

Crosswalk: 2012 Thurston County Flood Hazard Mitigation Plan Actions and Draft 2017 Hazards Mitigation Plan Flood Actions

2012 Flood Plan Actions	Activity Category	Related 2017 Mitigation Plan Actions
<p>FMI-1 – Identify properties that are potential candidates for elevation, relocation or buyout based on an evaluation of flood risks, project feasibility, and planned flood risk reduction capital projects. A list of targeted high-priority acquisitions should be prepared and annually updated. An example of a high-priority project would be a property identified by FEMA as a repetitive loss property. Once the list is established, pursue funding opportunities to implement the projects.</p> <p>Ongoing</p>	<p>Prevention</p>	<p>TC-FH-16 - Draft a prioritized list of which residences the county would help relocate out or elevate above the 100-year floodplain, if state or federal monies are available; and</p> <p>TC-FH-15 - Draft a prioritized list of which floodway residences the county would relocate out or acquire (buyout) if state and federal monies are available.</p>
<p>FMI-2—Using the best available data on flood risk, conduct outreach to property owners to alert them to the risks and ways to deal with them, to inform them about potential opportunities to mitigate the risks, and to assess their interest in participation should funding be available. Property owners who are interested in participating in one of these programs should be informed that having flood insurance might help qualify them for funding assistance. Ongoing</p>	<p>Prevention Public Education and Awareness</p>	<p>CW-MH-6 - Develop and maintain a hazards mitigation public outreach strategy.</p>
<p>FMI-3—Continue a conservative approach to woody debris management and maintenance, using state- or County-established best management practices. Ongoing</p>	<p>Prevention Natural Resource Protection</p>	<p>TC-FH-18 - Encourage research into bioengineering and other techniques which provide streambank protection and improve fisheries using large woody debris. Support local demonstration projects which could provide such research.</p>
<p>FMI-4—Continue to maintain compliance and good standing with the programmatic requirements of the National Flood Insurance Program. Ongoing</p>	<p>Prevention Property Protection Public Education and Awareness</p>	
<p>FMI-5—Strive to maintain Thurston County’s Community Rating System classification of no higher than Class 5, as a primary measure of successful flood risk reduction. Ongoing</p>	<p>Prevention Property Protection Public Education and Awareness Natural Resource Protection Emergency Services</p>	<p>TC-FH-1 - Continue Thurston County’s enrollment in the Community Rating System (CRS) program as a part of the National Flood Insurance Program.</p>
<p>FMI-6—Expand multi-jurisdictional and multi-stakeholder coordination efforts and seek inter-local agreements or other contractual relationships in support of achieving long-term comprehensive flood risk reduction solutions, potentially in conjunction with salmon recovery efforts and regional flood risk reduction efforts. Ongoing</p>	<p>Prevention Public Education and Awareness Natural Resource Protection Emergency Services Structural Projects</p>	<p>TC-FH-4 - Continue to be actively involved in the multiple jurisdiction flood hazard reduction efforts within the Chehalis River Basin Flood Authority.</p> <p>CW-MH-7 - Strengthen interjurisdictional asset management capabilities.</p> <p>CW-MH-8 - Strengthen the capabilities to establish and maintain situational awareness of health and medical system and resource coordination during an emergency.</p>

