

Floodplain Management Plan 2023 Update – Action Item Memo

Committee Member feedback requested:

Our next committee meeting will involve a discussion of goals, floodplain management activities and outreach projects for the three elements of the floodplain management plan.

Please briefly review the activities, outreach projects and messages being considered as action items in the 2023 FMP Update. In the next committee meeting, we will be discussing activity scoring and recommendations for modifications and additions. If you have ideas for new activities that you would like discussed, please email Robin (rdalke@cityofsalem.net) or bring ideas and questions to the next committee meeting on Thursday, September 21, 2023.

Floodplain Management Plan Action Items

The following table compiles all activities being considered as action items in the 2023 FMP Update. The CRS Coordinator's Manual organizes floodplain management activities into six distinct categories: Preventive; Property Protection; Natural Resource Protection; Emergency Services; Structural Projects; and Public Information. The table's columns are explained as follows:

- This table assigns a temporary **Activity Number** to each activity. This Activity Number corresponds to the Activity Number used in the scoring chart. Activities selected by the committee to be action items included in the 2023 FMP Action Plan will be provided an action item number associated with one of the six categories of floodplain management activities.
- **Source Code** is the plan from which the activity was selected for consideration in the 2023 FMP Update. The Source Codes are as follows:
 - FMP — Selected or considered in the 2018 Floodplain Management Plan Action Item
 - CAP — Climate Action Plan
 - SMP — Stormwater Master Plan
 - SWMP — Stormwater Management Plan
 - SACP — Salem Area Comprehensive Plan
 - TMDL — Total Maximum Daily Load Implementation Plan
- **Scoring** with a plus (+) indicator received a positive score when a preliminary review by staff was performed using the scoring matrix from prior FMPs. The result is not necessarily a reflection of the community's opinion about the activity, but the appropriateness of that activity being added as an action item to the 2023 FMP Update Action Plan. Scoring with a negative indicator (-) are those activities not selected as action items and will be discussed. Negative scored items may be completed in the context of other City plans and programs.
- **Other Reference Number** is the goal number, policy number, activity number, or other code number (if any) used in the source from which the activity was selected. The Other Reference Number is to be used in combination with the Source Code to clarify the full intent of the activity as explained in the original source plan.
- **Description** is abbreviated as much as possible for the sake of brevity. The activity is to be implemented as described in the original source plan.

Activities being Considered for 2023 FMP Update

Activity Number	Source Code	Scoring	Other Reference Number	Description
Preventive Activities				
4	FMP	+	PA1	Maintain benchmark data
2	FMP	+	PA2	Inspect and clean streams and stormwater facilities annually
3	FMP	+	PA4	Promote low impact development practices in development and redevelopment projects
4	FMP	+	PA5	Create 100-year inundation maps using data from Stormwater Master Plan
5	FMP	+	PA7	Provide additional staff training in administering regulations
6	FMP	+	PA8	Coordinate stormwater and flood management regulations with communities and organizations that share Salem's watersheds
7	FMP	+	PA9	Improve program for periodic site inspections of existing development within the floodplain
8	FMP	+	PA12	Protect buildings from shallow flooding
9	FMP	-	PA14	Investigate adoption of a new floodplain/natural area zone in the Salem Revised Code
41 (NEW)	FMP	+	1	Modify density requirements in floodplains to increase open space
42 (NEW)	FMP	-	4	Provide variable detention requirements throughout the watershed to minimize peak flows during 100-year flood events
43 (NEW)	FMP	-	8	Revise or update zoning ordinances to provide incentive, performance, or watershed-based zoning
45 (NEW)	FMP	+	14	Limit fill, buildings, and/or material storage in floodplain
46 (NEW)	FMP	-	15	Increase freeboard floor requirements
47 (NEW)	FMP	-	16	Require engineered foundations in floodplain
48 (NEW)	FMP	-	17	Restrict substantial improvements cumulatively

