

DEPARTMENT OF WATER RESOURCES

NORTHERN REGION OFFICE
2440 MAIN STREET
RED BLUFF, CA 96080-2356



October 18, 2019

Ms. Tina Scott, Chairperson
Lake County Board of Supervisors
255 North Forbes Street
Lakeport, California 95453

Dear Ms. Scott:

The purpose of this letter is to notify you of the Department of Water Resources' (DWR) findings from our Community Assistance Visit (CAV) with the County of Lake (County). On March 28, 2019, Michael Ward with DWR and Xing Liu with the Federal Emergency Management Agency (FEMA) Region IX met with your staff to discuss the County's participation in the National Flood Insurance Program (NFIP). The enclosed CAV report summarizes our findings.

The success of the County's floodplain management program depends upon knowledgeable and experienced staff. Staff turnover in recent years has led to problems with administration and enforcement of the program. Administration issues include the lack of documentation for new development. Enforcement problems have resulted in several new structures that are non-compliant with minimum NFIP construction standards. Several of these structures also fail to meet the County's higher construction standards for floodplain development.

The County has made progress in mitigating many of these problems, but improvements to the program are needed. The following community actions have been identified to help ensure program compliance and to mitigate existing violations:

1. Develop Standard Operating Procedures and Inspection Protocols for the administration and enforcement of the County's floodplain management program. We suggest that the County also look at opportunities to automate its permitting process using its permit tracking software.
2. Update the County's floodplain management ordinance to include the following NFIP requirements:
 - Code of Federal Regulations (CFR) Section 65.3 requirement to notify FEMA within 6 months of availability of technical or scientific data for changes in base flood elevation.

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- CFR Section 60.3(b)(3) requirement to provide the base flood elevation for development of subdivisions greater than 50 lots or 5 acres within an approximate Zone A.
 - CFR Section 60.3(d)(3) requirement for hydrologic and hydraulic analyses for development within a regulatory floodway.
3. Evaluate the compliance of the 53 Elevation Certificates (EC) that were recently developed by the County to mitigate past permitting errors. Provide a list of structures from this compliance evaluation that did not meet minimum NFIP construction standards.
 4. Provide a Corrective Action Plan to mitigate violations for the 13 structures identified in the CAV report and the structure violations identified from the County's review of the 53 ECs.

Please provide a plan for addressing these actions and a timeline for implementation by November 22, 2019. If you have any questions concerning the report or require further information, please contact Mr. Michael Ward at (530) 529-7378.

Sincerely,



Todd Hillaire, Chief
Flood and Watershed Engineering Section

Enclosures

cc: Mr. Scott De Leon
County of Lake
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Ms. Yuliya Osetrova
County of Lake
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NFIP Specialist & Community Rating System Coordinator

Federal Emergency Management Agency, Region IX

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Oakland, California 94607

FEDERAL EMERGENCY MANAGEMENT AGENCY COMMUNITY ASSISTANCE VISIT REPORT

SECTION I

| | | | |
|--|-------------------------|--|-------------------------------------|
| 1. NAME OF COMMUNITY: Lake County | 2. STATE: California | 3. COMMUNITY ID NUMBER: 060090 | 4. COUNTY: Lake County |
| 5. VISIT CONDUCTED BY: Xing Liu, Michael Ward | | 6. AGENCY: California Department of Water | 7. DATE OF VISIT: March 28, 2019 |

SECTION II

| | |
|--|--|
| 8. NAME OF LOCAL OFFICIAL: Dave Cowan | 9. TELEPHONE NUMBER: (707) 263-2344 |
| 10. ADDRESS OF LOCAL OFFICIAL: 255 North Forbes Street, Lakeport, California 95453 | |

SECTION III - FINDINGS PART A

| QUESTIONS - Select appropriate response | RESPONSE | | |
|---|-----------------------------|-------|------|
| | Serious | Minor | None |
| 1. Are there problems with the community's floodplain management regulations? | | X | |
| 2. Are there problems with the community's administrative/enforcement procedures? | X | | |
| 3. Are there engineering or other problems with the maps or Flood Insurance Study? | | X | |
| 4. Are there any other problems in the community's floodplain management program? | X | | |
| 5. Are there problems with the Biennial Report data? | _ N/A _ YES _ N/A _ NO | | |
| 6. Are there any programmatic issues or problems identified? | _ X _ YES _____ NO | | |
| 7. Have structures been identified as being in violation? (Check appropriate category below.) <u> X </u> A potential violation or violations has/have been identified. _____ No violations have been identified. <u> X </u> Actions are being taken on the part of the community to remedy the violation(s) identified during the CAV. | | | |

