NOTICE OF PUBLIC MEETING

CITY OF ALBANY
CITY COUNCIL WORK SESSION
City Hall, Municipal Court Room
333 Broadalbin Street SW
Monday, August 8, 2011
4:00 p.m.
AGENDA

Rules of Conduct for Public Meetings

1. No person shall be disorderly, abusive, or disruptive of the orderly conduct of the hearing.
2. Persons shall not testify without first receiving recognition from the presiding officer and stating their full name and residence address.
3. No person shall present irrelevant, immaterial, or repetitious testimony or evidence.
4. There shall be no audience demonstrations such as applause, cheering, display of signs, or other conduct disruptive of the hearing.

4:00 p.m. **CALL TO ORDER**

4:00 p.m. **ROLL CALL**

4:05 p.m. **NORTH ALBANY FLOODPLAIN STUDY REPORT** – Jeff Blaine, Heather Hansen
Action Requested: Information, discussion, direction.

5:10 p.m. **INSURANCE SERVICES OFFICE FLOOD RATING** – Heather Hansen
Action Requested: Information.

5:15 p.m. **INSURANCE SERVICES OFFICE FIRE RATING UPDATE** – John Bradner
Action Requested: Information.

5:20 p.m. **COUNCILOR COMMENTS**

5:30 p.m. **CITY MANAGER REPORT**

5:35 p.m. **ADJOURNMENT**

City of Albany Web site: www.cityofalbany.net

The location of the meeting/hearing is accessible to the disabled. If you have a disability that requires accommodation, advance notice is requested by notifying the Human Resources Department at 917-7500.

TO: Albany City Council

VIA: Wes Hare, City Manager
Greg Byrne, Community Development Director
Mark Shepard, P.E., Public Works Director

FROM: Jeff Blaine, P.E., Assistant Public Works Director/City Engineer
Heather Hansen, CFM, Planning Manager

DATE: August 4, 2011, for the August 8, 2011, City Council Work Session

SUBJECT: North Albany Floodplain Study Update and Floodplain Policy Questions

RELATES TO:
- Great Neighborhoods
- A Safe City
- An Effective Government

Action Requested:

Staff is requesting Council direction on two floodplain related policy questions.

Discussion:

Executive Summary

At the January 24, 2011, City Council Work Session, Public Works staff presented the preliminary results of the North Albany Floodplain Study (NAFS). Council authorized staff to finalize the study, proceed with public outreach, and submit the study to FEMA for review and approval.

In the meantime, staff has two policy questions related to development in the floodplain. The first question is specific to the NAFS and the second is a general, citywide, floodplain development policy question.

1. *What data should staff use for evaluating floodplain development proposals in North Albany while FEMA reviews the floodplain study?*

   Rationale: Once the NAFS is submitted to FEMA, it takes 12-18 months to review and approve it. During the interim, we have a conflict between the currently adopted FEMA flood study and maps, and the newer NAFS.

   Option 1 – Utilize NAFS as advisory only (our current interim practice).

   Option 2 – Use both studies and regulate to the "worst case" (FEMA recommendation; would require amendment to ADC Article 6).

2. *Does Council want our floodplain development regulations to consider flood impacts to neighboring property owners (referred to as "No Adverse Impact")?*

   Rationale: Our adopted floodplain development regulations comply with the minimum FEMA requirements, which do not include consideration of the impacts of fill and other development to neighboring property owners during times of flooding. Staff has used the NAFS model as a tool to demonstrate that neighboring properties can be significantly affected by fill.

   Option 1 – Do not implement a No Adverse Impact Approach (status quo).

Option 2 – Implement a No Adverse Impact Approach (requires amendment to ADC Article 6).

Background

At the January 24, 2011, City Council Work Session, Public Works staff presented the preliminary results of a North Albany Floodplain Study (NAFS). A copy of the power point presentation is provided as *Attachment A*. During the presentation the following major findings of the study were reviewed:

1. A previously unidentified floodway through West and East Thornton Lakes; and
2. Significant differences between the study results and the FEMA floodplain for both the extents and depth of flooding.

Following the presentation, Council authorized staff to finalize the study, proceed with public outreach, and submit the study to FEMA for review and approval.

The NAFS has since been finalized and staff is planning to begin public outreach in September or October. Once public outreach activities are completed, staff will proceed with the necessary submittals to FEMA. It is anticipated that FEMA will take up to 18 months to issue a decision on our study. As a result, it is necessary to define what criteria Council wants applied to floodplain development activities in North Albany in the interim.

There are several development proposals within the North Albany floodplain area that require clarification on floodplain development policies prior to making formal application to the City. Staff is seeking direction in order to respond to these proposed developments. This memo provides discussion and background for considering the policy questions. Public Works and Community Development continue to collaborate on floodplain development issues and therefore have jointly prepared the information contained in this memo.

Policy Questions

Policy Question No. 1 – What data does Council want staff to use for evaluating floodplain development proposals in North Albany during the 12-18 months when FEMA reviews the NAFS?

Until FEMA approves the new flood information developed by the City's evaluation of the North Albany floodplain there will be a conflict in flood data. This conflicting data presents a challenge in how development is regulated in the interim.

FEMA recommends, but does not require, that in instances like these both the FEMA data and the study data be utilized, and proposed developments be regulated to the worst case scenario. Their reasoning is provided in *FEMA's Floodplain Management Bulletin 1-98*, which has been provided as *Attachment B*.

In summary, the bulletin states that in areas where the study shows higher flood elevations than the FEMA data, the City should regulate to the higher elevation in order to protect the health, safety, and property of our citizens. In locations where the study shows lesser amounts of flooding, they recommend against using the study data in case FEMA review, or a valid appeal, identifies a required change that increases the projected amount of flooding. This recommendation is made to avoid placing citizens at a greater flood risk and also potential increases in flood insurance premiums. For previously unmapped floodways, FEMA recommends regulating to the study results to minimize flood damages by ensuring the flood

carrying capacity of the floodway is preserved since obstruction of floodways can significantly increase potential flooding upstream.

Since FEMA does not direct a course of action but rather only makes recommendations, Council has options on how to proceed during this interim time. Following are two options staff developed for Council consideration. Council may direct staff to pursue one of the options below or develop a different option.

Option 1 – Utilize the New North Albany Flood Study Information as Advisory Only

The City Council could choose to utilize the approved FEMA data and only advise applicants in the North Albany area of the recent study results. Under this approach staff would inform applicants that FEMA concurrence with the recent study could have future flood risk and flood insurance implications on their property. In instances where the study shows higher flood elevations, staff would advise the applicant to consider building to the higher elevation if they want to reduce the risk of flooding and having additional flood insurance requirements in the future. As a result, the decision to build to the higher elevation would be optional.