Activities being Considered for 2023 FMP Update

Activity Number	Source Code	Scoring	Other Reference Number	Description
49 (NEW)	FMP	–	18	Reduce substantial improvement threshold below 50%
50 (NEW)	FMP	–	19	500-year protection of critical facilities
51 (NEW)	FMP	–	72	Analyze unmapped areas to create new flood studies
52 (NEW)	FMP	–	74	Sign Cooperating Technical Partner agreement with FEMA
53 (NEW)	FMP	+	80	Adopt compensatory storage requirements for development in the floodplain (1.5 to 1)
58 (NEW)	FMP	–	73	Adopt more restrictive floodway standard
59 (NEW)	SMP	+	3.14	Collect data and conduct analysis to detect variations in trends and changes in historic weather patterns
63 (NEW)	SWMP	–	PC-1	Improve clarity in Stormwater Management Design Standards regarding infiltration testing requirements and determination of infiltration feasibility.
64 (NEW)	SWMP	–	PC-2	Evaluate existing codes and standards for LID and GSI approaches and prepare LID/GSI prioritization strategy
65 (NEW)	SWMP	+	OM-1	Update the official “waterways” geodatabase to incorporate field-verified information
66 (NEW)	SWMP	–	OM-8	Update the City’s Operations Pollution Prevention Plan
67 (NEW)	CAP	–	NR-01	Incentivize the inclusion of smaller, walkable parks/open space in new, large, subdivision developments.
70 (NEW)	CAP	–	NR10	Provide assistance to local institutions to increase their own tree coverage and create spaces such as urban forests, community gardens, and pollinator habitats
71 (NEW)	CAP	–	NR15	Offer incentives/rebates to homeowners, businesses, and developers to install pervious surfaces with the goal of decreasing runoff and flooding.

Activities being Considered for 2023 FMP Update

Activity Number	Source Code	Scoring	Other Reference Number	Description
72 (NEW)	CAP	–	NR16	Identify areas (e.g., underutilized parking lots, empty malls/commercial space) that can be “de-paved” and converted to green space.
62 (NEW)	SWMP	+	IL-3	Dry weather outfall and illicit discharge screening plan and inspection program
80 (NEW)	SACP	+	CC 2.3	Pursue a variety of flood prevention and mitigation strategies, including incentivizing property owners to make improvements that incorporate green infrastructure.
Property Protection Activities				
11	FMP	+	PP1	Improve floodplain protection assistance program
12	FMP	+	PP2	Implement Flood Insurance Plan
13	FMP	–	PP3	Acquire easements for public and private stormwater facilities
14	FMP	+	PP4	Investigate financial assistance program for Elevation Certificates and Letter of Map changes
44 (NEW)	FMP	–	12	Acquire gravel pits/lakes for flood mitigation (\$24M)
54 (NEW)	FMP	–	28	Acquire repetitive loss / flood prone properties
55 (NEW)	FMP	–	29	Retrofit existing buildings or other structural protection
61 (NEW)	SWMP	+	PI-6	Volunteer green stormwater cleaning program
73 (NEW)	CAP	–	NR19	Develop a program for private or public acquisition of floodplain land and restoration of these floodplains to prevent future damage from flooding.
Natural Resource Protection Activities				
15	FMP	+	NR1	Provide grant funding for restoration projects in riparian areas
16	FMP	+	NR2	Amend Salem Revised Code to implement provisions of the Endangered Species Act as they relate to floodplain development

Activities being Considered for 2023 FMP Update

Activity Number	Source Code	Scoring	Other Reference Number	Description
17	FMP	–	NR3	Enhance natural functions for City-owned properties in the floodplain
18	FMP	–	NR4	Form Watershed Planning Committee
19	FMP	–	NR6	Streamline process to accept land donations to City for natural areas
20	FMP	+	NR7	Increase quality and quantity of vegetative cover.
21	FMP	–	NR8	Prepare a Flood Species Assessment in conformance with CRS Activity 510
35 (NEW)	FMP	+	40	Provide incentives for floodplain restoration and vegetation
36 (NEW)	FMP	–	41	Create a 50-foot riparian setback for all development
37 (NEW)	FMP	–	42	Establish local ordinance for wetland protection
39 (NEW)	FMP	–	45	Create natural floodplain functions plan
40 (NEW)	FMP	+	46	Acquire open space lands in floodplains to preserve natural functions
68 (NEW)	CAP	–	NR05	Amend City code to require minimum 25-foot no-build zone within riparian corridor
74 (NEW)	CAP	–	NR24	Enhance natural floodplain functions on City-owned properties in the floodplain
76 (NEW)	SACP	–	CC 3.5	Allow or require FEMA's cluster development standards as a mechanism for preserving additional open space in the floodplain and adapting to climate change-exacerbated flooding.
77 (NEW)	TMDL	+	4B	Provide information and resource assistance to streamside owners regarding stream stabilization and riparian enhancement projects
78 (NEW)	TMDL	–	5A	Increase riparian buffer protection through local assessment
79 (NEW)	TMDL	–	6A	Update and implement Riparian Outreach Plan

