# 2013 Action Plan Implementation Status

| **Basin/River** | **Name** | **Description** | **Status** |
| --- | --- | --- | --- |
| Skykomish | Maloney Creek Confluence Improvements | Investigate ways to improve infrastructure at the mouth of Maloney Creek and on the SF Skykomish River to reduce the frequency of flooding of homes and property within the Town of Skykomish. | Completed in 2013. |
| Skykomish | Miller River Road Protection | Repair of 290 feet of rock revetment within its existing footprint to provide protection to Miller River Road. | Completed in 2014. |
| Skykomish | Miller River Home Buyouts | Purchase monastery compound threatened by flooding and erosion. | Completed in 2014. |
| Skykomish | South Fork Skykomish Repetitive Loss Mitigation | Elevate or buyout individual structures in the South Fork Skykomish Basin to eliminate the risk of flooding or erosion damage during future flood events. | Since 2017, 20 parcels purchased, covering 7.89 acres. Two more acquisitions are in process. No home elevations have occurred in the SF Skykomish Basin. |
| Skykomish | Skykomish Home Buyouts | Purchase homes and property subject to flooding risk in the Town of Skykomish. | Incorporated into South Fork Skykomish Repetitive Loss Mitigation. |
| Skykomish | Timberlane Erosion Buyouts | Acquire and remove homes along a stretch of the South Fork Skykomish River that are endangered by erosive forces, channel migration, and inundation. | Since inception, eight parcels purchased, totaling 2 acres. |
| Upper Snoqualmie | City of Snoqualmie Natural Area Acquisition | Acquire and demolish individual residential structures to eliminate the associated risk of flood damage to homes. | This project was incorporated into the Upper Snoqualmie Residential Flood Mitigation project in 2013. |
| Upper Snoqualmie | Meadowbrook 2011 Repair | Repair damage from 2011 flood event. | Completed in 2017. |
| Upper Snoqualmie | Middle Fork Levee System Improvements | Upgrade the Middle Fork Snoqualmie levees to meet the US Army Corps of Engineers PL84-99 certification standards. | One Middle Fork Snoqualmie levee upgraded to meet PL 84-99 certification standards in 2020. |
| Upper Snoqualmie | Mason-Thorsen Extension 2011 Repair | Repair damage resulting from flood events. | Completed in 2011. |
| Upper Snoqualmie | North Bend Residential Flood Mitigation | Relocate or elevate individual residential structures to eliminate the associated risk of flood damage to homes. | This project was incorporated into the Upper Snoqualmie Residential Flood Mitigation project in 2017. |
| Upper Snoqualmie | South Fork Levee System Improvements | Design and reconstruct the impaired segment of levee in place to resolve six known levee deficiencies. | Necessary repairs completed in 2018. |
| Upper Snoqualmie | SR 202 Bridge Lengthening | Expand bridge SR202 opening over South Fork Snoqualmie and Ribary Creek to improve conveyance and reduce upstream flood impacts. | The Bendigo Bridge Replacement project was identified as a Proposed Long Term Action in the South Fork Snoqualmie River Capital Investment Strategy that was completed in 2017. |
| Upper Snoqualmie | Upper Snoqualmie Residential Flood Mitigation (includes North Bend Residential Flood Mitigation and City of Snoqualmie Natural Area Acquisition) | Acquire flood-prone properties or elevate individual structures in the Upper Snoqualmie basin to eliminate the risk of flood damage when Snoqualmie River flows overtop the existing levees. | Since 2008, 48 home elevations have been completed and two are currently underway. Since 2008, 25 parcels have been acquired, totaling 24.1 acres, with one more in process. |
| Upper Snoqualmie | Record Office Repair | The Record Office revetment is located along the Snoqualmie River in the City of Snoqualmie.  Flooding in 2015 and 2016 damaged the revetment, causing loss of riprap armoring and steepening the bank along approximately 200 feet.  The revetment protects a city street and various utilities form river erosion hazards. | The repair and adjacent riparian enhancements were completed in 2022, with the City of Snoqualmie incorporating in other park and stormwater-related improvements in the area. |
| Lower Snoqualmie | Aldair Buyout | Remove homes and agricultural structures from behind the Aldair levee, to eliminate risk of a potential levee failure. | No further progress on the purchase of the three agricultural properties abutting the Aldair levee since 2010. |