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<p>FMI-7—Undertake a feasibility study on the formation of a countywide flood control zone district. This study should focus on the following:</p> <ul style="list-style-type: none"> • What are the capital costs of flood risk reduction projects within the county? • What would be the costs to the constituents of Thurston County to implement a flood control zone district? • How would this affect other Thurston County programs? • What would be the benefit to the constituents of Thurston County? • Recommendations for structure and organization of the district. Ongoing 	Prevention Public Education and Awareness Natural Resource Protection Emergency Services Structural Projects	
<p>FMI-8—Analyze the findings of the flood control zone district feasibility report and determine if its recommendations should be adopted. Create a prioritized list of flood risk reduction projects and programs throughout the county that could be funded under this mechanism.</p> <p>No Action</p>	Prevention Property Protection Public Education and Awareness Natural Resource Protection Emergency Services Structural Projects	
<p>FMI-9—Invest in flood prediction and forecast modeling to support all facets of the Thurston County floodplain management program, including but not limited to flood hazard identification, flood threat recognition in support of flood notification programs, climate change adaptation, and risk assessment. Ongoing</p>	Prevention Emergency Services	
<p>FMI-10—Complete an inventory of all publicly maintained stormwater facilities COMPLETE</p>	Prevention	
<p>FMI-11—Create an inventory and establish a priority list for culvert replacement that takes into account fish passage, flood depth reduction and future losses avoided. COMPLETE</p>	Structural Projects <i>Prevention</i>	<p>TC-FH-22 - Draft a prioritized list of road segments and bridges that should be elevated above the 100-year floodplain and culverts that will fail under flood flow. Upgrade these structures if state or federal monies become available.</p>
<p>FMI-12—Utilizing the best available data, science and technology, enhance the existing flood notification program, striving to identify a notification protocol within systems that have real-time flood threat recognition capability. COMPLETE</p>	Emergency Services	<p>TC-MH-4 (completed in 2016) - Improve alert and warning capabilities.</p>
<p>FMI-13—Update the County emergency response plan to reflect any changes to flood notification protocol within the county. Ongoing</p>	Emergency Services	
<p>FMI-14—Utilizing the best available data, science and technology, maintain and enhance as data becomes available the Level 2, user-defined HAZUS-MH model that was constructed to support this planning effort. Ongoing</p>	Prevention Public Education and Awareness Emergency Services	

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FMI-15 —Develop a post-flood disaster action plan that establishes protocols for the County such as substantial damage determination, the recording of perishable data (such as high water marks), grant support, staffing, continuity of operations, and recovery. Ongoing	Emergency Services	
FMI-16 —Perform a comprehensive assessment of floodplain restoration, reconnection and enhancement of floodplain storage opportunities in the county. Ongoing	Natural Resource Protection Structural Projects	
FMI-17 —Work with the County departments responsible for implementation and maintenance of the County’s capital improvements programs to identify flood hazard mitigation projects that are eligible for hazard mitigation grants. Once projects are identified, pursue grant funding for those projects shown to be cost-effective. Ongoing	Prevention Structural Projects	TC-FH-2 - Secure funding for flood related projects within the 20-year Stormwater Capital Facilities Plan.
FMI-18 —Collaborate with Pierce County and Tacoma Power to identify appropriate operational procedures of Alder Lake Dam that will minimize the flood risk on the Nisqually River. COMPLETE	Emergency Services	CW-FH-1 - Develop emergency evacuation routes and update Comprehensive Emergency Management Plans for potential catastrophic dam failure. TC-FH-25 - Develop evacuation plans for communities and residents situated downstream from the Nisqually and Skookumchuck river dams.
FMI-19 —Continue to develop and implement an annual public outreach strategy that seeks to leverage public information resources and capabilities within the county. Ongoing	Public Education and Awareness	CW-MH-6 - Develop and maintain a hazards mitigation public outreach strategy.
FMI-20 —Continue to pursue/ maintain Thurston County floodplain management program compliance with the National Marine Fisheries Service biological opinion regarding the National Flood Insurance Program. Ongoing	Natural Resource Protection	
FMI-21 —Establish a link between the Thurston County Flood Hazard Mitigation Plan and the Natural Hazards Mitigation Plan for the Thurston Region. The Flood Hazard Mitigation Plan will become the flood hazard component of the Natural Hazards Mitigation Plan upon its next update. All future updates to the two plans will occur on the same planning cycle upon plan integration. COMPLETE	Prevention	
FMI-22 —Obtain digital data and create GIS maps of the flood inundation from possible failures of the Skookumchuck Dam on the Skookumchuck River and the Alder and LaGrande Dams on the Nisqually River. Using this data, assess the risk associated with these facilities utilizing the best available data and science. COMPLETE	Prevention Emergency Services	
FMI-23 —Develop evacuation plans for communities and residents downstream from the Nisqually and Skookumchuck River dams.	Emergency Services	TC-FH-25 - Develop evacuation plans for communities and residents situated downstream from the Nisqually and Skookumchuck river dams.

