



November 12, 2014

TO: Flood Authority Members
FROM: Scott Boettcher, Staff
SUBJECT: Update: Flood proofing (Vent Retrofits, Local Area Analysis)

The purpose of this memo is to update and make recommendation on next steps regarding utilizing of remaining 2013-15 Chehalis Basin Capital Budget funds for local flood proofing, specifically flood vent retrofits and local area analysis pilots. We will discuss this material at our Thursday, 11/13/2014 Flood Authority meeting in Montesano. Please feel free to call or email if you have any questions (i.e., 360/480-6600, scottb@sbgh-partners.com).

I. Background:

At the Flood Authority's 10/16/2014 conference call, the Flood Authority directed staff to advertise to Basin governments the availability of remaining 2013-15 Chehalis Basin Capital Budget funds for local flood proofing, specifically flood vent retrofits and local area analysis pilots. This was done 10/22/2014, with a stated due date for interest requests of 11/07/2014. See staff memo to Basin governments here https://www.ezview.wa.gov/Portals/_1492/images/Final%20--%20Opportunity%20Announcement%2010202014.pdf.

II. Update: Vent Retrofits

One Basin Government submitted a request for vent retrofits. That was the Town of Bucoda. Bucoda's request was for roughly 25-30 homes.

On 11/10/2014 Flood Authority staff met with floodplain and policy personnel from the WA Department of Ecology (Tom Clingman, Scott McKinney, and Jeffree Stewart) as well as staff from French & Associates (French Wetmore, Jerry Louthain, and Mark Riebau). Purpose of the meeting was to discuss a process for moving forward on Bucoda's request, as well as how to continue to advertise the availability of funds for vent retrofitting.

The following are elements for that process for discussion with Flood Authority members:

- a. Bucoda publicize the program to its citizens and secure permit applications and approval for on-site inspections from interested property owners. Specific addresses would be put in contractor bid specifications.
- b. French & Associates would train Bucoda staff on what to look for in the permit applications and on-site inspections. Other interested communities could attend the training.
- c. Flood Authority staff (Scott) prepare bid package to secure contractor for Bucoda's vent retrofits, and then also potentially other communities at future negotiated prices.



- d. Bid package should reference the following specs:
- 1) "A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters." [see NFIP rule at 44 CFR 60.3(c)(5)]
 - 2) Openings must be on at least two walls. [not in rule; however is industry standard practice]
 - 3) Reference, for benefit of permit officer and contractors FEMA Technical Bulletin here https://www.ezview.wa.gov/Portals/_1492/images/FEMA%20Tech%20Bulletin%201.pdf.
- e. Hold a pre-bid conference.
- f. Proposals would be reviewed and evaluated by Ecology, French & Associates and Flood Authority staff.
- g. Bucoda would issue the building permits.
- h. When a project is completed, the Town permit officer would inspect and sign off on each project. The contractor would submit the Town's documentation with its monthly invoice to Flood Authority staff for approval and processing.
- i. Note1 -- If other communities sign on, they would follow the same procedures. The "negotiated rate" should be based on the same criteria as the contractor's Bucoda bid, with an adjustment perhaps for travel distance from the contractor's base.
- j. Note2 – Here is an interesting case study on the effect proper vents can have on lowering flood insurance rates
https://www.ezview.wa.gov/Portals/_1492/images/OR%20PPT%20%20Retro%20Case%20Study%20copy.pdf

Roles:

- Flood Authority Staff -- Contract Manager.
- Lewis County – Fiscal Agent (to be confirmed).
- French & Associates – Technical Assistance.

Budget:

- \$100,000 (placeholder figure depending on contract amount for Bucoda work and interest in vent retrofits within other jurisdictions).

Recommendation:

1. Flood Authority staff recommend this process be approved and staff move forward pending confirmation of Lewis County's capacity and willingness to be fiscal agent.
2. Flood Authority staff recommend continuing to promote the availability of 2013-15 funds for vent retrofits to Basin Government.



III. Update: Local Area Analysis

One Basin Government submitted their interest in being a local area analysis pilot. That was Thurston County.

- Note1: Thurston County does need to confirm with the County Commissioners.
- Note2: It was not entirely clear in emails whether or not Aberdeen wanted to be a local area analysis pilot as well. Flood Authority staff will confirm whether Aberdeen wants to be a local area analysis pilot as well.

On 11/10/2014 Flood Authority staff met with floodplain and policy personnel from the WA Department of Ecology (Tom Clingman, Scott McKinney, and Jeffree Stewart) as well staff from French & Associates (French Wetmore, Jerry Louthain, and Mark Riebau). Purpose of the meeting was to discuss the process for moving forward with the local area analysis pilot effort.

The following are elements for that process for discussion with Flood Authority members:

- a. French & Associates meet with Thurston County (assuming County Commissioners approve Thurston being a pilot) to flesh out the mechanics and timing of the pilot. Area analyses are prepared consistent with the following a five step process that also ensures CRS credit:
 - 1) Notification and survey of all residents of the area.
 - 2) Coordination with other agencies and programs that may impact flooding of the area.
 - 3) Data collection on each property, including a site visit.
 - 4) Review of alternative approaches to mitigate flood damage (and their costs and benefits).
 - 5) Prepare the analysis report.
- b. French & Associates and the County conduct the pilot. There may be one, two, or three reports, depending on the final delineation of the repetitive loss area(s).
- c. Results are written up in a 10-15 page report detailing risk areas and priority actions (elevating, retrofits, buyouts, etc.).
- d. Report is presented to the Board of County Commissioners. The Board may adopt the analyses if the County wants CRS credit for the product.
- e. Priority actions are then queued up for immediate action (e.g., further vent retrofits) or support through future funding.
- f. French & Associates concludes pilot with lessons learned document for Flood Authority.
- g. Note – If Aberdeen or another community is willing, the process described above would be followed.

Recommendation:

1. Flood Authority staff recommend this process be approved and staff move forward.
2. Flood Authority staff recommend continuing to promote the availability of 2013-15 funds for local area analysis pilots.