## Worksheet to Evaluate Management Measures to Retain in IAS Update, with Status per 2015 Plan

This table lists all the management measures in the 2015 Austin Streams I-Plan, with brief status notes for each. Columns 7 through 8 are for recording stakeholder recommendations for continued use, modification, or removal of those measures in the Updated I-Plan.

#	Management Measure	Responsible Party or Parties	Overall Status	Status Notes (Notes compiled from <u>2017, 2019, and 2020 status reports</u> )	Retain	Modify	Remove	Move to Control Action
1.0	Riparian Zone Restoration							
1.1	Increase riparian zones in Austin parks by expanding Grow Zone initiative.	City of Austin (CoA)	Completed 2015 Plan measures; program is ongoing.	Grow Zones evaluated and expanded (three acres in Year 4); additional sites were evaluated, but no opportunities in Year 5.				
1.2	Recruit adopters for all creeks and parks in the watersheds.	Austin Parks Foundation (APF), Keep Austin Beautiful (KAB)	Completed by APF.	All eligible parks in Walnut, Waller, and Taylor Slough watersheds are adopted; there are no adoptable parks in Spicewood watershed. Maps of adopted creek segments provided on KAB website; APF supports volunteer efforts in parks, greenbelts, and preserves not eligible for adoption.				
1.3	Use volunteers to help expand Grow Zone riparian initiative.	APF, KAB	Completed by APF.	Park adopters educated about Grow Zones and Restoration Plans (which they can create in coordination with KAB and CoA-WPD) during Adopt-a-Park orientations. In fall, 2019, APF, with KAB, hosted a restoration workshop in Shoal Creek to provide information for adopters about creekside restoration work. KAB hosted subsequent monthly trainings at local creeks, and APF assisted with recruiting adopters to attend. APF, with the CoA, developed Land Stewardship Plans for park adopters.				

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1.4	Increase riparian buffer zone width for new development.	City of Austin	Completed 2015 Plan measures; program is ongoing.	Forty-five site plans approved for construction through FY20. Cumulatively, the 2013 Watershed Protection Ordinance has protected approximately 20 miles of riparian buffer in the impacted watersheds.				
1.5	Require and enforce waterway setbacks in Walnut Creek watershed.	Travis County	Completed.	The setback requirements have been fully implemented with each non-subdivision development project.				
2.0	Wastewater Infrastructure							
2.1	Require failing OSSFs to connect to City sewer lines and provide incentives for connection when new mains are installed.	City of Austin	Completed 2015 Plan measures; program is ongoing.	No updates for years 1-3. In years 4 -5, 45 OSSFs were connected to a centralized wastewater collection system.				
2.2	Provide incentives in Walnut Creek area for OSSF repair and improvements.	Travis County	Completed 2015 Plan measures; program is ongoing.	Travis County approved the OSSF fee waiver to assist owners who choose a proactive remedy rather than deferring action on OSSF repairs until cited in violation. The County maintains information on the incentives on its website.				
2.3	Inspect and repair sewer lines.	City of Austin	Completed 2015 Plan measures; program is ongoing.	As of August 14, 2020, the City had (1) televised and inspected 1,129,235 linear feet of sanitary sewer pipes and scored them in accordance with NASSCO Pipeline Assessment and Certification Program, and (2) rehabilitated or replaced 17,444 linear feet of sewer lines.				

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2.4	Inspect and repair sewer lines.	UT Austin	Completed 2015 Plan measures; program is ongoing.	A total of 24,955 linear feet of sanitary and storm sewer laterals were cleaned and/or repaired.				
2.5	Respond to sewer overflows.	City of Austin	Completed 2015 Plan measures; program is ongoing.	COA-AW O&M program includes cleaning, TV inspection, and smoke testing to clean and ID public and private defects in collection systems, and repair and improve the system. AW has implemented an emergency response plan to assure 24/7 availability. No information on SSOs reported in 2017 or 2019 reports; 53 reportable SSOs occurred in FY 20 (by 8/14/2020).				
2.6	Respond to sewer overflows.	UT Austin	Completed 2015 Plan measures; program is ongoing.	Thirteen SSOs occurred and were reported to TCEQ and COA, all remediated on-site.				
2.7	Reduce contamination from private sewage laterals through inspection when overflows occur, ensuring repair when needed.	City of Austin	Completed 2015 Plan measures; program is ongoing.	Program ongoing.				
2.8	Design and construct outdoor public toilets in high-use locations in Waller Creek: pilot program.	City of Austin	Completed.	COA completed the pilot study and expanded the program to install three additional public toilets in 2020.				