The exception to this approach would be within the unmapped floodway where staff would regulate that as if the floodway were already mapped and approved by FEMA. This approach is consistent with the current Albany Development Code (ADC) language provided in ADC 6.100 and is necessary for preservation of the floodway and protection of life and property.

In consideration of this approach, it is important to remember the study did not re-model the Willamette River itself. The study does rely upon correction of an apparent error in the Willamette River flood data just downstream of Albany. In light of this apparent discrepancy, Council may choose to proceed with Option 1 until FEMA has had a chance to review and comment on the study.

Option 2 – Regulate to the Worst Case (Current FEMA Data or New Floodplain Study Data)

Council could consider Albany Development Code (ADC) amendments to adopt the NAFS now, rather than waiting for FEMA approval. With adoption of the ADC amendments, the floodplain would be regulated according to the worst case data between the existing FEMA data and the new study data. This would be consistent with FEMA's recommendations as discussed above. It would provide the greatest level of flood protection for/from new development but also could result in flood protection measures that would not ultimately be required at the end of the process.

Next Steps – Community Development staff is currently reviewing development applications using the current ADC language and advising applicants about the NAFS results, consistent with Option 1 above. If Council chooses to pursue Option 2 as FEMA recommends, Community Development and Public Works staff will prepare draft ADC amendments to support that option and bring them through a legislative code amendment process for adoption.

Based on the City's current floodplain program, the City is eligible to apply for a FEMA Pre-Disaster Mitigation grant to help fund elevating, relocating, or purchasing and demolishing structures that are identified as being at highest risk of flood damage. If Council were interested in pursuing this grant opportunity, the state floodplain manager has indicated that Option 2 above would strengthen the City's application. Under this grant program, the City would manage the grant fund with property owners providing matching funds. If Council is interested in

considering applying for a FEMA Pre-Disaster Mitigation grant, staff can conduct additional research and present the findings at a future Council Work Session.

Policy Question No. 2 – Does Council want to consider regulating floodplain development under a No Adverse Impact approach?

Many communities are moving toward, or have implemented, a No Adverse Impact (NAI) approach to managing their floodplains. NAI floodplain management implements development regulations to ensure the development actions of one property owner are not allowed to adversely impact other property owners or increase local flooding. This type of approach recognizes that the minimum standards of the National Flood Insurance Program (NFIP), as Albany adopted in September 2010, do not entirely prevent flood damage that can result from development in the floodplain. *Attachment C* provides a NAI white paper from the Association of State Floodplain Managers that discusses this important issue.

A program that is compliant with the NFIP but does not have any other regulating component does not require a proposed floodplain development activity, such as fill, evaluate all of its impacts on neighboring properties. As a result, the NFIP minimum standards support a common misconception that the flood fringe can be filled without an adverse impact to properties in the floodplain. Although filling within the flood fringe may not adversely impact the regulatory floodway, it still can have an adverse impact on neighboring properties. To help demonstrate this phenomenon, staff randomly chose two properties within the flood fringe of the North Albany floodplain study area to model the potential impacts on neighboring properties if these properties were filled. Filling the first site proved to have little to no impact on neighboring properties while filling the second site had significant impacts. Staff will present the modeling results for the second site at the Work Session to help demonstrate how fill in the flood fringe can impact other properties and why a NAI approach deserves consideration.

A NAI regulation will likely require some properties to mitigate impacts of their activity in the floodplain, increasing the cost of development. In some cases under a NAI regulation, fill may be completely restricted if adequate mitigation cannot be made in order to protect other properties. The competing values of protecting existing property owners from flood impacts and keeping development affordable are difficult to balance.

Staff has summarized two options for Council to consider regarding impacts of development in the floodplain. Council may direct staff to pursue one of the options below or develop a different option.

Option 1 – Do Not Implement a No Adverse Impact Approach

This option would require no further Council action. The floodplain would continue to be managed as it is currently. However, staff would suggest that each floodplain development permit provide a statement that the City has not evaluated the proposal for potential negative impacts to neighboring properties and that the property owner is ultimately responsible for preventing, and could be liable for, any negative flood/drainage related impacts to neighboring properties under Oregon Drainage Law. This will provide notice to the property owner that they may be subject to liability if another party is damaged due to the improvements in the floodplain.

Option 2 – Implement a No Adverse Impact Approach

To pursue this approach, Council would consider new ADC language that would move towards a NAI approach to reviewing floodplain development proposals. Other local agencies, such as Benton County and Corvallis, have incorporated similar additional protections. Under this option, staff would review the approaches taken by other local communities for NAI and propose new ADC language. Staff would then bring draft ADC modifications forward through a legislative code amendment process for adoption.

Next Steps – Community Development staff is currently reviewing development applications consistent with the current ADC language which only partially considers a NAI approach (increased velocities as a result of fill, grading, or excavating). The current code does not require evaluations that would identify any increase in the extents or depths of flooding on neighboring properties resulting from a proposed development activity. If Council selects Option 1, no further Council action is required and staff will continue to evaluate proposals based on the current Code language. If Council chooses to pursue Option 2, Community Development and Public Works staff will prepare draft ADC amendments to support that option and bring them through a legislative code amendment process for adoption. Until the time Council adopts ADC language to support Option 2, floodplain development permit applications will continue to be reviewed consistent with the current ADC language which does not require a complete NAI evaluation.

Conclusion

The North Albany floodplain modeling is complete and staff is preparing to begin public outreach activities prior to making a formal submittal to FEMA for review and potential concurrence. Staff is requesting Council direction on how to utilize the study results in the interim until FEMA has completed their review.

Staff is also seeking clarification on whether Council intends to regulate the floodplain based on the NFIP minimum standards or if Council would like to consider higher standards intended to protect neighboring properties from adverse impacts of the proposed floodplain development activity.

Staff also would like to know if Council is interested in considering pursuit of a FEMA Pre-Disaster Mitigation grant to help fund the elevation, relocation, or purchase of homes that are identified as being at highest risk of flood damage.

There are several development proposals in North Albany that are driving the timing of these questions. The developers are asking staff to answer these questions so they have clear direction on how to package their permit applications. Based on Council's direction, staff will draft any required ADC modifications for consideration by the Planning Commission and City Council prior to scheduling a public hearing for adoption.

Budget Impact:

None at this time.

JJB:prj
Attachments
c: Melanie Adams, Building Official (via e-mail)
North Albany Neighborhood Association

North Albany Floodplain Evaluation

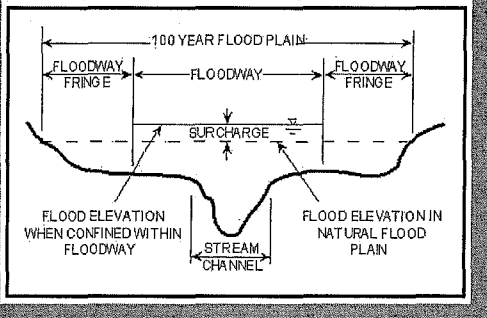
1

What is a floodplain?

