

NUVEEN INSURED CALIFORNIA PREMIUM INCOME MUNICIPAL FUND 2 IN  
Form N-Q  
January 29, 2010

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT  
COMPANY

Investment Company Act file number 811-7492

Nuveen Insured California Premium Income Municipal Fund 2, Inc.  
(Exact name of registrant as specified in charter)

Nuveen Investments  
333 West Wacker Drive, Chicago, Illinois 60606  
(Address of principal executive offices) (Zip code)

Kevin J. McCarthy Vice President and Secretary  
333 West Wacker Drive, Chicago, Illinois 60606  
(Name and address of agent for service)

Registrant's telephone number, including area code: 312-917-7700

Date of fiscal year end: 2/28

Date of reporting period: 11/30/09

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (§§ 239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after the close of the first and third fiscal quarters, pursuant to rule 30b1-5 under the Investment Company Act of 1940 (17 CFR 270.30b1-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q unless the Form displays a currently valid Office of Management and Budget ("OMB") control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to the Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. § 3507.



Item 1. Schedule of Investments

Portfolio of Investments (Unaudited)

Nuveen Insured California Premium Income Municipal Fund 2, Inc. (NCL)

November 30, 2009

Principal

Amount (000)	Description (1)	%
	Education and Civic Organizations – 5.6% (3.7% of Total Investments)	
\$ 620	California Educational Facilities Authority, Revenue Bonds, University of the Pacific, Series 2000, 5.875%, 11/01/20 – NPFG Insured	11
1,250	California Educational Facilities Authority, Student Loan Revenue Bonds, Cal Loan Program, Series 2001A, 5.400%, 3/01/21 – NPFG Insured (Alternative Minimum Tax)	3
1,500	California State University, Systemwide Revenue Bonds, Series 2005A, 5.000%, 11/01/25 – AMBAC Insured	5
6,000	University of California, Revenue Bonds, Multi-Purpose Projects, Series 2003A, 5.000%, 5/15/27 – AMBAC Insured (UB)	5
9,370	Total Education and Civic Organizations	
	Health Care – 2.2% (1.5% of Total Investments)	
1,410	California Statewide Communities Development Authority, Revenue Bonds, Saint Joseph Health System, Trust 2554, 18.284%, 7/01/47 – FSA Insured (IF)	7
2,000	The Regents of the University of California, Medical Center Pooled Revenue Bonds, Series 2007A, 4.500%, 5/15/37 – NPFG Insured	5
650	University of California, Hospital Revenue Bonds, UCLA Medical Center, Series 2004A, 5.500%, 5/15/18 – AMBAC Insured	5
4,060	Total Health Care	
	Housing/Single Family – 1.5% (1.0% of Total Investments)	
340	California Housing Finance Agency, Home Mortgage Revenue Bonds, Series 2006H, 5.750%, 8/01/30 – FGIC Insured (Alternative Minimum Tax)	2
1,985	California Housing Finance Agency, Home Mortgage Revenue Bonds, Series 2006K, 5.500%, 2/01/42 – AMBAC Insured (Alternative Minimum Tax)	2
315	California Housing Finance Agency, Single Family Mortgage Bonds, Series 1997C-2-II, 5.625%, 8/01/20 – NPFG Insured (Alternative Minimum Tax)	2
2,640	Total Housing/Single Family	
	Tax Obligation/General – 24.7% (16.4% of Total Investments)	
1,460	ABC Unified School District, Los Angeles County, California, General Obligation Bonds, Series 2000B, 5.750%, 8/01/16 – FGIC Insured	8

