

	Management Strategy		Measurable Goals	Milestones	FY	FY	FY	FY	FY	Annual Goal Tracking	Annual Status Update
					16-17	17-18	18-19	19-20	20-21		
GIS Data Review & Assessment	1. Utilize GIS data to assess shade/canopy cover, prioritize and document planting projects, and to evaluate changes in the City's tree canopy.	1A	Assess 2009 Riparian Shade Inventory to determine applicable updates that may include options for improved constraint/opportunities mapping and increasing the number of available shade categories (FY 2016-17).	Convene workgroup to review 2009 Inventory data and to develop project scope that incorporates collective data needs among different sections.	X					Identify workgroup involvement, track meetings and significant decisions/outcomes. Track progress made on desktop tasks and field verification and analysis.	Revisited. The consultant that performed the previous update indicated that they were unable to update the study with our newly requested categories. Upon consultation with the consultant that will be conducting the tree canopy study (1D), we are looking at different technologies to complete this task. We will be looking to budget for the riparian canopy study in FY 2020-21. The original stream shade assessment was conducted in 2009; therefore implementation of an updated study will provide a look over a 10-year horizon.
				Develop scope of work with project goals (and budget if consultant services needed).	X						
				Conduct desktop/field analysis internally or with assistance of consultant services.	X	X					
		1B	Review Riparian Prioritization Database and weighting criteria for potential improvements and increased utility (FY 2016-17).	Convene workgroup to determine desired functionality for increased use.	X					Identify workgroup involvement, track meetings and significant decisions, and field inspections	Completed. The stormwater retrofit prioritization tool is completed and it uses riparian values in the assessment for those properties that have streams running through them. Riparian projects can be entered into this database and ranked. Generating and ranking riparian sites for planting will be an ongoing process, and if changes to the tool are found that would make it more useful for reviewing and ranking these projects, then they will be incorporated into the tool.
				Identify high priority areas/taxlots based on data review (shade, constraints, ownership, access, opportunity for community involvement etc.)		X					
				Generate prioritized list of future targeted areas for planting and riparian enhancements (FY 2017-18).		X					
		1C	Create GIS database to document all upland and riparian projects (FY 2017-18).	Develop criteria and tracking mechanism for database.	X					Identify workgroup involvement, track meetings and significant decisions/outcomes. Track the number of fines, planting sites, and number of plants planted.	Ongoing. In FY 2017 - 18, the first map of all upland and riparian projects was created. Staff continue to update this map annually after the close of the fiscal year. In FY 2019-20, we will be seeking opportunities to share this map publicly.
				Work with Community Development to ensure knowledge of priority sites for planting (fines).	X						
				Generate a master map to assist with internal communication and update as needed based on available project data.		X					

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		1D	Complete next update to 2010 Salem Canopy Study (FY 2020-21).	Develop scope of work, hire COR, and update study.					X	Track progress made on next canopy study.	Scheduled. The Tree Canopy Assessment is scheduled to be completed by January 1, 2020. The study will also include an analysis of ecosystem services provided by the tree canopy. In FY 2018/19, the City completed its first year of a 5-year tree planting and maintenance contract with Treecology; 151 trees were planted. In addition, under the City contract with Friends of Trees, 75 large stock trees were planted in city parks in the 2018/19 fiscal year. In summer/fall of 2019 we will continue the street tree inventory, using a random sample method of 240 street segments to improve our level of accuracy.
		2A	Continue to utilize contracted services to coordinate multi-year riparian planting projects on City-owned parcels (Annually).	Update annual Scope of Work with contractor to outline project location(s), site preparation, planting plan, maintenance needs, and estimated schedule of activities.	X	X	X	X	X	Track annually the number of linear feet planted, number of trees/shrubs installed, and number of volunteers involved.	Scheduled. Friends of Trees will be providing continued maintenance of the Judson Middle School site. One tree and shrub planting event is planned at McKay School Park and another at Orchard Heights Park in FY 2019-20. In addition, a tree care event will be planned for May 2020.
	With consideration for the time needed for site prep and invasive vegetation removal in mind, ensure that at least 150 linear feet of streambank are planted with native trees/shrubs and/or receive targeted invasive vegetation removal each year (Annually).			X	X	X	X	X	Ongoing: Approximately 340 feet of streambank on the north / north-west side of Pringle Creek at Judson Middle school were planted with 150 native trees and 1250 native shrubs. Number of volunteers for the planting and tree-care event: 88. In FY 2019/20, an estimated 300 feet of streambank on the east / south-east side of Glen Creek at Orchard Heights will be planted.		
	Reassess and document continued project maintenance needs (Annually).			X	X	X	X	X	Ongoing. Friends of Trees provides continued maintenance work at Judson Middle School and has been preparing for planting at McKay Park and Orchard Heights Park. These two parks each have one planting date scheduled for FY 2019-20.		
	Reassess contract renewal/continued contracting needs for future planting events.				X				Renewed. The contact with Friends of Trees was renewed for a 5-year period. FY 2019-20 is the first year of the new 5-year period.		
				Meet with District staff to discuss possible collaboration and potential concerns.	X					Completed in prior years.	