Floodplain – The combined area of the floodway and flood fringe; also known as 100-year floodplain

Floodway – The stream channel plus the area that must be kept free from encroachment in order to pass the 100-year flood without increasing flood elevations more than one foot

Flood Fringe – The remaining area within the floodplain on either side of the floodway. Floodwater in this area has little to no velocity.



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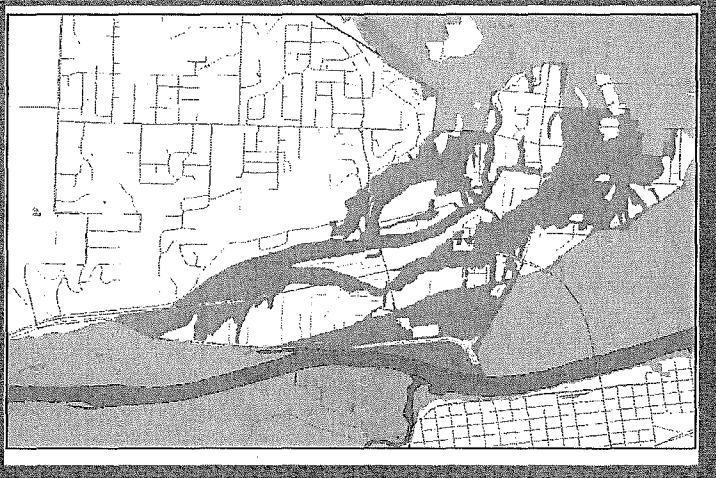
North Albany Floodplain – FEMA



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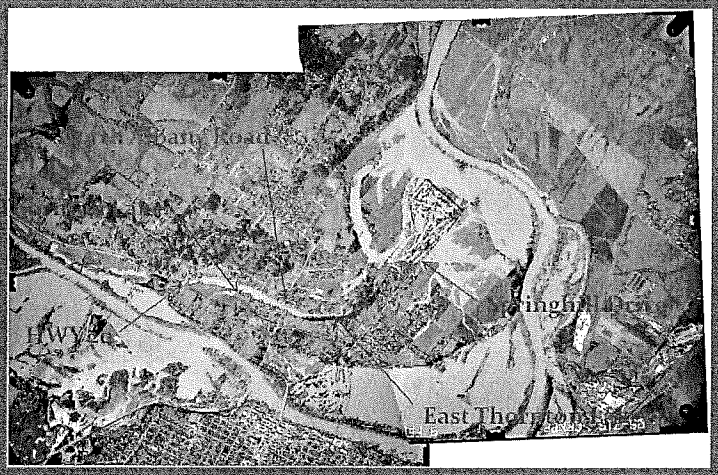
1964 Flood

Estimated to be close to a 100-year flood event

4

1996 Flood

Estimated to be less than a 25-year flood



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Why was the evaluation initiated?

- Development pressures in North Albany
  - Subdivisions/Partitions
  - Building Permits
  - Other fill, grading, and excavating activities
- FEMA maps were believed to be inaccurate
  - Suspected there was an unmapped floodway through North Albany that should be protected.
- Incorporation with current master planning efforts and goals.
- Added benefit of being completed in advance of any design efforts for improving North Albany Road.

6

How was the floodplain evaluated?

- Pacific Water Resources developed a HEC-RAS computer model that utilized:
  - Detailed LIDAR ground surface elevation data as collected by the State.
  - Ground survey data at critical locations
  - FEMA's 100-year flood elevation projections for the Willamette River, as appropriate
  - USGS Willamette River Gauge data at the Highway 20 (Ellsworth Street) Bridge

7

Preliminary results

Two important findings:

1) Verified that during a Willamette River flood event there is an unmapped floodway through North Albany.

2) The flood levels predicted by FEMA in North Albany are significantly different from what the study determined.

8

Preliminary results continued

- Floodwater from the Willamette approaches West Thornton Lake from three crossings of Highway 20.
- The combined flows from these three locations total approximately 5,600 cubic feet per second.
- The water flowing over HWY 20 has the greatest impact on floodwaters through the Lakes.
- HWY 20 acts as a weir with water spilling over the top of it.

9

Preliminary results continued

- Because of the weir effect of HWY 20, the flood water surface elevation is approximately five feet less than FEMA predicts near the west end of West Thornton Lake (less flooding).
- As one moves downstream out into the County towards Springhill Drive, the elevation is approximately two feet higher than FEMA predicts (more flooding).

10

Confidence in preliminary results

- Historic river gauge data on the Willamette River and photos of the 1964 flood provided a good method for the consultants to check their work.
- Both sources of information provide strong support for the general accuracy of the analysis.

11

What do we do with this information?

Staff Suggestions:

- Public Outreach
  - Personal contact with the five existing home owners shown to be located within the floodway.
  - Hold an open house in North Albany to review findings.
  - Inform Benton County of study results.
- Request FEMA concurrence and map amendments
  - Ensures information is readily available to everyone.
  - Strengthens City's position on development review.
- Development Review
  - Information must be used for development review per FEMA requirement to use "Best Available Information."
- More accurate local emergency planning

12

Impacts to existing residents

- Better informed about risks of living in the floodplain.
- Better protection against unintended negative consequences associated with future development.
- Potential changes in flood insurance requirements.
  - Number of properties required to carry flood insurance.
  - Insurance premiums.

13

Impacts on future development

- No development allowed in floodway except in limited circumstances as provided for in Article 6 of the ADC.
- Not proposing any changes in regulation.
  - Developers will be aware of undevelopable areas in advance, rather than spending thousands of dollars to come to the same conclusion.
  - As a result, only localized impact evaluations specific to the proposed development will need to be completed.
    - Localized evaluations can now be accomplished at a lesser cost by utilizing the PWR evaluation.

14

Staff's Request

Staff requests Council approval to move forward with public outreach activities and to submit application for proposed map amendments to FEMA.

Estimated Cost ~ $70,000

Estimated time to complete FEMA review process is approximately one year.