1,425	Bassett Unified School District, Los Angeles County, California, General Obligation Bonds, Series 2006B, 5.250%, 8/01/30 – FGIC Insured	8
3,000	California State, General Obligation Bonds, Series 2006, 4.500%, 9/01/36 – FSA Insured	9
4,400	California, General Obligation Bonds, Series 2003, 5.000%, 2/01/31 – NPMFG Insured	2
3,000	California, General Obligation Veterans Welfare Bonds, Series 2001BZ, 5.375%, 12/01/24 – NPMFG Insured (Alternative Minimum Tax)	12
3,200	Coast Community College District, Orange County, California, General Obligation Bonds, Series 2006C, 0.000%, 8/01/31 – FSA Insured	8
2,210	Fontana Unified School District, San Bernardino County, California, General Obligation Bonds, Trust 2668, 9.099%, 8/01/28 – FSA Insured (IF)	8
1,255	Los Angeles Community College District, Los Angeles County, California, General Obligation Bonds, Series 2005A, 5.000%, 8/01/24 – FSA Insured	8
4,000	Los Angeles Unified School District, Los Angeles County, California, General Obligation Bonds, Series 2007A, 4.500%, 7/01/24 – FSA Insured Los Rios Community College District, Sacramento, El Dorado and Yolo Counties, California, General Obligation Bonds, Series 2006C:	7
2,110	5.000%, 8/01/21 – FSA Insured (UB)	8
3,250	5.000%, 8/01/22 – FSA Insured (UB)	8
3,395	5.000%, 8/01/23 – FSA Insured (UB)	8
1,270	Merced City School District, Merced County, California, General Obligation Bonds, Series 2004, 5.000%, 8/01/22 – FGIC Insured	8
305	Roseville Joint Union High School District, Placer County, California, General Obligation Bonds, Series 2006B, 5.000%, 8/01/27 – FGIC Insured	8
2,500	Sacramento City Unified School District, Sacramento County, California, General Obligation Bonds, Series 2005, 5.000%, 7/01/27 – NPMFG Insured	7
1,125	San Diego Unified School District, California, General Obligation Bonds, Election of 1998, Series 1999A, 0.000%, 7/01/21 – FGIC Insured	
2,000	San Francisco Community College District, California, General Obligation Bonds, Series 2002A, 5.000%, 6/15/26 – FGIC Insured	6
1,000	San Ramon Valley Unified School District, Contra Costa County, California, General Obligation Bonds, Series 2004, 5.000%, 8/01/24 – FSA Insured	8
2,445	Washington Unified School District, Yolo County, California, General Obligation Bonds, Series 2004A, 5.000%, 8/01/21 – FGIC Insured	8
43,350	Total Tax Obligation/General Tax Obligation/Limited – 58.8% (39.1% of Total Investments) Anaheim Public Finance Authority, California, Subordinate Lease Revenue Bonds, Public Improvement Project, Series 1997C:	
5,130	0.000%, 9/01/18 – FSA Insured	
8,000	0.000%, 9/01/21 – FSA Insured California Infrastructure Economic Development Bank, Revenue Bonds, North County Center for Self-Sufficiency Corporation, Series 2004:	