**NATIONAL FLOOD INSURANCE PROGRAM
COMMUNITY ASSISTANCE VISIT
PART B - NARRATIVE**

Lake County, California
March 28, 2019

The following is a summary of Community Assistance Visit (CAV) findings in support of Section III – Findings, Part A, located on the previous page. The CAV included the review of the County's floodplain management ordinance, a tour of Special Flood Hazard Areas (SFHA), and discussions with staff on permitting and enforcement procedures. The County's last CAV was conducted in 2012.

Discussion of Section III - Findings, Part A, Questions 1 through 7

Section III, Question 1 - Floodplain Management Regulations

Floodplain management regulations are codified in Chapter 25 – Floodplain Management of the County's Municipal Code. The code includes higher construction standards for lowest floor elevation and floodproofing for all flood zones. Within an approximate Zone A, new or substantially improved development is required to be elevated at least 1-foot above the Base Flood Elevation (BFE) as determined by the Floodplain Administrator. In all other zones, the lowest floor is required to be elevated at least 1-foot above the BFE.

The Municipal Code appears to be missing the following National Flood Insurance Program (NFIP) requirements:

- 1) Code of Federal Regulations (CFR) Section 65.3 requirement to notify FEMA within 6 months of availability of technical or scientific data for changes in base flood elevation.
- 2) CFR Section 60.3(b)(3) requirement to provide the base flood elevation for development of subdivisions greater than 50 lots or 5 acres within an approximate Zone A.
- 3) CFR Section 60.3(d)(3) requirement for a hydrologic and hydraulic analyses for development within a regulatory floodway.

The County should review the language of Municipal Code Section 5.1(c)(1)(i) regarding elevation requirements for development within Zone AO. This section requires development to be "*elevated above the highest adjacent grade, or nearest downstream road, whichever is higher, to a height equal to or exceeding the depth number specified in feet on the FIRM (Flood Insurance Rate Map) by at least one foot.*"

The text is confusing and could be paraphrased as ... *elevated above the highest*

adjacent grade to the depth number specified in feet on the FIRM or to the height of nearest downstream road, whichever is higher, plus one foot.

It's important to note that the code does not require higher elevations for service equipment such as electrical, heating, ventilation, plumbing and air conditioning equipment. This is compliant with minimum NFIP requirements; however, Section 322.1.6 of the California Residential Code now requires service equipment to be elevated to the BFE plus one foot.

Section III, Question 2 - Administrative and Enforcement Procedures

A problem impacting the County's ability to maintain compliance with the NFIP has been staff turnover. Changes in staffing have led to a breakdown in permitting procedures resulting in at least 61 developments within SFHAs that were not required to obtain an Elevation Certificate (EC). The County has determined that 54 of those developments were insurable structures. In response, the County has mitigated this oversight by having staff develop ECs for structures located within Zone AO. The County also contracted with a surveyor to develop ECs for development located within Zone AE. To date, ECs have been obtained for all of the insurable structures except for one.

The County's procedure for processing permit applications starts at the Community Development Department. When a permit application comes to the department, the site address is reviewed using a Geographical Information System (GIS) to determine if the location falls within a SFHA. Those developments that fall within a SFHA are forwarded to the County Floodplain Administrator (FPA). The FPA makes a determination of the flood zone, BFE, and minimum construction requirements. A final EC is required when construction is completed.

The County's procedure for processing permit applications depends on experienced personnel. Written Standard Operating Procedures would help alleviate some of the County's problems with administration and oversight of floodplain development permits. Aspects of permit processing and oversight could also be automated using permit tracking software.

Section III, Question 3 - Engineering or Other Problems with Maps or Flood Insurance Study

County FIRMs became effective on September 30, 2005. Four FIRM panels for the Anderson Springs area are currently under revision. The flood profile for Wolf Creek is being revised and should be effective in 2020.

Section III, Question 4 - Community Floodplain Management Program

Assessment of the County's floodplain management program included a field inspection of current development and a review of ECs for structures built during the period of 2013 through 2018. The field inspection was conducted on March 27, 2019, by FEMA and County staff. Nine structures were identified for compliance verification. With one exception, developments were found to be compliant with minimum NFIP requirements.