| Lower Snoqualmie | Farm Flood Task Force Implementation | Provide technical and cost-sharing assistance to agricultural landowners in floodplains to help them better maintain their operations during and after flood events. Specific project actions include farm pads, elevations of barns and agricultural accessory dwellings, etc. | Three Barns have been elevated since 2009, as well as one golf course club house. Twenty-six farm pads were permitted and constructed in the Lower Snoqualmie Valley as part of the farm pad program. |
| Lower Snoqualmie | Lower Snoqualmie Repetitive Loss Mitigation | Elevate or purchase individual structures in the Lower Snoqualmie basin to eliminate the risk of damage during Snoqualmie River floods. | This project was merged with the Lower Snoqualmie Residential Flood Mitigation in 2019. |
| Lower Snoqualmie | Lower Snoqualmie Residential Flood Mitigation | Provide technical and cost-sharing assistance to residential and agricultural landowners in the Lower Snoqualmie floodplain to help them better withstand the impacts of flooding. Specific project actions include farm pads, elevations of homes, and elevation or flood proofing of agricultural structures. | Since 2008, 17 home elevations have been completed in the Lower Snoqualmie Basin, with three more in progress. 15 parcels have been acquired, totaling 33.9 acres. One more is in process. Three barn elevations were completed as part of Farm Flood Task Force Implementation project. Twenty-six farm pads were permitted and constructed in the Lower Snoqualmie Valley as part of the farm pad program. |
| Lower Snoqualmie | McElhoe/Person Levee | Repair damage from 2006 flood event. | Completed in 2012. |
| Lower Snoqualmie | Sinnema Qualle Repair | Project included reconstruction of 750 feet of bank revetment to protect the Snoqualmie Valley Trail and State Route 203 from ongoing bank erosion and slope instability. | Completed in 2016. |
| Lower Snoqualmie | Tolt Pipeline Protection | Project reconstructed 1,200 feet of bank revetment, which was threatening the Tolt River Pipeline. The pipeline provides about 1/3 of the water to more than a million people in Seattle and surrounding cities. | Completed in 2018. |
| Tolt | Lower Tolt River Acquisition | Purchase Swiftwater property to allow for future setback of Upper Frew levee (right bank) | This acquisition was completed in 2013. Additional high priority acquisitions in the Lower Tolt are ongoing. |
| Tolt | San Souci Neighborhood Buyout | Multi-year project included removing nearly 20 at-risk homes from willing sellers. Following the full neighborhood acquisition, the river was reconnected to 33 acres of its historic floodplain. | All but the three northern-most parcels from one landowner were acquired by 2018, and the floodplain reconnection was completed in 2019. |
| Tolt | SR 203 to Trail Bridge Floodplain Reconnection | Setback Frew levee (right bank) to improve conveyance and allow habitat enhancement. | Project in preliminary design, construction currently scheduled for 2027. |
| Tolt | Tolt River Mile 1.1 Levee Setback | Purchase flood and erosion prone properties on both sides of the Tolt River between SR203 and the Snoqualmie Valley Trail Bridge. These acquisitions will allow for future setback of the Tolt 1.1 (Hwy to RR Bridge) levee in order to reduce flood and channel migration hazards, increase sediment storage and flood conveyance capacity, restore natural riverine processes, and reduce future maintenance costs. | Acquired 16 parcels, totaling 11.27 acres. |
| Tolt | Tolt River Natural Area Acquisitions | Acquire up to 12 properties in the channel migration zone of the Tolt River in the vicinity of the Tolt Natural Area. | Acquired 16 additional parcels since 2008, totaling 29.52 acres. Ongoing. |
| Tolt | Tolt Supplemental Study | Update technical information on flood and erosion risks and habitat restoration to recommend priority actions. | Tolt Capital Investment Strategy was completed in 2017. |
| Raging | Abandoned Bridge Abutment and Waring Revetment Removal |  | The project has not been implemented. |
| Raging | Alpine Manor Mobile Home Park Acquisition | Acquire and remove most, if not all, of the homes in the Alpine Manor Mobile Home Park, as well as several single family homes in the area in order to permanently remove these structures from areas at high risk for channel migration, avulsion and flooding. | All but one at-risk parcel acquired as of 2023. Raging River Channel Migration Zone Study and Map was completed in 2019 and improved the understanding of properties at risk from channel migration and avulsion. |
| Raging | Preston Fall City Upper Repair |  | Repair was completed in 2012. |
|  |  |  |  |
|  |  |  |  |
