BLACKROCK MUNIYIELD CALIFORNIA FUND, INC

Form N-Q June 27, 2011

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: John M. Perlowski, 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: 07/31/2011

Date of reporting period: 04/30/2011

Item 1 – Schedule of Investments

BlackRock MuniYield California Fund, Inc. (MYC)

Schedule of Investments April 30, 2011 (Unaudited)

(Percentages shown are based on Net Assets)

	Par	
Municipal Bonds	(000)	Value
California — 98.2%		
Corporate — 2.3%		
City of Chula Vista California, Refunding		
RB, San Diego Gas & Electric,		
Series A, 5.88%, 2/15/34	\$ 975	\$ 1,015,346
University of California, RB, Series O,		
5.25%, 5/15/39	5,590	5,640,925
		6,656,271
County/City/Special District/School District — 37.5%		
California State Public Works Board, RB,		
Various Capital Projects, Sub-Series		
I-1, 6.63%, 11/01/34	5,000	5,273,850
Campbell Union High School District,		
GO, Election of 2006, Series C,		
5.75%, 8/01/40	4,000	4,150,720
City & County of San Francisco		
California, COP, Refunding, Series A:		
5.00%, 10/01/29	3,540	3,523,008
5.00%, 10/01/30	6,700	6,601,510
City of Los Angeles California, COP,		
Senior, Sonnenblick Del Rio West Los		
Angeles (AMBAC), 6.20%, 11/01/31	2,000	2,010,020
City of San Jose California, RB,		
Convention Center Expansion &		
Renovation Project:		
6.50%, 5/01/36	1,520	1,534,455
6.50%, 5/01/42	1,860	1,866,770
El Dorado Union High School District,		
GO, Election of 2008, 5.00%,		
8/01/35	5,000	5,073,650
El Monte Union High School District		
California, GO, Election of 2002,		
Series C (AGM), 5.25%, 6/01/32	10,120	10,317,340
Grossmont Healthcare District, GO,		

Election of 2006, Series B, 6.13%,		
7/15/40	2,000	2,102,060
Los Angeles Municipal Improvement	2,000	2,102,000
Corp., RB, Real Property, Series E:		
5.75%, 9/01/34	1,000	1,025,190
6.00%, 9/01/34	2,285	2,380,559
Murrieta Valley Unified School District	2,203	2,300,339
Public Financing Authority, Special Tax		
Bonds, Refunding, Series A (AGC),		
5.13%, 9/01/26	6,575	6,683,422
Oak Grove School District California, GO,	0,575	0,000,422
Election of 2008, Series A, 5.50%,		
8/01/33	4,000	4,155,520
Pico Rivera Public Financing Authority,	4,000	4,100,020
RB:		
5.50%, 9/01/31	1,500	1,502,865
5.75%, 9/01/39	6,025	5,925,166
0.1070, 0.101700	0,020	0,020,100
	Par	
Municipal Bonds	(000)	
Mullicipal Bolius	(000) Value	•
California (continued)	(000) Value	
	(000) Value	
California (continued)	(000) Value	
California (continued) County/City/Special District/School	(000) Value	
California (continued) County/City/Special District/School District (concluded)	(000) Value	
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax	(000) Value	
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding,	(000) Value	
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos	\$ 2,750	\$ 2,628,725
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%,		
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28		
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28 San Diego Regional Building Authority		
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28 San Diego Regional Building Authority California, RB, County Operations		
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28 San Diego Regional Building Authority California, RB, County Operations Center & Annex, Series A:	\$ 2,750	\$ 2,628,725
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28 San Diego Regional Building Authority California, RB, County Operations Center & Annex, Series A: 5.38%, 2/01/28	\$ 2,750 150	\$ 2,628,725 155,715
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28 San Diego Regional Building Authority California, RB, County Operations Center & Annex, Series A: 5.38%, 2/01/28 5.38%, 2/01/36	\$ 2,750 150	\$ 2,628,725 155,715
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28 San Diego Regional Building Authority California, RB, County Operations Center & Annex, Series A: 5.38%, 2/01/28 5.38%, 2/01/36 San Jose Evergreen Community College	\$ 2,750 150	\$ 2,628,725 155,715
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28 San Diego Regional Building Authority California, RB, County Operations Center & Annex, Series A: 5.38%, 2/01/28 5.38%, 2/01/36 San Jose Evergreen Community College District California, GO, Refunding,	\$ 2,750 150	\$ 2,628,725 155,715
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28 San Diego Regional Building Authority California, RB, County Operations Center & Annex, Series A: 5.38%, 2/01/28 5.38%, 2/01/36 San Jose Evergreen Community College District California, GO, Refunding, CAB, Election of 2004, Series A	\$ 2,750 150 4,700	\$ 2,628,725 155,715 4,712,878
California (continued) County/City/Special District/School District (concluded) Pittsburg Redevelopment Agency, Tax Allocation Bonds, Refunding, Subordinate, Los Medanos Community Project, Series A, 6.50%, 9/01/28 San Diego Regional Building Authority California, RB, County Operations Center & Annex, Series A: 5.38%, 2/01/28 5.38%, 2/01/36 San Jose Evergreen Community College District California, GO, Refunding, CAB, Election of 2004, Series A (NPFGC), 5.12%, 9/01/23 (a)	\$ 2,750 150 4,700	\$ 2,628,725 155,715 4,712,878

