \$841,785,948*) 162.5% | | 901,092,463 |
| Liabilities in Excess of Other Assets (0.2)% | | (708,267) |
| Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (32.3)% | | (179,282,656) |
| VRDP Shares, at Liquidation Value (30.0)% | | (166,500,000) |
| Net Assets Applicable to Common Shares 100.0% | | \$ 554,601,540 |

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* As of October 31, 2015, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

| | |
|-------------------------------|----------------|
| Tax cost | \$ 662,197,405 |
| Gross unrealized appreciation | \$ 60,336,761 |
| Gross unrealized depreciation | (702,268) |
| Net unrealized appreciation | \$ 59,634,493 |

Notes to Schedule of Investments

* Cost for federal income tax purposes.

(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) 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.

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc.
(MCA)

(d) Represents the current yield as of period end.

(e) During the period ended October 31, 2015, investments in issuers considered to be an affiliate 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 October 31, 2015 | Income |
|-------------------------------------|------------------------------------|-----------------|---------------------------------------|--------|
| BIF California Municipal Money Fund | 12,279,624 | 9,383,216 | 21,662,840 | \$ 1 |

Portfolio Abbreviations

| | |
|--------------|---|
| AGC | Assured Guarantee Corp. |
| AGM | Assured Guaranty Municipal Corp. |
| AMBAC | American Municipal Bond Assurance Corp. |
| AMT | Alternative Minimum Tax (subject to) |
| ARB | Airport Revenue Bonds |
| BHAC | Berkshire Hathaway Assurance Corp. |
| COP | Certificates of Participation |
| GO | General Obligation Bonds |
| LRB | Lease Revenue Bonds |
| NPFGC | National Public Finance Guarantee Corp. |
| RB | Revenue Bonds |

Derivative Financial Instruments Outstanding as of Period End

Financial Futures Contracts

| Contracts | Issue | Expiration | Notional Value | Unrealized Appreciation |
|--------------|----------------------------|---------------|-------------------|----------------------------|
| Short | | | | |
| (36) | 5-Year U.S. Treasury Note | December 2015 | \$ 4,311,844 | \$ 47,629 |
| (43) | 10-Year U.S. Treasury Note | December 2015 | \$ 5,490,562 | 72,433 |
| (20) | Long U.S. Treasury Bond | December 2015 | \$ 3,128,750 | 52,821 |
| (6) | U.S. Ultra Bond | December 2015 | \$ 958,500 | 17,280 |
| Total | | | | \$ 190,163 |

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc. (MCA)

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 Funds' 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 and derivative financial instruments, refer to the Fund's most recent financial statements as contained in its 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 | | \$ 879,429,623 | | \$ 879,429,623 |
| Short-Term Securities | \$ 21,662,840 | | | 21,662,840 |
| Total | \$ 21,662,840 | \$ 879,429,623 | | \$ 901,092,463 |

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

| | Level 1 | Level 2 | Level 3 | Total |
|---|------------|---------|---------|------------|
| Derivative Financial Instruments¹ | | | | |
| Assets: | | | | |
| Interest rate contracts | \$ 190,163 | | | \$ 190,163 |

¹ Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation (depreciation) on the instrument. 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 (concluded)

BlackRock MuniYield California Quality Fund, Inc. (MCA)

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 | \$ 183,750 | | | \$ 183,750 |
| Liabilities: | | | | |
| TOB Trust Certificates | | \$ (179,260,565) | | (179,260,565) |
| VRDP Shares | | (166,500,000) | | (166,500,000) |
| Total | \$ 183,750 | \$ (345,760,565) | | \$ (345,576,815) |

During the period ended October 31, 2015, there were no transfers between levels.

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 MuniYield California Quality Fund, Inc.

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

Date: December 22, 2015

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 MuniYield California Quality Fund, Inc.

Date: December 22, 2015

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

Date: December 22, 2015