

BLACKROCK MUNIYIELD CALIFORNIA QUALITY FUND, INC.

Form N-Q

December 20, 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 811-06692

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: 07/31/2017

Date of reporting period: 10/31/2016

Item 1 Schedule of Investments

Schedule of Investments October 31, 2016 (Unaudited)

BlackRock MuniYield California Quality Fund, Inc. (MCA)

(Percentages shown are based on Net Assets)

| | Par (000) | Value |
|---|--------------|--------------|
| Municipal Bonds | | |
| California 87.8% | | |
| Corporate 0.5% | | |
| City of Chula Vista California, Refunding RB, San Diego Gas & Electric, Series A, 5.88%, 2/15/34 | \$ 2,435 | \$ 2,708,962 |
| County/City/Special District/School District 33.6% | | |
| Arcadia Unified School District, GO, Election of 2006, Series A, 5.00%, 8/01/37 | 7,925 | 8,005,518 |
| Centinela Valley Union High School District, GO, Refunding, Election of 2008, Series B, 6.00%, 8/01/23 (a) | 2,250 | 2,914,222 |
| City & County of San Francisco California, COP, Port Facilities Project, Series C, AMT, 5.25%, 3/01/32 | 1,050 | 1,214,136 |
| County of Kern California, COP, Capital Improvements Projects, Series A (AGC), 6.00%, 8/01/35 | 2,000 | 2,219,200 |
| County of Los Angeles Public Works Financing Authority, Refunding RB, Series D: 4.00%, 12/01/40 | 1,000 | 1,074,850 |
| 5.00%, 12/01/45 | 1,265 | 1,490,145 |
| County of Orange California Sanitation District, COP, Series A, 5.00%, 2/01/19 (a) | 2,500 | 2,727,450 |
| County of Orange California Water District, COP, Refunding, 5.25%, 8/15/34 | 9,045 | 10,094,310 |
| County of Riverside California Public Financing Authority, RB, Capital Facilities Project, 5.25%, 11/01/45 | 10,000 | 11,928,400 |
| County of San Joaquin California Transportation Authority, Refunding RB, Limited Tax, Measure K, Series A, 6.00%, 3/01/36 | 2,755 | 3,304,430 |
| Fremont Union High School District, GO, Refunding, 4.00%, 8/01/40 | 1,150 | 1,243,840 |
| Garden Grove Unified School District, GO, Election of 2010, Series C, 5.25%, 8/01/37 | 2,725 | 3,273,897 |
| Gavilan Joint Community College District, GO, Election of 2004, Series D: 5.50%, 8/01/31 | 2,165 | 2,535,237 |
| 5.75%, 8/01/35 | 8,400 | 9,910,824 |
| | Par (000) | Value |
| Municipal Bonds | | |
| California (continued) | | |
| County/City/Special District/School District (continued) | | |
| Grossmont California Healthcare District, GO, Election of 2006, Series B, 6.13%, 7/15/21 (a) | \$ 2,500 | \$ 3,076,500 |
| Grossmont Union High School District, GO, Election of 2008, Series C, 5.50%, 8/01/33 | 1,880 | 2,211,839 |
| Imperial Irrigation District, Series A, Electric System Revenue, 5.13%, 11/01/18 (a) | 5,000 | 5,424,700 |
| Kern Community College District, GO, Safety Repair & Improvements, Series C, 5.25%, 11/01/32 | 5,715 | 6,968,305 |
| Los Angeles Municipal Improvement Corp., Refunding LRB, Real Property, Series B (AGC), 5.50%, 4/01/19 (a) | 2,075 | 2,298,187 |
| Mount San Antonio Community College District, GO, Refunding, Election of 2008, Series 2013 A, 5.00%, 8/01/34 | 4,500 | 5,329,620 |
| Ohlone Community College District, GO, Election of 2010, Series A, 5.25%, 8/01/21 (a) | 8,140 | 9,690,670 |
| Orchard School District, GO, Election of 2001, Series A (AGC), 5.00%, 8/01/19 (a) | 7,490 | 8,315,997 |
| Perris Union High School District, GO, Election of 2012, Series B, 5.25%, 9/01/39 | 2,715 | 3,225,230 |
| Pittsburg Unified School District, GO, Election of 2006, Series B (AGM): 5.50%, 8/01/34 | 2,000 | 2,157,600 |
| 5.63%, 8/01/18 (a) | 4,500 | 4,874,580 |
| Redlands Unified School District California, GO, Election of 2008 (AGM), 5.25%, 7/01/33 | 5,000 | 5,352,900 |
| San Diego Community College District, GO, 5.00%, 8/01/41 (b) | 2,250 | 2,697,097 |
| San Diego Unified School District, GO, CAB, Series C (c): Election of 2008, 0.00%, 7/01/42 | 2,900 | 1,154,751 |
| Election of 2008, 0.00%, 7/01/43 | 1,000 | 383,150 |
| Election of 2008, 0.00%, 7/01/45 | 1,300 | 460,915 |
| 0.00%, 7/01/47 | 830 | 272,423 |

