

MEMORANDUM

Date: September 26, 2018
To: Chehalis Basin Board
From: Andrea McNamara Doyle, Office of Chehalis Basin (OCB) Director
Re: Draft Community Flood Assistance & Resilience (CFAR) Program

At the September 6, 2018 Chehalis Basin Board meeting, the Board supported the Office of Chehalis Basin staff recommendation to develop an updated outline/framework for a “floodproofing” program. The Board also asked staff to evaluate how Natural Systems Design (NSD) and other local government, agency, tribal, or consultant staff can contribute to defining how channel migration and erosion hazard assessments could be integrated into a basin-wide floodproofing program.

At the October 4 board meeting, staff will provide a progress report and share a recommended approach for developing a basin-wide program for addressing property damages from floodwater inundation and erosion hazards from channel migration. This memo provides background information and the staff recommendations for:

- Program goals and objectives;
- The types of issues the board will be asked to provide direction on;
- Next steps for developing the program; and
- Re-naming the program from the informal “floodproofing program” to the Community Flood Assistance and Resilience (CFAR) Program.

Background

The Chehalis Basin Strategy is an ambitious collection of potential actions to both improve and restore river habitat and reduce flood damage. Success requires a basin-wide strategy that includes near-term and long-term actions, as well as small and large-scale projects. The long-term goal of the Strategy is to integrate these actions to most effectively and efficiently make the basin a safer place for families and communities impacted by flooding, and to improve and restore aquatic species habitat now and for future generations.

The approach to reduce flood damage will require a combination of large-scale projects and local scale actions. Local scale actions include floodproofing (e.g., acquisition, structure elevation, etc.), local flood damage reduction projects, land use management, utilization of updated regulatory flood data, floodplain protection practices, construction standards, and the flood warning system. All of these local scale actions need to work in concert and be consistent with implementation of large-scale projects as well as the basin-wide efforts to restore aquatic species habitat. Local scale actions will be needed both

in areas that are affected by large-scale flood projects, as well as in areas not protected or affected by large-scale projects.

This memo focuses on the objectives and process to develop a program to protect individual properties through floodproofing and other methods to address property damage from channel migration. Floodproofing is intended to address the damage caused by rising flood waters. Floodproofing includes any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property (including water and sanitary facilities, structures and their contents, etc.). Floodproofing most often involves elevating structures on floodprone property or buying properties and converting the land to other beneficial uses in order to eliminate the risk.

In addition to damage caused by rising flood waters, damage also occurs in a number of places in the Chehalis Basin as a result of river channels migrating, eroding land and damaging structures and beneficial uses of the land. The CFAR program will need to address damage from both of these issues, rising flood waters and channel migration.

As mentioned at the September board meeting, OCB staff have developed a Floodplain/Flood Risk Reduction Manager job description for the staff position that was funded for this current biennium. This staff position is needed to help oversee, review, and perform aspects of the work related to the Board's desired program. As currently envisioned, this staff position would function as a Project Manager for all technical work done by consultants as well as performing many other duties. This position will play an important role in coordinating communications about the work and results with affected groups (such as local governments) and individual landowners. The position is also expected to enhance local governments' capabilities to communicate effectively with one another and with constituents about flood risks, and allow for improved exchange of information about risks between all levels of government (e.g, Federal Emergency Management Agency [FEMA], state, counties & cities and other partners and stakeholders).

Potential Goals for the Program

1. Provide technical and financial assistance to local communities and landowners to protect lives and property from river flooding and channel migration.
2. Reduce direct economic damages to property, including buildings and their contents, and associated indirect adverse impacts on people, businesses and communities in the basin.
3. Encourage compatible human uses, economic activities, and improved habitat conditions in flood-prone and channel migration areas.
4. Develop criteria to prioritize state investments throughout the basin in a way that considers local government readiness and landowner willingness; potential benefits to areas not otherwise protected by large-scale flood damage reduction elements of the strategy; and

consistency with ecosystem restoration goals included within the Aquatic Species Restoration Plan.

5. Undertake activities in a coordinated, cost-effective and environmentally-sensitive manner.

Issues that Need to be Addressed

In regard to floodproofing, there are several issues that need to be addressed:

1. *Prioritization of properties for floodproofing:* Various local governments in the basin have completed different levels of planning for floodproofing and flood damage reduction. For example, the City of Centralia in 2016 developed a property protection program that prioritizes areas of the city for elevating homes and businesses, and areas where it is a priority to purchase properties to add to the city's open space areas or other beneficial public uses. The Governor's Work Group supported funding actions consistent with Centralia's plan and encouraging other local governments to develop similar strategies for their jurisdictions.

Thurston County has developed some priorities for elevations and buyouts, and is currently beginning work on sub-area plans in the Grand Mound and Rochester areas that could address these issues. Other jurisdictions have likely already identified areas where floodproofing actions would be priorities within their existing land use and zoning plans (e.g., existing regulatory floodways, designated shoreline buffer areas, delineated channel migration zones, and land use zones where most new buildings and improvements to existing buildings are already prohibited). And still other jurisdictions are at different points in the process of working through FEMA-initiated floodplain management comprehensive assessments (e.g., Bucoda, Chehalis, Lewis County).