15

Example Site Specific Results

- Highway 20
- West end of West Thornton Lake
- North Albany Road
- Councilor Collins' house
- Packard Subdivision site

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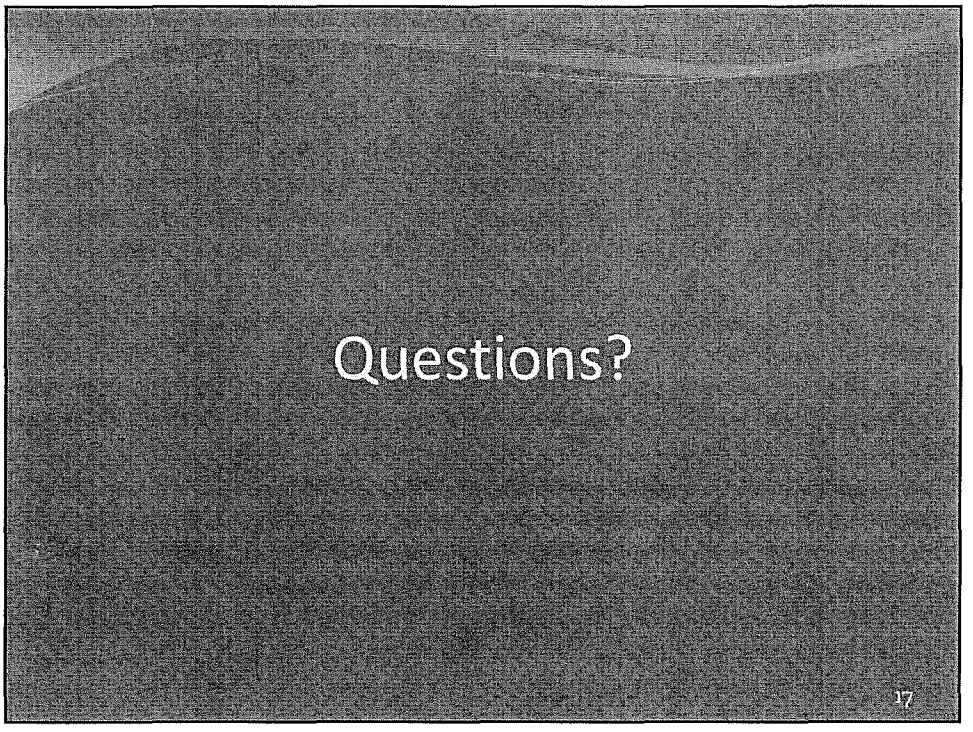
Questions?
17

FEMA

ATTACHMENT B

SEE PAGE 3 OF 5

Use Of Flood Insurance Study (FIS) Data As Available Data

Floodplain Management Bulletin 1-98

Background

Flood Insurance Studies (FIS) use detailed hydrologic and hydraulic analyses to model the 1% annual chance flood event, determine BFEs, and designate floodways and risk zones (Zones AE, A1-30, AH, AO, VE, and V1-30). The flood hazard data are portrayed in tabular fashion in the FIS narrative and graphically as flood profiles that are attached to the narrative. They are portrayed planimetrically on the FIRM. Over 10,000 communities have now been provided detailed FISs and issued FIRMs that include BFEs for Zones AE, A1-30, AH, AO, VE, and V1-30.

A draft FIS can be prepared by a study contractor to FEMA under 44 CFR Part 66 or by appellants under 44 CFR Part 65 for the purpose of establishing or revising BFE and floodway data. FEMA reviews and modifies, as appropriate, the draft FIS to ensure it complies with established NFIP criteria. Once FEMA has reviewed and approved the draft FIS, FEMA releases the information to the public as a Preliminary FIS and FIRM for review and comment during a statutory 90-day appeal period in accordance with 44 CFR Part 67. Until such time as the 90-day appeal period is completed and a notice of final flood elevation determination [Letter of Final Determination (LFD)] has been provided, the BFE and floodway data in the FIS are considered preliminary and subject to change.

Due to the cost of developing detailed flood hazard data, not all floodplains can be studied using detailed methodologies. A primary factor FEMA uses in it's system for prioritizing floodplain studies or restudies with BFEs and floodway data is whether the floodplains of the flooding sources are currently or are projected to be subject to development pressure. In NFIP communities where there are few existing buildings in the floodplain and minimal development pressure, FEMA does not prepare a detailed FIS. These communities are converted to the Regular Program with a FIRM in which all of the special flood hazard areas are designated Zone A without BFEs using approximate methodologies. Most NFIP communities will have FIRMs that include a combination of special flood hazard areas that have been studied in detail with BFEs and floodway data and special flood hazard areas that have been studied using approximate methods which have been designated Zone A.

Introduction

When areas have been designated as special flood hazard areas on the community's Flood Hazard Boundary Map (FHBM) or Flood Insurance Rate Map (FIRM) and no Base Flood Elevations (BFEs) or an identified

floodway have been developed, communities are required to apply the provisions of 44 Code of Federal Regulations 60.3(b)(4). Subparagraph 60.3(b)(4) requires that communities:

> Obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source... [44 CFR 60.3(b)(4)]

Data obtained are to be used by communities as criteria for requiring that new construction and substantial improvements have their lowest floors elevated to or above the BFE (non-residential structures can also be floodproofed to or above the BFE) and for prohibiting any encroachments in a floodway that would result in any increase in flood levels during occurrence of the base flood discharge. The data obtained should be used as long as they reasonably reflect flooding conditions expected during the base flood, are not known to be scientifically or technically incorrect, and represent the best data available. Data from a draft or preliminary Flood Insurance Study (FIS) constitute available data under 44 CFR 60.3(b)(4). This bulletin provides guidance on the use of FEMA draft or preliminary FIS data as available data for regulating floodplain development.

NFIP Requirements: Use of Draft or Preliminary FIS Data

For Zone A:

For Zone A areas designated on the community's effective FHBM or FIRM, the BFE and floodway data from a draft or preliminary FIS constitute available data under Subparagraph 60.3(b)(4). The requirement at Subparagraph 60.3(b)(4) is an important floodplain manage-ment tool for reducing flood damages in areas where a detailed engineering study to develop BFEs and designate floodways on streams has not been conducted. Communities are required to reasonably utilize the data from a draft or preliminary FIS under the section of their ordinance that applies to this paragraph. A community is allowed discretion in using this data only to the extent that the technical or scientific validity of the data in the draft or preliminary FIS is questioned.

When all appeals have been resolved and a notice of final flood elevation determination has been provided in a LFD, communities are required to use the BFE and floodway data for regulating floodplain development in accordance with 44 CFR 60.3(b)(4) since the data represents the best data available. This includes meeting the standards at 44 CFR 60.3(c), and (d) which includes the requirement that new construction, substantial improvements, and other development have their lowest floor elevated to or above the BFE (non-residential structures can also be floodproofed to or above the BFE). Communities must regulate floodplain development using the data in the FIS under 60.3(b)(4) until such time as the community has adopted the revised FIRM and FIS.

In Zone A areas, the rationale for requiring reasonable utilization of BFE and floodway data in a draft or preliminary FIS is premised on the absence of other BFE or floodway data and the need to protect new or substantially improved structures from flood damage until such time as appeals are completed and the BFEs and/or floodway are incorporated into the local ordinance. The use of the qualifier "reasonable" at 44 CFR 60.3(b)(4) reflects FEMA's statutory obligation to provide the public an opportunity to appeal the proposed elevation data.

