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 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

# Schedule of Investments April 30, 2010 (Unaudited)

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

Municipal Bonds         (000)         Value           California         108.8%         Corporat         4.2%           California Pollution Control Financing		Par	
Coporate 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 Chuld Vista California, Refunding	Municipal Bonds	(000)	Value
California Pollution Control FinancingAuthority, RB, Waste Management Inc.Project, Series C, AMT, 6.75%,12/01/27\$ 3,300\$ 3,381.213City of Chula Vista California, RefundingRB, San Diogo Gas & Electric,Series A, 5.88%, 2/15/349751.074.801University of California, RB, LimitedProject, Series B (AGM), 5.00%,5/15/338.4858.611.85113,067.865County/City/Special District/School District38.4%Arcata Joint Powers Financing Authority.California, Tax Allocation Bonds,Refunding, Community DevelopmentProject Loan, Series A (AMBAC),6.00%, 80/1232,5202,521,184California, Tax Allocation Bonds,Refunding, Community DevelopmentProject Loan, Series A (AMBAC),System, Sonies AF, 5.00%, 1201/292,5002,687,600City of Los Angeles California, COP,Senior, Sonnenblick Del Rio West LosAngeles (MABAC), 6.20%, 1101/312,0002,032,480City of Los Angeles California, RefundingRB, Series A, 5.00%, 601/399,87010,226,899El Monte Union High School District,210,12010,449,20California, GO, Election of 2002,Series C (AGM), 5.25%, 601/3210,12010,449,20Series C (AGM), 5.25%, 601/3210,12010,449,20Series C, CAMJ, 5.25%, 601/3210,12010,449,20Series C, CAMJ, 5.25%, 601/3210,12010,449,20Series C, CAMJ, 5.25%, 601/3210,12010,449,20 <t< td=""><td>California 108.8%</td><td></td><td></td></t<>	California 108.8%		
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       \$ 3,300       \$ 3,381,213         RB, San Diego Gas & Electric,       \$ 975       1,074,801         Series A, 5.88%, 2/15/34       975       1,074,801         University of California, RB, Limited       \$ 700       \$ 1,074,801         Project, Series B (AGM), 5.00%,       \$ 8,485       8,611,851         County/City/Special District/School District       38.4%       38.485       8,611,851         County/City/Special District/School District       38.4%       38.485       8,611,851         California, Tax Allocation Bonds,       Resummer Sinancing Authority,       38.4%       30.67,865         California, Community Development       Project Loan, Saries A (AMBAC),       6.00%, 8001/23       2,520       2,521,184         California, State Department of Water       System, Series A, 5,00%, 1201/29       2,500       2,687,600         System, Series A, 5,00%, 601/39       9,870       10,226,899       2,032,480         City of Los Angeles California, Refunding       Series A, 500%, 601/39       9,870       10,226,899         El Monte Union High School District,       California, GO, Election of 2002,       Ser	Corporate 4.2%		
Project, Series C, AMT, 6.75%,           12/01/27         \$ 3,300         \$ 3,381.213           City of Chula Vista California, Refunding	California Pollution Control Financing		
1201/27         \$ 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         975         1,074,801         100           Project, Series B (AGM), 5,00%,         5/15/33         8,485         8,611,851           5/15/33         8,485         8,611,851         13,067,865           County/City/Special District/School District         38,4%         30,067,865           California, Tax Allocation Bonds,         8         8,611,851           Project Loan, Series A (AMBAC),         6,00%, 80/1/23         2,520         2,521,184           California, State Department of Water         8         8         8,610           Resources, Refunding RB, Water         5         3,500         2,667,600           System, Series AF, 5,00%, 12/01/29         2,500         2,687,600           City of Los Angeles California, COP,         3,870         10,226,893           Series C, MBAC), 6,20%, 11/01/31         2,000         2,032,480           City of Los Angeles California, Refunding         3,870         10,226,893           El Monte Union High School District,         2         2         2,687,600           Ca	Authority, RB, Waste Management Inc.		
City of Chula Vista California, RefundingRB, San Diego Gas & Electric,Series A, 5.88%, 2/15/349751.074.801University of California, RB, LimitedProject, Series B (AGM), 5.00%,5/15/338,4858,11,85113.067.865Courty/City/Special District/School District38.4%Arcata Joint Powers Financing Authority,California, Tax Allocation Bonds,Refunding, Community DevelopmentProject, Series A (AMBAC),6.00%, 8/01/232,5202.5202,521,184California State Department of WaterResources, Refunding RB, WaterSystem, Series AF, 5.00%, 12/01/292,5002.607, 610 Listrict, COP,Senior, Sonnenblick Del Rio West LosAngeles California, RefundingRB, Series A, 5.00%, 60/1399,87010,226,899El Monte Union High School District,California, GO, Election of 2002,Series C (AGM), 5.25%, 60/13210,120Series C, IAGM), 5.25%, 60/132Fortana Unified School District,California, GO, Series A (AGM), 5.25%,801/287,0007,414,680	Project, Series C, AMT, 6.75%,		