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Trees & Native Vegetation	2. Partner with local agencies, non-profits, volunteer groups, and local residents to coordinate plantings and to control invasive vegetation along Salem streams.	2B Pursue MOA with local school district for multi-year riparian and upland planting projects on school owned lands. (FY 2016-17).	Draft MOA that meets District needs and clarifies project scope, boundaries, and future maintenance responsibilities.	x					Document collaboration efforts with District, Council acceptance, progress and/or changes made to MOA, and any associated planting activities. Track number of plants provided, and area planted.	Completed in prior years.
			Submit MOA to City Council for approval to execute.	x						Completed in prior years.
			Initiate planting efforts on school owned properties under MOA or alternate agreement.		x	x	x	x		Ongoing. The work at Judson Middle School is in progress and no new school sites are currently planned. We are recommending to complete the work at Judson successfully before continuing on with a new school.
		2C Continue to offer native vegetation to targeted streamside properties (Annually).	Continue to offer native vegetation to at least 20 private streamside residents to supplement public planting projects. These residents are typically adjacent to the contracted project area and identified as having low riparian shade.	x	x	x	x	x	Track number of properties receiving assistance and the number of plants provided.	Ongoing. The City has rolled this task into the contract with Friends of Trees to meet this milestone. In FY 2018/19, new sites were identified by the City of Salem. Friends of Trees staff assessed the sites for project appropriateness. Outreach materials were created to inform homeowners of the opportunity. Forty properties will be targeted in FY 2019/20. In addition, staff has been working to reinstate the Free Tree Program for fall of FY 2019/20.
			If available, continue to provide native trees and shrubs (or offer alternate resources) for additional requests received.	x	x	x	x	x		
		2D Initiate a collaborative effort with another partnering agency to assist private streamside property owners in Salem with invasive vegetation removal and control (FY 2015-16).	Finalize and submit to City Council a staff report with request to enter a MOA. If necessary, identify alternate partnering options.	x					Document Council Action, number of properties to receive assistance, and assistance provided.	Completed in prior years.
			Review existing streamside data and identify a proposed list of taxlots to receive assistance.	x						Ongoing. Properties along Croisan and Pringle Creeks that were identified as having knotweed were provided a letter regarding assistance with treatment of the plant.
			Seek approval/interest from identified streamside residents and initiate control efforts.	x						Ongoing: 7 sites along Pringle Creek were treated to control knotweed and 10 along Croisan Creek.
			Create tracking mechanism to document location of efforts and continued progress made.	x	x					Ongoing. A map of invasive species has been developed for field data collection by the stream crew. Data from the knotweed efforts will be forwarded to add to the map.