Activities being Considered for 2023 FMP Update

Activity Number	Source Code	Scoring	Other Reference Number	Description
69 (NEW)	CAP	–	NR05	Require developers to plant ecologically well adapted vegetation to create a vegetated buffer within the existing riparian corridor on all new development.
38 (NEW)	FMP	–	43	Expand erosion control program to include projects over 1 acre
Emergency Services Activities				
22	FMP	+	ES1	Implement emergency response plans for critical facilities
23	FMP	+	ES2	Create post-flood procedures for gathering flood data
24	FMP	+	ES3	Improve flood warning and response
25	FMP	+	ES6	Modify questionnaires that are used during flood events to improve data
26	FMP	+	ES7	Investigate development of incentives for critical facilities and industries in the floodplain to develop flood warning and response plans
27	FMP	+	ES8	Implement post-disaster mitigation policies from the Emergency Management Plan
75 (NEW)	CAP	–	EC05	Create a philanthropic fund to assist small businesses in recovering from and preparing for natural disasters
10	FMP	+	PA15	Prepare Substantial Damage Management Plan in conformance with CRS Activity 510
Structural Project Activities				
28	FMP	+	SP1	Construct stormwater capital improvement projects
56 (NEW)	FMP	–	57	Increase stormwater conveyance capacity
57 (NEW)	FMP	–	58	Channel and floodplain redesign & construction
34 (NEW)	TMDL	+	32	Implement and update the City's Stormwater Retrofit Plan and Hydromodification Assessment Report.
Public Information Activities				
29	FMP	+	PI1	Require hazard disclosure in real-estate transactions

Activities being Considered for 2023 FMP Update

Activity Number	Source Code	Scoring	Other Reference Number	Description
30	FMP	+	PI2	Implement a Program for Public Information
31	FMP	+	PI4	Coordinate floodplain management outreach efforts with the City's stormwater program implementation activities.
32	FMP	+	PI5	Compile and improve outreach materials to guide property owners in planting and habitat restoration of flood-prone properties
33	FMP	+	PI6	Improve outreach regarding protection of tree canopy for reducing stormwater runoff
60 (NEW)	SWMP	+	PI-5	Storm drain/catch basin marking program

Coverage Improvement Plan (Floodplain Insurance Plan) Action Items

The following table contains coverage improvement projects which are intended to increase flood insurance coverage in targeted areas. These action items remain unchanged from the 2022 annual review.

ID	Action Item
CP1	City newsletter article
CP2	Stakeholder training session
CP3	Presentations to neighborhood associations
CP4	Real estate and property management flier
CP5	Project involving mayor/council per CRS guidelines
CP6	Social media messages

Program for Public Information Outreach Projects (Flood Information and Outreach Plan)

The following table contains the current and proposed outreach projects and flood response preparations managed by staff. Outreach projects are intended for distribution during periods of low flood hazard and prior to wet weather season. These projects remain unchanged from the 2022 annual review.