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         5/15/33       8,485       8,611,851       13,067,865         County/City/Special District/School District       38.4%       33,067,865         County/City/Special District/School District       38.4%       4         Arcata Joint Powers Financing Authority,       California, Tax Allocation Bonds,       4         Refunding, Community Development       Project Loan, Series A (AMBAC),       6,00%, 8/01/23       2,520       2,521,184         California State Department of Water       Esources, Refunding RB, Water       5       5       5         System, Series AF, 5.00%, 12/01/29       2,500       2,687,600       2,032,480         City of Los Angeles California, COP,       Senies, Sonnenblick Del Rio West Los       3       3,020       2,032,480         City of Los Angeles California, Refunding       RB, Series A, 5,00%, 6/01/39       9,870       10,226,899       8         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	12/01/27	\$ 3,300	\$ 3,381,213
Series A, 5.8%, 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%         8,611,851         13,067,865           County/City/Special District/School District         38.4%         47.000         13,067,865           County/City/Special District/School District         38.4%         47.000         13,067,865           California, Tax Allocation Bonds,         47.000         13,067,865         13,067,865           California, Tax Allocation Bonds,         47.000         2,520         2,521,184           California State Department of Water         2,520         2,521,184           California State Department of Water         39.000         2,687,600           System, Series AF, 5.00%, 12/01/29         2,500         2,687,600           City of Los Angeles California, Refunding         30.000         2,032,480           City of Los Angeles California, Refunding         30.000         2,032,480           City of Los Angeles California, Refunding         30.000         30.000           RB, Series A, 5.00%, 6/01/39         9.870         10,226,899           El Monte Union High School District,         20	City of Chula Vista California, Refunding		
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, Sonnenbilick 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 Fortana Unified School District, California, GO, Series A (AGM), 5.25%, 8/01/28 7,000 7,414,680	RB, San Diego Gas & Electric,		
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%         13,067,865         13,067,865           County/City/Special District/School District         38.4%         4	Series A, 5.88%, 2/15/34	975	1,074,801
5/15/33         8,855         8,611,851           13,067,865         13,067,865           County/City/Special District/School District         98,4%           Arcata Joint Powers Financing Authority,         2           California, Tax Allocation Bonds,         7           Refunding, Community Development         7           Project Loan, Series A (AMBAC),         6,00%, 8/01/23         2,520         2,521,184           California State Department of Water         7         7         7           Resources, Refunding RB, Water         2,500         2,687,600         2           System, Series AF, 5,00%, 12/01/29         2,500         2,687,600         2           City of Los Angeles California, COP,         7         7         7         7           Senior, Sonnenblick Del Rio West Los         7         7         7         7           Angeles (AMBAC), 6,20%, 11/01/31         2,000         2,032,480         2         3         3         3         3         3         3	University of California, RB, Limited		
13,067,865County/City/Special District/School District38.4%Arcata Joint Powers Financing Authority, California, Tax Allocation Bonds, Refunding, Community Development Project Loan, Series A (AMBAC), 6.00%, 8/01/232,5202,521,184California State Department of Water Resources, Refunding RB, Water System, Series AF, 5.00%, 12/01/292,5002,687,600City of Los Angeles California, COP, Senier, Sonnenblick Del Rio West Los Angeles (AMBAC), 6.20%, 11/01/312,0002,032,480City of Los Angeles California, Refunding RB, Series A, 5.00%, 6/01/399,87010,226,899El Monte Union High School District, California, GO, Election of 2002, Series C (AGM), 5.25%, 6/01/3210,12010,449,204Fontana Unified School District, California, GO, Series A (AGM), 5.25%, 8/01/287,0007,414,680	Project, Series B (AGM), 5.00%,		
County/City/Special District/School District38.4%Arcata Joint Powers Financing Authority,California, Tax Allocation Bonds,Refunding, Community DevelopmentProject Loan, Series A (AMBAC),6.00%, 8/01/232,5206.00%, 8/01/232,5202,521,184California State Department of WaterResources, Refunding RB, WaterSystem, Series AF, 5.00%, 12/01/292,5002,5002,687,600City of Los Angeles California, COP,Senior, Sonnenblick Del Rio West LosAngeles (AMBAC), 6.20%, 11/01/312,000City of Los Angeles California, RefundingRB, Series A, 5.00%, 6/01/399,870RD, Series A, 5.00%, 6/01/3210,120Citfornia, GO, Election of 2002,Series C (AGM), 5.25%, 6/01/3210,120Sories C (AGM), 5.25%, 6/01/3210,120R01/287,000201/287,000	5/15/33	8,485	8,611,851
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			13,067,865
California, Tax Allocation Bonds, Refunding, Community DevelopmentProject Loan, Series A (AMBAC), 6.00%, 8/01/232,5202,521,184California State Department of Water2,5202,521,184Resources, Refunding RB, Water System, Series AF, 5.00%, 12/01/292,5002,687,600City of Los Angeles California, COP, Senior, Sonnenblick Del Rio West Los Angeles (AMBAC), 6.20%, 11/01/312,0002,032,480City of Los Angeles California, Refunding RB, Series A, 5.00%, 6/01/399,87010,226,899El Monte Union High School District, California, GO, Election of 2002, Series C (AGM), 5.25%, 6/01/3210,12010,449,204Fontana Unified School District, California, GO, Series A (AGM), 5.25%, 8/01/287,0007,414,680	County/City/Special District/School District	38.4%	
