

BLACKROCK MUNIYIELD CALIFORNIA FUND, INC  
Form N-Q  
June 28, 2010

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 811-06499

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

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: Anne F. Ackerley, Chief Executive Officer, BlackRock  
MuniYield California Fund, Inc., 55 East 52<sup>nd</sup> Street, New York, NY 10055.

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

Date of fiscal year end: 07/31/2010

Date of reporting period: 04/30/2010

Item 1 Schedule of Investments

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## Schedule of Investments April 30, 2010 (Unaudited)

BlackRock MuniYield California Fund, Inc. (MYC)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
California 108.8%		
Corporate 4.2%		
California Pollution Control Financing Authority, RB, Waste Management Inc. Project, Series C, AMT, 6.75%, 12/01/27	\$ 3,300	\$ 3,381,213
City of Chula Vista California, Refunding RB, San Diego Gas & Electric, Series A, 5.88%, 2/15/34	975	1,074,801
University of California, RB, Limited Project, Series B (AGM), 5.00%, 5/15/33	8,485	8,611,851
		13,067,865
County/City/Special District/School District 38.4%		
Arcata Joint Powers Financing Authority, California, Tax Allocation Bonds, Refunding, Community Development Project Loan, Series A (AMBAC), 6.00%, 8/01/23	2,520	2,521,184
California State Department of Water Resources, Refunding RB, Water System, Series AF, 5.00%, 12/01/29	2,500	2,687,600
City of Los Angeles California, COP, Senior, Sonnenblick Del Rio West Los Angeles (AMBAC), 6.20%, 11/01/31	2,000	2,032,480
City of Los Angeles California, Refunding RB, Series A, 5.00%, 6/01/39	9,870	10,226,899
El Monte Union High School District, California, GO, Election of 2002, Series C (AGM), 5.25%, 6/01/32	10,120	10,449,204
Fontana Unified School District, California, GO, Series A (AGM), 5.25%, 8/01/28	7,000	7,414,680
Los Angeles Municipal Improvement Corp., RB, Real Property, Series E:		

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5.75%, 9/01/34	500	531,500
6.00%, 9/01/34	1,860	2,029,148
Marin Community College District, GO, Election of 2004, Series A (NPFGC), 5.00%, 8/01/28	5,885	6,068,082
Modesto Irrigation District, COP, Series B, 5.50%, 7/01/35	3,300	3,484,041
Morgan Hill Unified School District, California, GO, CAB (FGIC), 5.07%, 8/01/26 (a)(b)	7,570	3,785,379
Murrieta Valley Unified School District, Public Financing Authority, Special Tax Bonds, Refunding, Series A (AGC), 5.13%, 9/01/26	6,675	7,022,567
	Par	
Municipal Bonds	(000)	Value
California (continued)		
County/City/Special District/School District (continued)		
Oak Grove School District, California, GO, Election of 2008, Series A, 5.50%, 8/01/33	\$ 4,000	\$ 4,274,720
Orange County Sanitation District, COP (NPFGC), 5.00%, 2/01/33	5,250	5,337,780
Pico Rivera Public Financing Authority, RB: 5.50%, 9/01/31	1,500	1,536,180
5.75%, 9/01/39	4,365	4,507,823
Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28	2,500	2,761,850
San Diego Regional Building Authority, California, RB, County Operations Center & Annex, Series A: 5.38%, 2/01/28	150	160,857
5.38%, 2/01/36	3,200	3,381,536
San Francisco Bay Area Transit Financing Authority, Refunding RB, Series A (NPFGC), 5.00%, 7/01/34	5,435	5,531,145

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San Jose Evergreen Community College District, California, GO, Refunding, CAB, Election of 2004, Series A (NPFGC), 5.12%, 9/01/23 (a)	10,005	5,118,558
San Juan Unified School District, California, GO, Election of 2002 (NPFGC), 5.00%, 8/01/28	5,000	5,088,150
Santa Ana Unified School District, GO, Election of 2008, Series A, 5.13%, 8/01/33	5,000	5,167,800
Santa Cruz County Redevelopment Agency, California, Tax Allocation Bonds, Live Oak/Soquel Community Improvement, Series A: 6.63%, 9/01/29	1,000	1,085,760
7.00%, 9/01/36	500	554,530
Twin Rivers Unified School District, GO, Election of 2006 (AGM), 5.00%, 8/01/29	9,390	9,580,148
Vacaville Unified School District, California, GO, Election of 2001 (NPFGC), 5.00%, 8/01/30	4,745	4,770,765
Ventura Unified School District, California, GO, Election of 1997, Series H (AGM), 5.13%, 8/01/34	1,000	1,017,680

