NUVEEN CONNECTICUT PREMIUM INCOME MUNICIPAL FUND Form N-Q April 29, 2010

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

FORM N-O

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-7606

Nuveen Connecticut Premium Income Municipal Fund (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: 5/31

Date of reporting period: 2/28/10

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 Connecticut Premium Income Municipal Fund (NTC)

February 28, 2010

Principal

Amount (000) Description (1)

Consumer Staples 1.7% (1.1% of Total Investments)

\$ 1,340 Puerto Rico, The Children s Trust Fund, Tobacco Settlement Asset-Backed Refunding Bonds, Series 2002, 5.375%, 5/15/33

Education and Civic Organizations 36.6% (24.6% of Total Investments)

- 1,000 Connecticut Health and Education Facilities Authority, Revenue Bonds, Quinnipiac University, Series 2006, 5.000%, 7/01/36 AMBAC Insured
- 1,595 Connecticut Health and Education Facilities Authority, Revenue Bonds, Quinnipiac University, Series 2007-I, 5.000%, 7/01/25 NPFG Insured
- 1,050 Connecticut Health and Education Facilities Authority, University of Hartford Revenue Bonds, Series 2006G, 5.250%, 7/01/36 RAAI Insured
 - 925 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Brunswick School, Series 2003B, 5.000%, 7/01/33 NPFG Insured
 - 500 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Canterbury School, Series 2006B, 5.000%, 7/01/36 RAAI Insured
 - 305 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Chase Collegiate School, Series 2007A, 5.000%, 7/01/27 RAAI Insured
 - 725 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Fairfield University, Series 1998H, 5.000%, 7/01/23 MBIA Insured
 - 750 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Horace Bushnell Memorial Hall, Series 1999A, 5.625%, 7/01/29 NPFG Insured
 - 800 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Loomis Chaffee School, Series 2005F, 5.250%, 7/01/19 AMBAC Insured
 - 270 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Renbrook School, Series 2007A, 5.000%, 7/01/37 AMBAC Insured
- 1,375 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Trinity College, Series 2004H, 5.000%, 7/01/21 NPFG Insured
- 2,000 Connecticut Health and Educational Facilities Authority, Revenue Bonds, University of Hartford, Series 2002E, 5.250%, 7/01/32 RAAI Insured
- 1,500 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Yale University, Series 2003X-1, 5.000%, 7/01/42 (UB)
- 3,550 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Yale University, Series 2007Z-1, 5.000%, 7/01/42 (UB)
- 6,150 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Yale University,

- Series 2007Z-3, 5.050%, 7/01/42 (UB)
- 250 Connecticut Higher Education Supplemental Loan Authority, Revenue Bonds, Family Education Loan Program, Series 1999A, 6.000%, 11/15/18 AMBAC Insured (Alternative Minimum Tax)
- 615 Connecticut Higher Education Supplemental Loan Authority, Revenue Bonds, Family Education Loan Program, Series 2001A, 5.250%, 11/15/18 NPFG Insured (Alternative Minimum Tax)
- 1,000 University of Connecticut, General Obligation Bonds, Series 2004A, 5.000%, 1/15/18 NPFG Insured
- 1,220 University of Connecticut, General Obligation Bonds, Series 2005A, 5.000%, 2/15/17 AGM Insured
- 685 University of Connecticut, General Obligation Bonds, Series 2006A, 5.000%, 2/15/23 FGIC Insured
- 1,000 University of Connecticut, Student Fee Revenue Refunding Bonds, Series 2002A, 5.250%, 11/15/19 FGIC Insured
- 27,265 Total Education and Civic Organizations

Health Care 15.7% (10.6% of Total Investments)

Connecticut Health and Educational Facilities Authority, Revenue Bonds, Bristol Hospital, Series 2002B:

- 500 5.500%, 7/01/21 RAAI Insured
- 700 5.500%, 7/01/32 RAAI Insured
- 645 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Eastern Connecticut Health Network, Series 2000A, 6.000%, 7/01/25 RAAI Insured Connecticut Health and Educational Facilities Authority, Revenue Bonds, Griffin Hospital, Series 2005B:
- 800 5.000%, 7/01/20 RAAI Insured
- 500 5.000%, 7/01/23 RAAI Insured
- 385 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Hospital For Special Care, Series 2007C, 5.250%, 7/01/32 RAAI Insured
- 2,620 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Middlesex Hospital, Series 2006, 5.000%, 7/01/32 AGM Insured
- 2,000 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Stamford Hospital, Series 1999G, 5.000%, 7/01/24 NPFG Insured
- 1,395 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Yale-New Haven Hospital, Series 2006J-1, 5.000%, 7/01/31 AMBAC Insured
- 3,000 Connecticut Health and Educational Facilities Authority, Revenue Refunding Bonds, Middlesex Health Services, Series 1997H, 5.125%, 7/01/27 NPFG Insured
- 12,545 Total Health Care

