

	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 16-17).	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.	In FY 2016-17 staff from Stormwater Services and staff from Planning & Development Services convened to discuss the needs for an updated Riparian Shade Inventory. A scope of work was developed and a contractor was hired. Work began in FY 2016-17, and will be completed in FY 2017-18. This work addresses the Functional Shade Buffer. We are currently working with a consultant to assist with a determination of Salem's potential as well as determining follow up shade assessments of riparian projects. Due to the majority of streamside properties being privately owned and developed close to the streams, a 35 - 70 foot set back and buffer is not attainable.	
				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 16-17).	Convene workgroup to determine desired functionality for increased use.	X					Identify workgroup involvement, track meetings and significant decisions, field inspections	Stormwater staff hired consultant services in FY 2016-17 to develop a Stormwater Retrofit Prioritization Tool and convened a workgroup consisting of staff from Public Works Engineering, Stormwater, and Planning to determine desired prioritization criteria and project weighting. This new tool will be used to prioritize stormwater retrofits as well as riparian planting/restoration projects included under this TMDL Implementation Plan. Staff from Stormwater and Planning met to review the 2011 Riparian Parcel Prioritization Database in order to determine riparian data needs for the updated Prioritization Tool. It is anticipated that the Prioritization Tool will be completed in FY 2017-18.	
				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 17-18).		X						
		1C	Create GIS database to document all upland and riparian projects (FY 17-18).	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 # of plants planted.	Stormwater staff met multiple times during this reporting period to discuss options for identifying stream segments and planting project sites in the City's existing GIS database. Staff will begin adding this information to the City's GIS and Asset management system in FY 2017-18. There were no fines issued during this reporting year pertaining to SRC Chapter 808 (Preservation of Trees and Vegetation). Priority planting sites were determined based on available shade data (see item 2A below).	
				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						
		1D	Complete next update to 2010 Salem Canopy Study (FY 20-21).	Develop scope of work, hire COR, and update study.						X	Track progress made on next canopy study.	This work is scheduled to be conducted in FY 2020-21.

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.

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 # linear feet planted, # trees/shrubs installed, and # volunteers involved.	Stormwater and Planning Services staff met with the City's planting contractor (Friends of Trees) multiple times during this reporting period to refine project locations and planting event details. In all, 533 volunteers planted 3,774 trees and shrubs at Friends of Trees and City of Salem events in FY 2016-17. More than 300 linear feet of streambank along Pringle Creek were the focus of repeated invasive vegetation removal activities in preparation for the riparian plantings. This area will continue to receive weed control activities to ensure long term success of native plantings. Stormwater and Planning staff initiated discussions this year regarding the potential for a long term vegetation management plan for planted areas.	
		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			
		Reassess and document continued project maintenance needs (Annually).	X	X	X	X	X			
		Reassess contract renewal/continued contracting needs for future planting events.		X						
	2B	Pursue MOA with local school district for multi-year riparian and upland planting projects on school owned lands. (FY 16-17).	Meet with District staff to discuss possible collaboration and potential concerns.	X					Document collaboration efforts with District, Council acceptance, progress and/or changes made to MOA, and any associated planting activities. Track # plants provided, and area planted.	Stormwater staff met with staff from the Salem-Keizer School District on multiple occasions during this reporting period to discuss planting options on District owned-property and the need for a Memorandum of Agreement (MOA). The MOA was approved by City Council on 1/09/17 and signed on 2/9/2017. Riparian weed removal and planting activities on District owned property are anticipated to be initiated in FY 2017-18.
			Draft MOA that meets District needs and clarifies project scope, boundaries, and future maintenance responsibilities.	X						
			Submit MOA to City Council for approval to execute.	X						
			Initiate planting efforts on school owned properties under MOA or alternate agreement.		X	X	X	X		
	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 # properties receiving assistance and the # plants provided.	Staff met with 6 residents along Plateau Street NE to discuss planting opportunities. Compost socks were added to help with a minor erosion issue in the Little Pudding River. A watershed grant was written to assess tree canopy health, but was retracted by homeowners due to liability concerns. Plants will be provided in FY 2017-18. Thirty-three residents along Waln Creek in South Salem were invited to a neighborhood meeting to inform the neighbors of assistance with providing native vegetation.
			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 15-16).	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, # properties to receive assistance, and assistance provided.	In May 2016, an IGA was signed between the City of Salem and the Marion Soil and Water Conservation District (SWCD) to partner to provide services for removing or treating invasive vegetation on private land. A grant for \$5,000 was received from the Marion SWCD for this purpose. A spring 2017 mailer was sent to streamside property owners asking them to contact the city if they have knotweed identified or need help to identify knotweed on their property. 11 property owners were identified as having knotweed growing along their stream. Some people owned multiple taxlots with knotweed.
			Review existing streamside data and identify a proposed list of taxlots to receive assistance.	X						

