

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 |

Common
Stock, par
value \$0.01
per share

7,769 ⁽¹⁾ D

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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

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(9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned
(e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) | 8. Price or Amount of Underlying Securities (Instr. 3 and 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|--|
| Stock Options | \$ 9.2 | | | | | 03/14/2007 - 03/14/2016 | Common Stock | 2,500 ⁽²⁾ |
| Stock Options | \$ 9.65 | | | | | 05/17/2007 - 05/17/2016 | Common Stock | 5,900 ⁽³⁾ |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |
| VANMASSENHOVE GARY C 100 S. SECOND AVE ALPENNA, MI 49707 | | X | | |

Signatures

/s/ Robert B. Pomerenk, pursuant to power of attorney

05/25/2010

**Signature of Reporting Person

Date

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.

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