



Date of Council Work Session: November 12, 2013

**TOWN OF LEESBURG  
TOWN COUNCIL MEETING**

**SUBJECT:** Request for Council to initiate amendments to the Zoning Ordinance - Article 13 as well as the Design and Construction Manual (DCSM) - Section 5-400 to conform to the current FEMA and Virginia Department of Conservation and Recreation (DCR) standards for the Towns floodplain management program regarding the regulatory 100 year (FEMA) floodplains located within the Town's corporate limits.

**Staff Contacts:** William R. Ackman, Jr. P.E.  
Irish Grandfield

**Recommendation:** Staff recommends that Council pass the attached resolution directing Staff to prepare amendments to the Zoning Ordinance - Article 13 as well as the DCSM - Section 5-400 to conform to the current FEMA and DCR standards for the Towns floodplain management program regarding the regulatory 100 year (FEMA) floodplains located within the Town's corporate limits.

**Summary:** Every few years, Staff receives a visit from DCR who performs an audit of our (FEMA) 100 year Floodplain Ordinances. As part of their audit, they meet with staff to discuss how many claims have been filed via FEMA flood insurance, review recently approved floodplain and floodplain alteration studies and then review any comments they may have regarding the Town's current versions of the Zoning Ordinance and DCSM.

On July 30, 2013, Mr. Nabil Ghalayini, P.E., CFM, DWRE, a Floodplain Program Specialist with DCR, met with various Town staff to discuss the items listed above. In his findings letter dated September 4, 2013 (see attached), Mr. Ghalayini found that *“the Town's Floodplain Management Program and activities in the floodplain appear to be in substantial conformance with the NFIP (National Flood Insurance Program) requirements”*. However, there were some housekeeping updates that DCR is requiring the Town make to our Zoning Ordinance and DCSM to be in full compliance with all of the *most current* federal and state requirements pertaining to activities in the FEMA floodplain.

**Background:** In order for any jurisdiction to become and remain eligible to participate in FEMA's Flood Insurance Program, the locality must meet or exceed all FEMA and DRC requirements. In addition, the locality must properly enforce their written floodplain regulations. Therefore, DCR prepares audits on all jurisdictions every 2 to 5 years to ensure that a jurisdiction is continuing to properly enforce, maintain and update their floodplain policies, procedures and ordinances on a regular basis.

Request for Council to initiate amendments to the Zoning Ordinance as well as the DCSM to conform to the current FEMA and DCR standards for the Towns floodplain management program regarding the regulatory 100 year (FEMA) floodplains located within the Town's Corporate Limits.  
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Prior to the July 30, 2013 audit, the Town's last DCR floodplain audit was on October 22, 2008. The Town was found to be in general conformance with FEMA and DCR regulations after that audit.

As noted in the summary above, after our July 30, 2013 audit, the Town once again was deemed to be in *general conformance* with DCR and FEMA's regulations. In fact, due to our floodplain ordinances, application of and enforcement of said ordinances, the Town of Leesburg has one of the lowest flood insurance claim rates in the entire State. Nonetheless, DCR is still requiring that the Town update our ordinance with some housekeeping items as noted within Mr. Ghalayini's letter to conform more to FEMA's latest Model Ordinance dated October 2011.

Based upon DCR's list, there do not appear to be any glaring errors in our ordinances. As noted in the attached CAV report prepared by Mr. Ghalayini, the issues noted were only "minor" in nature. Many of these items just require adding or revising definitions, re-wording or adding cross references to portions of our existing ordinances to better conform to FEMA's latest Model Ordinance. Other items, in many cases, just clarify what staff is already doing and provides additional code references to assist the Town with the application of and enforcement of floodplain regulations.

Once Council initiates Staff to begin updating our Floodplain ordinances, Staff anticipates coordinating with the private sector and various Town commissions before completing a final draft by the end of March 2014. After the final draft is blessed by DCR, Staff will bring the ordinance updates to the Planning Commission and to the Town Council for Public Hearings and adoption.



