Federated Enhanced Treasury Income Fund Form N-Q October 25, 2010

United States Securities and Exchange Commission Washington, D.C. 20549

Form N-Q Quarterly Schedule of Portfolio Holdings of Registered Management Investment Companies

811-22098

(Investment Company Act File Number)

Federated Enhanced Treasury Income Fund

(Exact Name of Registrant as Specified in Charter)

Federated Investors Funds 4000 Ericsson Drive Warrendale, PA 15086-7561 (Address of Principal Executive Offices)

(412) 288-1900 (Registrant's Telephone Number)

John W. McGonigle, Esquire
Federated Investors Tower
1001 Liberty Avenue
Pittsburgh, Pennsylvania 15222-3779
(Name and Address of Agent for Service)
(Notices should be sent to the Agent for Service)

Date of Fiscal Year End: 11/30/10

Date of Reporting Period: Quarter ended 08/31/10

Item 1. Schedule of Investments

Federated Enhanced Treasury Income Fund

Portfolio of Investments

August 31, 2010 (unaudited)

Principal Amount		Value
Amount	U.S. TREASURY 97.9%	value
\$3,369,175	U.S. Treasury Inflation-Protected Bond, 3.625%, 4/15/2028	4,500,010
4,031,920	U.S. Treasury Inflation-Protected Note, 1.375%, 1/15/2020	4,205,766
5,258,500	U.S. Treasury Inflation-Protected Note, Series D-2017, 2.625%, 7/15/2017	5,998,044
4,000,000	United States Treasury Bond, 4.375%, 11/15/2039	4,618,750
10,000,000	United States Treasury Bond, 5.250%, 11/15/2028	12,864,062
5,200,000	United States Treasury Bond, 7.500%, 11/15/2024	7,966,969
30,000,000	United States Treasury Note, 0.875%, 2/29/2012	30,217,968
5,000,000	United States Treasury Note, 1.000%, 10/31/2011	5,037,580
33,000,000	United States Treasury Note, 2.125%, 11/30/2014	34,375,275
35,000,000	United States Treasury Note, 2.750%, 10/31/2013	37,185,687
9,000,000	United States Treasury Note, 3.000%, 8/31/2016	9,680,210
15,000,000	United States Treasury Note, 3.500%, 5/15/2020	16,351,881
	TOTAL U.S. TREASURY (IDENTIFIED COST \$169,006,356)	173,002,202
	REPURCHASE AGREEMENT 2.6%	
4,535,000	Interest in \$8,035,000,000 joint repurchase agreement 0.250%, dated 8/31/2010 under which Bank of America N.A. will repurchase securities provided as collateral for \$8,035,056,799 on 9/1/2010. The securities provided as collateral at the end of the period were U.S. Government Agency securities with various maturities to 4/15/2040 and the market value of those underlying securities was \$8,233,620,614 (AT COST).	4,535,000
	TOTAL INVESTMENTS — 100.5% (IDENTIFIED COST \$173,541,356) ¹	177,537,202
	OTHER ASSETS AND LIABILITIES - NET — (0.5)%	(809,029)
	TOTAL NET ASSETS — 100%	\$176,728,173
At Amount 2	1 2010 the Fund had the following open futures contracts:	

At August 31, 2010, the Fund had the following open futures contracts:

Description	Number of Contracts	Notional Value		Unrealized Appreciation
³ U.S. Treasury Notes 10-Year Long Futures, 12/21/2010	868	\$109,042,500	December 2010	\$825,438

At August 31, 2010, the Fund had the following outstanding written call option contracts:

Security	Expiration Date Exercise Price	Contracts	Value
³ U.S. Treasury Notes 5-Year Short Calls on Futures, 9/24/2010	September 2010 \$120	651	\$681,516
³ U.S. Treasury Notes 2-Year Short Calls on Futures, 9/24/2010	September 2010 \$110	161	\$50,313
³ U.S. Treasury Bond Short Calls on Futures, 9/24/2010 (PREMIUMS RECEIVED \$1,343,804)	September 2010 \$133	357	\$1,176,984 \$1,908,813

Unrealized Appreciation on Futures Contracts and Value of Written Call Option Contracts is included in "Other Assets and Liabilities — Net."

1At August, 31, 2010, the cost of investments for federal tax purposes was \$173,541,356. The net unrealized appreciation of investments for federal tax purposes excluding any unrealized appreciation resulting from futures contracts and written call option contracts was \$3,995,846. This consists of net unrealized appreciation from investments for those securities having an excess of value over cost of \$3,995,846.

- 2 Assets, other than investments in securities, less liabilities.
- 3 Non-income producing security.

Note: The categories of investments are shown as a percentage of total net assets at August 31, 2010.

Investment Valuation

In calculating its net asset value (NAV), the Fund generally values investments as follows:

- Fixed-income securities acquired with remaining maturities greater than 60 days are fair valued using price evaluations provided by a pricing service approved by the Fund's Board of Trustees (the "Trustees").
- Fixed-income securities acquired with remaining maturities of 60 days or less are valued at their cost (adjusted for the accretion of any discount or amortization of any premium).