Refunding, Community DevelopmentProject Loan, Series A (AMBAC),6.00%, 8/01/232,5206.00%, 8/01/232,520California State Department of WaterResources, Refunding RB, WaterSystem, Series AF, 5.00%, 12/01/292,5002(ty of Los Angeles California, COP,Senior, Sonnenblick Del Rio West LosAngeles (AMBAC), 6.20%, 11/01/312,000City of Los Angeles California, RefundingRB, Series A, 5.00%, 6/01/399,870El Monte Union High School District,California, GO, Election of 2002,Series C (AGM), 5.25%, 6/01/3210,120Fontana Unified School District,California, GO, Series A (AGM), 5.25%,8/01/287,0007,114,680	Arcata Joint Powers Financing Authority,		
Project Loan, Series A (AMBAC),         2,520         2,521,184           6.00%, 8/01/23         2,520         2,521,184           California State Department of Water         2,500         2,687,600           Resources, Refunding RB, Water         2,500         2,687,600           System, Series AF, 5.00%, 12/01/29         2,500         2,687,600           City of Los Angeles California, COP,         2,000         2,032,480           Senior, Sonnenblick Del Rio West Los         2,000         2,032,480           City of Los Angeles California, Refunding         9,870         10,226,899           El Monte Union High School District,         2,012         10,449,204           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%,         10,120         10,449,204           Konta Unified School District,         7,000         7,414,680         10,124         10,124	California, Tax Allocation Bonds,		
6.00%, 8/01/23       2,520       2,521,184         California State Department of Water       Resources, Refunding RB, Water       2,500       2,687,600         System, Series AF, 5.00%, 12/01/29       2,500       2,687,600       2,687,600         City of Los Angeles California, COP,       2,000       2,032,480       2,032,480         Senior, Sonnenblick Del Rio West Los       2,000       2,032,480         City of Los Angeles California, Refunding       3,870       10,226,899         El Monte Union High School District,       2       10,120       10,449,204         Fontana Unified School District,       10,120       10,449,204         Fontana Unified School District,       2       10,120       10,449,204         Fontana Unified School District,       3/01/28       7,000       7,414,680	Refunding, Community Development		
California State Department of Water Resources, Refunding RB, Water System, Series AF, 5.00%, 12/01/29 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	Project Loan, Series A (AMBAC),		
Resources, Refunding RB, Water       2,500       2,687,600         System, Series AF, 5.00%, 12/01/29       2,000       2,687,600         City of Los Angeles California, COP,       2       2         Senior, Sonnenblick Del Rio West Los       2,000       2,032,480         Angeles (AMBAC), 6.20%, 11/01/31       2,000       2,032,480         City of Los Angeles California, Refunding       2       2         RB, Series A, 5.00%, 6/01/39       9,870       10,226,899         El Monte Union High School District,       2       2         California, GO, Election of 2002,       3       3         Series C (AGM), 5.25%, 6/01/32       10,120       10,449,204         Fontana Unified School District,       3       3         California, GO, Series A (AGM), 5.25%,       7,000       7,414,680	6.00%, 8/01/23	2,520	2,521,184
System, Series AF, 5.00%, 12/01/29         2,600         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         2,000         2,032,480           RB, Series A, 5.00%, 6/01/39         9,870         10,226,899           El Monte Union High School District,             California, GO, Election of 2002,         10,120         10,449,204           Fontana Unified School District,         10,120         10,449,204           Foutana Unified School District,         10,120         10,449,204           Series A (AGM), 5.25%, 6/01/32         10,120         10,449,204	California State Department of Water		
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       2,000       2,032,480         RB, Series A, 5.00%, 6/01/39       9,870       10,226,899         El Monte Union High School District,       7,000       10,449,204         California, GO, Election of 2002,       10,120       10,449,204         Fontana Unified School District,       10,120       10,449,204         Fontana Unified School District,       7,000       7,414,680	Resources, Refunding RB, Water		
Senior, Sonnenblick Del Rio West Los       2,000       2,032,480         Angeles (AMBAC), 6.20%, 11/01/31       2,000       2,032,480         City of Los Angeles California, Refunding       10,226,899         RB, Series A, 5.00%, 6/01/39       9,870       10,226,899         El Monte Union High School District,       2000       2000         California, GO, Election of 2002,       10,120       10,449,204         Fontana Unified School District,       10,120       10,449,204         Fontana Unified School District,       10,120       10,449,204         Series A (AGM), 5.25%, 6/01/32       10,120       10,449,204         Fontana Unified School District,       7,000       7,414,680	System, Series AF, 5.00%, 12/01/29	2,500	2,687,600