If a community decides not to use the BFE or floodway data in the draft or preliminary FIS because it is questioning the data through a valid appeal, the community must continue to ensure that buildings are constructed using methods and practices that minimize flood damages in accordance with the floodplain management requirements under subparagraphs 60.3(a)(3) and (4).

- Subparagraph 60.3(a)(3) requires communities to review permit applications to determine whether proposed building sites are reasonably safe from flooding. If a proposed building site is floodprone, communities are to require that new construction and substantial improvements be adequately anchored, use flood resistant materials, be constructed to minimize flood damages, and have attendant utilities protected during the conditions of flooding.

- Subparagraph 60.3(a)(4) requires communities to review subdivision proposal and other proposed new development, including manufactured home parks or subdivisions, to determine whether proposals will be reasonably safe from flooding. If a subdivision proposal or other proposed new development is floodprone, communities are required to review such proposals to assure potential flood damages are minimized, utilities are constructed to minimize or eliminate damages, and adequate drainage is provided to reduce the exposure to flood hazards.

For Zones AE, A1-30, AH, AO, VE, and V1-30:

The NFIP floodplain management criteria do not require communities to use BFE and flood way data from a draft or preliminary Flood Insurance Restudy in Zones AE, A1-30, AH, AO, VE, and V1-30 in lieu of using the BFE and floodway data contained in an existing effective FIS and FIRM. Because communities are afforded the opportunity to appeal BFE data from a restudy in accordance with Section 1363 of the National Flood Insurance Act of 1968, as amended, a presumption of validity is given to existing effective BFE data that has gone through the formal statutory appeals process and which has been adopted by the community.

However, in cases where BFEs increase in the restudied area, communities have the responsibility to ensure that new or substantially improved structures are protected, particularly if the increases in BFEs are significant. While FEMA can not mandate or require a community to use BFE and floodway data in a draft or preliminary FIS as available data or to use the data at the time FEMA issues the LFD to the community, FEMA encourages communities to reasonably utilize this information in instances where BFEs increase and floodways are revised to ensure that the health, safety, and property of their citizens are protected.

In cases where BFEs decrease, the community should not use this information to regulate floodplain development until the LFD has been issued or at least until all appeals have been resolved. If the draft or preliminary FIS provides information that BFEs are decreasing, but a valid appeal actually results in higher BFEs, the community could place its citizens at a greater flood risk by using the draft or preliminary FIS to regulate floodplain development. Also, these structures could be subject to increased flood insurance premiums.

In communities where floodways have not been designated for all or some of the flooding sources, but BFEs have been provided, communities are required to apply the criteria at 44 CFR 60.3(c)(10). This provision requires that:

> Until a regulatory floodway is designated, no new construction, substantial improvements, or other development shall be permitted unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. [44 CFR 60.3(c)(10)]

However, if a draft or preliminary FIS has designated floodways where none had previously existed, communities should reasonably utilize this data in lieu of applying the encroach- ment performance standard of 44 CFR 60.3(c)(10) since the data in the draft or preliminary FIS represents the best data available. By utilizing the floodway data from a draft or Pre- liminary FIS, communities avoid the expense of conducting the hydraulic analysis necessary to demonstrate compliance with 60.3 (c)(10). In addition, communities can

minimize flood damages by ensuring that the flood carrying capacity of the floodway is preserved since obstruction of floodways can significantly increase potential flooding upstream.

For Zones B, C, and X:

The NFIP floodplain management criteria do not require the use of BFE and floodway data from a draft or preliminary FIS under 44 CFR 60.3(b)(4) for an area or areas within Zones B, C, or X on the community's FIRM that are being revised to Zone AE, A1-30, AH, AO, VE, or V1-30. While FEMA can not mandate or require a community to use the information contained in the draft or preliminary FIS pertaining to areas designated as Zone B, C, or X as available data or use the data at the time FEMA issues the LFD to the community, FEMA encourages communities to reasonably utilize this information to ensure that the health, safety, and property of their citizens are protected.

Ordinance Requirements: Adoption of the Data

For Zone A:

When all appeals have been resolved and a notice of final flood elevation determination has been provided in a LFD, communities are required to use the BFE and floodway data for regulating floodplain development in accordance with 44 CFR 60.3(b)(4) since the data represents the best data available. This includes meeting the standards of Subparagraphs 60.3(c), (d), and/or (e). Communities must regulate floodplain development using the data in the FIS under Subparagraph 60.3(b)(4) until such time as the community has adopted the effective FIRM and FIS.

For Zones AE, A1-30, AH, AO, VE, V1-30, B, C, and X:

Communities are given six months from the date of the LFD in which to adopt the revised FIS and FIRM. This is in keeping with FEMA's statutory obligation to provide a reasonable time for the community to adopt floodplain management regulations consistent with the final flood elevation determinations. Subparagraph 44 CFR 59.24(a) of the NFIP Regulations provides for a six month compliance period in which the community must adopt the effective FIS and FIRM and amend existing regulations to incorporate any additional requirements under 44 CFR 60.3.

Floodplain management ordinances generally contain a section entitled "Basis for Establish-ing the Areas of Special Flood Hazard" in which the current effective FIS and FIRM are cited. Language in the ordinance may include any subsequent amendments thereto (i.e., to include any subsequent revised FIS and FIRM); however, this language should not be used as the basis for a community to use the preliminary FIS prior to the issuance of the LFD. If a community chooses to use BFE and floodway data from a preliminary FIS prior to the LFD being issued or use the data after a LFD is issued but before the effective date of the FIS and FIRM, it is advised that the community adopt this information before its use.

Insurance Implications

Zone A:

For a new or substantially improved structure, communities can use information from a draft or preliminary FIS for completing the Elevation Certificate in Zone A areas. The flood insurance policies for new or

substantially improved structures in Zone A that are rated using BFE data from a draft or preliminary FIS will often qualify for significantly lower insurance rates than policies that are rated without a BFE.

Zones AE, A1-30, AH, AO, VE, and V1-30:

For flood insurance rating purposes, in Zones AE, A1-30, AH, AO, VE, or V1-30, new or substantially improved structures are rated based on the BFE and FIRM zone in effect on the date of construction until the revised FIRM becomes effective. This is the case regardless of whether the preliminary FIS indicates that the proposed BFEs will increase or decrease.