- Shares of other mutual funds are valued based upon their reported NAVs.
- Derivative contracts listed on exchanges are valued at their reported settlement or closing price.
- Over-the-counter (OTC) derivative contracts are fair valued using price evaluations provided by a pricing service approved by the Trustees.

If the Fund cannot obtain a price or price evaluation from a pricing service for an investment, the Fund may attempt to value the investment based upon the mean of bid and asked quotations or fair value the investment based on price evaluations, from one or more dealers. If any price, quotation, price evaluation or other pricing source is not readily available when the NAV is calculated, the Fund uses the fair value of the investment determined in accordance with the procedures described below. There can be no assurance that the Fund could purchase or sell an investment at the price used to calculate the Fund's NAV.

Fair Valuation and Significant Events Procedures

The Trustees have authorized the use of pricing services to provide evaluations of the current fair value of certain investments for purposes of calculating the NAV. Factors considered by pricing services in evaluating an investment include the yields or prices of investments of comparable quality, coupon, maturity, call rights and other potential prepayments, terms and type, reported transactions, indications as to values from dealers, and general market conditions. Some pricing services provide a single price evaluation reflecting the bid-side of the market for an investment (a "bid" evaluation). Other pricing services offer both bid evaluations and price evaluations indicative of a price between the prices bid and asked for the investment (a "mid" evaluation). The Fund normally uses bid evaluations for U.S. Treasury and Agency securities, mortgage-backed securities and municipal securities. The Fund normally uses mid evaluations for other types of fixed-income securities and OTC derivative contracts. In the event that market quotations and price evaluations are not available for an investment, the fair value of the investment is determined in accordance with procedures adopted by the Trustees.

The Trustees also have adopted procedures requiring an investment to be priced at its fair value whenever the Adviser determines that a significant event affecting the value of the investment has occurred between the time as of which the price of the investment would otherwise be determined and the time as of which the NAV is computed. An event is considered significant if there is both an affirmative expectation that the investment's value will change in response to the event and a reasonable basis for quantifying the resulting change in value. Examples of significant events that may occur after the close of the principal market on which a security is traded, or after the time of a price evaluation provided by a pricing service or a dealer, include:

- With respect to securities traded in foreign markets, significant trends in U.S. equity markets or in the trading of foreign securities index futures or options contracts;
- With respect to price evaluations of fixed-income securities determined before the close of regular trading on the NYSE, actions by the Federal Reserve Open Market Committee and other significant trends in U.S. fixed-income markets;
- Political or other developments affecting the economy or markets in which an issuer conducts its operations or its securities are traded; and
- Announcements concerning matters such as acquisitions, recapitalizations, litigation developments, a natural disaster affecting the issuer's operations or regulatory changes or market developments affecting the issuer's industry.

The Trustees have approved the use of a pricing service to determine the fair value of equity securities traded principally in foreign markets when the Adviser determines that there has been a significant trend in the U.S. equity markets or in index futures trading. For other significant events, the Fund may seek to obtain more current quotations or price evaluations from alternative pricing sources. If a reliable alternative pricing source is not available, the Fund will determine the fair value of the investment using another method approved by the Trustees.

Various inputs are used in determining the value of the Fund's investments. 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 the Fund's own 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 inputs used, as of August 31, 2010, in valuing the Fund's assets carried at fair value:

Valuation Inputs

	Level 1 —	Level 2 —	_	
	Quoted	Other	Level 3 —	-
	Prices and	Significant	Significant	
	Investments in	Observable	Unobservable	
	Mutual Funds	Inputs	Inputs	Total
Debt Securities:				
U.S. Treasury	\$	\$173,002,202	\$ —	-\$173,002,202
Repurchase Agreement	_	4,535,000		4,535,000
TOTAL SECURITIES	_	177,537,202		-177,537,202
OTHER FINANCIAL INSTRUMENTS*	\$260,429	\$ —	- \$	-\$260,429

^{*} Other financial instruments include futures contracts and written call option contracts.

Item 2. Controls and Procedures

- (a) The registrant's Principal Executive Officer and Principal Financial Officer have concluded that the registrant's disclosure controls and procedures (as defined in rule 30a-3(c) under the Act) are effective in design and operation and are sufficient to form the basis of the certifications required by Rule 30a-(2) under the Act, based on their evaluation of these disclosure controls and procedures within 90 days of the filing date of this report on Form N-Q.
- (b) There were no changes in the registrant's internal control over financial reporting (as defined in rule 30a-3(d) under the Act) during the 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

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 Federated Enhanced Treasury Income Fund

By /S/ Richard A. Novak

Richard A. Novak

Principal Financial Officer

Date October 20, 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 /S/ J. Christopher Donahue

J. Christopher Donahue

Principal Executive Officer

Date October 20, 2010

By /S/ Richard A. Novak

Richard A. Novak

Principal Financial Officer

Date October 20, 2010