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) | | |
| San Jose California Financing Authority, LRB, Convention Center Expansion & Renovation Project, Series A: | | |
| 5.75%, 5/01/36 | \$ 2,570 | \$ 2,578,841 |
| 5.75%, 5/01/42 | 4,500 | 5,285,655 |
| San Jose California Financing Authority, Refunding LRB, Civic Center Project, Series A: | | |
| 5.00%, 6/01/32 | 3,375 | 3,969,270 |
| 5.00%, 6/01/39 | 5,800 | 6,697,840 |
| San Juan Unified School District, GO, Election of 2002 (AGM), 5.00%, 8/01/34 | 6,475 | 7,294,670 |
| San Leandro California Unified School District, GO, Election of 2010, Series A, 5.75%, 8/01/41 | 3,000 | 3,550,110 |
| Snowline Joint Unified School District, COP, Refunding, Refining Project (AGC), | | |
| 5.75%, 9/01/19 (a) | 5,600 | 6,348,440 |
| Sweetwater Union High School District, GO, Refunding, 4.00%, 8/01/42 | 2,500 | 2,685,900 |
| Walnut Valley Unified School District, GO, Election of 2007, Series B, 5.75%, 8/01/21 (a) | 7,680 | 9,324,134 |
| West Contra Costa California Unified School District, GO: | | |
| Election of 2010, Series A (AGM), | | |
| 5.25%, 8/01/41 | 6,140 | 7,202,957 |
| Election of 2010, Series B, 5.50%, 8/01/39 | 3,000 | 3,649,230 |
| Election of 2012, Series A, 5.50%, 8/01/39 | 2,500 | 3,041,025 |
| | | 187,458,995 |
| Education 1.4% | | |
| California Municipal Finance Authority, RB, Emerson College, 6.00%, 1/01/42 | 2,750 | 3,269,475 |
| University of California, RB, 5.25%, 5/15/36 | 3,680 | 4,433,075 |
| | | 7,702,550 |
| Health 11.1% | | |
| California Health Facilities Financing Authority, RB: | | |
| Children s Hospital, Series A, | | |
| 5.25%, 11/01/41 | 10,000 | 11,375,700 |
| | Par | |
| | (000) | Value |
| Municipal Bonds | | |
| California (continued) | | |
| Health (continued) | | |
| California Health Facilities Financing Authority, RB (continued): | | |
| Providence Health Services, Series B, | | |
| 5.50%, 10/01/39 | \$ 4,205 | \$ 4,688,323 |
| Sutter Health, Series A, 5.25%, 11/15/46 | 6,970 | 6,982,267 |
| Sutter Health, Series B, 6.00%, 8/15/42 | 7,715 | 9,001,322 |
| California Health Facilities Financing Authority, Refunding RB: | | |
| Catholic Healthcare West, Series A, | | |
| 6.00%, 7/01/39 | 5,500 | 6,147,515 |
| Dignity Health, Series A, 6.00%, 7/01/34 | 2,370 | 2,653,665 |
| Providence St. Joseph Health, 3.00%, 10/01/47 | 3,600 | 3,212,964 |
| California Statewide Communities Development Authority, RB, Sutter Health, Series A, | | |
| 6.00%, 8/15/42 | 5,130 | 5,993,584 |
| California Statewide Communities Development Authority, Refunding RB: | | |
| Catholic Healthcare West, Series D (BHAC), | | |
| 5.50%, 7/01/31 | 865 | 891,469 |
| CHF Irvine LLC, 5.00%, 5/15/40 | 750 | 858,885 |
| John Muir Health, Series A, 4.00%, 8/15/51 | 4,825 | 4,985,624 |
| Trinity Health Credit Group Composite Issue, 5.00%, 12/01/41 | 2,860 | 3,272,698 |
| Washington Township Health Care District, GO, Election of 2004, Series B, 5.50%, 8/01/38 | 1,625 | 1,946,214 |
| | | 62,010,230 |
| State 7.3% | | |
| State of California, GO, Various Purposes: | | |