COMMONWEALTH of VIRGINIA  
DEPARTMENT OF CONSERVATION AND RECREATION

600 East Main Street  
Richmond, Virginia 23219  
(804) 786-1712

September 4, 2013

William Ackman, P.E.  
Director of Plan Review / Floodplain Management Administrator  
Town of Leesburg  
25 West Market St  
Leesburg, VA 20176

Dear Mr. Ackman:

Thank you for taking the time to meet with me and provide a floodplain tour on July 30, 2013. The meeting was held for the purpose of conducting a National Flood Insurance Program (NFIP) Community Assistance Visit (CAV) to help the Town identify the steps necessary for maintaining compliance with NFIP requirements. Compliance is essential for remaining in good standing in the NFIP and for joining the Community Rating System (CRS) program.

I understand that it is the Town's intent to ensure that its floodplain ordinances meet or exceed the NFIP minimum requirements. Based on your August 13, 2013 email, you will initiate the process of updating the Town's floodplain regulations in September 2013 and provide DCR with a final draft in March 2014. Following are DCR's findings and recommendations that you might find useful.

Based on information provided by the Town during the CAV meeting, the Town's floodplain management program and activities in the floodplain appear to be in substantial compliance with the NFIP requirements. However, based on the FEMA-approved Floodplain Ordinance Checklist (FPO Checklist) the Town's current floodplain regulations (*Zoning Ordinance Article 13 - Flood Protection and Article 18 - Definitions of the Zoning Ordinance*) do not address all federal and state requirements pertaining to activities in the floodplain. We recommend that the Town update its floodplain regulations to reflect the provisions of the Virginia Model Floodplain Management Ordinance (Model Ordinance). The Model Ordinance was developed by FEMA and DCR to help participating NFIP communities in Virginia to comply with federal and state floodplain requirements. It can be custom tailored to fit the Town's regulatory framework.

For your convenience, I have enclosed the completed FPO checklist. A copy of the Model Ordinance was provided to the Town during the CAV meeting. A copy of the Model Ordinance is enclosed.

*State Parks • Stormwater Management • Outdoor Recreation Planning  
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation*

Additional guidance is also available at DCR's Dam Safety and Floodplain Management webpage at [http://www.dcr.virginia.gov/dam\\_safety\\_and\\_floodplains/documents/fpmordguidance100311.pdf](http://www.dcr.virginia.gov/dam_safety_and_floodplains/documents/fpmordguidance100311.pdf).

DCR recommends that the Town address the following:

- Several key definitions are not included in the Town's floodplain regulations. Please include, at a minimum, any applicable definitions listed in Item 3 of the FPO checklist. See Glossary section of the Model Ordinance.
- Include a statement about statutory authority; or if such statement is present elsewhere in the zoning code, consider providing a cross reference to it. See Section 1.1 of the Model Ordinance.
- Include a statement of purpose citing health, safety and welfares; or if such statement is present elsewhere in the zoning code, consider providing a cross reference to it. See Section 1.1 of the Model Ordinance.
- Include language about ordinance administration procedures and the FPA's responsibilities, including permit review to assure that sites are reasonably safe from flooding. See Section 2.2 of the Model Ordinance.
- Include enforcement provisions (violations/penalty); or if such provisions are present elsewhere in the zoning code, consider providing a cross reference to these provisions. See Section 1.7 of the Model Ordinance.
- Include a statements about Abrogation and Greater Restriction; or if such statement is present elsewhere in the zoning code, consider providing a cross reference to it. See Section 1.5 of the Model Ordinance.
- Include a statements about Severability; or if such statement is present elsewhere in the zoning code, consider providing a cross reference to it. See Section 1.6 of the Model Ordinance.
- Consider formally designating a Floodplain Administrator (FPA) and specifying the FPA's responsibilities. If the Zoning Administrator is effectively fulfilling the role of FPA, consider stating so. See Section 2.1 of the Model Ordinance.
- Include language about ordinance administration procedures and the FPA's responsibilities, including permit review to assure that sites are reasonably safe from flooding, and recordkeeping. It is important that the Town maintain records of LOMR as-builts as well as any elevation certificates in the SFHA in perpetuity. See Article II of the Model Ordinance.
- Under 44CFR65.3, the NFIP community is required to submit to FEMA new technical data resulting from physical changes that may affect flooding conditions within six months of the data availability. Please include this provision. See Section 2.7 of the Model Ordinance.
- Several NFIP requirements that apply to all known flood prone area, regardless of flood zone designation by FEMA, should be included in the Town's floodplain regulations:
  - Review permits to assure sites are reasonably safe from flooding. See Model Ordinance Sections 4.2. For new construction and substantial improvements in flood-prone areas:
    - Review permits to assure development site is reasonably safe from flooding. See Model Ordinance Section 4.2.A. and 4.2.B.

