

NUVEEN MISSOURI PREMIUM INCOME MUNICIPAL FUND

Form N-PX

August 26, 2010

FORM N-PX

**ANNUAL REPORT OF PROXY VOTING RECORD OF
REGISTERED MANAGEMENT INVESTMENT COMPANY**

Investment Company Act file number 811-07616

Nuveen Missouri Premium Income Municipal Fund

(Exact name of registrant as specified in charter)

333 West Wacker Drive, Chicago, Illinois 60606

(Address of principal executive offices) (Zip Code)

Gifford R. Zimmerman Chief Administrative Officer

(Name and address of agent for service)

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

Date of fiscal year-end: May 31

Date of reporting period: June 30, 2010

Item 1. Proxy Voting Record

The Registrant did not hold any voting securities and accordingly did not vote any proxies during the reporting period.

SIGNATURES:

Pursuant to the requirements of 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.

Nuveen Missouri Premium Income Municipal Fund

By /s/ Gifford R. Zimmerman

Gifford R. Zimmerman Chief Administrative Officer

Date

August 26, 2010