The EC review entailed the evaluation of 25 final construction ECs that were provided by the County. Structural compliance issues were identified for 13 of the developments that included violations for lowest floor elevation, flood opening area, and service equipment protections. The following is a list of developments that have NFIP compliance issues. Applicable EC data are summarized for each development along with a brief description of potential violations.

1) 18740 Magnolia Court, Hidden Valley Lake

EC Certification Date: 8/30/2017

- Item A7. Building Diagram Number: 8
- Item A8a. Square footage of crawlspace: 1,640 square feet
- Item A8c. Total net area of flood openings for crawlspace: 1,199 square inches
- Item A9a. Square footage of attached garage: 583 square feet
- Item A9c. Total net area of flood openings for attached garage: 652 square inches
- Item B8. Flood Zone: AE
- Item B9. BFE: 954.2 feet
- Item C2a. Top of the bottom floor: 951.8 feet
- Item C2b. Top of next higher floor: 955.5 feet
- Item C2d. Top of the garage slab: 952.8 feet
- Item C2e. Lowest elevation of machinery: 954.5 feet

The development is non-compliant with minimum NFIP construction standards because the total area of the crawlspace flood openings is insufficient. One square inch of flood opening is required for each square foot of crawlspace. Because the development does not meet this requirement, the "top of the bottom floor" (which is the floor of the crawlspace) is considered the lowest floor for regulatory compliance.

2) 2539 Lagoon Drive, Lakeport

EC Certification Date: 2/5/2018

- Item A7. Building Diagram Number: 8
- Item A8a. Square footage of crawlspace: 2,507 square feet
- Item A8c. Total net area of flood openings for crawlspace: 1,626 square inches
- Item A9a. Square footage of attached garage: 402 square feet
- Item A9c. Total net area of flood openings for attached garage: 174 square inches

- Item B8. Flood Zone: AE
- Item B9. BFE: 1,331.0 feet
- Item C2a. Top of bottom floor: 1,328.0 feet
- Item C2b. Top of next higher floor: 1,332.1 feet
- Item C2d. Top of the garage slab: 1,329.5 feet
- Item C2e. Lowest elevation of machinery: 1,327.8 feet

The development is non-compliant with minimum NFIP construction standards because the total area of the crawlspace and garage flood openings is insufficient. One square inch of flood opening is required for each square foot of crawlspace and garage. Because the development does not meet this requirement, the "top of the bottom floor" (which is the floor of the crawlspace) is considered the lowest floor for regulatory compliance.

The elevation of service equipment does not meet minimum NFIP requirements unless it is designed and installed to prevent water from entering or accumulating within the components and is resistant to hydrostatic and hydrodynamic loads during flooding.

3) 19575 Mountain Meadow South, Hidden Valley Lake

EC Certification Date: 4/23/2018

- Item A7. Building Diagram Number: 8
- Item A9a. Square footage of attached garage: 406 square feet
- Item A9c. Total net area of flood openings for attached garage: 0 square inches.
- Item B8. Flood Zone: AE
- Item B9. BFE: 953.9 feet
- Item C2b. Top of next higher floor: 955.4 feet
- Item C2d. Top of the garage slab: 951.5 feet
- Item C2e. Lowest elevation of machinery: 954.1 feet

The development is non-compliant with minimum NFIP construction standards because flood openings have not been provided for the attached garage. One square inch of flood opening is required for each square foot of garage. Because the development does not meet this requirement, the garage slab is considered the lowest floor for regulatory compliance.

4) 2100 Big Valley Road, Finley

EC Certification Date: 12/5/2016

- Item A7. Building Diagram Number: 9
- Item B8. Flood Zone: AO-2
- Item E1a. Top of the bottom floor: 0.7 feet below the HAG
- Item E1b. Top of the bottom floor: 0.4 feet below the LAG
- Item E2. Top of next highest floor: 2.3 feet above the HAG.

Item E4. Top of platform of machinery: 0.2 feet below the HAG.
 HAG – Highest Adjacent Grade
 LAG – Lowest Adjacent Grade

The development is non-compliant with minimum NFIP construction standards because the crawlspace floor is subgrade on all sides. Because of this violation, the crawlspace floor is considered to be the lowest floor for regulatory compliance. Communities can allow below-grade crawlspace construction within a SFHA if the communities floodplain management ordinance allows for that design. Additional requirements for subgrade crawlspaces are summarized in FEMA Technical Bulletin 11.