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| | | |
|---|--------|------------|
| 6.00%, 3/01/33 | 5,500 | 6,383,905 |
| 6.00%, 4/01/38 | 17,180 | 19,164,634 |
| 6.00%, 11/01/39 | 3,510 | 4,006,454 |
| State of California Public Works Board, LRB: | | |
| Department of Education, Riverside Campus Project, Series B, 6.50%, 4/01/34 | 3,670 | 4,141,338 |

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, Series I, 5.50%, 11/01/33 | \$ 2,575 | \$ 3,132,822 |
| Various Capital Projects, Sub-Series I-1, 6.13%, 11/01/19 (a) | 3,365 | 3,876,278 |
| | | 40,705,431 |
| Transportation 16.7% | | |
| Alameda Corridor Transportation Authority, Refunding RB, 2nd Subordinate Lien, Series B: | | |
| 5.00%, 10/01/36 | 2,035 | 2,370,429 |
| 5.00%, 10/01/37 | 1,395 | 1,622,343 |
| City & County of San Francisco California Airports Commission, ARB: | | |
| Series E, 6.00%, 5/01/39 | 9,650 | 10,818,905 |
| Special Facility Lease, SFO Fuel, Series A, AMT (AGM), 6.10%, 1/01/20 | 705 | 708,194 |
| Special Facility Lease, SFO Fuel, Series A, AMT (AGM), 6.13%, 1/01/27 | 985 | 989,373 |
| City & County of San Francisco California Airports Commission, Refunding ARB, AMT: | | |
| 2nd Series 34E (AGM), 5.75%, 5/01/18 (a) | 3,500 | 3,727,220 |
| 2nd Series A, 5.25%, 5/01/33 | 1,900 | 2,195,640 |
| Series A, 5.00%, 5/01/39 | 6,175 | 7,030,052 |
| Series A, 5.00%, 5/01/40 | 3,785 | 4,306,384 |
| City & County of San Francisco California Airports Commission, Refunding RB, AMT (AGM): | | |
| 2nd Series 32, 5.75%, 5/01/18 (a) | 2,285 | 2,447,258 |
| Balance 2nd, 5.75%, 5/01/24 | 2,715 | 2,908,498 |
| City of Los Angeles California Department of Airports, ARB: | | |
| AMT, Series D, 5.00%, 5/15/35 | 2,000 | 2,330,440 |
| AMT, Series D, 5.00%, 5/15/36 | 1,500 | 1,741,650 |
| Los Angeles International Airport, Sub-Series B, 5.00%, 5/15/40 | 2,500 | 2,801,325 |
| | Par | |
| | (000) | Value |
| Municipal Bonds | | |
| California (continued) | | |
| Transportation (continued) | | |
| City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Senior Series A, 5.25%, 5/15/29 | | |
| | \$ 4,760 | \$ 5,259,419 |
| City of San Jose California, Refunding ARB, Series A-1, AMT, 6.25%, 3/01/34 | 1,400 | 1,661,982 |
| County of Orange California, ARB, Series B, 5.75%, 7/01/34 | 5,000 | 5,164,700 |
| County of Sacramento California, ARB: | | |
| Senior Series B, AMT (AGM), 5.25%, 7/01/33 | 7,000 | 7,457,940 |
| Subordinated & Passenger Facility Charges/Grant, Series C (AGC), 5.75%, 7/01/39 | 5,555 | 5,978,458 |
| County of San Bernardino California Transportation Authority, RB, Series A, 5.25%, 3/01/40 | 4,500 | 5,354,190 |
| County of San Diego California Regional Airport Authority, Refunding ARB, Series B, 5.00%, 7/01/40 | 6,350 | 7,092,950 |
| Los Angeles Harbor Department, RB, Series B, 5.25%, 8/01/19 (a) | 2,760 | 3,080,684 |
| Port of Los Angeles California Harbor Department, RB, Series B, 5.25%, 8/01/19 (a) | 5,530 | 6,172,531 |
| | | 93,220,565 |
| Utilities 17.2% | | |
| Anaheim Public Financing Authority, RB, Electric System Distribution Facilities, Series A, 5.38%, 10/01/36 | | |
| | 5,000 | 5,818,000 |
| City of Los Angeles California Department of Water & Power, Refunding RB, Series A, 5.25%, 7/01/39 | 8,000 | 9,280,960 |
| City of Los Angeles California Wastewater System, Refunding RB, Sub-Series A, 5.00%, 6/01/28 | 2,000 | 2,261,940 |
| City of San Francisco California Public Utilities Commission Water Revenue, RB, Sub-Series A, 5.00%, 11/01/37 | 10,000 | 11,730,800 |