| Sammamish | Willowmoor Floodplain Restoration | Reconfigure the Sammamish River “transition zone” to provide necessary lake level control for Lake Sammamish, enhance habitat conditions in the river, adjacent wetlands, and tributaries for Endangered Species Act (ESA) listed Chinook salmon and other fish, and reduce the costs of ongoing maintenance of the transition zone. | Completed stakeholder outreach in 2015 and selected a preferred alternative design in 2016. Project design paused in 2019 to allow time to prepare additional technical analyses directed by the Flood District. |
| Lake WA Tribs | Lower Coal Creek Phase I | Increase the storage capacity of the regional detention pond while maintaining fish passage and increasing conveyance capacity at five box culvert crossings. | Group 1 – Upper Skagit Key Culvert Replacement construction completed fall 2017, currently in Post-Construction Monitoring.  Group 2 – Cascade Key and Newport Key Culvert Replacements, construction completed in 2018, currently in post-construction monitoring and storm repairs completed in fall 2020.  Group 3 – Glacier Key and Lower Skagit Key Culvert Replacements construction completed in fall 2020, currently in post-construction monitoring and storm repairs completed in summer 2020.  Group 4 – Newport Yacht Club and Grand Canal Outfalls and Storm Drains – design and land acquisitions activities ceased, unable to acquire easements, project will not proceed. |
| Lake WA Tribs | Issaquah Creek Repetitive Loss Mitigation | Mitigate repetitive loss properties on Issaquah Creek, and investigate other potential at-risk homes in  repetitive loss areas. | Progress identified in basin profile |
| Lake WA Tribs | McAleer/Lyon Channel Improvements | Re-establish a more natural floodplain for Lyon Creek and upgrade undersized culverts in the project area. | Completed in 2015. |
| Cedar | Belmondo Repair | Mitigation for emergency bank stabilization during 2009 flood. | First phase of mitigation for emergency repair completed in 2010 (rip rap removal, installation of one flow deflection structure, vegetated geogrids, native plantings). Second phase of mitigation completed 2012 (riprap removal, install rock toe and geogrids). Third phase of mitigation completed 2013 (install 2 flow deflection structures, roughness trees, vegetated geogrids). |
| Cedar | Cedar Pre-Construction Strategic Acquisitions | Acquire real estate properties that several large Flood District capital projects depend on, namely the levee setback projects at the Herzman, Jan Road, Rutledge-Johnson, Rhode, Getchman, Lower Jones Rd, and Elliot Bridge levee segments. Priorities for acquisition will be directed by the Flood District. | Acquired numerous properties from willing sellers to support capital projects. |
| Cedar | Cedar Levee Setback Feasibility | Determine bridge and levee modifications to increase level of flood protection along the lower 1.2 miles of the Cedar River through the City of Renton. | Feasibility study initiated in 2021. |
| Cedar | Cedar River Repetitive Loss Mitigation | Develop and implement mitigation measures for flood prone properties in repetitive loss areas. Acquisitions are from willing sellers. | Acquired numerous at-risk properties in flood-prone and repetitive loss areas. |
| Cedar | Cedar Rapids 2011 Repair | Perform emergency bank stabilization along setback levee alignment during January 2011 flood event. | Completed in 2011. |
| Cedar | Cedar River Gravel Removal | Remove gravel along the lower 1.25 miles of the Lower Cedar River in order to maintain 100-year level of flood protection for the City of Renton. | Completed in 2016. |
| Cedar | Dorre Don Meanders Phase I | Conduct feasibility study of existing levees to identify modifications and property acquisitions to reduce flood risks. | The project has not been completed. Three projects in this reach have been  identified in the Cedar River Capital Investment Strategy. |
| Cedar | Elliott Bridge Levee Setback | Acquire flood-prone homes in a repetitive loss area spanning both sides of the Cedar River. Levees on both banks will then be setback or removed. The project will eliminate potential for future flood damage to these homes. | Completed in 2016. |
| Cedar | Herzman Levee Setback | Remove and setback a portion of or the entire Herzman Levee along the right bank of the Cedar River between river mile 6.55 and river mile 6.70 to reduce upstream water surface elevations during flood events, reduce future maintenance needs on the downstream Cedar Trail 2 (CRT2) revetment, reduce future maintenance needs on the Herzman Levee, and provide improved riparian and aquatic habitat. | Planned for 2024. |