The “top of the next highest floor” would be the lowest floor if the elevation of the crawlspace floor was at or above the LAG. The elevation of “top of the next highest floor” is non-compliant with the County’s 1-foot freeboard requirement for lowest floor elevation.

The elevation of service equipment does not meet minimum NFIP requirements unless it is designed and installed to prevent water from entering or accumulating within the components and is resistant to hydrostatic and hydrodynamic loads during flooding.

5) 12753 Blue Heron Court, Clearlake Oaks

EC Certification Date: 3/26/2016

Item A7. Building Diagram Number: 8
 Item A8a. Square footage of crawlspace: 1450 square feet
 Item A8c. Total net area of flood openings for crawlspace: 1821 square inches
 Item A9a. Square footage of attached garage: 440 square feet
 Item A9c. Total net area of flood openings for attached garage: 420 square inches
 Item B8. Flood Zone: AE
 Item B9. Base Flood Elevation: 1,331.0 feet
 Item C2b. Top of next higher floor: 1,331.6 feet
 Item C2d. Top of the garage slab: 1,330.2 feet

The development is non-compliant with minimum NFIP construction standards because the total area of the garage flood openings is insufficient. One square inch of flood opening is required for each square foot of garage. Because the development does not meet this requirement, the garage slab is considered to be the lowest floor for regulatory compliance.

The “top of the next highest floor” would be the lowest floor if the garage had sufficient flood openings. The elevation of “top of the next highest floor” is non-compliant with the County’s 1-foot freeboard requirement for lowest floor elevation.

6) 2985 Soda Bay Road, Finley

EC Certification Date: 2/7/2017

- Item A7. Building Diagram Number: 8
- Item A8a. Square footage of crawlspace: 1,644 square feet
- Item A8c. Total net area of flood openings for crawlspace: 1,657 square inches
- Item B8. Flood Zone: AO-2
- Item E2. Top of next higher floor: 1.9 feet above the HAG
- Item E4. Top of machinery platform: 0.2 feet above the HAG

The development is non-compliant with minimum NFIP construction standards and the County's 1-foot freeboard requirement for lowest floor elevation. Minimum NFIP standards require the lowest floor to be elevated 2-feet above the HAG. County construction standards require the lowest floor to be elevated 3-feet above the HAG.

The elevation of service equipment does not meet minimum NFIP requirements unless it is designed and installed to prevent water from entering or accumulating within the components and is resistant to hydrostatic and hydrodynamic loads during flooding.

7) 17110 Appaloosa Road, Lower Lake

EC Certification Date: 6/2/2015

- Item A7. Building Diagram Number: 6
- Item A8a. Square footage of crawlspace: 1,351 square feet
- Item A8c. Total net area of flood openings for crawlspace: 1,793 square inches
- Item B8. Flood Zone: AO-1
- Item E2. Top of next higher floor: 2.8 feet above the HAG
- Item E4. Top of machinery platform: 0.5 feet below the HAG

The building diagram identified on the EC is incorrect and should be diagram 8. The total net open area for flood openings is likely over-estimated based on the "Typical Vent" photo included with the EC. The photo shows that the wall opening may be considerably smaller than the flood opening cover.

The elevation of service equipment does not meet minimum NFIP requirements unless it is designed and installed to prevent water from entering or accumulating within the components and is resistant to hydrostatic and hydrodynamic loads during flooding.

8) 15435 Sunset Avenue, Middletown

EC Certification Date: 3/1/2017

- Item A7. Building Diagram Number: 8
- Item A8a. Square footage of crawlspace: 1,035 square feet
- Item A8c. Total net area of flood openings for crawlspace: 1,036 square inches

- Item B8. Flood Zone: AO-2
- Item E2. Top of next higher floor: 3.5 feet above the HAG
- Item E4. Top of machinery platform: 0.5 feet above the HAG

The elevation of service equipment does not meet minimum NFIP requirements unless it is designed and installed to prevent water from entering or accumulating within the components and is resistant to hydrostatic and hydrodynamic loads during flooding.

