



Oregon

Kate Brown, Governor

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January 5, 2017

The Honorable Jeff Gowing, Mayor
City of Cottage Grove
400 E. Main Street
Cottage Grove, OR 97424

SUBJECT: Cottage Grove Participation in the National Flood Insurance Program

Dear Mayor Gowing,

The Department of Land Conservation and Development (DLCD) recently conducted a review of Cottage Grove's floodplain management program under a FEMA National Flood Insurance Program (NFIP) process known as the Community Assistance Visit (CAV). I am pleased to report that we found Cottage Grove to have an outstanding floodplain management program.

The CAV process is used to evaluate technical assistance needs related to local participation in the NFIP. It included a meeting with city staff in January 2016, discussions with city staff since that time, and a review of the city's floodplain management records. We also reviewed recent changes made to Cottage Grove's floodplain management regulations. A final CAV report has been prepared and submitted to the FEMA Region 10 office along with a copy of this letter. A copy of the final CAV report is enclosed for your review.

We found Cottage Grove to be in full compliance with NFIP minimum standards, and no follow-up actions are required. As a result of Cottage Grove's sound floodplain management practices, I will recommend to FEMA Region X that the Cottage Grove be invited to join the Community Rating System (CRS).

The NFIP CRS encourages communities that implement floodplain management activities that exceed NFIP minimum standards by providing discounted NFIP flood insurance premiums. I have enclosed a "CRS What-If" report that shows potential discounts by CRS Class for those carrying NFIP flood insurance in Cottage Grove. It is realistic to expect to enter the program as a Class 9 or 8. Several communities in Oregon have achieved Class 5 status.

DLCD appreciates Mr. Schesser's and Ms. Ferguson's efforts with respect to the CAV and their ongoing work to implement sound floodplain management practices.

If you or city staff have any questions about CAV findings, the NFIP, or CRS please feel free to contact me at 503-934-0027.

Sincerely,



Christine Shirley, Coordinator
Floodplain/Natural Hazards Program

Enclosure – CAV Report
CRS What-If report

Cc/w Enclosure:

Howard Schesser, Community Development Director
Amanda Ferguson, City Planner
Roxanne Pilkenton, Federal Emergency Management Agency, Region 10
Marlene Jacobs, ISO/CRS

**OREGON DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
COMMUNITY ASSISTANCE VISIT (CAV) / NATIONAL FLOOD INSURANCE PROGRAM**

1852 Main St.:



New construction (2014). Note all the flood openings!

JURISDICTION (COMMUNITY): Cottage Grove, NFIP Community #410120

TIME AND DATE OF VISIT (CAV): 10:00 AM – 12:00 January 19, 2016

LOCATION: Cottage Grove City Hall

CONDUCTED BY: Christine Shirley, DLCD Natural Hazards Program

COMMUNITY CONTACT(s): Howard Schesser, Cottage Grove Community Development Director

COMPLIANCE ISSUES: None

COMMUNITY PROFILE

Population (2013 est.)	Joined NFIP	Last CAV	Floodplain Ordinance #	Floodplain Ordinance Issues?	Latest FIRM	Map Issues?
9795	Nov. 15, 1985	2005	3.7.200	none	June, 1999	Yes

FLOOD INSURANCE PROFILE

Number of policies as of 11-2016	Number of policies X Zone	Number of policies residential	Number of policies Pre-FIRM	Number of claims paid, 1978-2016	Claims paid (\$)	Repetitive loss structures	CRS Class
60	30	57	46	3	\$5,069	0	NA

CAV ATTENDEES

Name	Position	Address	Telephone #	e-mail address
Howard Schesser	Community Development Director	400 E. Main St.	541-942-3340	cddirector@cottagegrove.org
Amanda Ferguson	Planner, Community Development	400 E. Main St.	541-942-3340	planner@cottagegrove.org

A. FIELD OBSERVATIONS – Field Inspection

A field inspection occurred prior to the community assistance visit on January 19, 2016. Christine Shirley conducted the field inspection for DLCD. Very little development over the last five years was observed in the SFHA. Cottage Grove provided two examples of new residential construction to inspect: 1852 W. Main Street and 2105 Ash Ave. They also suggested Christine look at improvements to the waste water treatment plant located at 1800 N. Douglas Avenue. She also looked at a new development at “Riverfront” and subsequently learned that the lots near the flood source and in the SFHA on the FIRM had been removed by a LOMR-F in 2009.