In order to develop a reasonable estimate of the size and scope of the program and—importantly—the potential costs associated with such a program, staff need to inventory where opportunities for floodproofing are already ripe or emerging, and confer with local governments and others to assess readiness to develop floodproofing strategies that could be funded through the Chehalis Basin Strategy.

2. *Administration of funds for floodproofing:* Floodproofing in the past has been largely funded by the federal government, and typically only after a federally declared disaster. Federal programs for pre- and post-disaster funding should be part of the basin floodproofing program but are cumbersome, limiting interest in participation on the part of local governments and landowners. It will be necessary to develop an accessible and accountable oversight system to administer state funds for floodproofing and coordinate with federal funds. This will require defining the respective roles and responsibilities of Office of Chehalis Basin and local governments in administering various elements of the program, and coordinating with federal funding sources.

In regard to channel migration there are several issues that need to be addressed:

1. *Defining Channel Migration Areas:* In considering how to best incorporate any new work related to channel migration zones (CMZ) and erosion hazards on a basin-wide scale, it is important to understand that there are significant differences between the baseline CMZ information available from one jurisdiction to another. Developing a basin-wide approach to CMZ or hazard assessments will require consultation and careful coordination with local governments before undertaking additional work on a broader scale within the basin. It is also important to recognize that significant differences exist between the guidance that is currently used for analyzing and delineating CMZs in the built environment versus guidance that is used for CMZ delineations in managed forestland. As a result, consultation and careful coordination with the agencies responsible for developing different existing CMZ guidance (Ecology & DNR) will be needed before and during any work on a broader scale within the basin.
2. *Scope of Additional Technical CMZ or Hazard Mapping:* Important decisions will need to be made regarding the various types of CMZ or hazard assessments that can or should be done in particular areas: e.g., broad planning level versus more targeted, detailed assessments (including choosing between multiple levels of detail based on a variety of factors). The approach selected will have significant implications for:
 - How long the work takes
 - How costly it is to do the work
 - How the results can and will be for different purposes (e.g., land use planning and/or regulation, hazard ratings, supporting FEMA programs [RiskMAP, NFIP]).
3. *Regulatory and Incentive Elements:* Establishing regulatory CMZs across the basin in a consistent manner would require action by local governments. Identifying “high hazard” areas could impact property values and raise liability issues for government entities. In developing a recommendation to the state and local governments, the board will need to consider how to balance regulatory and incentive-based approaches to address the current and future risks to property owners as well as current and future liability risk for affected governmental entities.

Proposed Workplan to Advance the Community Flood Assistance & Resilience (CFAR) Program

Below are the steps staff have currently identified to develop the CFAR Program, listed separately for floodproofing and CMZ.

Floodproofing:

1. Hire the OCB Floodplain/Flood Risk Reduction Manager.

2. Inventory basin jurisdictions to identify where opportunities for floodproofing are already ripe or emerging, and confer with local governments and others to assess readiness to develop floodproofing strategies that could be funded through the Chehalis Basin Strategy.
3. Provide funds to Centralia and other jurisdictions for priority property protection actions that consistent with locally adopted flood damage reduction strategies.
4. Evaluate current federal and state programs for pre-disaster mitigation (elevating structures, buy-outs, etc.) and develop the administrative approach for supporting local government floodproofing actions.
5. Review proposed approach, and results of inventory/assessment with Chehalis Basin Board, to obtain further Board guidance regarding the scope, scale, sequencing, and budget for working with local governments to develop actionable floodproofing strategies.
6. Develop estimates for long-term benefits and costs for inclusion in the long-term Chehalis Basin Strategy.

CMZ:

1. Assess current local government and state programs for CMZs in the basin.
2. Evaluate the regulatory and incentive options for reducing the risks for landowners from CMZs and high hazard areas.
3. Develop options for identifying CMZs or high hazard areas in consultation with staff from local government planning departments, tribal governments, Ecology & DNR, & Regional FEMA staff.
4. Develop a draft scope & budget for additional CMZ/Erosion hazard assessment work that will support the Chehalis Basin Strategy.
5. Review the options for a CMZ program with the Chehalis Basin Board and develop the preferred approach.
6. Develop the scope for additional technical work to delineate CMZ.

Board Guidance

Staff is requesting Board guidance on the following:

- Are the draft goals identified for the program consistent with the board's objectives? Are there additional goals that should be included?
- Are there other issues (policy, technical, legal, financial, etc.) that should be considered as staff develops the program? Of the issues identified, do you have priorities for when or how the board engages in addressing them through additional work sessions, briefings, subgroups, etc?
- Does the draft work plan approach and schedule for advancing the program align with the board's expectations?

Conclusion

The CFAR Program needs to be a key element of the Chehalis Basin Strategy. In the Programmatic Environmental Impact Statement, the alternatives included over \$40M for floodproofing in addition to large-scale projects to achieve significant reductions in flood damage. Developing the CFAR Program will require close coordination with local, state, federal and tribal governments. It will also require significant guidance from the Board at key points in the process. This work is a priority for the OCB staff over the rest of this fiscal year.