			Seek approval/interest from identified streamside residents and initiate control efforts.	X						Permission forms have been finalized and will be going to landowners in early September 2017 for an October 2017 treatment.		
			Create tracking mechanism to document location of efforts and continued progress made.	X	X						This milestone has been moved to FY 2017-18.	
			Continue to provide and track assistance as resources allow.		X	X	X	X			Follow up will occur in subsequent years to ensure the reduction of knotweed along Salem's streams.	
		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 19-20).	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 currently under development. Staff from multiple workgroups met throughout this reporting period to discuss data needs and desired options forward.
				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 17-18).	Develop long term approach for providing replacement trees/vegetation and planting assistance if needed.		X					Document internal coordination and determined approach for replacement trees.	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								
Stream Mitigation Bank	3. Implement Stream Mitigation Banking (SMB) Program as a means to offset impacts to waterways from public infrastructure improvements projects.	3A	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.	Monitoring of vegetation and established stream cross-sections continued during this reporting year per the Stream Mitigation Banking Program requirements. The Waln Creek project has continued to meet the applicable standards.		
			Continue to monitor the approved SMB Project Site (Waln Creek) according to established performance standards (Annually).	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.	A Long-Term Management Plan for the SMB Project site has not yet been developed.	
				Develop a Long-term Management Plan for the SMB Project Site.		X						
Stabilization	4. Pursue options for streambank stabilization and riparian enhancement projects that incorporate	4A	Evaluate options for project funding (FY 16-17).	X					Document determined funding mechanism, identified project location/scope, and efforts to project completion.	Funding for a pilot streambank stabilization/enhancement project has been identified within the City's Adopted Capital Improvement Plan beginning in FY 2016-17. A project location within the Pringle Creek Watershed was identified, consultant services secured, and a scope of work defined during this reporting period. The pilot project will encompass an approximated 3000 ft stretch of West Fork Pringle Creek adjacent to Judson Middle School and in Woodmansee Park in South Salem. Consultant services were tasked with completing an initial functional assessment of existing stream conditions in order to best determine options for stabilization and enhancement that incorporate large woody debris and/or alternate bioengineering methods. It is anticipated that this will be a multi-year, phased project. This effort will		
			Based on available funding mechanism determine pilot project location and estimated scope of effort.		X							
			Finalize project scope and design.			X	X					
			Initiate bioengineering methods and installation of large woody debris.				X					