B. COMMUNITY ASSISTANCE VISIT (CAV)

Christine met with Howard Schesser, Community Development Director, and Amanda Ferguson, City Planner. The CAV meeting followed the usual format – discussion of the CAV process, technical materials, the city’s flood damage prevention ordinance, the city permit processes for development and building permits, etc. Christine provided the city with an information sheet regarding the status of the city’s maps and flood insurance policies issued within the county.

C. CAV FOLLOW-UP

The city would like to join the CRS program. DLCD will recommend that Cottage Grove be considered for CRS and forward that recommendation to FEMA Region X.

D. FLOODPLAIN ORDINANCE REVIEW

Applicable Code Regulations: Chapter 3.7.200
Does ordinance comply with 44 CFR? Yes

Christine, the National Flood Insurance Program coordinator at DLCD, reviewed Cottage Grove Ordinance Chapter 3.7.200. The ordinance was last updated in 1999 when revised FIRMs were provided by FEMA. The city then provided DLCD with revisions to their flood hazard code in February 2016, which DLCD also reviewed. These revisions included some higher regulatory standards intended to position the city for participation in the Community Rating System. The proposed revisions were adopted in August 2016. DLCD finds the revised regulations to be in full compliance with the NFIP, and in some cases exceed minimum standards. For example, the revised regulations place limits on the creation or new lots and development in the floodway and a minimum two feet of freeboard is now required for all but critical facilities, which required a minimum of three feet of freeboard. The revised Flood Damage Prevention regulations are attached to this report.

E. FLOODPLAIN PROGRAM ADMINISTRATION

1) Who / What Department administers the community’s floodplain program?

The Cottage Grove Community Development Department administers the city’s floodplain program. The Community Development Department consists of the Planning Division, Building Division and Emergency Services.

2) Does the city use the FEMA Elevation Certificate form?

Yes. Elevation certificates are retained by the city for new construction and substantial improvements.

a) Under the jurisdiction's program, who completes Section A?

The building permit applicant's surveyor.

b) Under the jurisdiction's program, who completes Section B?

The building permit applicant's surveyor.

c) Who answers "B-11" regarding the elevation datum used for the BFE at sea-level determination?

The applicant for a building permit is required to obtain this from a surveyor.

d) Under the jurisdiction's program, who completes the remaining sections of the EC?

The building permit applicant's surveyor completes the elevation certificate. The completed certificate is then reviewed by the Community Development Department.

2) How long has the floodplain administrator been in the position? Experience?

The Community Development Director, Howard Schesser, has been employed in his position for 16 years. He has over 30 years of experience dealing with floodplain management. Amanda Ferguson has been with the city of Cottage Grove for 14 years. Both are Certified Floodplain Managers.

3) NFIP regulations require the retention of "as built" elevation and flood-proofing certificates [60.3(b)(1-iii)]. Does the jurisdiction comply? Explain

Yes. The city has had a long-standing practice of reviewing and retaining elevation certificates for new and substantially improved buildings in the SFHA after they were constructed or "as built." The city now reviews building elevations after the first floor is constructed. This allows for any necessary corrections to be made before further work is completed on structures.

a) Which department(s) retain copies of elevation certificates?

The Cottage Grove Community Development Department.

b) Is the elevation certificate based on preliminary building plans or final inspection?

The city provided several examples of elevation certificates from its development permit files, which were based on construction drawings. City staff also obtains as-built elevation certificates based on final inspection. These as-built certificates are maintained at the Community Development Department.

c) Is there a final inspection to verify "as built" elevation information? If so, who conducts?

City staff field inspects new construction and examines final elevation certificates for compliance with the Flood Damage Prevention Code.

4) What is the lowest floor (i.e., as built) elevation requirement?

Residential: at least 2 ft. above base flood elevation

Manufactured Homes: at least 2 ft. above base flood elevation

Critical Facilities: at least 3 feet above base flood elevation.

5) How many variances to the community's floodplain ordinance have been issued over the past 5 years? What is the nature of the variances?

None.

6) How does the community define "substantial damage" and "substantial improvement"? Is there a cumulative provision in the community's zoning or floodplain ordinance?

The city uses the standard FEMA definitions for substantial damage and substantial improvement. The city has not adopted a cumulative provision for substantial improvement.