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc. (MCA)

| | Par | |
|---|----------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| California (continued) | | |
| Utilities (continued) | | |
| City of San Francisco California Public Utilities Commission Water Revenue, Refunding RB, Series A: 5.25%, 11/01/19 (a) | \$ 6,280 | \$ 7,070,150 |
| 5.00%, 11/01/36 | 5,335 | 6,332,698 |
| County of Los Angeles Sanitation Districts Financing Authority, Refunding RB, Series A, 4.00%, 10/01/42 (b) | 8,210 | 8,790,857 |
| County of San Diego California Water Authority, COP, Refunding, Series A (AGM), 5.00%, 5/01/18 (a) | 4,895 | 5,200,938 |
| Dublin-San Ramon Services District Water Revenue, Refunding RB, 6.00%, 8/01/41 | 4,000 | 4,712,400 |
| East Bay California Municipal Utility District Wastewater System Revenue, Refunding RB, Sub-Series A (AMBAC), 5.00%, 6/01/17 (a) | 2,500 | 2,563,200 |
| East Bay California Municipal Utility District Water System Revenue, Refunding RB: Series A (NPFGC), 5.00%, 6/01/17 (a) | 3,000 | 3,075,840 |
| Sub-Series A, 5.00%, 6/01/30 | 5,000 | 5,679,350 |
| El Dorado Irrigation District / El Dorado County Water Agency, Refunding RB, Series A (AGM), 5.25%, 3/01/39 | 5,000 | 5,904,900 |
| Metropolitan Water District of Southern California, RB, Series A, 5.00%, 7/01/37 | 15,000 | 15,425,550 |
| San Diego Public Facilities Financing Authority Sewer, Refunding RB, Senior Series A, 5.25%, 5/15/19 (a) | 2,000 | 2,216,700 |
| | | 96,064,283 |
| Total Municipal Bonds - 87.8% | | 489,871,016 |
| Municipal Bonds Transferred to | | |
| | Par | |
| | (000) | Value |
| Tender Option Bond Trusts (d) | | |
| California 76.1% | | |
| County/City/Special District/School District 26.2% | | |
| County of San Luis Obispo Community College District, GO, Refunding, Election of 2014, Series A, 4.00%, 8/01/40 | \$ 6,585 | \$ 7,125,082 |
| County of San Mateo California Community College District, GO, Series A, 5.00%, 9/01/45 | 17,615 | 20,885,874 |
| Desert Community College District California, GO, Series C (AGM), 5.00%, 8/01/17 (a) | 12,150 | 12,543,781 |
| Los Angeles Community College District California, GO, Series A (a): Election of 2001 (AGM), 5.00%, 8/01/17 | 12,000 | 12,388,920 |
| Election of 2001 (NPFGC), 5.00%, 8/01/17 | 26,438 | 27,294,364 |
| Election of 2003, Series F-1, 5.00%, 8/01/18 | 12,000 | 12,862,320 |
| Los Angeles Community College District California, GO, Refunding, Election of 2008, 6.00%, 8/01/19 (a) | 9,596 | 10,899,849 |
| Los Angeles Unified School District California, GO, Series I, 5.00%, 1/01/34 | 5,000 | 5,518,000 |
| Palomar California Community College District, GO, Election of 2006, Series C, 5.00%, 8/01/44 | 15,140 | 17,875,798 |
| West Valley-Mission Community College District, GO, Election of 2012, Series B, 4.00%, 8/01/40 | 17,000 | 18,697,620 |
| | | 146,091,608 |
| Education 13.7% | | |
| Los Rios Community College District, GO, Election of 2008, Series A, 5.00%, 8/01/35 | 11,000 | 12,422,520 |
| University of California, RB: Series AM, 5.25%, 5/15/44 | 9,210 | 10,989,188 |
| Series O, 5.75%, 5/15/19 (a) | 11,193 | 12,533,348 |
| University of California, Refunding RB: Series A, 5.00%, 11/01/43 | 13,002 | 15,595,249 |