### Portfolio Abbreviations

To simplify the listings of portfolio holdings in the Schedule of Investments, the names and descriptions of many of the securities have been abbreviated

according to the following list:

AGC	Assured Guaranty Corp.	FGIC	Financial Guaranty Insurance Co.
AGM	Assured Guaranty Municipal Corp.	GNMA	Government National Mortgage Association
AMBAC	American Municipal Bond Assurance Corp.	GO	General Obligation Bonds
AMT	Alternative Minimum Tax (subject to)	LRB	Lease Revenue Bonds
CAB	Capital Appreciation Bonds	NPFGC	National Public Finance Guarantee Corp.
COP	Certificates of Participation	RB	Revenue Bonds

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## Schedule of Investments (continued)

BlackRock MuniYield California Fund, Inc. (MYC)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
California (continued)		
County/City/Special District/School District (concluded)		
Westminster Redevelopment Agency, California, Tax Allocation Bonds, Subordinate, Commercial Redevelopment Project No. 1 (AGC), 6.25%, 11/01/39	\$ 1,250	\$ 1,424,588
		119,552,634
<b>Education 7.7%</b>		
California Educational Facilities Authority, RB, Pitzer College, 6.00%, 4/01/40	2,500	2,667,325
California State Enterprise Development Authority, Refunding RB, The Thacher School Project, 5.13%, 9/01/39	6,965	7,054,779
California State University, RB, Systemwide, Series A, 5.50%, 11/01/39	2,725	2,873,294
University of California, RB: Limited Project, Series D (NPFGC), 5.00%, 5/15/32	2,500	2,559,525
Series L, 5.00%, 5/15/36	8,500	8,785,005
		23,939,928
<b>Health 15.2%</b>		
ABAG Finance Authority for Nonprofit Corps, Refunding RB, Sharp Healthcare, 6.38%, 8/01/34	1,750	1,843,730
California Health Facilities Financing Authority, Refunding RB: Catholic Healthcare West, Series A, 6.00%, 7/01/39	10,000	10,719,900
Catholic Healthcare West, Series E, 5.63%, 7/01/25	6,000	6,399,960
Scripps Health, Series A, 5.00%, 11/15/36	9,605	9,521,148

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St. Joseph Health System, Series A, 5.50%, 7/01/29	2,100	2,181,018
California Statewide Communities Development Authority, RB, Health Facility, Memorial Health Services, Series A: 6.00%, 10/01/23	3,270	3,411,755
5.50%, 10/01/33	3,015	3,060,255
California Statewide Communities Development Authority, Refunding RB: Catholic Healthcare West, Series D, 5.50%, 7/01/31	5,055	5,193,103
Senior Living, Southern California, 6.25%, 11/15/19	500	539,515
Senior Living, Southern California, 6.63%, 11/15/24	650	690,807
Senior Living, Southern California, 7.00%, 11/15/29	500	537,035
Senior Living, Southern California, 7.25%, 11/15/41	1,750	1,897,840
	Par	
Municipal Bonds	(000)	Value
<a href="#">California (continued)</a>		
<a href="#">Health (concluded)</a>		
City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22	\$ 1,310	\$ 1,350,492
		47,346,558
<a href="#">Housing 1.2%</a>		
California Rural Home Mortgage Finance Authority, RB, AMT: Mortgage-Backed Securities Program, Series B (GNMA), 6.15%, 6/01/20	25	25,258
Sub-Series FH-1, 5.50%, 8/01/47	415	232,392
Santa Clara County Housing Authority, California, RB, John Burns Gardens Apartments Project, Series A, AMT, 6.00%, 8/01/41	3,500	3,516,310
		3,773,960

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State 8.2%

California State Public Works Board, RB:

Department of Developmental Services, Porterville, Series C, 6.25%, 4/01/34	1,100	1,164,636
Department of Education, Riverside Campus Project, Series B, 6.50%, 4/01/34	10,000	10,770,000
Trustees of the California State University, Series D, 6.00%, 4/01/27	215	223,561
Various Capital Projects, Sub-Series I-1, 6.38%, 11/01/34	1,850	1,981,998

State of California, GO, Various Purpose:

6.00%, 3/01/33	5,000	5,503,550
6.50%, 4/01/33	5,000	5,668,850
		25,312,595

Transportation 6.3%

County of Orange California, RB,

Series B, 5.75%, 7/01/34	3,000	3,258,990
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County of Sacramento, California, RB,