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Stream Mitigation Bank	3. Implement Stream Mitigation Banking (SMB) Program as a means to offset impacts to waterways from public infrastructure improvements projects.	3A	Continue to monitor the approved SMB Project Site (Waln Creek) according to established performance standards (Annually).	Maintain riparian vegetation and control noxious/invasive weeds to ensure establishment of the approved native plant communities.	X	X	X	X	X	Track completion of required monitoring activities. Implement management recommendations.	Ongoing. The site is meeting all vegetation and channel stability requirements. City will pursue developing a management plan for the area that will allow for more credits to be released. The monitoring work is being done by contracted services with Pacific Habitat Services. Although the City has been released from the full vegetation monitoring report requirements, the City still keeps an eye on it and hosts the agencies once a year for a field inspection.	
				Monitor established stream cross-sections to ensure continued streambank stability.	X	X	X	X	X			
				Document site conditions with photographs from established points.	X	X	X	X	X			
				Meet permit and SMB standards for channel stability and habitat.	X	X	X	X	X			
			3B	Submit an annual monitoring report and SMB Report to the ACOE and DSL by January 31 of each year (Annually).	Report to agencies for seven years.	X	X	X	X	X	Track completion of required reports.	Ongoing. Staff submitted the report to agencies on January 31, 2018.
					Develop a Long-term Management Plan for the SMB Project Site.		X					Ongoing. The long term management plan is in development, the consultant has completed a draft.
			Evaluate options for project funding (FY 2016-17).		X					Completed in prior years.		
			Based on available funding mechanism determine pilot project location and estimated scope of effort.			X				Completed. Determined in prior years for Woodmansee Park in the Pringle Creek Watershed.		
				Continue to provide and track assistance as resources allow.		X	X	X	X		Ongoing. Assessment of the treated sites showed that the treatment along Croisan Creek in FY 2018/19 was not as successful as the prior year's treatment earlier in the season along Pringle Creek in FY 2017/18. Staff has identified sites for retreatment in FY 2019/20.	
		2E	Develop a process for pursuing strategic planting and/or other riparian enhancements on lands donated/vacated to the City and on newly developed/ re-developed properties (FY 2019-20).	Initiate internal meeting(s) with staff from multiple Divisions/Departments to determine core stakeholders, needs, and discuss options forward.		X	X			Document efforts/progress made on the development of an internal process.	See Strategy 1B above. Strategic planting opportunities and riparian enhancement projects will be prioritized using the Prioritization Tool.	
			Finalize and document internal procedures based on predetermined need.				X					
		2F	Develop mechanism to offer replacement trees to residents/businesses where fallen trees have been removed (FY 2017-18).	Develop long-term approach for providing replacement trees/vegetation and planting assistance if needed.		X				Document internal coordination and determined approach for replacement trees.	Ongoing. Replacement trees and vegetation will be offered to residents when the opportunity is identified or requested. No requests or opportunities based on fallen trees were identified during this reporting period.	
				Ensure appropriate tracking mechanism for this assistance is developed, as needed.		X						

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Stream Stabilization	4. Pursue options for streambank stabilization and riparian enhancement projects that incorporate bioengineering practices, the instream placement of woody debris, and native plants.	4A	Complete at least one streambank stabilization/enhancement pilot project per TMDL plan cycle that incorporates bioengineering practices and the instream placement of large woody debris and (FY 2020-21).	Finalize project scope and design.			X	X		Document determined funding mechanism, identified project location/scope, and efforts to project completion.	On hold. In February 2018, a consultant produced the West Fork Pringle Creek Design Concepts report, which summarizes design concepts for the enhancement of a stretch of Pringle Creek flowing through the City's Woodmansee Park. This project has been placed on hold for at least two years as upgrades to the City's ASR will be taking priority at the site.		
				Initiate bioengineering methods and installation of large woody debris.				X					
				Complete initial pilot project per final scope and design.					X				
		4B	Pursue development of no cost home new options/programs to assist residents with streambank erosion and planting (FY 2019-20).	Initiate internal meetings to determine best approach forward toward development of a new alternative for assistance.		X						Identify workgroup involvement, track meetings and significant decisions, and progress made on assistance program.	Completed. In previous fiscal years, it was determined to continue the use of the City's Watershed Protection and Preservation Grant to assist homeowners with streambank erosion.
				Finalize plan for providing assistance with streambank erosion.				X					
Riparian Protections	5. Continue to review and revise Salem Revised Code (SRC) provisions to ensure protection of riparian area buffers.	5A	Complete next review of SRC and Administrative Rules to identify inconsistencies and/or barriers to adequate enforcement (FY 2020-21)	Initiate internal workgroup to review recently reorganized SRC.		X				Identify workgroup involvement, track meetings and significant decisions, and changes proposed to SRC.	Ongoing. A small work group has been identified and this project will become a part of the discussion for the Natural Resources committee to further address in FY 2019-20.		
				Coordinate with staff from Public Works, Community Development, and Legal on any proposed adjustments to SRC and/or the Administrative Rules.		X	X	X	X				
				Ensure protections for areas identified as having ample riparian canopy cover based on available GIS data.		X	X	X	X				