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc. (MCA)

| Municipal Bonds Transferred to | Par | |
|---|-----------|---------------|
| Tender Option Bond Trusts (d) | (000) | Value |
| California (continued) | | |
| Education (continued) | | |
| University of California, Refunding RB (continued): | | |
| Series I, 5.00%, 5/15/40 | \$ 21,105 | \$ 24,890,125 |
| | | 76,430,430 |
| Health 14.4% | | |
| California Health Facilities Financing Authority, RB, Sutter Health, Series A, 5.00%, 8/15/52 | 10,000 | 11,377,400 |
| California Health Facilities Financing Authority, Refunding RB: | | |
| Lucile Salter Packard Children's Hospital, Series B, 5.00%, 8/15/55 | 4,500 | 5,195,925 |
| Sutter Health, Series A, 5.00%, 8/15/43 | 24,940 | 28,871,791 |
| California Statewide Communities Development Authority, RB, Kaiser Permanente, Series A, 5.00%, 4/01/42 | 19,860 | 22,586,778 |
| Regents of the University of California Medical Center Pooled Revenue, Refunding RB, Series L, 5.00%, 5/15/41 | 10,375 | 12,254,947 |
| | | 80,286,841 |
| State 0.9% | | |
| State of California, GO, Refunding, 4.00%, 9/01/37 | 4,575 | 4,978,195 |
| Transportation 7.8% | | |
| City & County of San Francisco California Airports Commission, Refunding RB, San Francisco International Airport, AMT, 5.00%, 5/01/46 | 10,000 | 11,420,500 |
| City of Los Angeles California Department of Airports, RB, Senior Revenue, Series A, AMT, 5.00%, 5/15/40 | 5,500 | 6,336,550 |
| City of Los Angeles California Department of Airports, Series D, AMT, 5.00%, 5/15/41 | 13,311 | 15,336,115 |
| Municipal Bonds Transferred to | | |
| Par | | |
| Tender Option Bond Trusts (d) | | |
| (000) | | |
| Value | | |
| California (continued) | | |
| Transportation (continued) | | |
| County of San Diego Regional Transportation Commission, Refunding RB, Series A, 5.00%, 4/01/48 | \$ 8,620 | \$ 10,306,158 |
| | | 43,399,323 |
| Utilities 13.1% | | |
| Anaheim Public Financing Authority, RB, Refunding, Series A: | | |
| 5.00%, 5/01/39 | 6,000 | 7,083,000 |
| 5.00%, 5/01/46 | 13,500 | 15,835,365 |
| City & County of San Francisco California Public Utilities Commission, RB, Water Revenue, Series B, 5.00%, 11/01/19 (a) | 4,380 | 4,898,767 |
| City of Los Angeles California Department of Water & Power, RB, Power System, Sub-Series A-1 (AMBAC), 5.00%, 7/01/37 | 5,029 | 5,160,008 |
| City of Los Angeles California Wastewater System, RB, Green Bonds, Series A, 5.00%, 6/01/44 | 6,290 | 7,449,813 |
| County of San Diego California Water Authority Financing Corp., COP, Refunding, Series A (AGM) (a): | | |
| 5.00%, 5/01/18 | 1,412 | 1,500,047 |
| 5.00%, 5/01/18 | 7,098 | 7,541,828 |
| Los Angeles Department of Water & Power, RB, Power System, Sub-Series A-1 (AGM), 5.00%, 7/01/37 | 13,525 | 13,876,504 |
| Rancho Water District Financing Authority, Refunding RB, Series A (AGM), 5.00%, 8/01/34 | 9,277 | 9,932,059 |
| | | 73,277,391 |
| Total Municipal Bonds Transferred to | | 424,463,788 |
| Tender Option Bond Trusts - 76.1% | | 914,334,804 |

Total Long-Term Investments
(Cost \$853,226,437) 163.9%

BLACKROCK MUNIYIELD CALIFORNIA QUALITY FUND, INC.