1,535	5.000%, 12/01/20 – AMBAC Insured	12
1,780	5.000%, 12/01/23 – AMBAC Insured	12
3,725	California State Public Works Board, Lease Revenue Bonds, Department of Corrections & Rehabilitation, Series 2005J, 5.000%, 1/01/17 – AMBAC Insured	1
380	Capistrano Unified School District, Orange County, California, Special Tax Bonds, Community Facilities District, Series 2005, 5.000%, 9/01/24 – FGIC Insured	9
6,000	El Monte, California, Senior Lien Certificates of Participation, Department of Public Services Facility Phase II, Series 2001, 5.000%, 1/01/21 – AMBAC Insured	1
8,280	Fontana Public Financing Authority, California, Tax Allocation Revenue Bonds, North Fontana Redevelopment Project, Series 2005A, 5.000%, 10/01/32 – AMBAC Insured	10
6,215	Golden State Tobacco Securitization Corporation, California, Enhanced Tobacco Settlement Revenue Bonds, Drivers Trust 2091, 9.489%, 6/01/45 – AGC Insured (IF)	6
2,000	Golden State Tobacco Securitization Corporation, California, Enhanced Tobacco Settlement Revenue Bonds, Residual Series 2040, 10.360%, 6/01/45 – FGIC Insured (IF)	6
	Golden State Tobacco Securitization Corporation, California, Tobacco Settlement Asset-Backed Revenue Bonds, Series 2005A:	
20,110	5.000%, 6/01/35 – FGIC Insured	6
7,500	5.000%, 6/01/45 – FGIC Insured	6
1,255	Hesperia Public Financing Authority, California, Redevelopment and Housing Projects Tax Allocation Bonds, Series 2007A, 5.000%, 9/01/37 – SYNCORA GTY Insured	9
1,700	Hesperia Unified School District, San Bernardino County, California, Certificates of Participation, Capital Improvement, Series 2007, 5.000%, 2/01/41 – AMBAC Insured	2
1,810	Kern County Board of Education, California, Certificates of Participation Refunding, Series 1998A, 5.200%, 5/01/28 – NPFG Insured	5
5,000	La Quinta Redevelopment Agency, California, Tax Allocation Refunding Bonds, Redevelopment Project Area 1, Series 1998, 5.200%, 9/01/28 – AMBAC Insured	3
2,185	Los Angeles Community Redevelopment Agency, California, Lease Revenue Bonds, Manchester Social Services Project, Series 2005, 5.000%, 9/01/37 – AMBAC Insured	9
1,000	Los Angeles Community Redevelopment Agency, California, Tax Allocation Bonds, Bunker Hill Project, Series 2004A, 5.000%, 12/01/20 – FSA Insured	12
1,250	Los Angeles County Metropolitan Transportation Authority, California, Proposition A First Tier Senior Sales Tax Revenue Bonds, Series 2003B, 5.000%, 7/01/19 – NPFG Insured	7
4,000	Los Angeles, California, Certificates of Participation, Municipal Improvement Corporation, Series 2003AW, 5.000%, 6/01/33 – AMBAC Insured	6
3,000	Los Angeles, California, Municipal Improvement Corporation, Lease Revenue Bonds, Police Headquarters, Series 2006A, 4.750%, 1/01/31 – FGIC Insured	1
6,120	Moreno Valley Community Redevelopment Agency, California, Tax Allocation Bonds, Series 2007A, 5.000%, 8/01/38 – AMBAC Insured	8
4,140	Plumas County, California, Certificates of Participation, Capital Improvement Program, Series 2003A, 5.000%, 6/01/28 – AMBAC Insured	6
390	Poway Redevelopment Agency, California, Tax Allocation Refunding Bonds, Paguay Redevelopment	12

