

# THE NATIONAL FLOOD INSURANCE PROGRAM IN MASSACHUSETTS

DCR'S FLOOD HAZARD MANAGEMENT PROGRAM



Walden Pond, Concord, Dec 2016  
Joy Duperault

# THE EXCHANGE AGREEMENT



## ***Flood insurance for floodplain enforcement***

Title 44 CFR (Code of Federal Regulations), Parts 59 through 80.

Massachusetts:

341 out of 351 communities are in the National Flood Insurance Program

There are approx. 50,500 active policies, with an average annual premium of \$1,530.

# BUZZARDS BAY COMMUNITIES

Acushnet 12 policies

Bourne 1,007 policies

Dartmouth 518 policies

Fairhaven 668 policies

Falmouth 2,331 policies

Gosnold 8 policies

Marion 497 policies

Mattapoissett 724 policies

New Bedford 308 policies

Rochester 9 policies

Wareham 1,767 policies

Westport 318 policies

**Altogether these 8,167 policies equal approx.  
\$2,058,556,000 in flood insurance coverage.**

Per FEMA database on 4/4/2017.

# BUZZARDS BAY COMMUNITIES

Since 1978 flood insurance claims  
have been paid out, totaling \$42,859,194 to date:

Acushnet \$14,622.31

Bourne \$5,499,302.87

Dartmouth \$921,854.75

Fairhaven \$3,454,629.67

Falmouth \$9,450,397.19

Gosnold \$2,214.69

Marion \$2,893,691.96

Mattapoisett \$6,791,752.62

New Bedford \$625,970.19

Rochester \$00.00

Wareham \$11,683,384.70

Westport \$1,521,373.20

Per FEMA database on 4/4/2017.

# FEMA'S POLICYHOLDER OUTREACH PROGRAM

## Actual example:

Westport policyholder owns 2 structures on one parcel, one of which is an old farmhouse with a basement and the other a tiny cottage on the beach. Both structures are pre-FIRM and neither structure is her primary residence. Her total annual flood insurance premium has been \$10,500.

She receives a letter from FEMA informing her that her policy has been examined, and that it will begin to rise at a rate of 25% per year until the actuarial rate has been met.

Next renewal = \$13,125

Then \$16,406... \$20,508... \$25,635... etc.

What are her options?



# FEMA'S COMMUNITY RATING PROGRAM

- ❖ Voluntary
- ❖ Requirements to meet higher standards
- ❖ Discounts on flood insurance premiums, between 5- 15%
- ❖ At a class 8 (10% discount) Fairhaven SFHA policyholders would save an average of \$241/year
- ❖ Wareham policyholders altogether would save approx. \$265,698/year at a class 8
- ❖ At only class 9 (5% discount) Falmouth policyholders would a save a total of \$200,932 each year

The Commonwealth's statewide regulations and your local practices may count for enough points to enter the program at a class 9 (5% discount.)

# DCR

## FLOOD HAZARD MANAGEMENT PROGRAM

DCR houses the Flood Hazard Management Program within its Office of Water Resources. Two staff are responsible for:

- Liaison between FEMA and Mass communities
- Technical support
- Monitoring floodplain development
- Reviewing state projects
- Coordinating with MEMA on grants and planning efforts
- Delivering NFIP training
- Assisting general callers
- Flood event/ disaster support



**We work for you!**

# NFIP DEFINITION OF DEVELOPMENT

Any manmade change to improved or unimproved real estate, including but not limited to building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations

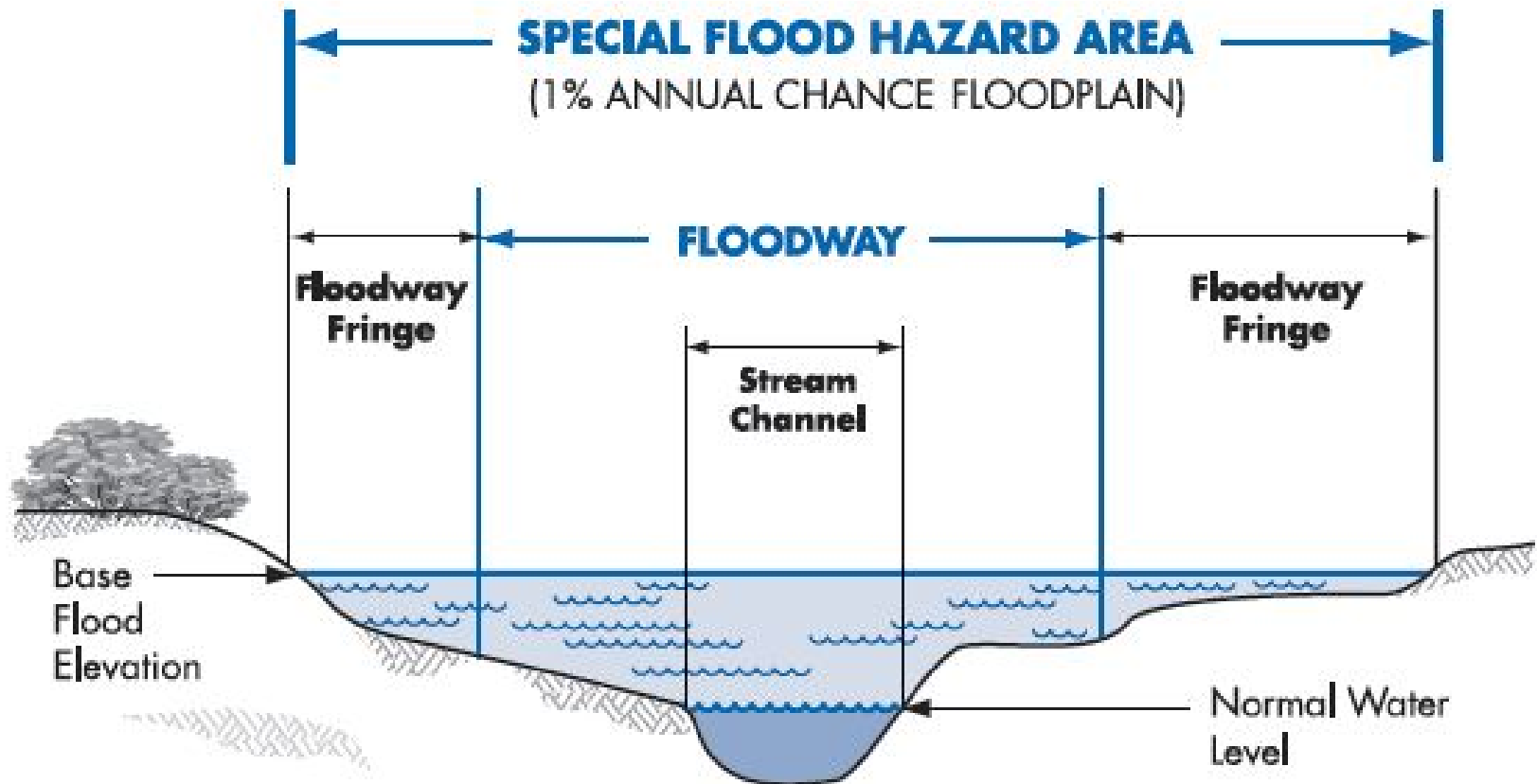


2014 photo by David L. Ryan, Boston Globe  
West Roxbury quarry



# FLOODPLAIN & FLOODWAY

## Understanding the Riverine Floodplain



# FEDERAL REGULATIONS IN STATE AND LOCAL CODES

The NFIP regulations in 44 CFR must be accepted at the local level, unless these reside in statewide mandatory codes.

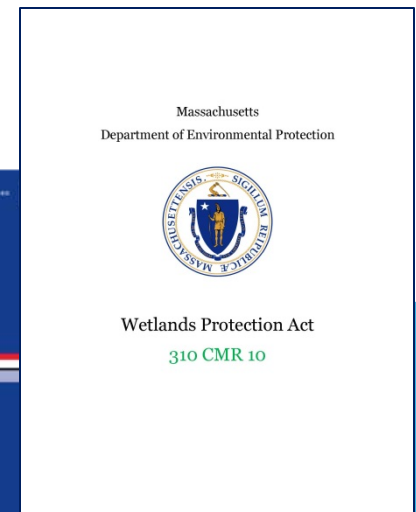
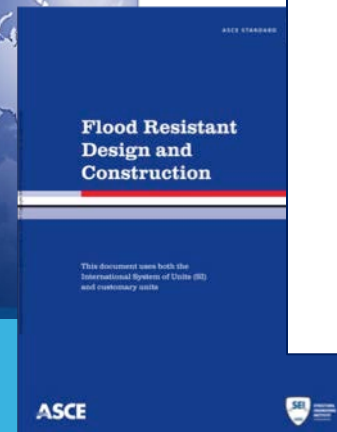
NFIP regulations in Massachusetts:

- Massachusetts amended 2009 IBC, IRC, IEBC and Appendix G (780 CMR)
- Mass. Wetlands Protection Act (310 CMR 10)
- Mass. Title V regulations (310 CMR 15, Title 5)
- MA Model Flood Ordinance, as reflected in local bylaws (AKA “flood ordinance”) which may be found in zoning bylaws or other local codes
- Other pertinent Massachusetts

regulations such as the DEP

Inlands and Coastal Wetlands

Restrictions (310 CMR 13 and 12)



# LOCAL BY-LAWS

Some examples include:

- In AE zones with regulatory floodways, encroachments are prohibited in the regulatory floodway which **would result in any increase** in flood levels within the community during the occurrence of the base flood discharge [310 CMR 10.57 (4)(a); NFIP 44 CFR 60.3(d)(3)]
- All subdivision proposals must be designed to assure that:
  - a) such proposals minimize flood damage;
  - b) all public utilities and facilities are located and constructed to minimize or eliminate flood damage; and
  - c) adequate drainage is provided to reduce exposure to flood hazards.



Merrimack River, Pawtucket Falls, Lowell  
Photo by Mike Pueschel

# LOCAL ENFORCEMENT

- Building official (commissioner, inspector)
- Conservation agent & commission
- Dept. of Public Works director
- Planners, community development staff
- Town administrators/ managers

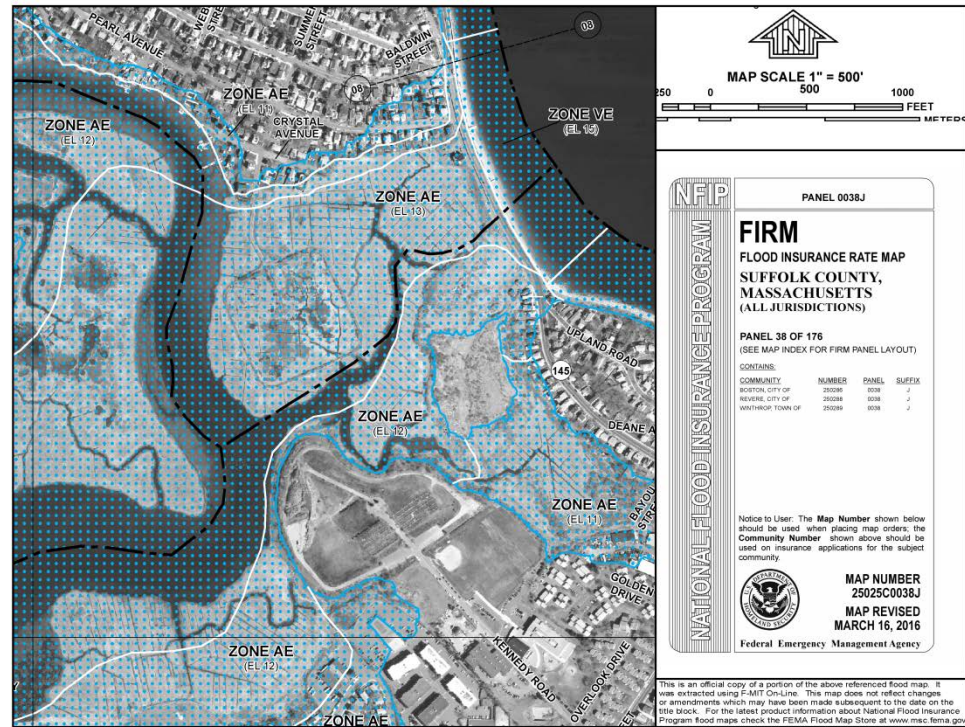
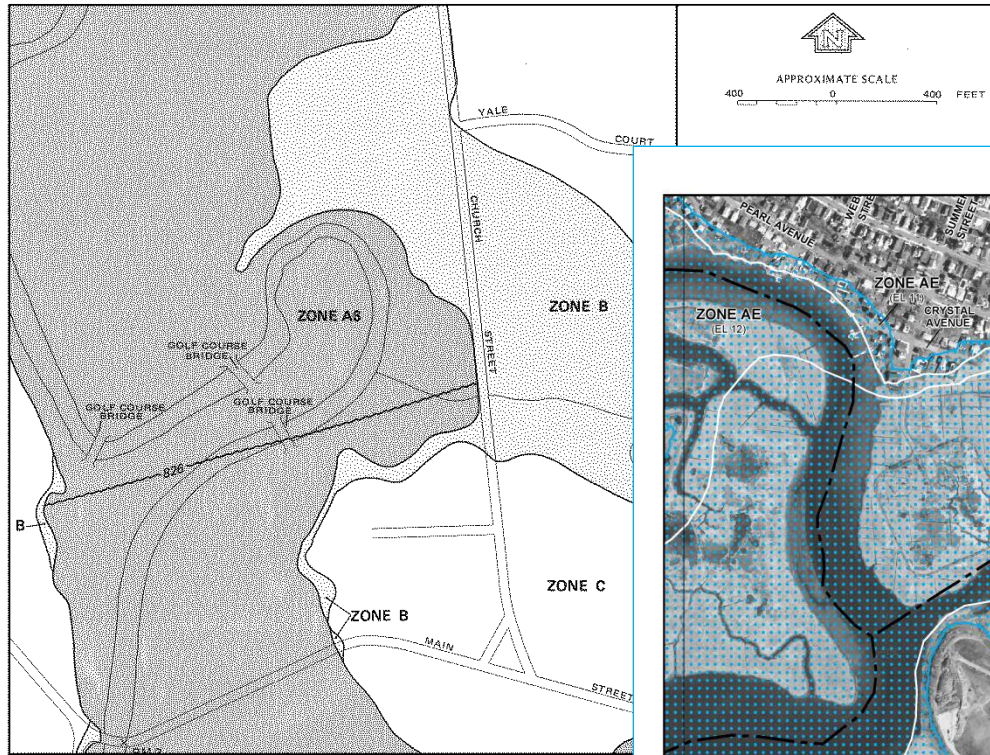