Santa Ana Unified School District, GO,		
Election of 2008, Series A, 5.13%,		
8/01/33	5,965	5,960,586
Santa Clara County Financing Authority,		
Refunding LRB, Series L, 5.25%,		
5/15/36	10,000	9,849,100
Santa Cruz County Redevelopment		
Agency California, Tax Allocation		
Bonds, Live Oak/Soquel Community		
Improvement, Series A:		
6.63%, 9/01/29	1,000	1,066,770
7.00%, 9/01/36	600	636,834
Twin Rivers Unified School District, GO,		
Election of 2006 (AGM), 5.00%,		
8/01/29	9,390	9,445,307
Westminster Redevelopment Agency		
California, Tax Allocation Bonds,		
Subordinate, Commercial		
Redevelopment Project No. 1 (AGC),		
6.25%, 11/01/39	1,250	1,360,513
		110,084,534
Education — 8.0%		
California Educational Facilities		
Authority, RB, Pitzer College, 6.00%,		
4/01/40	2,500	2,530,825
California Educational Facilities		
Authority, Refunding RB, San		
Francisco University, 6.13%,		
10/01/36	1,000	1,028,250

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

BLACKROCK MUNIYIELD CALIFORNIA FUND, INC.

APRIL 30, 2011

1

BlackRock MuniYield California Fund, Inc. (MYC)

Schedule of Investments (continued)

(Percentages shown are based on Net Assets)