| Cedar | Jan Road-Rutledge Johnson Levee Setbacks | Reconnect floodplain by removing levees, constructing a setback levee and side channels, and installing large wood structures and native vegetation. Jan Road project reduced risk to CRT 7 during high flows and provided safe egress to residents during flooding, provided mitigation for 2017 large wood relocation, and improved habitat conditions. | Jan Road completed 2022. Rutledge Johnson planned for 2025. |
| Cedar | Maplewood Acquisition and Setback | Complete a detailed landslide risk assessment and feasibility study for existing levee to reduce flood risk. | Landslide risk assessment completed in 2021. Schedule for feasibility study to be determined by prioritization in Cedar River Capital Investment Strategy. |
| Cedar | Rainbow Bend Levee Setback | Remove the Rainbow Bend levee to allow river flows to spread across the open space created by the completed acquisition of over 50 flood-prone homes. This slows flood velocities and reduces flood elevations in this area of the river, protecting the adjacent state highway and regional trail. | Completed in 2013. |
| Cedar | Rhode Levee Setback and Home Buyouts | Purchase homes along path of fastest, deepest flood flow, and set back the levee to lower localized velocities and depths. | Properties acquired from wiling sellers. Project schedule determined by prioritization in Cedar River Capital Investment Strategy. |
| Cedar | Cedar Rapids Repair | Repair 2020 damage to engineered log jam caused by erosion and scour resulting in loss of upper ballast, dislodging of key logs, shearing of piles, and damage to hardware connections. | Completed in 2021. |
| Cedar | Youngs Revetment Repair | Reposition logs that jammed up against the revetment during the January 2011 flood event, threatening the integrity of the flood protection structure. | Completed 2012. |
| Cedar | Riverbend Mobile Home Park Acquisition and Levee Setback |  | Completed in 2023. |
|  |  |  |  |
|  |  |  |  |
| Green | Black River Pump Station Repairs | Establishment of secondary containment for all fuel tanks and lines completed. Rehabilitation and improvements to the pump station to meet current standards, construction of high use engines and fish passage improvements continue. | Original scope completed in 2019. Other improvements on-going. |
| Green | Boeing Levee Addition – Kent | A new earthen levee and flood wall combination was constructed behind 1.000 feet of the existing Boeing Levee. | Completed in 2014. |
| Green | Boeing Levee USACE ERP | Planned Ecosystem Restoration Project (ERP) in partnership with Kent and the Corps of Engineers riverward of the setback levee and floodwall. | The project was not implemented, however the City of Kent applied for King County Parks levy grant in 2023 for feasibility studies for habitat and recreation improvements between the river and the setback facility. |
| Green | Briscoe Levee Setback | The City of Kent constructed four floodwall segments to support NFIP levee accreditation. Floodwall segments/reaches locations include RM 14.5-14.6 (Reach 1), 15.45-15.6 (Reach 2), 16.0-16.4 (Reach 3) and 16.9-17 (Reach 4). | Completed between 2014 and 2017. |
| Green | Briscoe Reach Design | This project was for design of a levee setback at Rivers Edge, located south of 190th and west of 62nd Ave S. at RM 16.1 to 16.2. Three parcels were purchased to support the setback. | This project was not implemented. The three parcels that were purchased were sold to private owners. Floodwall Reach 4 was instead constructed. |
| Green | Green River Flood Emergency Prep | Local efforts to prepare for flooding after USACE advised that Howard A. Hanson Dam was compromised. Preparation efforts included building miles of sandbag and HESCO barriers on the levee crest. | Completed in 2012. |
| Green | Green River PL 84-99 Mitigation | Between 2008 and 2009, 461 trees were cut from the Lower Green River levees to maintain eligibility for the PL 84-99 levee program. Permitting for this work required mitigation including placement of large wood and planting of riparian trees in three locations include Foster Golf, the Green River Natural Resource Area and Teufel. | Completed in 2018 |
| Green | Hawley Road Levee – Kent | Earthen levees were installed behind the existing Hawley Road Levee | Completed in 2014. |
| Green | Horseshoe Bend Acquisition and Reconstruction | Reconstruct the Horseshoe Bend Levee at the Breda facility (RM 24.46-24.72) and McCoy (RM 24.26-24.45) to a more stable configuration in order to reduce flood risk to the surrounding areas. The projects will also increase the design containment elevation to the 500-year (0.2% annual chance) flood. | Two acquisitions completed in 2018, the City of Kent constructed a secondary containment facility in 2012/2013, landward of the McCoy segment of the Horseshoe Bend Levee. A repair of the McCoy facility is planned for 2024, and repair of the Breda facility is planned for 2027. |