	Project, Series 2000, 5.750%, 6/15/33 – NPMG Insured	
325	Rialto Redevelopment Agency, California, Tax Allocation Bonds, Merged Project Area, Series 2005A, 5.000%, 9/01/35 – SYNCORA GTY Insured	9
1,000	Rocklin Unified School District, Placer County, California, Special Tax Bonds, Community Facilities District 1, Series 2004, 5.000%, 9/01/25 – NPMG Insured	9
405	Roseville, California, Certificates of Participation, Public Facilities, Series 2003A, 5.000%, 8/01/25 – AMBAC Insured	8
5,000	San Bernardino Joint Powers Financing Authority, California, Certificates of Participation Refunding, Police Station Financing Project, Series 1999, 5.500%, 9/01/20 – NPMG Insured	3
1,500	San Jose Redevelopment Agency, California, Tax Allocation Bonds, Merged Project Area, Series 2005A, 5.000%, 8/01/28 – NPMG Insured	8
5,510	Sweetwater Union High School District Public Financing Authority, California, Special Tax Revenue Bonds, Series 2005A, 5.000%, 9/01/28 – FSA Insured	9
1,020	Washington Unified School District, Yolo County, California, Certificates of Participation, Series 2007, 5.125%, 8/01/37 – AMBAC Insured	8
117,265	Total Tax Obligation/Limited Transportation – 7.4% (4.9% of Total Investments)	
6,500	Foothill/Eastern Transportation Corridor Agency, California, Toll Road Revenue Refunding Bonds, Series 1999, 0.000%, 1/15/18 – NPMG Insured	
4,000	Orange County Transportation Authority, California, Toll Road Revenue Bonds, 91 Express Lanes Project, Series 2003A, 5.000%, 8/15/18 – AMBAC Insured	8
5,000	San Francisco Airports Commission, California, Revenue Refunding Bonds, San Francisco International Airport, Second Series 2001, Issue 27A, 5.250%, 5/01/31 – NPMG Insured (Alternative Minimum Tax)	5
15,500	Total Transportation U.S. Guaranteed – 19.5% (12.9% of Total Investments) (4)	
1,380	California Educational Facilities Authority, Revenue Bonds, University of the Pacific, Series 2000, 5.875%, 11/01/20 (Pre-refunded 11/01/10) – MBIA Insured	11
	California, Various Purpose General Obligation Bonds, Series 2000:	
7,995	5.750%, 3/01/22 (Pre-refunded 3/01/10) – NPMG Insured	3
1,900	5.750%, 3/01/27 (Pre-refunded 3/01/10) – NPMG Insured	3
2,085	Central Unified School District, Fresno County, California, General Obligation Bonds, Series 1993, 5.625%, 3/01/18 – AMBAC Insured (ETM)	3
3,000	Escondido Union High School District, San Diego County, California, General Obligation Bonds, Series 1996, 5.700%, 11/01/10 – MBIA Insured (ETM)	5
	Fresno Unified School District, Fresno County, California, General Obligation Bonds, Series 2001F:	
1,065	5.125%, 8/01/21 – FSA Insured (ETM)	2
1,160	5.125%, 8/01/22 – FSA Insured (ETM)	2
1,220	5.125%, 8/01/23 – FSA Insured (ETM)	2
1,500	Hacienda La Puente Unified School District, Los Angeles County, California, General Obligation	8

	Bonds, Series 2000A, 5.250%, 8/01/25 (Pre-refunded 8/01/10) – MBIA Insured	
	Manteca Unified School District, San Joaquin County, California, General Obligation Bonds, Series 2004:	
1,000	5.250%, 8/01/21 (Pre-refunded 8/01/14) – FSA Insured	8
1,000	5.250%, 8/01/22 (Pre-refunded 8/01/14) – FSA Insured	8
1,610	Poway Redevelopment Agency, California, Tax Allocation Refunding Bonds, Paguay Redevelopment Project, Series 2000, 5.750%, 6/15/33 (Pre-refunded 12/15/10) – MBIA Insured	12
4,320	Riverside County, California, GNMA Mortgage-Backed Securities Program Single Family Mortgage Revenue Bonds, Series 1987B, 8.625%, 5/01/16 (Alternative Minimum Tax) (ETM)	
1,000	Sacramento County Sanitation District Financing Authority, California, Revenue Bonds, Series 2000A, 5.500%, 12/01/20 (Pre-refunded 12/01/10) – AMBAC Insured	12
905	University of California, Hospital Revenue Bonds, UCLA Medical Center, Series 2004A, 5.500%, 5/15/18 (Pre-refunded 5/15/12) – AMBAC Insured	5
31,140	Total U.S. Guaranteed Utilities – 8.1% (5.4% of Total Investments)	
3,740	California Pollution Control Financing Authority, Revenue Refunding Bonds, Southern California Edison Company, Series 1999B, 5.450%, 9/01/29 – NPFPG Insured	3
670	Merced Irrigation District, California, Electric System Revenue Bonds, Series 2005, 5.125%, 9/01/31 – SYNCORA GTY Insured	9
100	Sacramento City Financing Authority, California, Capital Improvement Revenue Bonds, Solid Waste and Redevelopment Projects, Series 1999, 5.800%, 12/01/19 – AMBAC Insured	12
1,950	Salinas Valley Solid Waste Authority, California, Revenue Bonds, Series 2002, 5.250%, 8/01/27 – AMBAC Insured (Alternative Minimum Tax)	8
	Santa Clara, California, Subordinate Electric Revenue Bonds, Series 2003A:	
2,800	5.000%, 7/01/24 – NPFPG Insured	7
5,000	5.000%, 7/01/28 – NPFPG Insured	7
14,260	Total Utilities Water and Sewer – 22.7% (15.1% of Total Investments)	
2,975	Chino Basin Regional Finance Authority, California, Sewerage System Revenue Bonds, Inland Empire Utilities Agency, Series 1994, 6.000%, 8/01/16 – AMBAC Insured	2
2,000	El Dorado Irrigation District, California, Water and Sewer Certificates of Participation, Series 2004A, 5.000%, 3/01/21 – FGIC Insured	3
750	Fortuna Public Finance Authority, California, Water Revenue Bonds, Series 2006, 5.000%, 10/01/36 – FSA Insured	10
460	Healdsburg Public Financing Authority, California, Wastewater Revenue Bonds, Series 2006, 5.000%, 4/01/36 – NPFPG Insured	4
2,700	Los Angeles County Sanitation Districts Financing Authority, California, Senior Revenue Bonds, Capital Projects, Series 2003A, 5.000%, 10/01/21 – FSA Insured	10
2,000	Los Angeles, California, Wastewater System Revenue Bonds, Series 2005A, 4.500%, 6/01/29 – NPFPG Insured	6
430	Marina Coast Water District, California, Enterprise Certificate of Participation, Series 2006,	6