Photo by WordPress.com

**Who is the  
community's  
floodplain  
administrator?**

# FEMA'S MAP SERVICE CENTER

<https://msc.fema.gov>



# GOOGLE EARTH WITH NFHL



# MASS OLIVER

Oliver OLIVER: MassGIS's Online Mapping Tool [OLIVER Updates](#)

5 Featherbed lane dartmouth Zoom to a town

**Available Data Layers**

- DEP Tier Classified 21E Sites
- DEP BWP Major Facilities
- FEMA Flood Data (Most Current)
  - Q3 Flood Zones (from Paper FIRMs, where FEMA National Flood Hazard Layer Polygon)
- FEMA Q3 Flood from Paper FIRMs
- Ground Water Discharges
- Solid Waste Diversion and Disposal
- Title 5 Buffers
- Surface Water Protection Areas
- Underground Storage Tanks

**Active Data Layers**

Check all Uncheck all Remove all

- FEMA National Flood Hazard Layer Polygon
- Tax Parcels for Query
- Detailed Features
- Tax Parcels

**Legend**

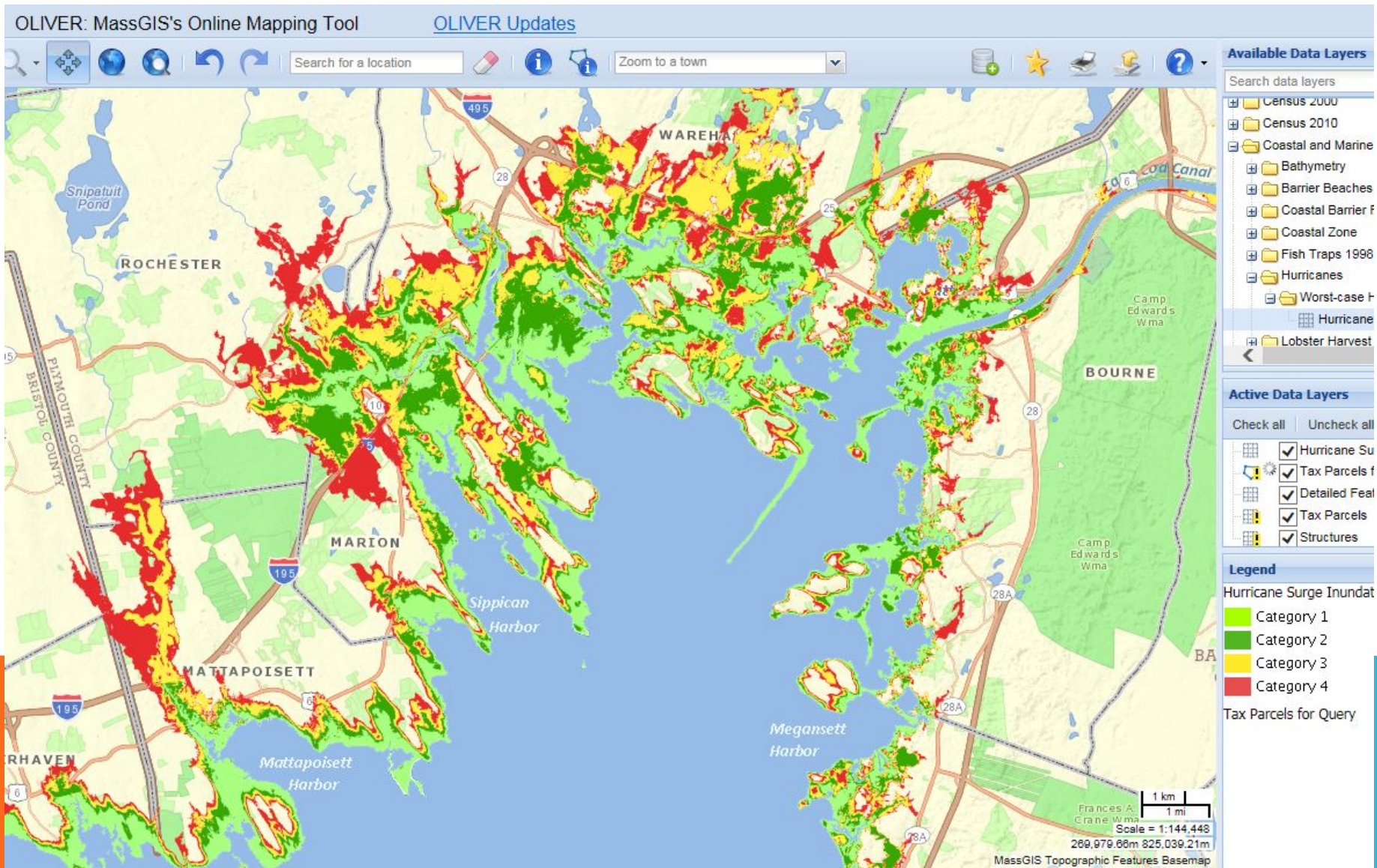
FEMA National Flood Hazard Layer Polygons

- A: 1% Annual Chance of Flooding, no BFE
- AE: 1% Annual Chance of Flooding, with BFE
- AE: Regulatory Floodway
- AH: 1% Annual Chance of 1-3ft Ponding, with BFE
- AO: 1% Annual Chance of 1-3ft Sheet Flow Flooding, with BFE
- VE: High Risk Coastal Area
- D: Possible But Undetermined Hazard
- X: 0.2% Annual Chance of Flooding
- X: Reduced Flood Risk due to Levee
- Area Not Included
- Area with no DFIRM - Paper FIRMs in Effect
- Tax Parcels for Query

