

First Federal of Northern Michigan Bancorp, Inc.
 Form 4
 May 25, 2010

FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person *
 VANMASSENHOVE GARY C

2. Issuer Name and Ticker or Trading Symbol
 First Federal of Northern Michigan Bancorp, Inc. [FFNM]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)
 100 S. SECOND AVE
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)
 05/24/2010

Director 10% Owner
 Officer (give title below) Other (specify below)

ALPENA, MI 49707

(City) (State) (Zip)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)
 Form filed by One Reporting Person
 Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
				Code	V Amount (A) or (D) Price			
Common Stock, par value \$0.01 per share	05/24/2010		P	1,500	A	\$ 1.95 2,750	I	By Spouse IRA
Common Stock, par value \$0.01 per share						3,192	I	BY IRA1
Common Stock, par value \$0.01 per share						3,789	I	BY IRA2

Explanation of Responses:

* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

(1) Includes shares of restricted stock that vest over a five year period, commencing on May 17, 2006, at the rate of 20% per year.

(2) Represents stock options that vest over a five year period, commencing on March 14, 2006, at a rate of 20% per year.

(3) Represents stock options that vest over a five year period, commencing on mAY 17, 2006, at a rate of 20% per year.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.