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3.0	Domestic Pet Waste							
3.1	Educate park users through signs and citywide "Scoop the Poop" efforts, enforce requirements in parks to remove pet waste.	City of Austin	Completed 2015 Plan measures; program is ongoing.	Signage updated in all watersheds; rangers patrol parks and provide info about off-leash and pet waste regulations and Scoop-the-Poop, incorporated STP into "Leave No Trace" education. COA WPD works with two non-profits and Austin Animal Center to reach the public at events and through social media, website, newsletters, brochures, and giveaways. COA-WPD conducts its own outreach vial social media and STP website, annual mailing to pet service businesses and dog friendly apartment buildings, distributes free yard signs, and posts STP signage at pet waste dispensers in parks; large STP signs placed at Turkey Creek, Pease Park OLA, Barking Springs, and other parks.				
3.2	Install pet waste bags dispensers in all City parks in watersheds.	City of Austin	Completed.	COA-WPD purchased 142 mounted trash cans and 7,354,000 pet waste bags for City-maintained parks during FY18, FY19 and FY20.				
3.3	Place educational kiosks in Walnut Creek Park off- leash area.	City of Austin; Friends of Austin Dog Parks	Completed 2015 Plan measures; program is ongoing.	Kiosks installed; COA-WPD checks and maintains kiosks annually. All kiosks in good condition at inspection in FY20.				

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3.4	Educate pet-care businesses about pet waste management, seek their cooperation to distribute educational materials to their customers.	Austin Sierra Club; Austin Chamber of Commerce	Not completed.	No status reported.				
4.0	Resident Outreach							
4.1	Invite COA–WPD staff to meetings to provide education on programs to reduce fecal contamination and ways citizens/ neighborhood associations may participate.	Austin Neighborhoods Council	Partially completed.	Completed in 2017 only.				
4.2	Request briefings/reports from COA departments on the progress of proposed fecal contamination reduction strategies and take appropriate action.	Austin Environmental Board	Completed.	Briefing to Environmental Commission in 2016; no briefings requested during Year 3 due to Commissioner turnover; briefings during year 5 were limited due to COVID 19.				

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4.3	Distribute homeless survival guides with educational materials on the water quality impacts from outdoor defecation.	City of Austin	Completed.	Activities in 2015 and 2017-2019: Educational materials were printed and mostly provided to House for Homeless nonprofit for distribution. Homeless Resource Guide not printed and distributed in FY20. COA has developed a more robust focus on homelessness issues since the I-Plan developed. City's Public Information Office is working with an interdepartmental group on a publication including information about encampment life, Leave No Trace principles, City requirements, and resources.				
4.4	Earth Camp and other AISD campus outreach.	City of Austin	Completed 2015 Plan measures; program is ongoing.	Scoop-the-Poop messaging is integrated into Earth Camp, Earth School, and Clean Creek Campus presentations (curriculum).				
4.5	Incorporate riparian and "Scoop the Poop" educational messaging into volunteer workdays and annual meetings.	APF, KAB	APF completed 2015 Plan measures; program is ongoing.	Years 3,4: 111 projects held in affected watersheds that include STP curriculum. All park adopters are educated about Grow Zones and Restoration Plans they can create. Year 5: STP education provided as part of: Annual Adopt-a- Park summits (2015-20); It's My Park Day, Park Improvement Education Series classes (2015-2017); riparian restoration training for park and creek adopters, non-profit partners and volunteer stakeholders; social media campaigns; and online materials.				