| Green | Holiday Kennel Acquisition and Berm | Property acquired in 2017. Initial project subsumed under Lower Russell Road Levee Setback Project which was completed in 2023. Project replace an old levee and revetment that did not meet current engineering design standards. | Completed in 2023. |
| Green | Reddington Reach Setback and Extension | Project replaced a sub-standard levee with a new levee that protects nearly 600 properties valued at $680M. Created wider corridor for flood flows which greatly reduced flood risks to residents, business and infrastructure within the City of Auburn and the Green River Valley and provided wider riparian corridor with enhanced ecological benefits, improved natural river functions. | Completed in 2014. |
| Green | Russell Road Upper | Installation of a 1,190 foot secondary levee behind the existing Russell Road Upper Levee at two locations, RM 19.5-19.8 and RM 20.1 to 20.4. | Completed in 2013. |
| Green | Sandbag Removal | Removal of 26 miles of temporary flood-protection sandbags on the Green River. | Completed in 2012. |
| Green | USACE SWIF | The Lower Green River System Wide Improvement Framework (SWIF) was submitted to the Corps of Engineers on March 26, 2019. . The SWIF outlines a prioritized strategy to address levee deficiencies to optimize flood risk reduction, address system-wide issues, and maintain eligibility for the 17 miles of levees currently enrolled in the USACE Levee rehabilitation and Inspection Program under PL 84-99. USACE officially accepted the Interim Green River The Final SWIF was accepted by USACE in September 2019 and implementation will continue through 2028. | Ongoing |
|  |  |  |  |
| White | Countyline to A Street Levee Setback | Address loss in channel capacity due to ongoing sedimentation by removing 4,500 linear feet of existing levee and reconnecting the river with 121 acres of off-channel aquatic habitat on the river’s left bank. Involved construction of a new setback levee, 6,000 feet in length, protected by a 5,780-foot wood bio-revetment and several engineered log jams. The project is expected to provide significant flood risk reduction for more than 200 residential properties near the river. | Completed in 2017. |
| White | Red Creek Acquisitions | Acquire homes near the confluence of Red Creek and the White River as willing sellers become available. | The project has not been implemented. |
| White | Right Bank Levee Setback | Acquire at-risk, flood prone residential properties along the right bank of the White River within the City of Pacific to allow for the construction of a new levee setback flood protection structure. Acquired residential structures will be removed, temporary sand-filled flood protection barriers will be removed, artificial fill will be excavated, existing wetland areas will be enhanced, and an earthen setback levee will be constructed. | In planning/design phases. |
| White | Greenwater Acquisition | Acquire flood prone residences along the White River near the Greenwater River, several of which experience inundation and are very exposed to channel migration hazards. | One property has been donated in 2020. |
|  |  |  |  |
|  |  |  |  |
| Monitoring/Maintenance | Flood CIP Monitoring and Maintenance | Monitor projects using performance measures and adaptive management to track the effectiveness of completed projects and inform the design and  implementation of future projects. | Ongoing. |
| Opportunity Fund | Subregional Opportunity Fund | Provide funding equal to each jurisdiction in King County to allow the jurisdiction to carry our local flood reduction improvements, local storm water control improvements, and watershed management activities. | Ongoing, annually. |
| Seattle | Alaskan Way Seawall Construction | Rebuild the Alaskan Way Seawall along Elliot Bay to protect the downtown waterfront, meet current seismic standards, and improve nearshore habitat. | Completed in 2017. |
| Seattle | South Park Duwamish Backwater | Construct a pump station to alleviate flooding in Seattle's Duwamish industrial area that occurs during high tides when storm water runoff is unable to drain to the Duwamish River. | Completed in 2023. |
| Countywide | Central Charges | Administrative project used for incurring expenditures for central costs assigned by the Budget Office. | Ongoing, annually. |
| Countywide | Flood Emergency | Provides funding for minor emergency repairs during a flood event. | Ongoing, as needed. |
| Countywide | WRIA grants | Provide grant funding for salmon recovery and riverine habitat restoration. | Ongoing, annually. |