Stream St	bioengineering practices, the instream placement of woody debris, and native plants.		Complete initial pilot project per final scope and design.																		continue to develop in FY 2017-18.				
		4B	Pursue development of no cost home new options/programs to assist residents with streambank erosion and planting (FY 19-20).	Initiate internal meetings to determine best approach forward toward development of a new alternative for assistance.																		Two pilot streambank erosion projects have been developed. The one at Plateau Street is complete and is being monitored for success for small-scale erosion. The second is a large-scale erosion project that is in the project development phase. This project will be considered for a watershed protection and enhancement grant in FY 2018-19.			
				Finalize plan for providing assistance with streambank erosion.																				The strategy will need to consider low cost, matching cost, and loans in addition to a no cost solution.	
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 (FY20-21)	Initiate internal workgroup to review recently reorganized SRC.																					
				Coordinate with staff from Public Works, Community Development, and Legal on any proposed adjustments to SRC and/or the Administrative Rules.																				It is anticipated that this effort will be initiated in FY 2017-18.	
				Ensure protections for areas identified as having ample riparian canopy cover based on available GIS data.																					
ch		6A	Assess the low-shade audience for development of a targeted outreach plan and schedule (FY 17-18).	Use updated riparian shade inventory and prioritization database to identify low canopy areas for targeted outreach.																		The riparian shade reassessment began in FY 2016-17 to address the area of influence along a stream. The initial scope of work was completed. Additional discussion with our consultants on how to best assess our area of influence on private property and the implications of a reduced "riparian zone" continue.			
				Assess barriers to audience identified above.																				Slated for FY 2017/18	
				Develop outreach schedule for targeted properties.																				Slated for development in FY 2017/18	
				Pursue the development of incentives to encourage planting along streambanks.																				Slated for development in FY 2017/18	
		6B	Update Riparian Outreach Plan incorporating results of streamside survey (FY 18-19)	Develop and conduct survey for streamside residents.																				Track survey development, # of surveys completed, and results.	This item will be under review in 2017-18 to determine if we will update the plan in house or use consulting services.
				Update outreach plan based on the survey results.																					
		6C	Use a variety of tools to convey riparian values to the general public (Annually).	Update retooled website with "key components" information from Riparian Outreach Plan.																				The City's website has undergone a substantial revision. Riparian content will be added to the website upon completion of the upgrade. This has been slated for update in FY 2017/18.	

Public Education & Outreach	6. Assess and engage the community in education efforts focused on stream temperature.		Compile updated information for streamside mailers, online ads, radio, presentations.	X	X	X	X	X	provided to citizens.	Riparian information and values will be addressed in FY 2017-18.		
		6D	Assist with development and implementation of a local backyard habitat program.	X	X	X	X	X	Track progress made on habitat program, # applications, partners and participants.	Staff is assisting with planning efforts of the Marion Soil and Water Conservation District's efforts to roll out a local backyard habitat program. Pilot participants are going through the process. No yards were able to be certified at this time. Salem will continue to provide assistance with planning and implementation. The backyard habitat program is open to all residents, not just streamside owners.		
			Continue/develop partnerships to share messages and leverage resources (Annually).							On January 24, 2017, the Mid-Willamette Outreach Group (MWOOG) hosted their sixth Erosion Control and Stormwater Management Summit (Summit). New this year, MWOOG offered a Certified Erosion and Sediment Control Lead (CESCL) course through the Northwest Environmental Training Center. Event Attendance: Summit: 54, CESCL: 36, Total: 90. MWOOG has also been developing a Green Stormwater Infrastructure Maintenance Certification Program in conjunction with Chemeketa Community College.		
			Continue to participate in MWOOG and regional coalition.	X	X	X	X	X				
			Develop and implement streamside workshops for riparian landowners.			X	X	X		This item will be developed to address temperature and erosion issues.		
		6E	Continue to support/promote weed control efforts of Salem based volunteer groups (Annually).	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	Track advertising activities and all efforts associated with planting projects on public or private streamside properties.	The No Ivy Coalition hosted 12 events, not specific to streamside properties. Event statistics: 680 volunteer hours 660 trees saved	
				Pursue options to utilize volunteer weed removal services to supplement both public planting projects and efforts to assist private streamside properties.	X	X	X	X	X	On September 24, 2016, 157 volunteers attended the SOLVE clean up at Wallace Marine Park, picking up trash and removing ivy.		
		Internal Communication	7. Ensure internal awareness of TMDL requirements, Implementation Plan strategies, and project updates/needs.	7A	Develop informational report that provides an overview of the City's TMDL Implementation Plan (Plan) and annual reporting requirements to Salem City Council (FY 16-17).	Provide staff report to City Council once per 5-year TMDL cycle.	X					Staff will work to identify the year to provide the staff report to council. This year's report will provide an infographic on the management strategies.
					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	Facebook posts are generally posted the Monday following the event. Event summaries will be provided for the management report at this time as well beginning FY 2017-18.
				Complete 2 TMDL related articles per year for internal newsletter.	X	X	X	X	X	The August 2016 Issue of Public Work's internal newsletter featured an article celebrating our 40th year as a Tree City USA and the December 2016 issue featured an article about the benefits of trees.		