	5.000%, 6/01/31 – NPFPG Insured	
12,000	Orange County Sanitation District, California, Certificates of Participation, Series 2003, 5.000%, 2/01/33 – FGIC Insured (UB)	8
1,520	San Buenaventura, California, Water Revenue Certificates of Participation, Series 2004, 5.000%, 10/01/25 – AMBAC Insured	10
1,000	San Diego County Water Authority, California, Water Revenue Certificates of Participation, Series 2008A, 5.000%, 5/01/38 – FSA Insured	5
3,675	San Dieguito Water District, California, Water Revenue Bonds, Series 2004, 5.000%, 10/01/23 – FGIC Insured	10
	Santa Clara Valley Water District, California, Certificates of Participation, Series 2004A:	
1,400	5.000%, 2/01/19 – FGIC Insured	2
445	5.000%, 2/01/20 – FGIC Insured	2
465	5.000%, 2/01/21 – FGIC Insured	2
2,500	West Basin Municipal Water District, California, Revenue Certificates of Participation, Series 2003A, 5.000%, 8/01/30 – NPFPG Insured	8
	Yorba Linda Water District, California, Certificates of Participation, Highland Reservoir Renovation, Series 2003:	
2,010	5.000%, 10/01/28 – FGIC Insured	10
2,530	5.000%, 10/01/33 – FGIC Insured	10
38,860	Total Water and Sewer	
\$ 276,445	Total Investments (cost \$260,690,903) – 150.5%	
	Floating Rate Obligations – (10.2)%	
	Other Assets Less Liabilities – 5.5%	
	Auction Rate Preferred Shares, at Liquidation Value – (45.8)% (5)	
	Net Assets Applicable to Common Shares – 100%	

Fair Value Measurements

In determining the value of the Fund’s investments various inputs are used. These inputs are summarized in the three broad levels listed below:

Level 1 – Quoted prices in active markets for identical securities.

Level 2 – Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

Level 3 – Significant unobservable inputs (including management’s assumptions in determining the fair value of investments).