- Unless new or substantially improved structures, including manufactured homes, are strictly prohibited in all flood prone areas, the floodplain regulations must include the following provisions:
  - Require anchoring (including manufactured homes) to prevent floatation, collapse, or lateral movement. See Model Ordinance Section 4.2.C.
  - Require the use of flood-resistant materials and construction methods that minimize flood damage. See Model Ordinance Section 4.2.D.
  - Require keeping electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities away from floodwaters. See Model Ordinance Section 4.2.E.
- Review subdivision proposals to assure that:
  - Such proposals minimize flood damage. See Model Ordinance Section 4.4.A.
  - Adequate drainage is provided. See Model Ordinance Section 4.4.C.
- Require new and replacement water supply and sanitary sewer systems to be designed to minimize or eliminate infiltration. See Model Ordinance Section 4.2.F and 4.2.G.
- Require on-site waste disposal systems be located to avoid impairment or contamination. See Model Ordinance Section 4.2.H.
- The floodplain regulations should include language regarding determination of the base flood elevations in Zone A consistent with Section 3.1.A.3 of the Model Ordinance. In Zone A, require base flood elevation data for subdivision proposals or other developments greater than 50 lots or 5 acres. See Section 4.4.D of the Model Ordinance.
- For Zone A, when BFEs are obtained or determined, all applications for development in the floodplain should include the BFE at the development site, the elevation of the lowest floor, the flood proofing elevation and existing and proposed topographic data. Consider supplementing current language under 110-59. See Section 4.1.B of the Model Ordinance.
- The requirements for elevating and anchoring manufactured homes in existing manufactured home parks should be specified. See Sections 4.2.B, 4.3.A, and 4.3.D of the Model Ordinance.
- Include requirements for permanent openings designed to allow the entry and exit of flood waters for new construction and/or substantial improvements, fully enclosed areas below the lowest floor (parking, building access or storage) See Section 4.3.C of the Model Ordinance.
- As a participating NFIP community, the Town is ultimately responsible for compliance with the NFIP regulations, including building permits and inspections, within its limits. If the Town relies on Loudoun County for building permits and inspections, consider specifying the applicable NFIP floodplain requirements in a Memorandum of Understanding (MOU) or other written agreement with the County to help ensure compliance. The Town's Floodplain Administrator is responsible for seeing that the building permits and inspections are compliant with the NFIP requirements.
- Please note that reference to the Virginia Uniform State Building Code (USBC) is not sufficient. It is FEMA's policy to require that the NFIP requirements be spelled out in the community's floodplain regulations. Similarly, any MOU with the County should refer to the specific NFIP

Ltr. to W. Ackman  
September 4, 2013  
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requirements in addition to referring to the USBC. Also, please note that FEMA requires that elevation certificates for buildings in the floodplain be saved in perpetuity.

- Please provide FEMA with a GIS layer of the most current Town limits so that they may be reflected in upcoming map revisions.

Please let me know if you have any questions.

Sincerely,



Nabil Ghalayini, P.E., CFM, D.WRE  
Floodplain Program Specialist

**FEDERAL EMERGENCY MANAGEMENT AGENCY  
NATIONAL FLOOD INSURANCE PROGRAM  
COMMUNITY ASSISTANCE VISIT (CAV)  
REPORT**

**SECTION I**

1. NAME OF COMMUNITY Town of Leesburg	2. STATE VA	3. COMMUNITY ID # 510091	4. COUNTY Loudoun
5. VISIT CONDUCTED BY Nabil Ghalayini, P.E., CFM	6. AGENCY DCR	CIS UPDATED 9/12/2013	7. DATE OF VISIT 7/30/2013

**SECTION II**

8. NAME OF LOCAL OFFICIAL Bill Ackman, P.E.	9. TELEPHONE NO. 703-771-2740	FOR A LIST OF THE ATTENDEES SEE SECTION V.
10. TITLE: Director of Plan Review	11. ADDRESS OF LOCAL OFFICIAL 25 West Market St Leesburg, VA 20176 <a href="mailto:wackman@leesburgva.gov">wackman@leesburgva.gov</a>	