If a community chooses to use proposed BFEs from a draft or a preliminary FIS for a new or substantially improved structure, the flood insurance rate is still based on the BFE and FIRM Zone in effect on the date of construction. The flood insurance rate will be based on the elevation difference between the BFE and FIRM Zone in effect and the elevation of the lowest floor. Therefore, if a new or substantially improved structure is built to the proposed BFE from a draft or preliminary FIS and this BFE is higher than the BFE in effect, the flood insurance rate may be significantly lower. However, a new or substantially improved structure built to the proposed BFE that is lower than the BFE in effect may result in a significantly higher flood insurance rate. In this case, the insured will qualify for a premium pro rata refund once the revised FIRM is effective.

Zones B, C, and X:

For flood insurance rating purposes, new or substantially improved structures are rated based on the FIRM Zone in effect (i.e., Zone B, C, or X) on the date of start of construction. If a community chooses to use proposed BFEs from a draft or preliminary FIS for a new or substantially improved structure, the flood insurance rate is still based on the FIRM Zone in effect (i.e., Zone B, C or X) on the date of construction.

ATTACHMENT C

Association of State Floodplain Managers

NAI—No Adverse Impact Floodplain Management

Background

Flood damage in the United States continues to escalate. From the early 1900s to the year 2007, flood damage increased six-fold, and now averages over $6 billion annually, even when Hurricanes Katrina, Rita, and Wilma (2005) are not included. This has occurred despite the investment of billions of dollars in structural flood control and the application of many other structural and non-structural measures over these many decades. Even in the face of increasing flood losses, we continue to intensify development, and to do so in a manner in which flood-prone or marginally protected structures suddenly become susceptible to damage because the actions of others in and around the floodplain and watershed have worsened the flood hazard.

Current national standards for floodplain management allow development activity to divert flood waters onto other properties; to reduce the size of natural channel and overbank conveyance areas; to fill essential valley storage space; and to alter water velocities—all with little or no regard for how these changes affect other people and property in the floodplain or elsewhere in the watershed. The net result is that our own actions are intensifying the potential for flood damage. The current course is one that will result in continually rising costs over time, is not equitable to those whose property is affected, has been shown to be economically and environmentally unsustainable, and is a pattern of conduct generally not supported by the courts.

Over the past 50 years a system has developed through which local and individual accountability has been supplanted by federal programs for flood control, disaster assistance, and tax incentives that encourage and subsidize floodplain occupation and development. Although future funding for projects and programs of the U.S. Army Corps of Engineers, the Natural Resources Conservation Service, and other federal agencies will fluctuate, the general pattern of federal disaster response has become firmly entrenched and is not likely to change in the foreseeable future. At the same time, the minimum floodplain management standards of the National Flood Insurance Program have been accepted by many as the default standards for communities, even though they were designed for the purposes of an insurance program and not necessarily to control escalating flooding. In view of this nationwide system of federal programs, it is not surprising that many local governments assume that the minimum NFIP standards provide acceptable flood protection and also allow themselves to become financially disconnected from the consequences and impacts of their land use decisions. The result is that the burden of those impacts—increased flood damage and flood disasters—is transferred from those who make (and benefit from) the local decisions about land use to those who pay for the flood disaster—principally the federal taxpayers.

No Adverse Impact floodplain management offers local governments a way to prevent the worsening of flooding and other negative impacts on the community—right now. Although some state and local governments may have abandoned their responsibilities for protecting public health, safety, and welfare in the face of flood hazards, most simply have assumed that the federal programs represent an acceptable standard of care. They perhaps do not realize that these very approaches can induce additional flooding and damage within their communities. No Adverse Impact principles give communities a way to promote *responsible* floodplain development through community-based decision making. With the No Adverse Impact approach, communities will be able to put federal and state programs to better use—enhancing their local initiatives to their communities' advantage. No Adverse Impact floodplain management empowers the community (and its citizens) to build better-informed "wise development" stakeholders at the local level. It is a step towards individual accountability because it prevents increases in flood damage to other properties. No Adverse Impact floodplain management helps communities identify the potential impacts of development and implement action to mitigate them before the impacts occur.

No Adverse Impact Floodplain Management Defined

"No Adverse Impact Floodplain Management" is a managing principle that is easy to communicate and, from legal and policy perspectives, tough to challenge. In essence, ***No Adverse Impact floodplain management takes place when the actions of one property owner are not allowed to adversely affect the rights of other property owners.*** *The adverse effects or impacts can be measured in terms of increased flood peaks, increased flood stages, higher flood velocities, increased erosion and sedimentation, or other impacts the community considers important.* The No Adverse impact philosophy can shape the default management criteria: a community develops and adopts a comprehensive plan to manage development that identifies acceptable levels of impact, specifies appropriate measures to mitigate those adverse impacts, and establishes a plan for implementation. No Adverse Impact criteria can be extended to entire watersheds as a means to promote the use of regional retention/detention or other stormwater techniques to mitigate damage from increased runoff from urban areas.

The No Adverse Impact approach will result in reduced flood damage. However, its true strength is seen when proposed development actions that would affect local flooding or the property rights of others are permitted only when they are in accord with a locally adopted plan that identifies the negative impacts the community wishes to avoid and/or mitigate. The plan could be specific to flood damage or be quite robust, encompassing related objectives such as water quality protection, groundwater recharge, or the management of stormwater, wetlands, and riparian zones. Because it is a local initiative, an NAI-based plan removes the mentality that floodplain management is something imposed by the federal government. Instead, it promotes local accountability for developing and implementing a comprehensive strategy and plan. With the flexibility to adopt comprehensive, locally tailored management plans (which would be recognized by FEMA and other federal programs as the acceptable management approach in that community) the community gains control of its land use decision-making process and is supported in adopting innovative approaches it considers appropriate for its situation.

No Adverse Impact management makes sense, and it is the right and legally appropriate thing to do. Too often our discussions on development approaches turn into arguments over the range of application and the effect these approaches may have on those who choose to encroach upon the floodplain. To reduce future costs and inequities, we must change this perspective. We must take a management stance that prevents any development activity from imposing additional flood impacts on other properties and also frees communities to manage flood hazards and development through comprehensive local plans, thus protecting the property rights of the entire community.

Conclusion

This central message—that we are continuing to induce flood damage even while enforcing the minimum standards of the NFIP—has not been communicated effectively. The message has been lost in part because the floodplain management community has spent too much time debating individual issues instead of stepping back to evaluate the cumulative impact of all the management approaches being applied throughout the nation's watersheds.

Current management systems to reduce flood losses are costly and often allow development that fails to evaluate or mitigate both current and future adverse impacts on other properties.

The No Adverse Impact approach will lead to reduced flood losses throughout the nation while promoting and rewarding strong water stewardship and mitigation at the local level.

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For more information, the ASFPM can be contacted at (608) 274-0123. Full copies of the ASFPM documents on flood policy, including many published articles on No Adverse Impact, *NAI and the Courts: Protecting the Property Rights of All*, the *NAI Toolkit*, the *Coastal NAI Handbook*, and other publications, can be downloaded free of charge at http://www.floods.org.

