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

UNITEDSTATES SECURITIESANDEXCHANGECOMMISSION 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 52nd Street, New York, NY 10055.

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

Date of fiscal year end: 07/31/2010

Date of reporting period: 04/30/2010

Item 1 Schedule of Investments

Schedule of Investments April 30, 2010 (Unaudited)

BlackRock MuniYield California Fund, Inc. (MYC) (Percentages shown are based on Net Assets)

	Par	
Municipal Bonds	(000)	Value
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:		

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

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

BLACKROCK MUNIYIELD CALIFORNIA FUND, INC.

APRIL 30, 2010

Schedule of Investments (continued)

BlackRock MuniYield California Fund, Inc. (MYC)

(Percentages shown are based on Net Assets)

	Par	
Municipal Bonds	(000)	Value
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
Education 7.7%		
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
Health 15.2%		
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

St. Joseph Health System, Series A,		
5.50%, 7/01/29	2,10	0 2,181,018
California Statewide Communities		
Development Authority, RB, Health		
Facility, Memorial Health Services,		
Series A:		
6.00%, 10/01/23	3,27	0 3,411,755
5.50%, 10/01/33	3,01	5 3,060,255
California Statewide Communities		
Development Authority, Refunding RB:		
Catholic Healthcare West, Series D,		
5.50%, 7/01/31	5,05	5,193,103
Senior Living, Southern California,		
6.25%, 11/15/19	50	0 539,515
Senior Living, Southern California,		
6.63%, 11/15/24	65	0 690,807
Senior Living, Southern California,		
7.00%, 11/15/29	50	0 537,035
Senior Living, Southern California,		
7.25%, 11/15/41	1,75	0 1,897,840
	Par	
Municipal Bonds	(000)	Value
California (continued)		
Health (concluded)		
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
Housing 1.2%		
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,		
Santa Clara County Housing Authority, California, RB, John Burns Gardens		
California, RB, John Burns Gardens	3,500	3,516,310
California, RB, John Burns Gardens Apartments Project, Series A, AMT,		3,516,310 3,773,960

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
County of Sacramento, California, RB,		
Senior, Series B, 5.75%, 7/01/39	900	967,851
Los Angeles Department of Airports,		
Refunding RB, Senior, Los Angeles		
International Airport, Series A, 5.00%,		
5/15/40	4,880	4,972,525
San Francisco City & County Airports		
Commission, RB, Series E, 6.00%,		
5/01/39	4,835	5,303,221
San Francisco Port Commission,		
California, RB, Series A, 5.13%,		
3/01/40	5,000	5,005,400
		19,507,987
2 BLACKROCK MUNIYIELD CALIFORNIA FUND, INC.		
APRIL 30, 2010		

Schedule of Investments (continued)

BlackRock MuniYield California Fund, Inc. (MYC) (Percentages shown are based on Net Assets)

	Par	
Municipal Bonds	(000)	Value
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

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	
Municipal Bonds	(000)	Value
Puerto Rico 3.2%		
County/City/Special District/School District 1.8%		
Puerto Rico Sales Tax Financing Corp.,		
RB, First Sub-Series A, 6.50%,		
8/01/44	\$ 5,000	\$ 5,648,550
State 1.4%		
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)		
California 41.3%		
Corporate 5.8%		
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
County/City/Special District/School District 14.3%		
Contro Costo Community College		

Contra Costa Community College

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
Education 11.3%		
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
BLACKROCK MUNIYIELD CALIFORNIA FUND, INC.		

APRIL 30, 2010

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
California (concluded)			
Education (concluded)			
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
Utilities 9.9%			
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	Q1	
Short-Term Securities		Shares	
CMA California Municipal Money Fund,		5.045.004	5 0 4 5 0 0 4
0.04% (d)(e)		5,045,201	5,045,201
Total Short-Term Securities			F 0.4F 004
(Cost \$5,045,201) 1.6%			5,045,201
Total Investments			400 004 400
(Cost \$470,320,103*) 154.9%			482,231,468
Other Assets Less Liabilities 1.7%			5,225,806
Liability for Trust Certificates, Including Interest			(70 100 507)
Expense and Fees Payable (22.5)% Professed Shares at Redemption Value (24.1)%			(70,188,507)
Preferred Shares, at Redemption Value (34.1)%			(105,968,869)

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,
Net
at April 30,

Αf