Angeles (AMBAC), 6.20%, 11/01/31       2,000       2,032,480         City of Los Angeles California, Refunding       9,870       10,226,899         RB, Series A, 5.00%, 6/01/39       9,870       10,226,899         El Monte Union High School District,       10,120       10,449,204         California, GO, Election of 2002,       10,120       10,449,204         Fontana Unified School District,       10,120       10,449,204         Kalifornia, GO, Series A (AGM), 5.25%,       7,000       7,414,680	City of Los Angeles California, COP,		
City of Los Angeles California, Refunding RB, Series A, 5.00%, 6/01/399,87010,226,899El Monte Union High School District, California, GO, Election of 2002, Series C (AGM), 5.25%, 6/01/3210,12010,449,204Fontana Unified School District, California, GO, Series A (AGM), 5.25%, 8/01/287,0007,414,680	Senior, Sonnenblick Del Rio West Los		
RB, Series A, 5.00%, 6/01/39       9,870       10,226,899         El Monte Union High School District,	Angeles (AMBAC), 6.20%, 11/01/31	2,000	2,032,480
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	City of Los Angeles California, Refunding		
California, GO, Election of 2002,       10,120       10,449,204         Series C (AGM), 5.25%, 6/01/32       10,120       10,449,204         Fontana Unified School District,       10       10         California, GO, Series A (AGM), 5.25%,       7,000       7,414,680	RB, Series A, 5.00%, 6/01/39	9,870	10,226,899
Series C (AGM), 5.25%, 6/01/32         10,120         10,449,204           Fontana Unified School District,             California, GO, Series A (AGM), 5.25%,         7,000         7,414,680	El Monte Union High School District,		
Fontana Unified School District,         California, GO, Series A (AGM), 5.25%,         8/01/28       7,000       7,414,680	California, GO, Election of 2002,		
California, GO, Series A (AGM), 5.25%,         8/01/28       7,000       7,414,680	Series C (AGM), 5.25%, 6/01/32	10,120	10,449,204
8/01/28 7,000 7,414,680	Fontana Unified School District,		
	California, GO, Series A (AGM), 5.25%,		
	8/01/28	7,000	7,414,680
Los Angeles Municipal Improvement	Los Angeles Municipal Improvement		
Corp., RB, Real Property, Series E:	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	2,100 2,181,01	8
California Statewide Communities			
Development Authority, RB, Health			
Facility, Memorial Health Services,			
Series A:			
6.00%, 10/01/23	3	3,270 3,411,75	5
5.50%, 10/01/33	3	3,060,25	5
California Statewide Communities			
Development Authority, Refunding RB:			
Catholic Healthcare West, Series D,			
5.50%, 7/01/31	5	5,055 5,193,10	3
Senior Living, Southern California,			
6.25%, 11/15/19		500 539,51	5
Senior Living, Southern California,			
6.63%, 11/15/24		650 690,80	7
Senior Living, Southern California,			
7.00%, 11/15/29		500 537,03	5
Senior Living, Southern California,			
7.25%, 11/15/41	1	,750 1,897,84	0
	Par		
Municipal Bonds	Par (000)	Value	
Municipal Bonds California (continued)		Value	
		Value	
California (continued)		Value	
California (continued) Health (concluded)		Value	
California (continued) Health (concluded) City of Torrance California, Refunding		Value \$ 1,350,492	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical	(000)		
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical	(000)	\$ 1,350,492	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22	(000)	\$ 1,350,492	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22 Housing 1.2%	(000)	\$ 1,350,492	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22 Housing 1.2% California Rural Home Mortgage Finance	(000)	\$ 1,350,492	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22 Housing 1.2% California Rural Home Mortgage Finance Authority, RB, AMT:	(000)	\$ 1,350,492	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22 Housing 1.2% California Rural Home Mortgage Finance Authority, RB, AMT: Mortgage-Backed Securities	(000)	\$ 1,350,492	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22 Housing 1.2% California Rural Home Mortgage Finance Authority, RB, AMT: Mortgage-Backed Securities Program, Series B (GNMA), 6.15%,	(000) \$ 1,310	\$ 1,350,492 47,346,558	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22 Housing 1.2% California Rural Home Mortgage Finance Authority, RB, AMT: Mortgage-Backed Securities Program, Series B (GNMA), 6.15%, 6/01/20 Sub-Series FH-1, 5.50%, 8/01/47 Santa Clara County Housing Authority,	(000) \$ 1,310	\$ 1,350,492 47,346,558 25,258	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22 Housing 1.2% California Rural Home Mortgage Finance Authority, RB, AMT: Mortgage-Backed Securities Program, Series B (GNMA), 6.15%, 6/01/20 Sub-Series FH-1, 5.50%, 8/01/47 Santa Clara County Housing Authority, California, RB, John Burns Gardens	(000) \$ 1,310	\$ 1,350,492 47,346,558 25,258	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22 Housing 1.2% California Rural Home Mortgage Finance Authority, RB, AMT: Mortgage-Backed Securities Program, Series B (GNMA), 6.15%, 6/01/20 Sub-Series FH-1, 5.50%, 8/01/47 Santa Clara County Housing Authority, California, RB, John Burns Gardens Apartments Project, Series A, AMT,	(000) \$ 1,310 25 415	\$ 1,350,492 47,346,558 25,258	
California (continued) Health (concluded) City of Torrance California, Refunding RB, Torrance Memorial Medical Center, Series A, 6.00%, 6/01/22 Housing 1.2% California Rural Home Mortgage Finance Authority, RB, AMT: Mortgage-Backed Securities Program, Series B (GNMA), 6.15%, 6/01/20 Sub-Series FH-1, 5.50%, 8/01/47 Santa Clara County Housing Authority, California, RB, John Burns Gardens	(000) \$ 1,310	\$ 1,350,492 47,346,558 25,258	