9) 19815 Mountain Meadow South, Hidden Valley Lake

EC Certification Date: 8/9/2018

- Item A7. Building Diagram Number: 8
- Item A8a. Square footage of crawlspace: 1,600 square feet
- Item A8c. Total net area of flood openings for crawlspace: 1,920 square inches
- Item A9a. Square footage of attached garage: 446 square feet
- Item A9c. Total net area of flood openings for attached garage: 328 square inches
- Item B8. Flood Zone: AE
- Item B9. Base Flood Elevation: 953.0 feet
- Item C2b. Top of the next higher floor: 960.3 feet
- Item C2d. Top of the garage slab: 950.3 feet
- Item C2e. Top machinery platform: 957.3 feet

The development is non-compliant with minimum NFIP construction standards because the total area of the garage flood openings is insufficient. One square inch of flood opening is required for each square foot of garage. Because the development does not meet this requirement, the garage slab is considered to be the lowest floor for regulatory compliance.

The building diagram identified on the EC is incorrect and should be diagram 7.

10) 20797 Napa Avenue, Middletown

EC Certification Date: 8/23/2016

- Item A7. Building Diagram Number: 8
- Item A8a. Square footage of crawlspace: 1,500 square feet
- Item A8c. Total net area of flood openings for crawlspace: 1,500 square inches
- Item B8. Flood Zone: AO-2
- Item E2. Top of next higher floor: 3.1 feet above the HAG
- Item E4. Top of machinery platform: Not provided.

The elevation of the service equipment is missing from the EC. This development also included a detached garage. A separate EC is required for the garage.

11) 15425 Sunset Avenue, Middletown

EC Certification Date: 1/17/2017

- Item A7. Building Diagram Number: 8
- Item A8a. Square footage of crawlspace: 1,928 square feet
- Item A8c. Total net area of flood openings for crawlspace: 2,764.8 square inches
- Item A9a. Square footage of garage: 396 square feet
- Item A9c. Total net area of flood openings: 316.8 square inches
- Item B8. Flood Zone: AO-2
- Item E3. Attached garage (top of slab): 0.0 feet

The development is non-compliant with minimum NFIP construction standards because the total area of the garage flood openings is insufficient. One square inch of flood opening is required for each square foot of garage. Because the development does not meet this requirement, the garage slab is considered to be the lowest floor for regulatory compliance.

Section E of the EC is incomplete.

12) 4886 Wendy Lane, Kelseyville

EC Certification Date: 3/14/2013

- Item A7. Building Diagram Number: 1A
- Item A9a. Square footage of garage: 568 square feet
- Item A9c. Total net area of flood openings for attached garage: "N/A"
- Item B8. Flood Zone: AO-2
- Item C2d. Top of garage slab: 999.7 feet (0.2 feet below the HAG)
- Item C2e. Top of machinery platform: 1001.6 (1.7 feet above the HAG)
- Item C2g. Highest adjacent grade: 999.9 feet

The development is non-compliant with minimum NFIP construction standards and the County's 1-foot freeboard requirement for lowest floor elevation. Minimum NFIP standards require the lowest floor to be elevated 2-feet above the HAG. County construction standards require the lowest floor to be elevated 3-feet above the HAG. Flood openings would bring the garage into compliance as an enclosure.

The elevation of service equipment does not meet minimum NFIP requirements unless it is designed and installed to prevent water from entering or accumulating within the components and resistant to hydrostatic and hydrodynamic loads during flooding.

13) 15975 Wardlaw Street, Middletown

EC Certification Date: 1/31/2017

- Item A7. Building Diagram Number: 8

- Item A8a. Square footage of crawlspace: 1,773 square feet
- Item A8b. Total net area of flood openings for crawlspace: 1,664 square inches
- Item B8. Flood Zone: AO-2
- Item E1. Top of bottom floor: 0.32 feet below the HAG
- Item E2. Top of next higher floor: 4.81 feet above the HAG
- Item E4. Top of machinery platform: 0.18 feet above the HAG

The development is non-compliant with minimum NFIP construction standards because the total area of the crawlspace flood openings is insufficient. One square inch of flood opening is required for each square foot of crawlspace. Because the development does not meet this requirement, the "top of the bottom floor" (which is the floor of the crawlspace) is considered the lowest floor for regulatory compliance.

The elevation of service equipment does not meet minimum NFIP requirements unless it is designed and installed to prevent water from entering or accumulating within the components and resistant to hydrostatic and hydrodynamic loads during flooding.