TO: Albany City Council

VIA: Wes Hare, City Manager
Greg Byrne, Community Development Director

FROM: Heather Hansen, Planning Manager

DATE: August 3, 2011 for the August 8, 2011 City Council Work Session

SUBJECT: City's Status in FEMA's Community Rating System Program

RELATES TO STRATEGIC PLAN THEME:
- Great Neighborhoods; Safe City
- Healthy Economy; Effective Government

Action Requested: None

Discussion:

National Flood Insurance Program (NFIP): Nearly 20,000 communities across the United States and its territories participate in FEMA's NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes federally-backed flood insurance available to homeowners, renters, and business owners in these communities. The City of Albany joined the NFIP in 1985.

Community Rating System (CRS): The NFIP's CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: (1) Reduce flood losses; (2) Facilitate accurate insurance rating; and (3) Promote the awareness of flood insurance.

Flood Insurance Premium Discounts
Based on CRS Classifications

Class	Credit Points	SFHA Discount	Non-SFHA Discount
1	4,500+	45%	10%
2	4,000-4,499	40%	10%
3	3,500-3,999	35%	10%
4	3,000-3,499	30%	10%
5	2,500-2,999	25%	10%
6	2,000-2,499	20%	10%
7	1,500-1,999	15%	5%
8	1,000-1,499	10%	5%
9	500-999	5%	5%
10	0-499	0%	0%

The City joined the CRS program in 1991. We started out in the program with a classification of nine. In preparation for that review, an inter-departmental team worked together to document and implement CRS-eligible activities. The team hoped to improve the City's rating by two classification levels, but several items, such as Goal 5, were not implemented in time. We will request a review within the next year and we are confident we can account for enough additional credit points to move to a CRS Classification of 5.

Budget Impact: None

Attachments: ISO letter; CRS Verification Report

INSURANCE SERVICES OFFICE, INC.
2789 NW Arlington Drive Albany, OR 97321 mjacobs@iso.com PHONE (541) 704-5434

January 4, 2011

Ms. Heather Hansen
Planning Manager
City of Albany
Post Office Box 490
Albany, OR 97321

Dear Ms. Hansen:

Enclosed are the results regarding credits for your Community Rating System (CRS) Cycle visit.

At the present time, I have verified 2078 credit points for the City of Albany. This results in a CRS Classification of 6. Attached is a verification report and a credit calculation worksheet AW-720 which contains an overall point summary. The information provided is subject to further review and acceptance by DHS/FEMA.

Thank you for your cooperation during my visit. I am certain you may have questions so please don't hesitate to contact me.

Yours very truly,

Marlene Jacobs, CFM
ISO/CRS Specialist

Cc Mr. Jeff Woodward, DHS/FEMA Region X
Ms. Denise Atkinson, DHS/FEMA Region X
Ms. Christine Shirley, State of Oregon NFIP Coordinator
Ms. Sherry Harper, ISO, Planning Technical Coordinator

FLOODPLAIN MANAGEMENT TEAM WORK PROGRAM (2010)

Team : Melanie Adams, Chris Bailey, Evan Fransted, Heather Hansen, Randy Peppers, Gordon Steffensmeier, Darrel Tedisch

FEMA-CRS PROGRAM ACTIVITIES & POINTS	***CRS Activities*** ***· Tasks*** **Subtasks**	**Staff** (Lead in **Bold**)
310: Elevation certificates	a. Maintain FEMA elevation certificates (EC) on all bldgs in the SFHA after the date of application to CRS (10/1991). ECs must be made available to the public.	Melanie; Randy
	d. Maintain elevation certificates in computer format (ECCF)	**Melanie**; Allison
	e. Maintain elevation certificate data on a website (ECWS)	Melanie
	Off-site record storage – secure, safe area at least 1 mile away	Melanie; Allison
320: Map information service	Maintain and provide floodplain information, including FIRM info to inquirers, info on flood insurance purchase reqs, keeping old FIRMSs and updates of the maps used for the service, publicize the service at least annually, advise inquirers whether the property is in SFHA, and answer questions about related topics such as local FP management reqs.	**All**
330: Outreach ***[NOTE: We would really need to have a 'public information program' to get full points for this]***	Need more outreach!	**Darrel**; Team
	a. Outreach projects to the entire community (OPC); Send written info to all properties in the community thru mailing or newsletter	**Heather**
	b. Outreach projects to floodplain properties (OPF): Send a notice directed to properties in floodprone areas clearly explaining that the property is subject to flooding. Send letter to people in the floodplain + publicity.	**Heather**
	c. 1. Additional outreach, such as flood awareness week, or flyers in local paper (OPA) ***(NOTE: no credit for this if next project is done)***	
	Public education on disaster response	Darrel
	2. Outreach projects pursuant to a public information program strategy (OPS).	
	d. Promotion of flood insurance (PFI): Distribute letter or brochure on flood insurance to all properties in community.	**Heather**
350: Flood protection information	a. Flood protection library (LIB): If the local library contains at least one document from these topics and the documents are entered into the catalog system	**Evan**
	b. Locally pertinent documents (LPD): Documents include ones keyed to local or state conditions.	
	c. Flood protection website (WEB): Including flood protection info or links on the city's website	**Evan**

Team : Melanie Adams, Chris Bailey, Evan Fransted, Heather Hansen, Randy Peppers, Gordon Steffensmeier, Darrel Tedisch

FEMA-CRS PROGRAM ACTIVITIES & POINTS	*CRS Activities* · *Tasks* Subtasks	**Staff** (Lead in **Bold**)
360: Flood protection assistance	Providing site-specific flood and flood-related data, such as floor elevations, data on historical flooding in the 'hood, so inquirers can relate the flood threat to their 'hoods.	All
	Providing names of contractors and consultants knowledgeable of retrofitting techniques	
	Providing material on how to select a qualified contractor and what recourse they have if they are dissatisfied with performance	Heather
	Making site visits to review flooding, drainage, and sewer problems and providing one-on-one advice to the property owner	Heather; Melanie; Jeff
	Providing advice and assistance on retrofitting techniques in Activity 530	
	If person providing advice and assistance on retrofitting has graduated from EMI retrofit course	Melanie
	Used to require a log, now requires a letter	Melanie & Jeff coord
410: Additional flood data	***Subject to impact adjustment*(48x1.1)**	
	The points for the above are multiplied by the ratio that reflects how much of the study was financed by non-FEMA funds	
	If new study was done to one or more higher standards than the FEMA mapping criteria	
	Based on allowable floodway surcharge used in study	
	If city maps and regulates areas of special flood-related hazards	
420: Open space preservation	***Subject to impact adjustment* NOTE: We get credit 3 times -- acres of reg floodplain - how many are open space (parks, cemetaries, ballfields), how many are deed restricted, how many serve natural and beneficial function(326x1.1)**	
	Keeping vacant floodplain lands open, e.g., public ownership, private preserve, no new buildings or fill	Evan; Gordon
	If deeds for the parcels preserved as OS restrict future development	Gordon
	If OS parcels are in an undeveloped natural state, have been restored, or protect natural and beneficial functions	Heather; Evan
	If OS is also in area subject to one of special flood-related hazards (see 401)	
	TMDL & Goal 5	Heather & Chris
430: Higher regulatory standards	***Subject to impact adjustment* (366x1.1)**	Randy
	Freeboard (FRB): freeboard requirement	
	Engineered foundations	Randy
	Counting improvements cumulatively	Randy
	Substantial improvement threshold lower than 50%	Randy