Target Audience	Topics and Messages (see table 24)	Outcomes (See table 24)	Project(s)
Audience 1. Streamside and Floodplain Property Owners	Topic 1-7 and associated PPI Messages	1-7	OP1. Annual letter to owners of flood-prone properties
	Topic 1,3,4,6,7 and associated PPI Messages	1,3,4,6,7	OP2. Streamside Mailer to flood-prone properties
Audience 2. All Salem Property Owners and Residents	Topic 1-7 and associated PPI Messages	1-7	OP3. City Newsletter Article
	Topic 1-6 and associated PPI Messages	1-6	OP4. Presentation to neighborhood association
	Topic 1-4, 7 and associated PPI Messages	1-4, 7	OP5. Sandbag station brochure and sign
	Topic 6 and associated PPI Messages	6	OP6. Placards next to storm catch basin inlets
	Topic 1 and 6 and associated PPI Messages	1, 6	OP7. Floodplain Interpretive Trail Sign at Minto Brown Park
	Topic 2-4, 7 and associated PPI Messages	2-4, 7	OP8. Social Media Messages
	Topic 1-7 and associated PPI Messages	1-7	OP9. Public Works Day floodplain booth
	Topic 6 and associated PPI Messages	6	OP16. Dump no waste door hangars
	Topic 1, 2, 3 and associated PPI Messages	1,2,3	FRP3. Social media messages during flood events
	Topic 2,4, 5 and associated PPI Messages	2,4,5	FRP4. Social media messages after flood events
Target Area 3. Repetitive Loss Properties	Topic 1-5, 7 and associated PPI Messages	1-5,7	OP10. Repetitive Loss Letter

Target Audience	Topics and Messages (see table 24)	Outcomes (See table 24)	Project(s)
Target Area 4. Real Estate Agents and Insurance Companies	Topics 1-5 and associated PPI Messages	1-5	OP11. Information flyer for real estate agents
	Topics 1-5 and associated PPI Messages	1-5	OP12. Training for real estate professionals and insurance agents
Target Area 5. Developers, Contractors and Design Professionals	Topics 1-6 and associated PPI Messages	1-6	OP13. Information kiosk at PAC
	Topics 1, 2, 4 and 5 and associated PPI Messages	1,2,4, 5	OP14. Flood information and Insurance mailer to design professionals
Target Area 6. Educators, Students, Natural Resource Groups	Topics 1, 3, 4 and 6 and associated PPI Messages	1,3,4,6	OP15. Presentation to schools, teachers or watershed council
Target Area 7. Media and WRAPIO	Topics 1-5 and associated FRP Messages	1-5	FRP1. Media kit for reporters during flood event
		1-5	FRP2. Media kit for reporters after flood event
		1-5	FRP6. Radio PSA's after flood event
		1-5	FRP7. FRP messages for WRAPIO during flood event
		1-5	FRP8. FRP Messages for WRAPIO after flood event

Program for Public Information Messages (Flood Information and Outreach Plan)

The following table includes flood information messages that can be delivered based on specific topics and desired outcomes. These messages remain unchanged from the 2022 annual review.

Topic	PPI Message	Outcome
1. Know your flood hazard	A. Your property is at risk for flooding	Increase number of flood inquiries
	B. Know your watershed and how flooding can occur	
	C. Contact information of those who can help you	
2. Insure your property for your flood hazard	D. Homeowner insurance does not cover flood damage	Increase flood insurance coverage
	E. Remember coverage for structures and contents	
	F. Purchase flood insurance before it's too late	

Topic	PPI Message	Outcome
3. Protect people from the hazard	G. Make an evacuation plan	Reduce injuries during flood events
	H. Flood waters are dangerous for cars and pedestrians. Do you walk or drive through flooded areas.	
	I. Watch for power lines and gas leaks	
4. Protect your property from the hazard	J. Elevating your home could save you money	Reduce negative impacts of development on floodplains
	K. Retrofitting your home will reduce flood damage	
	L. Sandbags can be found by calling PW Dispatch or visiting www.cityofsalem.net/emergencies	
5. Build responsibly	M. Avoid obstructions in the floodway, like fences	Reduce negative impacts of development on natural floodplain function
	N. Know the floodplain development permit requirements	
	O. Check flood elevations early in the project.	
6. Protect natural floodplain functions	P. Preserve/restore native vegetation and trees	Reduce negative impacts of development on natural floodplain function and protect existing resources
	Q. No dumping into storm drains. These drain directly to our waterways	
	R. Look but don't touch. Floodplain areas provide refuge for wildlife, some of which are threatened or endangered.	
7. Flood Warning	S. Sign up for Community Alerts to receive emergency flood warnings on your mobile device, landline or email. Sign up at www.cityofsalem.net/communityalerts	Increase Salem Community Alert System subscribers who may not have a landline to receive automated emergency alerts