#### State 8.2%

012/0		
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%		

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

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# Schedule of Investments (concluded)

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

Option Bond Tutals (c)         (000)         Value           California (concluded)	Municipal Bonds Transferred to Tender		Par	
Education (concluded)         Los Angeles Community College District,           California, CG, Election of 2003,         \$ 10,002         \$ 10,237,933           Persita Community College District, GO,         Election of 2000, Series D (AGM),         5,00%, 801/30         1,995         2,043,878           University of California, RB, Series O,         5,75%, \$15,634         2,805         3,149,428         3,149,428           5,75%, \$15,634         2,805         3,149,428         3,5171,570         20,000         20,828,408           University of California, RB, Series O,         5,75%, \$15,634         2,805         3,149,428         3,5171,570         20,000         20,828,408         3,5171,570         20,000         20,828,408         3,5171,570         20,000         20,828,409         5,75%,576,576,576,576         5,757,576         5,757,576         5,757,576         5,757,576         3,5171,570         20,000         20,828,409         5,82,409         5,82,409         5,82,409         5,82,409         5,82,409         5,82,409         5,82,409         5,82,409         5,82,409         5,82,409         5,82,82,409         5,82,82,83         5,82,82,83         5,82,82,83         5,82,82,81         5,82,82,81         5,82,82,81         5,84,82,21,468         5,94,5,201         5,94,5,201         5,94,5,201         5,94,5,201	Option Bond Trusts (c)		(000)	Value
Los Angeles Community College District,         Gallornia, GO, Election of 2003,         \$ 10,002         \$ 10,237,933           Perala Community College District, GO,         Election of 2000, Series D (AGM),         1,995         2,043,878           Election of 2000, Series D (AGM),         1,995         2,043,878           University of California, RB, Series O,         3,149,426         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,171,570           California, RB, Series A, 5,00%, 701/33         4,748         4,882,312           Metropolitan Water District of Southern         20,000         20,892,400           California, RB, Series A, 5,00%, 501/31         5,010         5,123,326           Total Municipal Bonds Transferred to         20,000         20,892,400           T	California (concluded)			
California, GO, Election of 2003,         \$ 10,002         \$ 10,237,333           Peralta Community Collego District, GO,         Election of 2000, Series D (AGM),         5.00%, 801/30         1,995         2.043,378           S.00%, 801/30         1,995         2.043,378         35,171,570           University of California, RB, Series O,         35,171,570         35,171,570           Utilities 9.9%         2,805         3,149,428           Series H, 5.00%, 701/33         4,748         4,882,312           Metropolitan Water District, COP,         5         5,173         20,000         2,892,400           Saries H, 5.00%, 701/33         4,748         4,882,312         30,893,393           701/37         20,000         2,892,400         5,123,286           Saries A (AGM), 5,00%, 5/01/31         5,010         5,123,286         30,893,393           Total Municipal Bonds Transferred to         30,893,393         30,893,393         30,893,393           Total Long-Term Investments         20,447,493         128,626,439         30,893,393           Total Long-Term Investments         30,449,4567         5,045,201         5,045,201           Sold Addition Huncipal Money Fund,         5,045,201         5,045,201         5,045,201           Outly (d)(e)         5,045,201	Education (concluded)			
Series E (AGM), 5,00%, 8/01/31         \$ 10,002         \$ 10,237,933           Peratta Community College District, GO,         Election of 2000, Series D (AGM),         5,048, 201,395           5,00%, 8/01/30         1,995         2,043,875           University of California, RB, Series O,         35,171,570           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           5,75%, 5/15/34         2,805         3,149,426           Series H, 5,00%, 7/01/3         4,748         4,882,31           Metropolitan Water District, COP,         Series A, 5,00%,         20,000         20,982,400           San Diego County Water Authority, COP,         Series A (AGM), 5,00%, 501/31         5,123,282         30,803,803           Total Municipal Bonds Transferred to         Teader Option Bond Transferred to         128,626,439         128,626,439           Total Long-Term Investments         Cost § 445,274,902         153,3%         477,186,257         Sol45,201         5,045,201         5,045,201           Total Short-Term Securities         Sol45,201	Los Angeles Community College District,			
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,         2,805         3,149,426         35,171,570           5.7%,5/15/34         2,805         3,149,426         35,171,570           University of California, RB, Series O,         2,805         3,149,426           5.7%,5/15/34         2,805         3,149,426           5.7%,5/15/34         2,805         3,169,426           5.8         2,99%         2,805         3,169,426           California, RB, Series A, 5.00%, 7/01/33         4,748         4,882,312           Metropolitan Water District of Southern         20,000         20,892,400           San Diego County Water Authority, COP,         30,898,033         30,898,033           Sold Municipal Bonds Transferred to         30,898,033         30,898,033           Total Municipal Money Fund,         128,626,439         128,626,439           Cost \$465,274,902)         153.3%         477,186,267         Short-Term Securities         50,045,201         5,045,201         5,045,201         5,045,201         5,045,201         5,045,201         5,045,201         5,045,201         5,045,201         5,045,201         5,045,201         5,045,201         5,045,2	California, GO, Election of 2003,			
Election of 2000, Series D (AGM),         1,995         2,043,878           University of California, RE, Series O,         2,005         3,149,426           5,75%, 5/15/34         2,005         3,149,426           35,171,570         20,005         3,149,426           University of California, RE, Series O,         35,171,570           Utilities 9.9%         2         3,149,426           Eastern Municipal Water District, COP,         3         3           Series A, Son%, 701/33         4,748         4,882,312           Metropolitan Water District of Southern         20,000         20,892,400           San Diego County Water Authority, COP,         3         30,898,038           Series A (AGM), 5,00%, 5001/31         5,010         5,123,326           Otal Municipal Bonds Transferred to         30,898,038         30,898,038           Total Municipal Bonds Transferred to         128,626,439         30,898,038           Coda California Municipal Money Fund,         0,4% (dyle)         5,045,201         5,045,201           Ovék (dyle)         5,045,201         5,045,201         5,045,201           Total Short-Term Securities         5,045,201         5,045,201           Cost \$4,05,201,01.6%         5,045,201         5,045,201           Total Short-Ter	Series E (AGM), 5.00%, 8/01/31		\$ 10,002	\$ 10,237,933