OCTOBER 31, 2016

5

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc. (MCA)

| Short-Term Securities | Shares | Value |
|--|-----------|-----------------------|
| BlackRock Liquidity Funds, MuniCash, Institutional Class, 0.44% (e)(f) | 6,792,240 | \$ 6,792,919 |
| Total Short-Term Securities | | |
| (Cost \$6,792,598) 1.2% | | 6,792,919 |
| Total Investments (Cost \$860,019,035*) 165.1% | | 921,127,723 |
| Liabilities in Excess of Other Assets (0.3)% | | (1,627,766) |
| Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (35.0)% | | (195,321,496) |
| VRDP Shares at Liquidation Value, Net of Deferred Offering Costs (29.8)% | | (166,219,607) |
| Net Assets Applicable to Common Shares 100.0% | | \$ 557,958,854 |

* As of October 31, 2016, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

| | |
|-------------------------------|----------------|
| Tax cost | \$ 664,694,419 |
| Gross unrealized appreciation | \$ 62,850,189 |
| Gross unrealized depreciation | (1,367,076) |
| Net unrealized appreciation | \$ 61,483,113 |

Schedule of Investments (continued)

BlackRock MuniYield California Quality Fund, Inc. (MCA)

Notes to Schedule of Investments

- (a) 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.
- (b) When-issued security.
- (c) Zero-coupon bond.
- (d) 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.
- (e) During the period ended October 31, 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, 2016 | Net Activity | Shares Held at October 31, 2016 | Value at October 31, 2016 | Income |
|--|------------------------------------|-----------------|---------------------------------------|---------------------------------|----------|
| BlackRock Liquidity Funds, MuniCash, Institutional Class | 143,051 | 6,649,189 | \$ 6,792,240 | \$ 6,792,919 | \$ 6,584 |

- (f) 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.

Derivative Financial Instruments Outstanding as of Period End

Futures Contracts

| Contracts Short | Issue | Expiration | Notional Value | Unrealized Appreciation |
|--------------------|----------------------------|---------------|-------------------|----------------------------|
| (10) | 5-Year U.S. Treasury Note | December 2016 | \$1,207,969 | \$ 9,052 |
| (98) | 10-Year U.S. Treasury Note | December 2016 | \$12,703,250 | 171,436 |
| (72) | Long U.S. Treasury Bond | December 2016 | \$11,715,750 | 425,783 |
| (24) | Ultra U.S. Treasury Bond | December 2016 | \$4,222,500 | 206,101 |
| Total | | | | \$ 812,372 |

Portfolio Abbreviations

AGC Assured Guarantee Corp.

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| | |
|--------------|---|
| 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. |
| CAB | Capital Appreciation Bonds |
| COP | Certificates of Participation |
| GO | General Obligation Bonds |
| LRB | Lease Revenue Bonds |
| NPFGC | National Public Finance Guarantee Corp. |
| RB | Revenue Bonds |

BLACKROCK MUNIYIELD CALIFORNIA QUALITY FUND, INC.

OCTOBER 31, 2016

7

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 methodologies 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 the 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 the 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. Investments classified within Level 3 have significant unobservable inputs used by the Global Valuation Committee in determining the price for Fair Valued Investments. Level 3 Investments include equity or debt issued by privately-held companies. There may not be a secondary market, and/or there are a limited number of investors. Level 3 investments may also be adjusted to reflect illiquidity and/or non-transferability, with the amount of such discount estimated by the Global Valuation Committee in the absence of market information.

Changes in valuation methodologies 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 is based on the pricing transparency of the investments 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 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 | | \$ 914,334,804 | | \$ 914,334,804 |
| Short-Term Securities | \$ 6,792,919 | | | 6,792,919 |
| Total | \$ 6,792,919 | \$ 914,334,804 | | \$ 921,127,723 |
| Derivative Financial Instruments² | | | | |
| Assets: | | | | |
| Interest rate contracts | \$ 812,372 | | | \$ 812,372 |

¹ See above Schedule of Investments for values in each state or political sub-division.

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

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 futures contracts | \$ 520,750 | | | \$ 520,750 |
| Liabilities: | | | | |
| Bank overdraft | | \$ (222,227) | | (222,227) |
| TOB trust certificates | | (194,950,191) | | (194,950,191) |
| VRDP Shares at Liquidation Value | | (166,500,000) | | (166,500,000) |
| Total | \$ 520,750 | \$ (361,672,418) | | \$ (361,151,668) |

During the period ended October 31, 2016, there were no transfers between levels.

BLACKROCK MUNIYIELD CALIFORNIA QUALITY FUND, INC.

OCTOBER 31, 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 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 20, 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 MuniYield California Quality Fund, Inc.

Date: December 20, 2016

By: /s/ Neal J. Andrews
Neal J. Andrews

Chief Financial Officer (principal financial officer) of

BlackRock MuniYield California Quality Fund, Inc.

Date: December 20, 2016