**SECTION III – FINDINGS**

<b>PART A: Check appropriate response.</b>	<b>Level of Findings</b>
<b>1. Are there problems with the community's floodplain management regulations?</b>	<b>Minor</b>
<b>2. Are there problems with the community's administrative and enforcement procedures?</b>	<b>None</b>
<b>3. Are there engineering or other problems with the maps or flood insurance study?</b>	<b>Minor</b>
<b>4. Are there any other problems in the community's floodplain management program?</b>	<b>None</b>
<b>5. Are there any programmatic issues or problems identified? (Programmatic problems may relate to the nation or region as a whole, not merely to an individual community)</b>	<b>No</b>

**6. Are there any potential violations of the community's floodplain management regulations? (Check appropriate category)**

**No violations have been identified**

### SECTION IV – FINDINGS (CONT)

1. **Floodplain Management Regulations:** The Town’s floodplain rewritten in 2003 with additional revisions in February 2011. DCR identified minor deficiencies.
2. **Administrative and Enforcement Procedures:** No issues identified.
3. **Engineering, Flood Maps and the Flood Insurance Study:** Some discrepancies between elevation contours used in FIS and local county elevation contours.
4. **Other Community Floodplain Management Program Problems:** No issues identified. Community was advised not to purge elevation certificates for properties in the floodplain.
5. **Programmatic Issues:** None identified.
6. **Potential Violations:** None identified.

### SECTION V –NARRATIVE

#### 1. Community Background:

The Town of Leesburg includes 12.4 sq.mi; its population is 42,616 (2010 census)

It first joined the NFIP in 1975. The last CAV was on 10/22/2008.

The current FIRM date is 7/5/2001. The SFHA flood zones are A, and AE with FW.

#### 2. General CAV notes

The Town includes floodplain in its comprehensive plan. Except for approximately 1500 ft along the north side (left bank) of Town Branch between Wirt Street SW and Harrison Street SE where non-residential buildings in the flood fringe are allowed, structures are not permitted in the SFHA. The Town relies on the CLOMR / LOMR process to remove a property from the SFHA before allowing new structures. Any permitted use of the SFHA must not increase the BFE. A floodplain alteration study is required along with the permit application. Approval requires a CLOMR. Certificate of occupancy requires a completed LOMR. The Dulles Motorcars building in the SFHA of Tuscarora Creek was occupied with a CLOMR only due to a misunderstanding, and the Town is working on obtaining the LOMR after the fact. The Town does not have a dedicated floodplain outreach program, but it provides assistance to residents with the LOMA application process.

#### 3. Additional Meeting Participants

NAME	TITLE	PHONE	EMAIL
Mac Willingham,	Senior Engineer	703-771-2741	<a href="mailto:mwillingham@leesburgva.gov">mwillingham@leesburgva.gov</a>

P.E., CFM			
Scott Parker, AICP	Assistant Town Manager	703-771-2771	<a href="mailto:sparker@leesburgva.gov">sparker@leesburgva.gov</a>
Dennis Darnes, P.E.	Chief of Plan Review	703-771-2740	<a href="mailto:ddarnes@leesburgva.gov">ddarnes@leesburgva.gov</a>
Berry Hill, Susan	Director of Planning & Zoning	703-771-2770	<a href="mailto:sberryhill@leesburgva.gov">sberryhill@leesburgva.gov</a>
Mumaw, Charlie	Deputy Director of Public Works	703-771-2743	<a href="mailto:cmumaw@leesburgva.gov">cmumaw@leesburgva.gov</a>
Brian Boucher	Deputy Director of Planning & Zoning	703-771-2774	<a href="mailto:bboucher@leesburgva.gov">bboucher@leesburgva.gov</a>
Irish Grandfield	Environmental Planner	703-771-2766	<a href="mailto:igrandfield@leesburgva.gov">igrandfield@leesburgva.gov</a>
Chris Thompson	<b>Loudoun County</b> Building Code Operations Manager	703-771-5527 703-777-0220	<a href="mailto:Chris.Thompson@loudoun.gov">Chris.Thompson@loudoun.gov</a>