14) 21550 CA HWY 29, Middletown

EC Certification Date: 1/3/2018

- Item A7. Building Diagram Number: 8
- Item A8a. Square footage of crawlspace: 1,300 square feet
- Item A8c. Total net area of flood openings for crawlspace: 1,950 square inches
- Item A9a. Square footage of attached garage: 600 square feet
- Item A9b. Total net area flood openings for attached garage: 0 square inches
- Item B8. Flood Zone: AO-2
- Item E1a. Top of bottom floor: 1.0 feet above the HAG
- Item E1b. Top of bottom floor: 0.6 feet above the HAG
- Item E2. Top of next higher floor: 4.3 feet above the HAG
- Item E3. Attached garage (top of slab): 2.3 feet above the HAG
- Item E4. Top of platform of machinery: 4.2 feet above the HAG

The development is non-compliant with the County's 1-foot freeboard requirement for lowest floor based on the data provided. The FIRM shows the structure is partially located within the floodway.

The EC indicates that the structure is located within Zone AO-2; however, based on review of the FIRM, the structure is located within Zone AE. The BFE is approximately 1,123 feet based on the flood profile.



Section III, Question 5 - Biennial Report Data

Not applicable.

Section III, Question 6 - Programmatic Issues

It appears that a breakdown in procedures for permitting and enforcement of development within a SFHA occurred during the period of 2015 through 2018. This resulted in several structures being finalized without meeting the requirement for a final EC. This also resulted in structural violations for lowest floor elevation, flood opening area, and service equipment protections.

The County recently developed ECs for those structures where the final EC requirement was not enforced. It's unknown at this time how many of those structures are noncompliant with minimum construction standards. Our review of the 25 final construction ECs provided by the County show that roughly 50 percent of those structures may be noncompliant.

Under current County inspection practices, verification of flood openings and lowest floor elevations may not occur until final inspection. At that stage of development, structural retrofits may be necessary if the structure is found to be non-compliant. This problem can be mitigated if the County requires an inspection for flood openings and lowest floor elevation during early stages of construction.

It's important to note that Section 110.3.3 of the California Building Standards (CBS) requires a certified elevation upon placement of the lowest floor prior to any further

vertical construction. To help ensure NFIP compliance, an option for the County would be to verify flood openings during the lowest floor inspection.

In light of these problems, we recommend that the County establish Standard Operating Procedures for permitting and enforcement of development within a SFHA. This should include an assessment of how the County reviews building plan submittals as well as an evaluation of inspection protocols to ensure compliance with its construction standards.

Section III, Question 7 - Structure Violations

Structure violations were identified for the developments listed below. The violations are summarized in Section III, Question 4 – Community Floodplain Management Program.

- 1) 18740 Magnolia Court, Hidden Valley Lake
- 2) 2539 Lagoon Drive, Lakeport
- 3) 19575 Mountain Meadow South, Hidden Valley Lake
- 4) 2100 Big Valley Road, Finley
- 5) 12753 Blue Heron Court, Clearlake Oaks
- 6) 2985 Soda Bay Road, Finley
- 7) 17110 Appaloosa Road, Lower Lake
- 8) 15435 Sunset Avenue, Middletown
- 9) 19815 Mountain Meadow South, Hidden Valley Lake
- 10) 15425 Sunset Avenue, Middletown
- 11) 4886 Wendy Lane, Kelseyville
- 12) 15975 Wardlaw Street, Middletown
- 13) 21550 CA HWY 29, Middletown

Community Actions Needed

The following community actions have been identified:

1. Develop Standard Operating Procedures and Inspection Protocols for the administration and enforcement of the County's floodplain management program. We suggest that the County also look at opportunities to automate its permitting process using its permit tracking software.
2. Update the County's floodplain management ordinance to include the following NFIP requirements:
 - CFR Section 65.3 requirement to notify FEMA within 6 months of availability of technical or scientific data for changes in base flood elevation.
 - CFR Section 60.3(b)(3) requirement to provide the base flood elevation for

development of subdivisions greater than 50 lots or 5 acres with an approximate Zone A.

- CFR Section 60.3(d)(3) requirement for a hydrologic and hydraulic analyses for development within a regulatory floodway.
3. Evaluate the 53 ECs for compliance and provide a list of structures that fail to meet minimum NFIP construction standards. The 53 ECs were recently developed by the County to mitigate past permitting errors.
 4. Provide a Corrective Action Plan to mitigate the structure violations identified in this report and the structure violations identified from the County's review of the 53 ECs.

Please provide a plan for addressing these actions and a timeline for implementation by November 22, 2019.

CAV Meeting Participants

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