The inputs or methodology used for valuing securities are not an indication of the risk associated with investing in those securities. The following is a summary of the Fund’s fair value measurements as of November 30, 2009:

	Level 1	Level 2	Level 3	Total
Investments:				
Municipal Bonds	\$ —\$262,496,832		\$ —\$262,496,832	

Income Tax Information

The following information is presented on an income tax basis. Differences between amounts for financial statement and federal income tax purposes are primarily due to timing differences in recognizing taxable market discount, timing differences in recognizing certain gains and losses on investment transactions and the treatment of investments in inverse floating rate securities reflected as financing transactions, if any. To the extent that differences arise that are permanent in nature, such amounts are reclassified within the capital accounts on the Statement of Assets and Liabilities presented in the annual report, based on their federal tax basis treatment; temporary differences do not require reclassification. Temporary and permanent differences do not impact the net asset value of the Fund.

At November 30, 2009, the cost of investments was \$242,451,346.

Gross unrealized appreciation and gross unrealized depreciation of investments at November 30, 2009, were as follows:

Gross unrealized:	
Appreciation	\$ 9,174,687
Depreciation	(7,009,719)
Net unrealized appreciation (depreciation) of investments	\$ 2,164,968

Primarily all of the Fund’s net assets are invested in municipal securities that guarantee the timely payment of principal and interest.

- (1) All percentages shown in the Portfolio of Investments are based on net assets applicable to Common shares unless otherwise noted.
- (2) Optional Call Provisions: Dates (month and year) and prices of the earliest optional call or redemption. There may be other call provisions at varying prices at later dates. Certain mortgage-backed securities may be subject to periodic principal paydowns.

- (3) Ratings: Using the higher of Standard & Poor's Group ("Standard & Poor's") or Moody's Investor Service, Inc. ("Moody's") rating. Ratings below BBB by Standard & Poor's or Baa by Moody's are considered to be below investment grade.

The Portfolio of Investments may reflect the ratings on certain bonds whose insurer has experienced downgrades as of the end of the reporting period. Subsequent to the reporting period, and during the period this Portfolio of Investments was prepared, there may have been reductions to the ratings of certain bonds resulting from changes to the ratings of the underlying insurers both during the period and after period end. Such reductions would likely reduce the effective rating of many of the bonds insured by that insurer or insurers presented at period end.

- (4) Backed by an escrow or trust containing sufficient U.S. Government or U.S. Government agency securities which ensure the timely payment of principal and interest. Such investments are normally considered to be equivalent to AAA rated securities.

- (5) Auction Rate Preferred Shares, at Liquidation Value as a percentage of Total Investments is 30.4%.

N/R Not rated.

(ETM) Escrowed to maturity.

(IF) Inverse floating rate investment.

(UB) Underlying bond of an inverse floating rate trust reflected as a financing transaction.

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Item 2. Controls and Procedures.

- 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") (17 CFR 270.30a-3(c))) are effective, as of a date within 90 days of the filing date of this report that includes the disclosure required by this paragraph, based on their evaluation of the controls and procedures required by Rule 30a-3(b) under the 1940 Act (17 CFR 270.30a-3(b)) and Rule 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934 (17 CFR 240.13a-15(b) or 240.15d-15(b)).
  
- 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 (17 CFR 270.30a-3(d))) 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.

File as exhibits as part of this Form a separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the 1940 Act (17 CFR 270.30a-2(a)), exactly as set forth below: See EX-99 CERT attached hereto.

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SIGNATURES

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.

(Registrant) Nuveen Insured California Premium Income Municipal Fund 2, Inc.

By (Signature and Title) /s/ Kevin J. McCarthy  
Kevin J. McCarthy  
Vice President and Secretary

Date January 29, 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 (Signature and Title) /s/ Gifford R. Zimmerman  
Gifford R. Zimmerman  
Chief Administrative Officer (principal executive officer)

Date January 29, 2010

By (Signature and Title) /s/ Stephen D. Foy  
Stephen D. Foy  
Vice President and Controller (principal financial officer)

Date January 29, 2010