Scale = 1:4,514  
246,268.47m 811,250.92m  
MassGIS Topographic Features Basemap

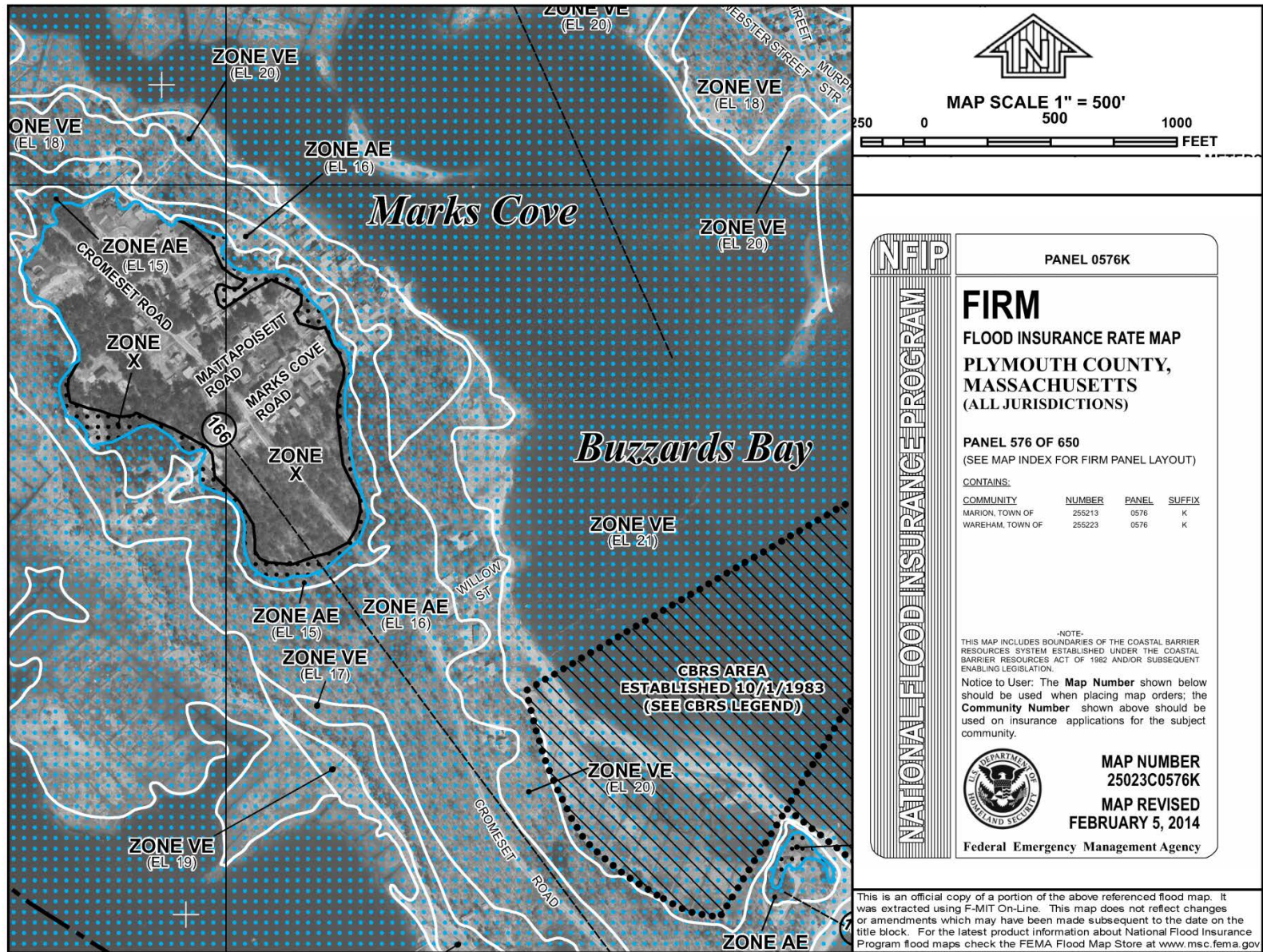
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# BUZZARDS BAY HURRICANE INUNDATION ZONES

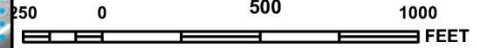




# MARK'S COVE, WAREHAM, FEMA FIRM



MAP SCALE 1" = 500'



PANEL 0576K

## FIRM

FLOOD INSURANCE RATE MAP  
PLYMOUTH COUNTY,  
MASSACHUSETTS  
(ALL JURISDICTIONS)

PANEL 576 OF 650

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

**CONTAINS:**

COMMUNITY	NUMBER	PANEL	SUFFIX
MARION, TOWN OF	255213	0576	K
WAREHAM, TOWN OF	255223	0576	K

NOTE:  
THIS MAP INCLUDES BOUNDARIES OF THE COASTAL BARRIER RESOURCES SYSTEM ESTABLISHED UNDER THE COASTAL BARRIER RESOURCES ACT OF 1982 AND/OR SUBSEQUENT ENABLING LEGISLATION.