4. **Mitigation Grants:** None
5. **Other Community Floodplain Management Program Problems:** None
6. **Programmatic Issues:** None
7. **Potential Violations:** None
8. **Flood Insurance Statistics** (from CIS):
 

Total Number of Policies:	120
Total Premiums:	\$ 76,120
Insurance in Force:	\$27,763,800
Total Number of Closed Paid Losses:	4
Amount of Closed Paid Losses:	\$140,160
Sub. Damage Claims Since 1978:	0
9. **Hazard Mitigation Planning Status:** Included in state hazard mitigation plan.
10. **Other Community Floodplain Management Problems:** None identified.
11. **Other Findings:**
  - a. **Floodplain Tour:**

- i. **Repetitive Loss Structures:** Only one repetitive loss structure at 39955 Oatlands Mill Road was reported in the database, but it is actually outside Town limits and was not visited.
  - ii. **Minus Rate Structures:** No minus rated structures were reported.
  - iii. **Recent Buildings:** Douglass High School built above BFE of Tuscarora Creek with approved LOMR. Dulles Motorcars car dealership. Car lot in SFHA of Tuscarora Creek .
  - iv. **Other:** Greenway Farm stormwater detention facility, upper Tuscarora basin.
- b. **Capital Improvements:** Two regional stormwater detention facilities were built and one facility is planned to mitigate flood impacts on existing structures in the floodplain.
  - c. **State & Federal Projects:** VDOT overpass at Sycolin Road over Tuscarora Creek.

**12. Training Needs:** Recommended EMI Floodplain Management and CRS training.

**13. Municipalities:** Not applicable

**14. Community Rating System:** The Town is interested in participating in light of BW-12 and the new preliminary Loudoun County Risk MAP anticipated in 2014 that may eventually increase the number of existing structures in the SFHA. The Town was advised to join the NoVA CRS Users Group, and was provided with a copy of the CIS CRS "What if" table.

**15. Community Action Needed:** Provide FEMA with a GIS layer of the current Town limits. Update the floodplain regulations to meet current NFIP requirements.



Douglass High School



Dulles Motorcars

PRESENTED November 13, 2013

RESOLUTION NO. \_\_\_\_\_

ADOPTED \_\_\_\_\_

A RESOLUTION: INITIATING AMENDMENTS TO THE ZONING ORDINANCE:  
ARTICLE 13; AND THE DESIGN AND CONSTRUCT STANDARDS  
MANUAL: ARTICLE 5, SECTION 5-400 TO CONFORM TO CURRENT  
FEMA AND VIRGINIA DCR STANDARDS

WHEREAS, the Leesburg Zoning Ordinance and the Leesburg Design and Construction Standards Manual (DCSM), set forth Town ordinances and regulations for the Towns floodplain management program regarding the regulatory 100 year (FEMA) floodplains throughout the Town; and

WHEREAS, in a letter from the Virginia Department of Conservation and Recreation (DCR), dated September 4, 2013, DCR states “the Town’s Floodplain Management Program and activities in the floodplain appear to be in substantial conformance with the NFIP (*National Flood Insurance Program*) requirements”.

WHEREAS, the letter from DCR further states that the Town’s current floodplain regulations do not address all of the most current federal and state requirements pertaining to activities in the FEMA floodplain; and

WHEREAS, amendments to the Leesburg Zoning Ordinance and the DCSM regarding FEMA floodplain ordinances and regulations are necessary to conform to the floodplain requirements recommended by FEMA and DCR.

THEREFORE, RESOLVED, by the Council of the Town of Leesburg that amendments to the Leesburg Zoning Ordinance and the DCSM floodplain ordinances and regulations are hereby initiated to Conform to the requirements set forth by FEMA and DCR.

A RESOLUTION: INITIATING AMENDMENTS TO THE ZONING ORDINANCE: ARTICLE 13; AND THE DESIGN AND CONSTRUCT STANDARDS MANUAL: ARTICLE 5, SECTION 5-400 TO CONFORM TO CURRENT FEMA AND VIRGINIA DCR STANDARDS

PASSED this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

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Kristen C. Umstattd, Mayor  
Town of Leesburg

ATTEST:

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Clerk of Council