Senior, Series B, 5.75%, 7/01/39	900	967,851
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Los Angeles Department of Airports,

Refunding RB, Senior, Los Angeles International Airport, Series A, 5.00%, 5/15/40	4,880	4,972,525
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San Francisco City & County Airports

Commission, RB, Series E, 6.00%, 5/01/39	4,835	5,303,221
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San Francisco Port Commission,

California, RB, Series A, 5.13%, 3/01/40	5,000	5,005,400
		19,507,987

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## Schedule of Investments (continued)

BlackRock MuniYield California Fund, Inc. (MYC)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
California (concluded)		
Utilities 27.6%		
California Infrastructure & Economic Development Bank, RB, California Independent System Operator, Series A, 6.25%, 2/01/39	\$ 2,170	\$ 2,293,603
California Statewide Communities Development Authority, RB, Pooled Financing Program, Series C, City of West Sacramento (AGM), 5.25%, 10/01/28	2,380	2,422,316
City of Chula Vista, California, Refunding RB, San Diego Gas & Electric, Series D, 5.88%, 1/01/34	2,500	2,755,900
Eastern Municipal Water District, California, COP, Series H, 5.00%, 7/01/35	7,775	7,994,955
Los Angeles Department of Water & Power, RB: Power System, Sub-Series A-1 (AMBAC), 5.00%, 7/01/37	15,100	15,510,720
System, Sub-Series A-2 (AGM), 5.00%, 7/01/35	7,250	7,439,007
Metropolitan Water District of Southern California, RB: Series A, 5.00%, 7/01/32	1,390	1,455,525
Series A (AGM), 5.00%, 7/01/30	1,000	1,036,770
Series C, 5.00%, 7/01/35	7,145	7,417,010
Metropolitan Water District of Southern California, Refunding RB: Series B, 5.00%, 7/01/35	2,675	2,776,837
Series C, 5.00%, 7/01/31	1,750	1,869,280
Oxnard Financing Authority, RB, Redwood Trunk Sewer & Headworks, Series A (NPFGC), 5.25%, 6/01/34	4,160	4,190,160

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Sacramento Municipal Utility District, RB, Cosumnes Project (NPFGC), 5.13%, 7/01/29	18,500	18,620,250
Sacramento Regional County Sanitation District, Refunding RB, County Sanitation District 1 (NPFGC), 5.00%, 8/01/35	5,675	5,776,810
San Diego Public Facilities Financing Authority, Refunding RB, Senior Series A, 5.38%, 5/15/34	1,910	2,041,771
San Francisco City & County Public Utilities Commission, Refunding RB, Series A, 5.13%, 11/01/39	2,295	2,403,117 86,004,031
Total Municipal Bonds in California		338,505,558

	Par (000)	Value
Municipal Bonds		
<b>Puerto Rico 3.2%</b>		
<b>County/City/Special District/School District 1.8%</b>		
Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.50%, 8/01/44	\$ 5,000	\$ 5,648,550
<b>State 1.4%</b>		
Commonwealth of Puerto Rico, GO, Refunding, Public improvement, Series B, 6.50%, 7/01/37	4,000	4,405,720
Total Municipal Bonds in Puerto Rico		10,054,270
Total Municipal Bonds 112.0%	348,559,828	

Municipal Bonds Transferred to Tender		
Option Bond Trusts (c)		
<b>California 41.3%</b>		
<b>Corporate 5.8%</b>		
San Francisco Bay Area Rapid Transit District, Refunding RB, Series A (NPFGC), 5.00%, 7/01/30	6,000	6,167,280
University of California, RB, Series L, 5.00%, 5/15/40	11,597	11,894,135 18,061,415
<b>County/City/Special District/School District 14.3%</b>		
Contra Costa Community College		

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District, California, GO, Election of 2002 (AGM), 5.00%, 8/01/30	10,215	10,421,750
Fremont Unified School District, Alameda County, California, GO, Election of 2002, Series B (AGM), 5.00%, 8/01/30	4,003	4,101,120
Los Angeles Community College District, California, GO, Election of 2008, Series A, 6.00%, 8/01/33	3,828	4,292,727
San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33	7,732	8,119,958
Santa Clara County Financing Authority, Refunding LRB, Series L, 5.25%, 5/15/36	10,001	10,461,382
Sonoma County Junior College District, GO, Refunding, Election of 2002, Series B (AGM), 5.00%, 8/01/28	6,875	7,098,479
		44,495,416
<b>Education 11.3%</b>		
California Educational Facilities Authority, RB, University of Southern California, Series A, 5.25%, 10/01/18	13,845	14,846,270
California State University, RB, Systemwide, Series A (AGM), 5.00%, 11/01/39	4,840	4,894,063