Municipal Bonds (000) Value California (continued) Education (concluded) California State Enterprise Development Authority, Refunding RB, The Thacher School Project, 5.13%, 9/01/39 \$6,965 \$6,649,276 California State University, RB, Systemwide, Series A: 5.50%, 11/01/39 \$2,725 \$2,652,379 (AGM), 5.00%, 11/01/39 \$4,840 \$4,371,633 San Francisco Community College District, GO, Election of 2005,		Par	
Education (concluded) California State Enterprise Development Authority, Refunding RB, The Thacher School Project, 5.13%, 9/01/39 \$6,965 \$6,649,276 California State University, RB, Systemwide, Series A: 5.50%, 11/01/39 \$2,725 \$2,652,379 (AGM), 5.00%, 11/01/39 \$4,840 \$4,371,633 San Francisco Community College District, GO, Election of 2005,	Municipal Bonds	(000)	Value
California State Enterprise Development Authority, Refunding RB, The Thacher School Project, 5.13%, 9/01/39 \$ 6,965 \$ 6,649,276 California State University, RB, Systemwide, Series A: 5.50%, 11/01/39 \$ 2,725 \$ 2,652,379 (AGM), 5.00%, 11/01/39 \$ 4,840 \$ 4,371,633 San Francisco Community College District, GO, Election of 2005,	California (continued)		
Authority, Refunding RB, The Thacher School Project, 5.13%, 9/01/39 \$ 6,965 \$ 6,649,276 California State University, RB, Systemwide, Series A: 5.50%, 11/01/39 2,725 2,652,379 (AGM), 5.00%, 11/01/39 4,840 4,371,633 San Francisco Community College District, GO, Election of 2005,	Education (concluded)		
School Project, 5.13%, 9/01/39 \$ 6,965 \$ 6,649,276 California State University, RB, \$ 5,50%, 11/01/39 \$ 2,725 \$ 2,652,379 (AGM), 5.00%, 11/01/39 \$ 4,840 \$ 4,371,633 San Francisco Community College \$ 5,50%, 11/01/39 \$ 5,50%, 11/01/39 District, GO, Election of 2005, \$ 6,965 \$ 6,649,276	California State Enterprise Development		
California State University, RB, Systemwide, Series A: 5.50%, 11/01/39 2,725 2,652,379 (AGM), 5.00%, 11/01/39 4,840 4,371,633 San Francisco Community College District, GO, Election of 2005,	Authority, Refunding RB, The Thacher		
Systemwide, Series A: 5.50%, 11/01/39 2,725 2,652,379 (AGM), 5.00%, 11/01/39 4,840 4,371,633 San Francisco Community College District, GO, Election of 2005,	School Project, 5.13%, 9/01/39	\$ 6,965	\$ 6,649,276
5.50%, 11/01/39 2,725 2,652,379 (AGM), 5.00%, 11/01/39 4,840 4,371,633 San Francisco Community College District, GO, Election of 2005,	California State University, RB,		
(AGM), 5.00%, 11/01/39 4,840 4,371,633 San Francisco Community College District, GO, Election of 2005,	Systemwide, Series A:		
San Francisco Community College District, GO, Election of 2005,	5.50%, 11/01/39	2,725	2,652,379
District, GO, Election of 2005,	(AGM), 5.00%, 11/01/39	4,840	4,371,633
	San Francisco Community College		
	District, GO, Election of 2005,		
Series D, 5.00%, 6/15/34 6,341,612	Series D, 5.00%, 6/15/34	6,420	6,341,612
23,573,975			23,573,975
Health — 15.4%	Health — 15.4%		
ABAG Finance Authority for Nonprofit	ABAG Finance Authority for Nonprofit		
Corps, Refunding RB, Sharp	Corps, Refunding RB, Sharp		
Healthcare:	Healthcare:		
6.38%, 8/01/34 2,000 2,014,020	6.38%, 8/01/34	2,000	2,014,020
Series A, 6.00%, 8/01/30 2,229,480	Series A, 6.00%, 8/01/30	2,250	2,229,480
California Health Facilities Financing	California Health Facilities Financing		
Authority, Refunding RB:	Authority, Refunding RB:		
Catholic Healthcare West, Series A,	Catholic Healthcare West, Series A,		
6.00%, 7/01/39 10,000 10,056,700	6.00%, 7/01/39	10,000	10,056,700
Providence Health, 6.50%,	Providence Health, 6.50%,		
10/01/38 2,650 2,832,850	10/01/38	2,650	2,832,850
St. Joseph Health System, Series A,	St. Joseph Health System, Series A,		
5.50%, 7/01/29 2,100 1,993,467	5.50%, 7/01/29	2,100	1,993,467
Sutter Health, Series B, 6.00%,	Sutter Health, Series B, 6.00%,		
8/15/42 5,215 5,288,584	8/15/42	5,215	5,288,584
California Statewide Communities	California Statewide Communities		
Development Authority, RB:	Development Authority, RB:		
Health Facility, Memorial Health	Health Facility, Memorial Health		
Services, Series A, 6.00%,	Services, Series A, 6.00%,		
10/01/23 3,270 3,356,786	10/01/23	3,270	3,356,786