Housing/Multifamily 5.2% (3.5% of Total Investments)

- 1,000 Connecticut Housing Finance Authority, Housing Mortgage Finance Program Bonds, Series 1999D-2, 6.200%, 11/15/41 (Alternative Minimum Tax)
- 1,000 Connecticut Housing Finance Authority, Multifamily Housing Mortgage Finance Program Bonds, Series 2006G-2, 4.800%, 11/15/27 (Alternative Minimum Tax)

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2,000	Connecticut Housing Finance Authority, Single Family Housing Mortgage Finance Program Bonds,	1				
	Series 2010-A2, 4.500%, 11/15/30					
4,000	Total Housing/Multifamily					
	Housing/Single Family 7.4% (4.9% of Total Investments)					
	Connecticut Housing Finance Authority, Housing Mortgage Finance Program Bonds, Series 2001C:					
1,000	5.300%, 11/15/33 (Alternative Minimum Tax)	1				
500	5.450%, 11/15/43 (Alternative Minimum Tax)	1				
1,675	Connecticut Housing Finance Authority, Housing Mortgage Finance Program Bonds, Series 2004-A5,					
	5.050%, 11/15/34					
	Connecticut Housing Finance Authority, Housing Mortgage Finance Program Bonds, Series 2006-A1:					
205	4.700%, 11/15/26 (Alternative Minimum Tax)	1				
220	4.800%, 11/15/31 (Alternative Minimum Tax)	1				
2,045	Connecticut Housing Finance Authority, Housing Mortgage Finance Program Bonds, Series 2006D,					
	4.650%, 11/15/27					
5,645	Total Housing/Single Family					
	Long-Term Care 3.8% (2.6% of Total Investments)					
320	Connecticut Development Authority, First Mortgage Gross Revenue Refunding Healthcare Bonds,					
	Church Homes Inc. Congregational Avery Heights, Series 1997, 5.700%, 4/01/12					
615	Connecticut Development Authority, First Mortgage Gross Revenue Refunding Healthcare Bonds,					
	Connecticut Baptist Homes Inc., Series 1999, 5.500%, 9/01/15 RAAI Insured					
	Connecticut Development Authority, Revenue Refunding Bonds, Duncaster Inc., Series 1999A:					
1,000	5.250%, 8/01/19 RAAI Insured					
1,000	5.375%, 8/01/24 RAAI Insured					
2,935	935 Total Long-Term Care					
	Tax Obligation/General 21.0% (14.1% of Total Investments)					
750	Bridgeport, Connecticut, General Obligation Refunding Bonds, Series 2002A, 5.375%, 8/15/19					
	FGIC Insured					
1,110	Connecticut State, General Obligation Bonds, Series 2004C, 5.000%, 4/01/23 FGIC Insured					
	Connecticut State, General Obligation Bonds, Series 2006A, 4.750%, 12/15/24	1				
	Connecticut State, General Obligation Bonds, Series 2006C, 5.000%, 6/01/23 AGM Insured					
500	Connecticut State, General Obligation Bonds, Series 2006E, 5.000%, 12/15/20	1				
	Hartford, Connecticut, General Obligation Bonds, Series 2005A:					
	5.000%, 8/01/20 AGM Insured					
	4.375%, 8/01/24 AGM Insured					
	New Haven, Connecticut, General Obligation Bonds, Series 2006, 5.000%, 11/01/17 AMBAC Insured	1				
	North Haven, Connecticut, General Obligation Bonds, Series 2006, 5.000%, 7/15/24					
1,860	Puerto Rico, General Obligation and Public Improvement Bonds, Series 2001A, 5.500%, 7/01/20					
	NPFG Insured					

1,420 Regional School District 16, Connecticut, General Obligation Bonds, Series 2003, 5.000%,

Suffield, Connecticut, General Obligation Bonds, Series 2005:

3/15/16 AMBAC Insured

- 465 5.000%, 6/15/17
- 460 5.000%, 6/15/19
- 1,000 5.000%, 6/15/21
- 1,500 West Hartford, Connecticut, General Obligation Bonds, Series 2005B, 5.000%, 10/01/18
- 14,665 Total Tax Obligation/General

Tax Obligation/Limited 24.4% (16.4% of Total Investments)

- 380 Capitol Region Education Council, Connecticut, Revenue Bonds, Series 1995, 6.700%, 10/15/10 Connecticut Health and Educational Facilities Authority, Child Care Facilities Program Revenue Bonds, Series 2006F:
- 1,300 5.000%, 7/01/31 AGC Insured
- 1,000 5.000%, 7/01/36 AGC Insured
- 1,945 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Child Care Facilities Program, Series 1999C, 5.625%, 7/01/29 AMBAC Insured Connecticut, Special Tax Obligation Transportation Infrastructure Purpose Bonds, Series 2002B:
- 2,000 5.000%, 12/01/20 AMBAC Insured
- 1,000 5.000%, 12/01/21 AMBAC Insured
 - 500 Connecticut, Special Tax Obligation Transportation Infrastructure Purpose Bonds, Series 2003B, 5.000%, 1/01/23 FGIC Insured
- 1,750 Connecticut, Special Tax Obligation Transportation Infrastructure Purpose Revenue Bonds, Series 2007A, 5.000%, 8/01/27 AMBAC Insured
- 1,100 Harbor Point Infrastructure Improvement District, Connecticut, Special Obligation Revenue Bonds, Harbor Point Project, Series 2010A, 7.875%, 4/01/39

 Puerto Rico Infrastructure Financing Authority, Special Tax Revenue Bonds, Series 2005A:
 - 960 0.000%, 7/01/32 FGIC Insured
- 2,615 0.000%, 7/01/33 FGIC Insured
- 2,000 Puerto Rico Municipal Finance Agency, Series 2002A, 5.250%, 8/01/21 AGM Insured
- 2,400 Puerto Rico Municipal Finance Agency, Series 2005C, 5.000%, 8/01/16 AGM Insured
 - 975 Puerto Rico Sales Tax Financing Corporation, Sales Tax Revenue Bonds, First Subordinate Series 2010A, 5.375%, 8/01/39
- 1,000 Virgin Islands Public Finance Authority, Gross Receipts Taxes Loan Note, Series 2003, 5.250%, 10/01/19 AGM Insured
- 20,925 Total Tax Obligation/Limited

Transportation 1.0% (0.6% of Total Investments)

- 750 Connecticut, General Airport Revenue Bonds, Bradley International Airport, Series 2001A, 5.125%, 10/01/26 FGIC Insured (Alternative Minimum Tax)
 - U.S. Guaranteed 12.0% (8.1% of Total Investments) (4)
- 50 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Eastern Connecticut Health Network, Series 2000A, 6.000%, 7/01/25 (Pre-refunded 7/01/10) RAAI Insured
- 650 Connecticut Health and Educational Facilities Authority, Revenue Bonds, Loomis Chaffee School, Series 2001D, 5.500%, 7/01/23 (Pre-refunded 7/01/11)
- 40 Connecticut, General Obligation Bonds, Series 1993E, 6.000%, 3/15/12 (ETM)

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- 1,500 Connecticut, General Obligation Bonds, Series 2002B, 5.500%, 6/15/21 (Pre-refunded 6/15/12)
 - 600 Guam Economic Development Authority, Tobacco Settlement Asset-Backed Bonds, Series 2001B, 5.500%, 5/15/41 (Pre-refunded 5/15/11)
- 1,000 Hartford, Connecticut, Parking System Revenue Bonds, Series 2000A, 6.400%, 7/01/20 (Pre-refunded 7/01/10)
- 400 Northern Mariana Islands, General Obligation Bonds, Series 2000A, 6.000%, 6/01/20 (Pre-refunded 6/01/10) ACA Insured
- 1,000 Puerto Rico Infrastructure Financing Authority, Special Obligation Bonds, Series 2000A, 5.500%, 10/01/40
 - 300 Puerto Rico, The Children s Trust Fund, Tobacco Settlement Asset-Backed Bonds, Series 2000, 5.750%, 7/01/20 (Pre-refunded 7/01/10)
- 1,100 University of Connecticut, General Obligation Bonds, Series 2003A, 5.125%, 2/15/21 (Pre-refunded 2/15/13) MBIA Insured
- 1,000 Virgin Islands Public Finance Authority, Gross Receipts Taxes Loan Note, Series 1999A, 6.500%, 10/01/24 (Pre-refunded 10/01/10)
- 1,000 Waterbury, Connecticut, General Obligation Bonds, Series 2002A, 5.375%, 4/01/17 (Pre-refunded 4/01/12) AGM Insured
- 8,640 Total U.S. Guaranteed