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	6A	Assess the low-shade audience for development of a targeted outreach plan and schedule (FY 2017-18).	Use updated riparian shade inventory and prioritization database to identify low canopy areas for targeted outreach.	X	X				Determine feasible target number for yearly outreach. Create schedule and track number of contacts, interested parties, and plants planted.	Revisited. The shade inventory was not updated based on consultant recommendations. However, discussions with a different company indicate that the City's desired update can be accomplished. Scope of work will be developed in FY 2019-20 to place into FY 20-21 budget. The updated shade study is requested to provide a comparison between the 10-year period from the first study as well as provide increments of shade from top of bank.
			Assess barriers to audience identified above.		X	X				Completed. A survey to assess barriers, values, habits, and actions was conducted in FY 2018/19.
			Develop outreach schedule for targeted properties.		X	X				Ongoing. We will be reaching out to 20 properties per year to assist with invasive species removal and planting. In addition, we will be providing up to 2,500 plants per year in the Free Tree Program. We also have planned two park plantings in FY 2019/20: Orchard Heights Park and McKay Park. This is the current extent of our current outreach abilities.
			Pursue the development of incentives to encourage planting along streambanks.		X	X	X	X		Planned. Staff will be reviewing the survey results in FY 2019/20 to determine what incentives would be more beneficial than the ones that we currently offer, if any.
	6B	Update Riparian Outreach Plan, incorporating results of streamside survey (FY 2018-19)	Develop and conduct survey for streamside residents.		X				Track survey development, number of surveys completed, and results.	Completed. A survey to streamside homeowners was conducted in FY 2018-19.
			Update outreach plan based on the survey results.		X	X				Planned. This results from the survey will be used to update the plan in FY 2019/20.
			Update retooled website with "key components" information from Riparian Outreach Plan.	X	X	X	X	X	Track number/content of updated materials to website	Ongoing. Staff has written riparian information for the web. Staff is currently addressing the web redesign and is slated to have the website complete by September 2019.

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Public Education & Outreach	6. Assess and engage the community in education efforts focused on stream temperature.	6C Use a variety of tools to convey riparian values to the general public (Annually).	Compile updated information for streamside mailers, online ads, radio, presentations.	x	x	x	x	x	updated materials to website. Document planting incentives (materials, trainings, etc.) provided to citizens.	Annually. The City's streamside guide direct mailer to homeowners living along a stream was mailed in June 2019. The City also uses the radio and social media to provide information on riparian values and volunteer opportunities for tree plantings along streams.
		6D Continue/develop partnerships to share messages and leverage resources (Annually).	Assist with development and implementation of a local backyard habitat program.	x	x	x	x	x	Track progress made on habitat program, number of applications, partners, and participants.	On hold. Staff continued to assist the Marion Soil and Water Conservation District with the program where needed. However, this item is currently placed on hold by the district. Staff has worked with the Master Gardeners to help further backyard habitat concepts with them.
			Continue to participate in MWOOG and regional coalition.	x	x	x	x	x		Ongoing. Staff attend monthly MWOOG meetings. The two culminating events are the annual Erosion Control Summit designed for construction professionals, agency staff, engineers, and operations staff; and the Water Festival designed for 4th and 5th grade students to learn about water-related urban issues. (ECS registration: 141 and Water Festival attendance: 90)
			Develop and implement streamside workshops for riparian landowners.			x	x	x		In progress. The FY 2018-19 survey to riparian property owners asks questions aimed to develop these workshops. A review of the answers to the questions will help us design workshops and other information in FY 2019/20.
			Promote efforts by local volunteer groups by providing materials to the public during community events, utilizing social media and internal communications, and advertising their efforts and the associated benefits through other tools as the resources are available.	x	x	x	x	x		