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## Schedule of Investments (concluded)

BlackRock MuniYield California Fund, Inc. (MYC)

(Percentages shown are based on Net Assets)

Municipal Bonds Transferred to Tender	Par	
Option Bond Trusts (c)	(000)	Value
<b>California (concluded)</b>		
<b>Education (concluded)</b>		
Los Angeles Community College District, California, GO, Election of 2003, Series E (AGM), 5.00%, 8/01/31	\$ 10,002	\$ 10,237,933
Peralta Community College District, GO, Election of 2000, Series D (AGM), 5.00%, 8/01/30	1,995	2,043,878
University of California, RB, Series O, 5.75%, 5/15/34	2,805	3,149,426
		35,171,570
<b>Utilities 9.9%</b>		
Eastern Municipal Water District, COP, Series H, 5.00%, 7/01/33	4,748	4,882,312
Metropolitan Water District of Southern California, RB, Series A, 5.00%, 7/01/37	20,000	20,892,400
San Diego County Water Authority, COP, Series A (AGM), 5.00%, 5/01/31	5,010	5,123,326
		30,898,038
Total Municipal Bonds Transferred to Tender Option Bond Trusts 41.3%		128,626,439
Total Long-Term Investments (Cost \$465,274,902) 153.3%	477,186,267	
<b>Short-Term Securities</b>		
	Shares	
CMA California Municipal Money Fund, 0.04% (d)(e)	5,045,201	5,045,201
Total Short-Term Securities (Cost \$5,045,201) 1.6%		5,045,201
Total Investments (Cost \$470,320,103*) 154.9%		482,231,468
Other Assets Less Liabilities 1.7%		5,225,806
Liability for Trust Certificates, Including Interest Expense and Fees Payable (22.5)%		(70,188,507)
Preferred Shares, at Redemption Value (34.1)%		(105,968,869)

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Net Assets Applicable to Common Shares 100.0%

\$ 311,299,898

\* The cost and unrealized appreciation (depreciation) of investments as of April 30, 2010, as computed for federal income tax purposes, were as

follows:

Aggregate cost	\$ 400,564,093	
Gross unrealized appreciation	\$ 13,759,589	
Gross unrealized depreciation		(2,228,222)
Net unrealized appreciation	\$ 11,531,367	

(a) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.

(b) Security is collateralized by Municipal or US Treasury obligations.

(c) Securities represent bonds transferred to a tender option bond trust in exchange for which the Fund acquired residual interest certificates.

These securities serve as collateral in a financing transaction.

(d) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment

Company Act of 1940, were as follows:

	Shares Held at July 31, 2009	Net Activity	Shares Held at April 30, 2010	Income
Affiliate				
CMA California				
Municipal				
Money Fund	7,607,697	(2,562,496)	5,045,201	\$1,733

(e) Represents the current yield as of report date.

Fair Value Measurements - Various inputs are used in determining the fair value of investments, which are as follows:

Level 1 price quotations in active markets/exchanges for identical assets and liabilities

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)

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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)

The inputs or methodologies used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and other significant accounting policies, please refer to the Fund's most recent financial statements as contained in its semi-annual report.

The following table summarizes the inputs used as of April 30, 2010 in determining the fair valuation of the Fund's investments:

Investments in Securities				
Valuation Inputs	Level 1	Level 2	Level 3	Total
Assets:				
Long-Term				
Investments <sup>1</sup>		\$477,186,267		\$ 477,186,267
Short-Term				
Securities	\$ 5,045,201			5,045,201
Total	\$ 5,045,201	\$477,186,267		\$ 482,231,468

<sup>1</sup> See above Schedule of Investments for values in each sector.

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### 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 13(a)-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 Fund, Inc.

By: /s/ Anne F. Ackerley

Anne F. Ackerley

Chief Executive Officer of

BlackRock MuniYield California Fund, Inc.

Date: June 28, 2010

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/ Anne F. Ackerley

Anne F. Ackerley

Chief Executive Officer (principal executive officer) of

BlackRock MuniYield California Fund, Inc.

Date: June 28, 2010

By: /s/ Neal J. Andrews

Neal J. Andrews

Chief Financial Officer (principal financial officer) of

BlackRock MuniYield California Fund, Inc.

Date: June 28, 2010

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