5.00%, 801/30         1,995         2,043,878           University of California, RB, Series O,         31,19,426         35,171,570           5.75%, 5/15/34         2,805         3,149,426         35,171,570           Utilities 9.9%         4,748         4,882,312           Eastern Municipal Water District, COP,         4,748         4,882,312           Metropolitan Water District of Southern         20,000         20,892,400           San Diego County Water Authority, COP,         30,398,038         30,398,038           Striss A (AGM), 5.00%, 5/01/31         5,010         5,123,326           30,398,038         30,398,038         30,398,038           Total Unicipal Bonds Transferred to         30,398,038         30,398,038           Total Long-Term Investments         128,626,439         30,45,201           Cost 4455,274,902) 153.3%         477,186,257         Shares           CMA California Municipal Money Fund,         5,045,201         5,045,201           Out% (d)(e)         5,045,201         5,045,201         5,045,201           Total Home'term Securities         5,045,201         5,045,201         5,045,201           Cost 45,045,201) 1.6%         5,045,201         5,045,201         5,045,201           Total Investments         5,045,201	Peralta Community College District, GO,			
University of California, RB, Series O,         3,189,426         3,575%, 5/15/34         2,805         3,149,426         3,5171,570           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         20,000         20,892,400         20,892,400           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         5,123,286         30,898,083           San Ziego County Water Authority, COP,         Series A (AGM), 5.00%, 5/01/31         5,123,286         30,898,083           Total Municipal Bonds Transferred to         128,626,439         30,898,083         30,898,083           Total Long-Term Investments         128,626,439         30,898,083         30,898,083           COAC California Municipal Money Fund,         5,045,201         5,045,201         5,045,201           O.04% (d)(e)         5,045,201         5,045,201         5,045,201         5,045,201           Total Short-Term Securities         5,045,201         5,045,201         5,045,201         5,045,201           Code \$4,70,320,1037         154,9%         482,231,468         5,045,201         5,045,201         5,225,865	Election of 2000, Series D (AGM),			
5.75%, 5/15/34         2,805         3,149,426           35,171,570         35,171,570           Utilities 9.9%           Eastern Municipal Water District, COP,         4,748         4,882,312           Metropolitan Water District of Southern         20,000         20,892,402           7/01/37         20,000         20,892,402           Saries A, KGM), 5,00%, 5/01/31         5,010         5,123,262           Series A (AGM), 5,00%, 5/01/31         5,010         5,123,262           Total Municipal Bonds Transferred to         128,626,439         3,898,038           Total Long-Term Investments         128,626,439         3,645,201           (Cost \$4,65,274,902)         153,3%         477,186,267         5,045,201           Short-Term Securities         Shares         5,045,201         5,045,201           (Cost \$4,02), 15,3%         477,186,267         5,045,201         5,045,201           Short-Term Securities         Shares         5,045,201         5,045,201           (Cost \$4,02), 15,3%         477,186,267         5,045,201         5,045,201           (Cost \$4,01,020,103°)         154,497         5,045,201         5,045,201           (Cost \$4,01,020,103°)         154,497         5,225,806         5,225,806	5.00%, 8/01/30		1,995	2,043,878
Series P.9%         Average of the series of the serie	University of California, RB, Series O,			
Utilities 9.9%           Eastern Municipal Water District, COP,           Series H, 5.00%, 701/33         4,748         4,882,312           Metropolitan Water District of Southern         20,000         20,892,400           San Diego County Water Authority, COP,         20,000         20,892,800           Series A, (AGM), 5.00%, 5/01/31         5,010         5,123,282           Otal Municipal Bonds Transferred to         30,898,083         30,898,083           Total Municipal Bonds Transferred to         128,626,439         30,898,083           Total Municipal Bonds Transferred to         128,626,439         30,898,083           Total Municipal Money Fund,         0,474,082,01         5,045,201         5,045,201           (Cost \$465,274,902) 153,3%         477,186,267         5,045,201         5,045,201           Short-Term Securities         5,045,201         5,045,201         5,045,201           (Cost \$406,274,902) 153,3%         477,186,267         5,045,201         5,045,201           Short-Term Securities         5,045,201         5,045,201         5,045,201           (Cost \$5,045,201) 1.6%         5,045,201         5,045,201         5,045,201           Total Investments         5,045,201         5,045,201         5,045,201         5,045,201           (Cost	5.75%, 5/15/34		2,805	3,149,426
Eastern Municipal Water District, COP,         4,748         4,882,312           Metropolitan Water District of Southern         20,000         20,892,400           Zalifornia, RB, Series A, 5,00%,         20,000         20,892,400           San Diego County Water Authority, COP,         20,000         5,123,326           Series A (AGM), 5,00%, 5/01/31         5,010         5,123,326           Total Municipal Bonds Transferred to         30,898,038           Total Municipal Money Fund,         128,626,439           Cotal Long-Term Investments         128,626,439           (Cost \$465,274,902) 153,3%         477,186,267           Short-Term Securities         Shares           CMA California Municipal Money Fund,         5,045,201           0.04% (d)(e)         5,045,201         5,045,201           Total Short-Term Securities         5,045,201         5,045,201           (Cost \$,5,045,201) 1.6%         5,045,201         5,045,201           Total Investments         482,231,468         5,225,806           (Cost \$,470,320,1037) 154.9%         482,231,468           Other Assets Less Liabilities 1.7%         5,225,806           Liability for Trust Certificates, Including Interest         5,225,806           Liability for Trust Certificates, Including Interest         5,225,906 <td></td> <td></td> <td></td> <td>35,171,570</td>				35,171,570