Health Facility, Memorial Health		
Services, Series A, 5.50%,		
10/01/33	3,580	3,516,491
Sutter Health, Series A, 6.00%,	3,360	3,310,431
8/15/42	3,600	3,650,796
California Statewide Communities	3,000	3,030,790
Development Authority, Refunding RB:		
Catholic Healthcare West, Series D,		
5.50%, 7/01/31	5,355	5,195,903
Senior Living, Southern California,	0,000	0,100,000
6.25%, 11/15/19	500	523,500
Senior Living, Southern California,	300	020,000
6.63%, 11/15/24	650	680,186
Senior Living, Southern California,	000	000,100
7.00%, 11/15/29	500	521,490
Senior Living, Southern California,	300	021, 10 0
7.25%, 11/15/41	1,750	1,830,272
City of Torrance California, Refunding	1,700	1,000,272
RB, Torrance Memorial Medical		
Center, Series A, 6.00%, 6/01/22	1,310	1,326,991
	.,	45,017,516
Housing — 1.1%		, ,
California Rural Home Mortgage Finance		
Authority, RB, AMT:		
Mortgage-Backed Securities		
Program, Series B (Ginnie Mae),		
6.15%, 6/01/20	15	15,286
Sub-Series FH-1, 5.50%, 8/01/47	300	137,670
	Par	
Municipal Bonds	(000)	/alue
California (continued)		
Housing (concluded)		
Santa Clara County Housing Authority		
California, RB, John Burns Gardens		
Apartments Project, Series A, AMT,		
6.00%, 8/01/41	\$ 3,500	\$ 3,213,210
		3,366,166
State — 6.6%		

California State Public Works Board, RB:

Department of Developmental		
Services, Porterville, Series C,		
6.25%, 4/01/34	1,190	1,215,990
Department of Education, Riverside	1,100	1,210,000
Campus Project, Series B, 6.50%,		
4/01/34	10,000	10,406,800
Trustees of the California State	10,000	10,400,500
University, Series D, 6.00%,		
4/01/27	215	223,215
Various Capital Projects,	210	225,210
Sub-Series I-1, 6.38%, 11/01/34	1,850	1,911,216
	1,000	1,911,210
State of California, GO, Various Purpose,	F 000	E 400.0E0
6.50%, 4/01/33	5,000	5,492,250 19,249,471
Transportation 7.00/		19,249,471
Transportation — 7.2%		
County of Orange California, RB,	0.000	0.145.500
Series B, 5.75%, 7/01/34	3,000	3,145,560
County of Sacramento California, RB,	000	007.070
Senior Series B, 5.75%, 7/01/39	900	907,272
Port of Oakland, RB, Series K, AMT	4.005	4 504 045
(NPFGC), 5.88%, 11/01/30	4,685	4,591,815
San Francisco City & County Airports		
Commission, RB, Series E, 6.00%,		
5/01/39	5,065	5,307,310
San Francisco Port Commission		
California, RB, Series A, 5.13%,		
3/01/40	5,000	4,675,300
San Joaquin County Transportation		
Authority, RB, Limited Tax, Measure K,		
Series A, 6.00%, 3/01/36	2,400	2,531,088
		21,158,345
Utilities — 20.1%		
California Infrastructure & Economic		
Development Bank, RB, California		
Independent System Operator,		
Series A, 6.25%, 2/01/39	2,170	2,244,366
City of Chula Vista California, Refunding		
RB, San Diego Gas & Electric,		
Series D, 5.88%, 1/01/34	2,500	2,603,450
City of Los Angeles California, Refunding		
RB, Sub-Series A, 5.00%, 6/01/32	3,000	3,028,230

City of Petaluma California, Refunding			
RB, 6.00%, 5/01/36	2,645		2,785,238
Dublin-San Ramon Services District,			
Refunding RB, 6.00%, 8/01/41	2,420		2,497,997
Eastern Municipal Water District			
California, COP, Series H, 5.00%,			
7/01/35	8,400		8,091,384
Los Angeles Department of Water &			
Power, RB, Power System, Series A-2,			
5.25%, 7/01/32	2,500		2,565,875
Oxnard Financing Authority, RB,			
Redwood Trunk Sewer & Headworks,			
Series A (NPFGC), 5.25%, 6/01/34	4,205		4,216,648
2 BLACKROCK MUNIYIELD CALIFORNIA FUND, INC.		APRIL 30, 2011	

BlackRock MuniYield California Fund, Inc. (MYC)

Schedule of Investments (continued)

(Percentages shown are based on Net Assets)