7) **How many LOMAs or LOMRs have been issued in the community over the past 5 years?**
FEMA has approved 4 LOMCs for Cottage Grove in the last 5 years, one of which was a LOMA-Out as Shown. The most recent approval occurred in September 2016. All told, nineteen LOMAs or LOMR-Fs have been approved in Cottage Grove, and no LOMRs without fill.

F. FLOOD HISTORY

Principal flooding sources are the Coast Fork Willamette River, Row River and Silk Creek. Based on development patterns and other factors, flooding of Silk Creek appears to have the greatest potential for generating flood damages within Cottage Grove. Flood events generally have occurred in December or January but can also occur in spring if snowpack is above average and rapid melting occurs.

1) Past Flood Events

Most recent flood event was in 1996. Because of the Cottage Grove Lake Dam on the Coast Fork of the Willamette River and the Dorena Lake Dam on the Row River, very little flooding occurred along these to two main water courses. The flooding that did occur was from Silk Creek, which is located in the western portion of Cottage Grove.

Other notable historic floods occurred as follows: Silk Creek –1964 and 1968, Coast Fork Willamette-1964. The original Flood Insurance Study for Cottage Grove states that the Cottage Grove Reservoir on the Coast Fork Willamette and Dorena Reservoir on Row River contribute to a substantial reduction in the base flood discharge.

2) Have any areas flooded that are not within FEMA-designated Special Flood Hazard Areas (SFHAs)?

The most recent maps for Cottage Grove (1999) were amended to include areas along Silk Creek that flooded in 1996. Nevertheless, the city would like the maps updated on a LiDAR base and to have the effective models reviewed.

3) Are there special circumstances or conditions that contribute to flood loss / damage (e.g., debris dams, low bridge clearance, under-sized culverts, etc.)?

The Community Development Director indicated that some of the bridges on Silk Creek have undersized culverts that may contribute to flood damages in the future.

4) Are there special hazards (e.g., fuel drums, lumber / log storage) within the community's SFHA?

None noted during field inspection or meeting.

5) Describe the impact of flooding on critical facilities (e.g., police, fire, hospitals, transfer stations, etc.) Which, if any, of these facilities are located in the floodplain?

The city police, fire, and hospital facilities were not affected by the 1996 flood. The city's water treatment plant and sewer plant are in the floodplain. The water treatment facility is elevated and was protected from the 1996 flood. The water treatment plant was replaced in early 2000's and was constructed on a high portion of land and the floor elevated above the BFE. The waste water treatment plant recently was upgraded. Portions of the office and lab are at or above the BFE.

G. BASIC COMPLIANCE PROBLEMS OR CONSIDERATIONS

No compliance issues noted during field inspection or CAV meeting.

1) Lowest floor

No problems with lowest floors were noted. Again, the city's standards are as follows:

Residential: at least 2 ft. above base flood elevation

Manufactured Homes: at least 2 ft. above base flood elevation

Critical Facilities: at least 3 ft. above base flood elevation

2) Basement provisions / problems

No basements have been approved in the floodplain.

3) Flood Openings

No problems were noted.

4) Floodway Issues? (Any building in the floodway, number of no-net rise approvals?)

There are currently four undeveloped properties in the floodway. The City recently restored a historic wooden covered railroad bridge (Chambers Bridge). A no-rise certificate was obtained and all local, state and federal permits were obtained for the reconstruction of the bridge.

5) Manufactured Home Parks (proper anchoring during installation)

There are no manufactured home parks in the SFHA.

6) Travel trailers / recreational vehicles (used as permanent housing year-around in the same location)

There are no RV parks in the floodplain.

H. MAPS AND MAPPING

1) Have there been corporate boundary changes since the most recent Flood Insurance Rate Map was issued? Are any proposed?

Yes, about 20 acres of floodplain have been annexed and are in the process of being developed on Silk Creek. The Pine Grove Subdivision has about six of its 40 lots within the Silk Creek floodplain. This subdivision has been built out with Floodplain Development Permits issued where required.

2) Are the FIRMs reasonably accurate?

Yes, since they were amended in 1999. There are two areas identified by the Community Development Department where minor map changes may be needed. Recent LOMAs have occurred there. The map in question is 41039C2091 F. The area in question is near Cherry Court. These issues are being addressed by the current mapping project with the use of LiDAR that the City participated in obtaining.