FLOODPLAIN MANAGEMENT TEAM WORK PROGRAM (2010)

Team : Melanie Adams, Chris Bailey, Evan Fransted, Heather Hansen, Randy Peppers, Gordon Steffensmeier, Darrel Tedisch

FEMA-CRS PROGRAM ACTIVITIES & POINTS	***CRS Activities*** ***· Tasks*** **Subtasks**	**Staff** (Lead in **Bold**)
	Protection of critical facilities - 500-year flood	Melanie; Heather
	Protection of floodplain storage capacity	
	Natural and beneficial function regulations (Goal 5)	Heather
	Prohibiting first floor enclosures	Heather
	Other higher standards	Heather; Evan
	Land development criteria (LDC) (see CRS Manual for calculation)	Evan
	Low density zoning (LZ) Up to 600 points is given for low density zoning. S= the minimum lot size in acres; LZs= 60 x 5 (RR zone).	Heather; Evan
	Regulations keyed to special flood-related hazards	
	State-mandated regulatory standards	
	City's classification under the Bldg Code Effectiveness Grading Schedule and adoption of International Code Series	Melanie
	Certification and training of city's staff	Heather
	Manufactured Home Parks (MHP): regulations require that new and replacement manufactured homes placed in existing manufactured home parks and subdivisions be properly anchored and elevated to or above the base flood elevation plus any required freeboard.	Heatehr; Randy
440: Flood data maintenance	****Subject to impact adjustment* (107x1.1)***	
	Implement digital or paper systems that improve access, quality, and/or ease of updating flood data. Data must be updated at least annually.	
	Program that maintains benchmarks so surveyors can find them and depend on them to be accurate	
	Maintain copies of all FIRMS that have been issued for the city	
450: Stormwater management	****Subject to impact adjustment* (88x1.1)***	
	Stormwater management regulations (SMR): Regulate development on a case-by-case basis to ensure that peak flow of runoff from each site will not exceed predevelopment runoff:	
	Freeboard for new buildings in B, C, D, or X zones (FRX): Requiring all new buildings to be protected from local drainage problems	Randy
	Erosion and sedimentation control regulations (ESC): Regulations to minimize erosion from land disturbed due to construction or farming	Jeff
	Water quality regulations (WQ) to improve quality of stormwater runoff	Chris
	Linda: Need updated citywide stormwater management master plan	Gordon?
	Recently completed TMDL Implementation Plan?	Chris
510: Floodplain management planning	*Activities below are in alignment with Multi-Hazard Mitigation Planning Regs (44 CFR 201.6) – 294 points total*	Darrel

Team : Melanie Adams, Chris Bailey, Evan Fransted, Heather Hansen, Randy Peppers, Gordon Steffensmeier, Darrel Tedisch

FEMA-CRS PROGRAM ACTIVITIES & POINTS	***CRS Activities*** ***· Tasks*** **Subtasks**	**Staff** (Lead in **Bold**)
540: Drainage system maintenance		
	Inspect the drainage system (natural and manmade) and remove debris	
	Regulations prohibiting dumping in streams and ditches	
610: Flood warning		
	Flood threat recognition system that forecasts flood elevations and arrival times at specific locations	
	Emergency warning dissemination (EWD)	
	Implementation of specific tasks to reduce or prevent threats to health, safety, and property	
	Coordination of flood warning and response activities with operators of critical facilities	
	Designation by the National Weather Service as a StormReady Community	

HIGHER REGULATORY STANDARDS

Prohibiting siting of critical facilities in the 500-year floodplain

Elevating equipment, ductwork, etc - engineered floor vents

Cumulative improvements

Substantial improvements (<50%)

Protection of floodplain storage capacity - no rise; compensatory cut and fill

Protecting natural and beneficial functions - need map

Prohibiting storage of gas & propane tanks (any particular size?) - storage of hazardous materials - threshold?

Requiring plans that show erosion and sedimenatation controls - done!

Requiring floodplain on subdivision plat - shoudl be okay - county surveoyrs

Enclosure limits (43)

TO: Albany City Council

VIA: Wes Hare, City Manager

FROM: John R. Bradner, Fire Chief JRB

DATE: August 4, 2011, for the August 8, 2011, City Council Work Session

SUBJECT: ISO (Insurance Services Office, Inc.) Public Protection Classification for Structure Fire Suppression Capabilities

RELATES TO STRATEGIC PLAN THEME: • A Safe City

Action Requested: No action requested.

Discussion:

The Fire Department received notification from Insurance Services Office (ISO) that our public protection classification for structure fire suppression capabilities would be downgraded unless the department took action to appeal this classification. The Department was successful in its appeal and has received notification from ISO that it will retain its previous classification of 3/8b.

Below is a chart defining the changes that were obtained through the appeal process:

	Credit Available	Initial Score	After Appeal	Difference
Receiving & Handling Fire Alarms				
Telephone Service	2	2.00	2.00	0
Operators	3	1.62	1.62	0
Dispatch Circuits	5	2.80	4.05	1.25
Total	**10**	**6.24**	**7.67**	**1.25**
Fire Department				
Engine Companies	10	7.74	7.72	-0.02
Reserve Pumpers	1	0.74	0.77	0.03
Pumper Capacity	5	5.00	5.00	0
Ladder Service	5	1.80	1.80	0
Reserve Ladder/Service	1	0.21	0.34	0.13
Station Distribution	4	2.25	2.30	0.05
Company Personnel	15	7.29	7.29	0
Training	9	5.58	5.85	0.27
Total	**50**	**30.34**	**31.07**	**0.73**
Water Supply				
Water System	35	34.00	34.00	0
Hydrants	2	1.90	1.90	0
Condition of Hydrants	3	2.09	2.09	0
Total	**40**	**37.99**	**37.99**	**0.00**
Divergence		-6.86	-6.57	0.29
Total	**100**	**67.89**	**70.16**	**2.27**

Budget Impact: No budget impact.