District, Refunding RB, Series A

	Par		
Municipal Bonds	(000)	Value	
California (concluded)			
Utilities (concluded)			
Sacramento Municipal Utility District,			
RB, Cosumnes Project (NPFGC),			
5.13%, 7/01/29	\$ 18	,500	\$ 18,511,100
Sacramento Regional County Sanitation			
District, Refunding RB, County			
Sanitation District 1 (NPFGC), 5.00%,			
8/01/35	6	,260	6,259,499
San Diego Public Facilities Financing			
Authority, Refunding RB, Senior			
Series A, 5.38%, 5/15/34	3	,910	3,967,242
San Francisco City & County Public			
Utilities Commission, Refunding RB,			
Series A, 5.13%, 11/01/39	2	,295	2,302,206
			59,073,235
Total Municipal Bonds in California			288,179,513
Puerto Rico — 2.8%			
County/City/Special District/School District — 1.4%			
Puerto Rico Sales Tax Financing Corp.,			
RB, First Sub-Series A, 6.50%,			
8/01/44	4	,000	4,173,200
State — 1.4%			
Commonwealth of Puerto Rico, GO,			
Refunding, Public Improvement,			
Series B, 6.50%, 7/01/37	4	,000	4,062,800
Total Municipal Bonds in Puerto Rico			8,236,000
Total Municipal Bonds – 101.0%			296,415,513
Municipal Bonds Transferred to Tender			
Option Bond Trusts (b)			
California — 69.8%			
Corporate — 8.8%			
San Francisco Bay Area Rapid Transit			

(NPFGC), 5.00%, 7/01/30	6,000		6,119,460
University of California, RB:			
Limited Project, Series B (AGM),			
5.00%, 5/15/33	8,488		8,387,581
Series L, 5.00%, 5/15/40	11,597		11,200,339
			25,707,380
County/City/Special District/School District — 31.4%			
City of Los Angeles California, Refunding			
RB, Series A, 5.00%, 6/01/39	9,870		9,752,054
Contra Costa Community College District			
California, GO, Election of 2002			
(AGM), 5.00%, 8/01/30	10,215		10,259,820
Fremont Unified School District Alameda			
County California, GO, Election of			
2002, Series B (AGM), 5.00%,			
8/01/30	4,003		4,014,852
Los Angeles Community College District			
California, GO:			
Election of 2001, Series E-1, 5.00%,			
8/01/33	14,850		14,652,643
Election of 2003, Series E (AGM),			
5.00%, 8/01/31	10,002		10,000,715
Election of 2008, Series A, 6.00%,			
8/01/33	3,828		4,132,614
Municipal Bonds Transferred to Tender	Par		
Option Bond Trusts (b)	(000)	Value	
California (concluded)			
County/City/Special District/School			
District (concluded)			
Los Angeles Community College District			
California, GO (concluded):			
Election of 2008, Series C, 5.25%,			
8/01/39		\$ 9,680	\$ 9,778,155
Orange County Sanitation District, COP			
(NPFGC), 5.00%, 2/01/33		9,348	9,378,761
San Diego Community College District			
California, GO, Election of 2002,			
5.25%, 8/01/33		7,732	7,861,044
San Francisco Bay Area Transit			

Financing Authority, Refunding RB,		
Series A (NPFGC), 5.00%, 7/01/34	5,439	5,478,806
Sonoma County Junior College District,	,	, ,
GO, Refunding, Election of 2002,		
Series B (AGM), 5.00%, 8/01/28	6,875	6,918,897
() , , , , , , , , , , , , , , , , , ,	-,	92,228,361
Education — 9.4%		, ,,,,,,
California Educational Facilities		
Authority, RB, University of Southern		
California, Series A, 5.25%, 10/01/39	13,845	14,203,585
Peralta Community College District, GO,		
Election of 2000, Series D (AGM),		
5.00%, 8/01/30	1,995	1,980,217
University of California, RB:		
Series L, 5.00%, 5/15/36	8,500	8,274,835
Series O, 5.75%, 5/15/34	2,805	2,984,885
		27,443,522
Utilities — 20.2%		
Eastern Municipal Water District, COP,		
Series H, 5.00%, 7/01/33	4,748	4,647,899
Los Angeles Department of Water &		
Power, RB:		
Power System, Sub-Series A-1		
(AMBAC), 5.00%, 7/01/37	15,098	14,966,237
System, Sub-Series A-2 (AGM),		
5.00%, 7/01/35	7,250	7,252,755
Metropolitan Water District of Southern		
California, RB:		
Series A, 5.00%, 7/01/37	20,000	20,188,800
Series C, 5.00%, 7/01/35	7,145	7,209,277
San Diego County Water Authority, COP,		
Series A (AGM), 5.00%, 5/01/31	5,010	5,031,643
		59,296,611
Total Municipal Bonds Transferred to		
Tender Option Bond Trusts – 69.8%		204,675,874
Total Long-Term Investments		
(Cost - \$506,940,105) - 170.8%		501,091,387
Short-Term Securities	Shares	
BIF California Municipal Money Fund,		
0.04% (c)(d)	1,179,593	1,179,593
Total Short-Term Securities		