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4.6	Community communication on water quality and protection issues to community organizations.	Shoal Creek and Pease Park Conservancies	Completed by Shoal Creek Conservancy. Watershed Protection Plan accepted by EPA in 2021.	Years 1 and 2: Six public meetings hosted by the Shoal Creek Conservancy in partnership with WPD; initiated watershed planning partnership with Meadows Center and COA; worked on relationships with neighborhood associations. Newsletter developed to educate subscribers about watershed and how to get involved. In partnership with COA-WPD, the Shoal Creek Conservancy began hosting stakeholder meetings in February 2018 to develop a Watershed Action Plan, with nine meetings held as of the Year 5 I-Plan status report.				
4.7	Request annual COA briefings on fecal bacteria; distribute updates at the HABLA and La Raza Roundtable meetings; provide links on PODER website to I- Plan and resources.	People Organized in Defense of Earth and Her Resource	Partially completed.	Handouts and information provided to HABLA and Raza Roundtable in 2016.				
5.0	Stormwater Treatment							
5.1	Install or retrofit water quality structural controls on public lands.	City of Austin	Completed.	Two water-quality retrofits installed at headwaters of Waller Creek in 2019 (Reznick Field biofiltration pond; Reilly Elementary School Green Stormwater Infrastructure demonstration project); modifications to three other areas (65 acres) to remove pollutants from runoff.				

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5.2	Inspect existing city- owned and commercial water quality controls, and repair problems as feasible.	City of Austin	Completed 2015 Plan measures; program is ongoing.	Year 3, 4 and 5 through 8-18-2020: inspected 2,465 commercial ponds and 365 residential ponds; maintained 41 ponds across all watersheds.				
5.3	Inspect and ensure proper operation of private water quality treatment and flood detention structures in Travis County jurisdiction.	Travis County	Completed 2015 Plan measures; program is ongoing.	Years 1-2: Inventoried facilities and gathered maintenance plans from responsible parties. Year 3-4: Conducted 77 inspections on the 28 private sites identified in year 2; 23 of 24 sites that were issued notices of violation have been brought into compliance. Year 5: All but two ponds compliant; 2 remaining under NOV were referred to COA on 6-18-2020 for follow-up during repairs; no illicit discharges observed from these two facilities.				
5.4	Dry-weather inspection of storm drain outfalls to identify illicit connections.	City of Austin	Completed.	All 36" stormwater outfalls were screened as of the end of 2016.				

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5.5	Dry-weather inspection of storm drain outfalls to identify illicit connections.	UT Austin	Completed 2015 Plan measures; program is ongoing.	All 163 storm drain outfalls were screened during the previous MS4 permit period of September 1, 2011, to September 17, 2018. UTA-EHS plans to screen all existing outfalls by the end of the current MS4 permit period, September 16, 2023.				
				In 2018-2019, UT-EHS screened 18 major outfalls, and of those, six were observed with dry weather flows. Field analysis for three of the discharges did not indicate sanitary or other characteristics of concern and EHS determined that the discharges were most likely the results of allowable non-stormwater discharges. Analysis of the other three discharges indicated potential characteristics of concern and as of 2020, are part of an ongoing investigation. EHS, UEM, Athletics, Landscape Services, and COA are working in collaboration to identify the source(s).				
5.6	Pilot program test new roadway bacterial reduction technology.	Travis County	Completed.	Flood detention and permanent water quality control structures associated with new roadway construction completed July 2014. Design work for Arterial A at 90%, but planned construction on hold because of right-of-way acquisition and general funding.				
5.7	Street sweeping on UT Austin campus.	UT Austin	Completed 2015 Plan measures; program is ongoing.	UT maintains a program for managing sediment, trash, and organic debris on street and parking areas. The University operates several motorized street sweepers for Main Campus. In 2018-2019, 140 cubic yards of debris were collected during the 63 hours of street sweeping that were completed.				

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5.8	Construction site inspection and monitoring.	City of Austin	Completed.	In 2016-2019, UT-EHC conducted 206 BMP inspections of exterior construction projects. E&S runoff control procedures were enforced on all projects. Deficiencies were noted and escalated until resolved.				
5.9	Inspect commercial and industrial facilities for illicit discharges.	Travis County	Completed 2015 Plan measures; program is ongoing.	Years 3-4: Travis County completed 20 inspections on 11 industrial facilities in the Walnut Creek watershed. Sites that were issued corrective actions were brought back into compliance in timely manner. No violations for offsite discharge were issued. Outreach efforts that included a trifold handout and one on one site meeting with key staff have reduced the number of violations noted over time.				
				Year 5: There are 14 industrial sites on the County's active inventory list for storm water in the Walnut Creek watershed, for which there are no current discharge violations. All sites were inspected in 2019. As of July 2020, eight of the 14 sites had been inspected.				