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

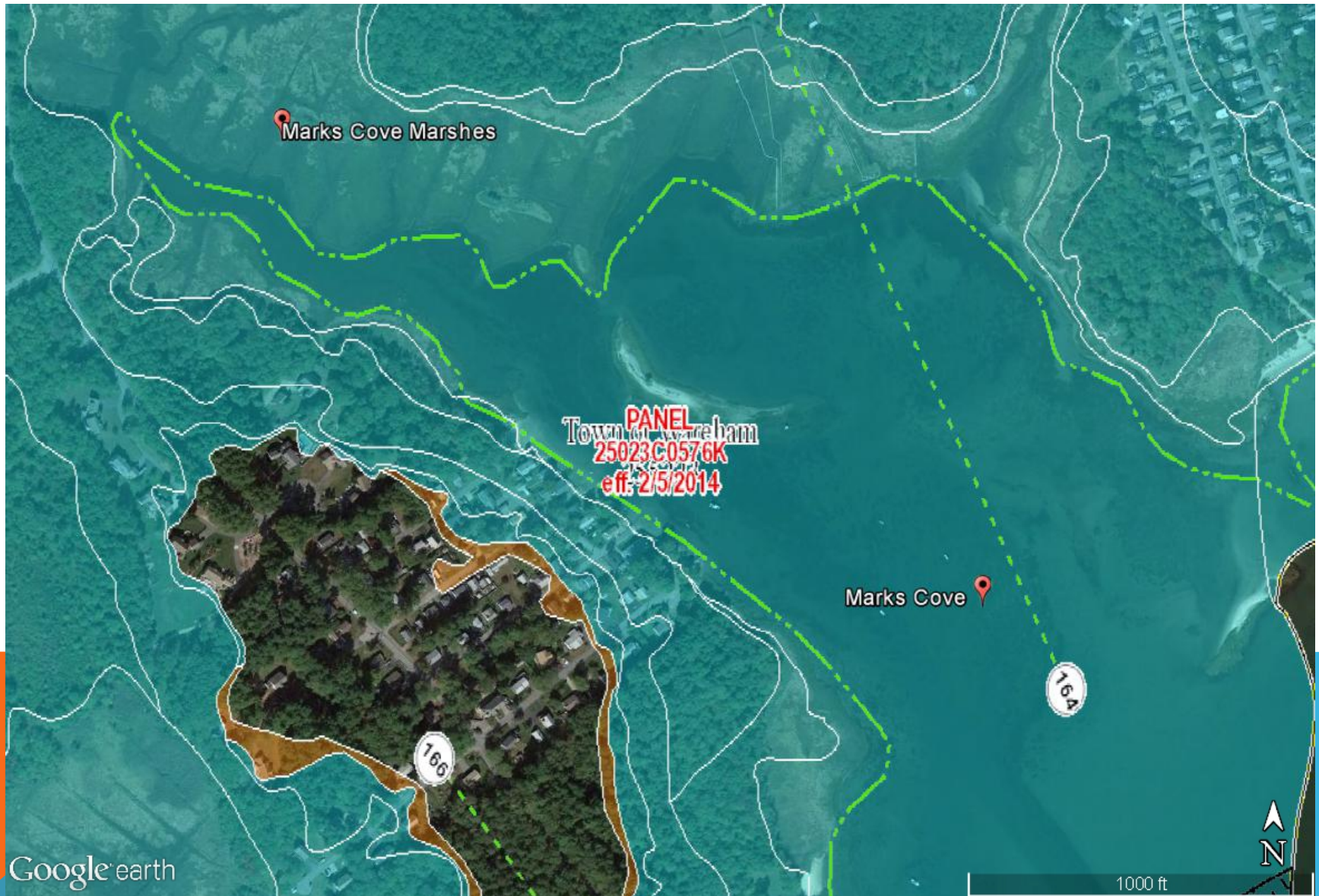


**MAP NUMBER**  
25023C0576K  
**MAP REVISED**  
FEBRUARY 5, 2014

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

# MARK'S COVE, WAREHAM, GOOGLE EARTH NFHL



# MARK'S COVE, WAREHAM, GOOGLE EARTH NFHL



# TECHNICAL ASSISTANCE & TRAINING

Your Flood Hazard Management Program office can help you with

- Technical assistance by email, letter or phone
- Review of proposals
- FEMA floodplain management materials and maps
- Training (map use, building codes, elevation certificates, higher standards, Letters of Map Change, etc.)
- Flood insurance questions and referrals
- Hazard mitigation project funding (information about programs)
- General NFIP questions

[www.studiopress.com](http://www.studiopress.com)

**Remember:  
We work for you!**



# GIVE US A CALL!

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Getty photo:  
John Cancalosi