Utilities 8.6% (5.8% of Total Investments)

- 1,150 Bristol Resource Recovery Facility Operating Committee, Connecticut, Solid Waste Revenue Bonds, Covanta Bristol Inc., Series 2005, 5.000%, 7/01/12 AMBAC Insured
- 1,000 Connecticut Development Authority, Pollution Control Revenue Refunding Bonds, Connecticut Light and Power Company, Series 1993A, 5.850%, 9/01/28
- 1,070 Connecticut Development Authority, Solid Waste Disposal Facilities Revenue Bonds, PSEG Power LLC Project, Series 2007A, 5.750%, 11/01/37 (Alternative Minimum Tax)
- 1,750 Connecticut Resource Recovery Authority, Revenue Bonds, American Ref-Fuel Company of Southeastern Connecticut LP, Series 1998A-I, 5.500%, 11/15/15 (Alternative Minimum Tax) Eastern Connecticut Resource Recovery Authority, Solid Waste Revenue Bonds, Wheelabrator Lisbon Project, Series 1993A:
- 260 5.500%, 1/01/14 (Alternative Minimum Tax)
- 1,290 5.500%, 1/01/20 (Alternative Minimum Tax)
- 6,520 Total Utilities

Water and Sewer 11.5% (7.7% of Total Investments)

- 500 Connecticut Development Authority, Water Facility Revenue Bonds, Aquarion Water Company Project, Series 200.7, 5.100%, 9/01/37 SYNCORA GTY Insured (Alternative Minimum Tax)
- 1,185 Connecticut, State Revolving Fund General Revenue Bonds, Series 2003A, 5.000%, 10/01/16 Greater New Haven Water Pollution Control Authority, Connecticut, Regional Wastewater System Revenue Bonds, Series 2005A:
- 1,520 5.000%, 11/15/30 NPFG Insured
- 2,260 5.000%, 8/15/35 NPFG Insured
 South Central Connecticut Regional Water Authority, Water System Revenue Bonds, Eighteenth

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Series 2003A:

1,000 5.000%, 8/01/20 NPFG Insured

1,075 5.000%, 8/01/33 NPFG Insured

1,100 Stamford, Connecticut, Water Pollution Control System and Facility Revenue Bonds, Series 2003A, 5.000%, 11/15/32

8,640 Total Water and Sewer

\$ 113,870 Total Investments (cost \$113,088,647) 148.9%

Floating Rate Obligations (10.3)%

MuniFund Term Preferred Shares, at Liquidation Value (23.7)% (5)

Other Assets Less Liabilities 5.5%

Auction Rate Preferred Shares, at Liquidation Value (20.4)% (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 February 28, 2010:

	Level 1	Level 2	Level 3	Total
Investments:				
Municipal Bonds	\$	\$114,762,031	\$	\$114,762,031

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 February 28, 2010, the cost of investments was \$105,188,205.

Gross unrealized appreciation and gross unrealized depreciation of investments at February 28, 2010, were as follows:

Gross unrealized:

Appreciation \$3,377,419

Depreciation (1,766,670)

Net unrealized appreciation (depreciation) of investments \$1,610,749

- (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.
- (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) MuniFund Term Preferred Shares and Auction Rate Preferred Shares, at Liquidation Value as a percentage of Total Investments are 15.9% and 13.7%, respectively.
- N/R Not rated.
- (ETM) Escrowed to maturity.
 - (UB) Underlying bond of an inverse floating rate trust reflected as a financing transaction.

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.

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 Connecticut Premium Income Municipal Fund

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

Kevin J. McCarthy

Vice President and Secretary

Date April 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 April 29, 2010

By (Signature and Title) /s/ Stephen D. Foy

Stephen D. Foy

Vice President and Controller (principal financial officer)

Date April 29, 2010