3) Does your community utilize flood profiles (Flood Insurance Study) to determine flood elevations?

Yes, on occasion the flood study is used to verify Base Flood Elevations provided by surveyors.

4) Will forth-coming or proposed land-uses require map revisions? (e.g., large-scale construction projects)

None identified at this time.

5) Does your community have computer graphics capability (e.g., GIS)? How is this tied in with the community's FIRMs?

No. The city receives GIS assistance from the Lane County. They have loaded the FIRMs onto their website for internal use and are working with Lane County to add them to the 'easy map' program accessible by the public.

I. MITIGATION OPPORTUNITIES / PROJECTS

No needed building mitigation projects were identified at this time.

Issues raised regarding infrastructure involved suggested modifications to bridges. The Woodson Bridge to west Cottage Grove was mentioned. Also, there are 4 bridges that cross Silk Creek. Some problems might be resolved by enlarging culverts. However, the Community Development Director believed elevating at

least two bridges might be necessary in the future. The city would like to wait until the mapping project with LiDAR to determine if this is required.

1) Watershed Programs

The city participates with the Coast Fork Willamette Watershed Council for improvements to both private and public property. They are investing money on the conversion of the old gravel pits known as our Row River Nature Park to a natural area with additional flood storage capacity and upgraded fish habitat with the Watershed Council.

2) Parks / Open space

The city encourages retention of open space in floodplains. The City will be active in protecting a wetland near Silk Creek in an area contemplated for development.

3) Fish / endangered species enhancement

Various projects habitat enhancement with Watershed Council have been performed. Besides the work in the Row River Nature Park Cottage Grove is working on riparian improvements along both rivers and creeks in the City.

4) Opportunities through the Community Rating System

Yes, the city is interested in joining the CRS.

5) Status of NFIP community's Natural Hazard Mitigation Plan

The city's 2016 hazard mitigation plan which updates our existing 2011 plan has been submitted to FEMA for approval. The Community Development Director anticipates final adoption in the first quarter of 2017.

J. HOW CAN DLCD BEST ASSIST THE COMMUNITY?

- Courses:** Cottage Grove staff have attended an NFIP 101 and other classes over the last five years. Opportunities to attend EMI advanced courses was mentioned
- Mitigation strategies:** The city would appreciate hearing about mitigation grant opportunities.
- Other:**

K. ATTACHMENTS

- Flood Hazard Regulations**
- CRS "What If"**

K. CAV CLOSE-OUT: Date January 5, 2017

Community: COTTAGE GROVE, CITY OF
 County: LANE COUNTY

State: OREGON
 CID: 410120

Current CRS Class = 10

[Printable Version]

	TOTAL	SFHA *	X-STD/AR/A99 **	PRP ***
PIF	60	30	4	26
PREMIUM	\$48,676	\$35,444	\$3,001	\$10,231
AVERAGE PREMIUM	\$811	\$1,181	\$750	\$394
CRS Class				
09 Per Policy	\$32	\$59	\$38	\$0
09 Per Community	\$1,922	\$1,772	\$150	\$0
08 Per Policy	\$62	\$118	\$38	\$0
08 Per Community	\$3,694	\$3,544	\$150	\$0
07 Per Policy	\$91	\$177	\$38	\$0
07 Per Community	\$5,467	\$5,317	\$150	\$0
06 Per Policy	\$123	\$236	\$75	\$0
06 Per Community	\$7,389	\$7,089	\$300	\$0
05 Per Policy	\$153	\$295	\$75	\$0
05 Per Community	\$9,161	\$8,861	\$300	\$0
04 Per Policy	\$182	\$354	\$75	\$0
04 Per Community	\$10,933	\$10,633	\$300	\$0
03 Per Policy	\$212	\$414	\$75	\$0
03 Per Community	\$12,706	\$12,405	\$300	\$0
02 Per Policy	\$241	\$473	\$75	\$0
02 Per Community	\$14,478	\$14,178	\$300	\$0
01 Per Policy	\$271	\$532	\$75	\$0
01 Per Community	\$16,250	\$15,950	\$300	\$0

* SHFA (Zones A, AE, A1-A30, V, V1-V30, AO, and AH): Discount varies depending on class.

** SFHA (Zones A99, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO): 10% discount for Classes 1-6; 5% discount for Classes 7-9.

*** Preferred Risk Policies are not eligible for CRS Premium Discounts.