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		<p>6E Continue to support/promote weed control efforts of Salem-based volunteer groups (Annually).</p> <p>Pursue options to utilize volunteer weed removal services to supplement both public planting projects and efforts to assist private streamside properties.</p>		x	x	x	x	x	Track advertising activities and all efforts associated with planting projects on public or private streamside properties.	Ongoing. The No Ivy Coalition held 11 ivy pull events at Englewood Park and Deepwood Estates and distributed information at the Englewood Forest Festival. A total of 128 volunteers spent 598 hours pulling ivy at the two locations.
Internal Communication	7. Ensure internal awareness of TMDL requirements, Implementation Plan strategies, and project updates/needs.	Develop informational report that provides an overview of the City's TMDL Implementation Plan (Plan) and annual reporting requirements to Salem City Council (FY 2016-17).	Provide staff report to City Council once per 5-year TMDL cycle.	x						Planned. This item is slated for the final year of the plan to coincide with the renewal process.
		7A Ensure that information about TMDL requirements and/or associated tree planting events is included in management reports and internal newsletter. (Ongoing/Annually)	Draft an event summary following each coordinated planting event.	x	x	x	x	x	Track progress made/comments on staff report, number of event summaries provided in management reports, and number of articles completed.	Ongoing. Event summaries are provided to the City's Public Information Officers and posted on the Clean Streams Facebook page. This FY all tree-related information was provided in one report to council, which was delivered in March 2019. The new annual tree report will be provided to City Council annually. The next report is scheduled for January 2020.
		Complete 2 TMDL related articles per year for internal newsletter.		x	x	x	x	x		The internal PW newsletter, <i>In the Trenches</i> , is currently not being produced. Other options to share information are being determined.

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Additional Items

Other: Groundwater Recharge	8. Identify mechanisms for groundwater recharge	8A	Promote infiltration rain gardens to the public to help recharge groundwater.	Assist with community development of rain gardens.						Development of community rain gardens or other projects that promote groundwater recharge.	In design. Funding for citizen-requested rain gardens along Court Street were reinstated in the FY 2019/20 budget. Outreach for project and project implementation are scheduled to occur in late summer 2019 and early fall 2019 respectively.
	9. Support protection and enhancement of North Santiam River Watershed	9A	Provide mechanisms for the support and enhancement of the North Santiam River function.	Provide funding to North Santiam Watershed Council to support their work plan.						Develop list of projects that are in part funded by the City's Grant.	<p>Ongoing. Funds from the City's Watershed Protection and Preservation Grant were used to help fund the North Santiam Watershed Council's projects during FY 2018-19.</p> <p>Bird Haven Floodplain Restoration Site - Located just above Stayton on the Linn County side of the river. 4,450 native stems (trees and shrubs)</p> <p>Westbrook Refuge. Private landowner site located on the North Santiam River, Marion County just before Lyons. 3,700 native stems (trees and shrubs)</p> <p>Fisherman's Bend Campground located along the Middle Reach of the North Santiam River 650 native stems (trees and shrubs)</p> <p>Total 8,850 native stems.</p>
				Assist efforts with the North Santiam Watershed Drought Contingency Plan.							List efforts of coordination.

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Other: Streambank erosion	10	10A	Assist with identifying potential causes to erosion concerns	Perform hydromodification analysis and develop remediation plan to address erosion issues along Goldcrest Brook.						Track activities and efforts associated with efforts along Goldcrest Brook.	In FY 2018-19, the City contracted with WEST Consultants to complete a hydromodification analysis and remediation plan in response to resident concerns regarding bank erosion and channel incision within Goldcrest Brook. In support of this analysis, the City installed two temporary stream gauging stations and one in-pipe flow sensor to capture flow data for Goldcrest Brook. Additional preparation for this study included use of the City's Stream Crew and inmate labor to selectively clear excess vegetation from the stream channel in order to allow access for WEST to measure cross-sections throughout the length of Goldcrest Brook and to allow for enhancement activities in the floodplain wetland south of Harritt Elementary School.

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