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FMI-24 —Draft a prioritized list of road segments and bridges that should be elevated above the 100-year floodplain and culverts that will fail under flood flow. Upgrade these structures if state or federal funds become available. COMPLETE	Prevention Structural Projects	TC-FH-22 - Draft a prioritized list of road segments and bridges that should be elevated above the 100-year floodplain and culverts that will fail under flood flow. Upgrade these structures if state or federal monies become available.
FMI-25 —Develop a southeast flood detour plan for the Thurston County Comprehensive Emergency Management Plan. COMPLETE	Emergency Services	CW-MH-4 – Create a lifeline transportation route GIS map for the Thurston region and integrate the data into the Thurston County Emergency Operations Plan and other local planning needs. TC-MH-3 - Improve the capability to identify moderate to long term road impedances, and put them into the CAD (Computer Aided Dispatch).
FMI-26 —Map the channel migration zones for all rivers in the region and the extent of high quality riparian habitat. COMPLETE	Prevention	TC-FH-7 - Remap the floodplains for all rivers, streams, and high groundwater areas and update the Flood Insurance Rate Maps (FIRMs). TC-FH-12 - Work with others to determine the width and conditions of buffers along river and stream shorelines.
FMI-27 —To support initiative # FMI-1, undertake a study of identified repetitive flood loss areas to determine the following: <ul style="list-style-type: none"> • Repetitive losses not captured by flood insurance data • Causes of the repetitive flooding • Assets impacted by the repetitive flooding (this would include assets such as livestock, out-buildings and rescue costs not already identified by FEMA) • Possible alternatives to remediate the repetitive flooding COMPLETE	Prevention	TC-FH-21 - Study repetitive public cost losses, this would include residential structures, but also include properties such as livestock, out-buildings and rescue costs not already identified by FEMA.
FMI-28 —Revise shoreline regulations to encourage shoreline protective structures to be bioengineered. Ongoing	Prevention Natural Resource Protection <i>Structural Projects</i>	TC-FH-11 - Revise shoreline regulations to encourage “shoreline protective structures” to be “bioengineered.”
FMI-29 —Review the recommendations of adopted stormwater drainage basin plans to determine which ones are still relevant for implementation. COMPLETE	Prevention	TC-FH-2 - Secure funding for flood related projects within the 20-year Stormwater Capital Facilities Plan.

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FMI-30 —Prepare new drainage basin plans for the high groundwater areas. Ongoing	Prevention	TC-FH-14 - Prepare new drainage basin plans in priority areas such as Salmon and Yelm Creeks.
FMI-31 —To support implementation of the Thurston County Critical Areas Ordinance, encourage research that establishes best management practices for bioengineering and other techniques that provide streambank protection and improve fisheries through the use of large woody debris. Support local demonstration projects that could support such research. COMPLETE	Natural Resource Protection	TC-FH-18 - Encourage research into bioengineering and other techniques which provide streambank protection and improve fisheries using large woody debris. Support local demonstration projects which could provide such research.
FMI-32 —Where feasible, consider the adoption of appropriate higher regulatory standards (including but not limited to freeboard, comp storage, lower substantial damage thresholds, setbacks and fill restrictions) as means to reduce future flood risk and support a no-adverse-impact philosophy of floodplain management. COMPLETE	Prevention	TC-FH-10 - Reevaluate land uses and zoning based upon new floodplain maps.
	Prevention	TC-FH-8 - Map the channel migration zones for all rivers in the region and the extent of high quality riparian habitat.
		TC-FH-9 – Develop mapping protocols to archive all flood maps and data sets so they can be reused later
		TC-FH-13 - Draft a Comprehensive Plan policy which encourages the creation and use of wetland mitigation bank
		TC-FH-17 - Work with landowners and others to establish reforested corridors along rivers and stream shorelines
		TC-FH-20 - Implement the recommendations of the adopted stormwater drainage basin plans.