Series H, 5.00%, 7/01/33         4,748         4,882,312           Metropolitan Water District of Southern         20,000         20,892,400           San Diego County Water Authority, COP,         20,000         20,892,400           Series A (AGM), 5,00%, 5/01/31         5,010         5,123,326           Jonda Diago County Water Authority, COP,         30,898,038         30,898,038           Total Municipal Bonds Transferred to         30,898,038         30,898,038           Total Municipal Bonds Transferred to         128,626,439         30,898,038           Total Long-Term Investments         128,626,439         30,898,038           (Cost \$465,274,902) 153,3%         477,186,267         128,626,439           Short-Term Securities         Shares         5045,201           CMA California Municipal Money Fund,         5,045,201         5,045,201           0.04% (d)(e)         5,045,201         5,045,201           Total Short-Term Securities         5,045,201         5,045,201           Cost \$5,045,201 1.6%         5,045,201         6,045,201           Total Investments         482,231,468         5,225,806           Cost \$470,320,103" 154.9%         482,231,468         5,225,806           Cher Assets Less Liabilities 1.7%         5,225,806         5,225,806	Utilities 9.9%			
Metropolitan Water District of Southern         California, RB, Series A, 5.00%,         20,000         20,892,400           7/01/37         20,000         20,892,400           San Diego County Water Authority, COP,         5,010         5,123,326           Series A (AGM), 5.00%, 5/01/31         5,010         5,123,326           Total Municipal Bonds Transferred to         30,898,038         30,898,038           Total Municipal Bonds Transferred to         128,626,439         128,626,439           Total Long-Term Investments         128,626,439         128,626,439           (Cost \$465,274,902) 153.3%         477,186,267         Shares           CMA California Municipal Money Fund,         5,045,201         5,045,201           0.04% (d)(e)         5,045,201         5,045,201           Total Short-Term Securities         5,045,201         5,045,201           Cost \$5,045,201         1.6%         5,045,201           Total Investments         100         5,045,201           (Cost \$470,320,103*)         154.9%         482,231,468           Other Assets Less Liabilities 1.7%         5,225,806         5,225,806           Liability for Trust Certificates, Including Interest         5,225,806         5,225,806	Eastern Municipal Water District, COP,			
California, RB, Series A, 500%,       20,000       20,892,400         San Diego County Water Authority, COP,       5,010       5,123,226         Series A (AGM), 5,00%, 5/01/31       5,010       5,123,326         Total Municipal Bonds Transferred to       30,898,038         Total Municipal Bonds Transferred to       128,626,439         Total Long-Term Investments       128,626,439         (Cost \$465,274,902) 153,3%       477,186,267         Short-Term Securities       Shares         CMA California Municipal Money Fund,       5,045,201         0.04% (d)(e)       5,045,201       5,045,201         Total Investments       5,045,201       5,045,201         (Cost \$4,045,271,1.6%       5,045,201       5,045,201         Total Investments       5,045,201       5,045,201         (Cost \$4,043,201,013') 154.9%       482,231,468       5,225,806         Cher Assets Less Liabilities 1.7%       5,225,806       5,225,806         Liability for Trust Certificates, Including Interest       5,225,806       5,225,806         Liability for Trust Certificates, Including Interest       5,045,805       5,225,806	Series H, 5.00%, 7/01/33		4,748	4,882,312
7/1/37       20,000       20,892,400         San Diego County Water Authority, COP,       5,010       5,123,326         Series A (AGM), 5.00%, 5/01/31       5,010       5,123,326         Total Municipal Bonds Transferred to       30,880,083         Total Municipal Bonds Transferred to       128,626,439         Total Long-Term Investments       128,626,439         (Cost \$465,274,902) 153.3%       477,186,267         Short-Term Securities       Shares         CMA California Municipal Money Fund,       5,045,201         0.04% (d)(e)       5,045,201         Total Short-Term Securities       5,045,201         (Cost \$5,045,201) 1.6%       5,045,201         Total Investments       5,045,201         (Cost \$5,045,201) 1.6%       5,045,201         Total Investments       5,045,201         (Cost \$5,045,201) 1.6%       5,045,201         Cost \$470,320,103*) 154.9%       482,231,468         Other Assets Less Liabilities 1.7%       5,225,806         Liability for Trust Certificates, Including Interest       5,225,806         Liability for Trust Certificates, Including Interest       5,225,806         Liability for Trust Certificates, Including Interest       5,045,001	Metropolitan Water District of Southern			
San Diego County Water Authority, COP,         Series A (AGM), 5,00%, 5/01/31       5,010       5,123,326         Stan Diego County Water Authority, 5/01/31       5,010       5,123,326         Stan Diego County Water Authority, 5/01/31       5,010       5,123,326         Stan Diego County Mater Authority, 5/01/31       5,010       5,123,326         Total Municipal Bonds Transferred to       128,626,439       128,626,439         Total Long-Term Investments       128,626,439       128,626,439         (Cost \$465,274,902) 153.3%       477,186,267       Short-Term Securities       Short-Term Securities         CMA California Municipal Money Fund,       0.04% (d)(e)       5,045,201       5,045,201         0.04% (d)(e)       5,045,201       5,045,201       5,045,201         Total Short-Term Securities       5,045,201       5,045,201         (Cost \$5,045,201) 1.6%       5,045,201       5,045,201         Total Investments       5,045,201       5,045,201         (Cost \$470,320,103*) 154,9%       482,231,468       60ther Assets Less Liabilities 1.7%       5,225,806         Liability for Trust Certificates, Including Interest       5,225,806       5,225,806         Liability for Trust Certificates, Including Interest       5,045,201       5,045,001	California, RB, Series A, 5.00%,			
Series A (AGM), 5.00%, 5/01/31         5,010         5,123,326           Series A (AGM), 5.00%, 5/01/31         5,010         5,123,326           Total Municipal Bonds Transferred to         30,898,038           Tonder Option Bond Trusts 41.3%         128,626,439           Total Long-Term Investments         128,626,439           (Cost \$465,274,902) 153.3%         477,186,267           Short-Term Securities         Shares           CMA California Municipal Money Fund,         5,045,201           0.04% (d)(e)         5,045,201           Total Short-Term Securities         5,045,201           (Cost \$5,045,201) 1.6%         5,045,201           Total Investments         (Cost \$470,320,103') 154.9%           (Cost \$470,320,103') 154.9%         482,231,468           Other Assets Less Liabilities 1.7%         5,225,806           Liability for Trust Certificates, Including Interest         5,045,201           Expense and Fees Payable (22.5)%         (70,188,507)	7/01/37		20,000	20,892,400