(Cost – \$1,179,593) – 0.4%		1,179,593
BLACKROCK MUNIYIELD CALIFORNIA FUND, INC.	APRIL 30, 2011	3

BlackRock MuniYield California Fund, Inc. (MYC)

Schedule of Investments (continued)

(Percentages shown are based on Net Assets)

Total	Investn	nents
i Ulai	แเงษอแ	Helits

(Cost - \$508,119,698*) - 171.2%	\$ 502,270,980
Other Assets Less Liabilities – 2.0%	5,962,515
Liability for Trust Certificates, Including Interest	
Expense and Fees Payable – (37.1)%	(108,969,035)
Preferred Shares, at Redemption Value – (36.1)%	(105,966,582)
Net Assets Applicable to Common Shares – 100.0%	\$ 293,297,878

^{*} The cost and unrealized appreciation (depreciation) of investments as of April 30, 2011, as computed for federal income tax purposes, were as follows:

Aggregate cost \$ 399,242,196 Gross unrealized appreciation \$ 4,517,753 Gross unrealized depreciation (10,366,471) \$ (5,848,718) Net unrealized depreciation

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

(c) 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, as amended, were as follows:

	Shares		Shares		
	Held at		Held at		
	July 31,	Net	April 30,		
Affiliate	2010	Activity	2011	Income	
BIF California					
Municipal					
Money Fund	12,364,497	(11,184,904)	1,179,593	\$ 2,485	
(d) Represents the current yield as of report date.					

• Financial futures contracts sold as of April 30, 2011 were as follows:

				Notional	Unrealized
Contracts	Issue	Exchange	Expiration	Value	Depreciation
100	10-Year U.S. Treasury Note	Chicago Board of Trade	June 2011	\$ 11,851,372	\$ (262,690)

- •Fair Value Measurements Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs are summarized in three broad levels for financial reporting purposes 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)
- •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 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 derivative financial instruments and other significant accounting policies, please refer to the Fund's most recent financial statements as contained in its semi-annual report.

The following tables summarize the inputs used as of April 30, 2011 in determining the fair valuation of the Fund's investments and derivative financial instruments:

Valuation Inputs	Level 1	Level 2		Level 3	Total	
Assets:						
Investments:						
Long-Term						
Investments ¹		_	\$ 501,091,387		_	\$ 501,091,387
Short-Term						
Securities		\$ 1,179,593	_		_	1,179,593
Total		\$ 1,179,593	\$ 501,091,387		_	\$ 502,270,980

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

4 BLACKROCK MUNIYIELD CALIFORNIA FUND, INC.

APRIL 30, 2011

BlackRock MuniYield California Fund, Inc. (MYC)

Schedule of Investments (concluded)

Valuation Inputs	Level 1	Level 2	Level 3	Total		
Derivative Financial Instruments ²						
Liabilities:						
Interest rate contracts	\$ (262,690)	_	_	\$ (262,690)		
² Derivative financial instruments are financial futures contracts, which are valued at the unrealized						
appreciation/depreciation on the instrument.						
BLACKROCK MUNIYIELD CALIFORNIA FUNI	D, INC.	APRIL 30, 2011		5		

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 31940 Act3)) 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 Fund, Inc.

By: /S/ John M. Perlowski

John M. Perlowski

Chief Executive Officer of

BlackRock MuniYield California Fund, Inc.

Date: June 24, 2011

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 Fund, Inc.

Date: June 24, 2011

By: /S/ Neal J. Andrews

Neal J. Andrews

Chief Financial Officer (principal financial officer) of

BlackRock MuniYield California Fund, Inc.

Date: June 24, 2011