30,898,038         Total Municipal Bonds Transferred to         Tender Option Bond Trusts 41.3%       128,626,439         Total Long-Term Investments       128,626,439         (Cost \$465,274,902) 153.3%       477,186,267         Short-Term Securities       Shares         CMA California Municipal Money Fund,       0.04% (d)(e)         0.04% (d)(e)       5,045,201         Total Short-Term Securities       5,045,201         (Cost \$5,045,201) 1.6%       5,045,201         Total Investments       5,045,201         (Cost \$470,320,103*) 154.9%       482,231,468         Other Assets Less Liabilities 1.7%       5,225,806         Liability for Trust Certificates, Including Interest       5,025,206         Expense and Fees Payable (22.5%)       (70,188,507)	San Diego County Water Authority, COP,			
Total Municipal Bonds Transferred to       128,626,439         Tender Option Bond Trusts 41.3%       128,626,439         Total Long-Term Investments       128,626,439         (Cost \$465,274,902) 153.3%       477,186,267         Short-Term Securities       Shares         CMA California Municipal Money Fund,       5,045,201         0.04% (d)(e)       5,045,201       5,045,201         Total Short-Term Securities       5,045,201       5,045,201         Cost \$5,045,201) 1.6%       5,045,201       5,045,201         Total Investments       5,045,201       5,045,201         (Cost \$470,320,103*) 154.9%       482,231,468       6,01er Assets Less Liabilities 1.7%       5,225,806         Clability for Trust Certificates, Including Interest       5,225,806       5,225,806         Expense and Fees Payable (22.5)%       (70,188,507)	Series A (AGM), 5.00%, 5/01/31		5,010	5,123,326
Tender Option Bond Trusts 41.3%       128,626,439         Total Long-Term Investments       (Cost \$465,274,902) 153.3%       477,186,267         Short-Term Securities       Shares         CMA California Municipal Money Fund,       5,045,201         0.04% (d)(e)       5,045,201         Total Short-Term Securities       5,045,201         (Cost \$5,045,201) 1.6%       5,045,201         Total Investments       5,045,201         (Cost \$470,320,103*) 154.9%       482,231,468         Other Assets Less Liabilities 1.7%       5,225,806         Liability for Trust Certificates, Including Interest       5,025,201         Expense and Fees Payable (22.5)%       (70,188,507)				30,898,038
Total Long-Term Investments (Cost \$465,274,902) 153.3% 477,186,267         Short-Term Securities         CMA California Municipal Money Fund,         0.04% (d)(e)       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       (70,188,507)	Total Municipal Bonds Transferred to			
(Cost \$465,274,902) 153.3%       477,186,267         Short-Term Securities       Shares         CMA California Municipal Money Fund,       5,045,201         0.04% (d)(e)       5,045,201         Total Short-Term Securities       5,045,201         (Cost \$5,045,201) 1.6%       5,045,201         Total Investments       5,045,201         (Cost \$470,320,103*) 154.9%       482,231,468         Other Assets Less Liabilities 1.7%       5,225,806         Liability for Trust Certificates, Including Interest       5,017,188,507)	Tender Option Bond Trusts 41.3%			128,626,439
Short-Term Securities         Shares           CMA California Municipal Money Fund,         5,045,201           0.04% (d)(e)         5,045,201         5,045,201           Total Short-Term Securities         5,045,201         5,045,201           (Cost \$5,045,201) 1.6%         5,045,201         5,045,201           Total Investments         5,045,201         5,045,201           (Cost \$470,320,103*) 154.9%         482,231,468         482,231,468           Other Assets Less Liabilities 1.7%         5,225,806         5,225,806           Liability for Trust Certificates, Including Interest         5,225,806         5,225,806           Expense and Fees Payable (22.5)%         (70,188,507)         5,225,806	Total Long-Term Investments			
CMA California Municipal Money Fund,       5,045,201       5,045,201         0.04% (d)(e)       5,045,201       5,045,201         Total Short-Term Securities       5,045,201       5,045,201         (Cost \$5,045,201) 1.6%       5,045,201       5,045,201         Total Investments       5,045,201       5,045,201         (Cost \$470,320,103*) 154.9%       482,231,468       6,225,806         Other Assets Less Liabilities 1.7%       5,225,806       5,225,806         Liability for Trust Certificates, Including Interest       70,188,507)	(Cost \$465,274,902) 153.3%	477,186,267		
0.04% (d)(e)       5,045,201       5,045,201         Total Short-Term Securities       (Cost \$5,045,201) 1.6%       5,045,201         (Cost \$5,045,201) 1.6%       5,045,201         Total Investments       482,231,468         (Cost \$470,320,103*) 154.9%       482,231,468         Other Assets Less Liabilities 1.7%       5,225,806         Liability for Trust Certificates, Including Interest       (70,188,507)	Short-Term Securities		Shares	
Total Short-Term Securities         (Cost \$5,045,201) 1.6%       5,045,201         Total Investments       (Cost \$470,320,103*) 154.9%         (Cost \$470,320,103*) 154.9%       482,231,468         Other Assets Less Liabilities 1.7%       5,225,806         Liability for Trust Certificates, Including Interest       (70,188,507)	CMA California Municipal Money Fund,			
(Cost \$5,045,201) 1.6%       5,045,201         Total Investments       (Cost \$470,320,103*) 154.9%         (Cost \$470,320,103*) 154.9%       482,231,468         Other Assets Less Liabilities 1.7%       5,225,806         Liability for Trust Certificates, Including Interest       5,225,806         Expense and Fees Payable (22.5)%       (70,188,507)	0.04% (d)(e)		5,045,201	5,045,201
Total Investments(Cost \$470,320,103*) 154.9%482,231,468Other Assets Less Liabilities 1.7%5,225,806Liability for Trust Certificates, Including Interest70,188,507Expense and Fees Payable (22.5)%(70,188,507)	Total Short-Term Securities			
(Cost \$470,320,103*) 154.9%       482,231,468         Other Assets Less Liabilities 1.7%       5,225,806         Liability for Trust Certificates, Including Interest       70,188,507	(Cost \$5,045,201) 1.6%			5,045,201
Other Assets Less Liabilities 1.7%5,225,806Liability for Trust Certificates, Including Interest(70,188,507)Expense and Fees Payable(22.5)%	Total Investments			
Liability for Trust Certificates, Including Interest         Expense and Fees Payable (22.5)%         (70,188,507)	(Cost \$470,320,103*) 154.9%			482,231,468
Expense and Fees Payable (22.5)% (70,188,507)	Other Assets Less Liabilities 1.7%			5,225,806
	Liability for Trust Certificates, Including Interest			
Preferred Shares, at Redemption Value (34.1)% (105,968,869)	Expense and Fees Payable (22.5)%			(70,188,507)
	Preferred Shares, at Redemption Value (34.1)%			(105,968,869)

Net Assets Applicable to Common Shares 100.0%

\* 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		Shares Held	
	at July 31,	Net	at April 30,	
Affiliate	2009	Activity	2010	Income
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)

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.

4 BLACKROCK MUNIYIELD CALIFORNIA FUND, INC.

APRIL 30, 2010

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: <u>/s/ Anne F. Ackerley</u> 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: <u>/s/ Anne F. Ackerley</u> Anne F. Ackerley Chief Executive Officer (principal executive officer) of BlackRock MuniYield California Fund, Inc.

Date: June 28, 2010

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

Date: June 28, 2010