City of Austin's BCCP Activities Quarter 1 Update: 1 October – 31 December 2021

BCCP Administration		
Infrastructure Projects	One Infrastructure Habitat Assessment Application was processed, and Determination Letters were issued from October through December 2021.	
Land Acquisition /Management Agreements	 Future expected preserve donations include a 10-acre addition to Parke West at the east end of Milky Way in River Place and Four Points Preserve adjacent to Sam Hamilton tract along the west end of Riverplace Boulevard. AW BCP continues working with West Lake Hills neighbors of the 18-acre AW BCP Little Bee Creek Preserve and other land conservation groups to expand the preserve. This preserve currently contains only 1 of 4 caves in a designated protected preserve known to provide habitat for the endangered Bee Creek Cave harvestman (<i>Texella reddelli</i>), that is restricted to this portion of Austin; the ESA-candidate Bracted Twistflower; and aquatic permit species of concern. Preservation of this creek also supports high water quality for the adjacent Ullrich WTP. 	
Reports and Events	No activity to report.	
Dual- managed Properties	No activity to report.	
Personnel	Andrew Harrod joined Wildlands Conservation Division's Outreach Program. Andrew has been active in volunteering and arranging hikes and cave tours for the Sierra Club.	
Rare and Endangered Resources Management		
Golden- cheeked Warbler (GCWA) and Black-capped Vireo (BCVI)	Staff entered BCVI and GCWA observation data into the geodatabase and summary spreadsheets to be compiled and submitted for annual reporting.	
Bracted Twistflower	Staff compiled a response to the U.S. F&WS proposed listing of the Bracted Twistflower as a threatened species under the Endangered Species Act.	
	Twistflower Site at Ullrich where no plants had been observed in the spring was revisited this fall and at least 18 seedlings were observed.	
Other monitoring	Staff participated in the Westcave Christmas Bird Count for the 15 th consecutive year on South Lake Austin macrosite tracts within the count circle. This citizen science project can provide insight into utilization of BCP habitat by birds during the winter.	
Jollyville Plateau Salamander	Monitoring live fuel moisture in Ashe juniper leaves in open and forest habitats. BCP continues to conduct aquatic life surveys of springs across the BCP on a periodic basis in hopes of locating new salamander locations and other rare stygobitic life.	
	AW BCP staff are collecting data for preparation of karst completion status analysis and report expected in FY22 with TC BCP.	

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Karst invertebrates/ karst work	AW BCP conducted cave faunal surveys and cave cricket exit counts on all other assigned caves (ongoing). Staff noticed that the Schizomids (shorttailed whipscorpion) has invaded millipede annex cave and so far looks like this newly introduced predator may have a negative impact of cave fauna including the listed species. Currently hydrogeological studies continue in the FM 2222 and RM 620 area. Contractors and staff continue to excavate filled caves on AW BCP preserves along FM 2222 with funding provided from Texas Department of Transportation to mitigate the FM 2222 bypass to RM 620. Contractors removed sediment from Black Cap Cave on Cortana Preserve and Gaping Maw on Stovepipe Karst Preserve. AW BCP completed a hydrogeological study report of Airmen's Cave in December 2021 and recommends the establishment of an easement for the portion of the underlying cave with applicants of a proposed redevelopment of Brodie Oaks Mall. While it appears the mall redevelopment has little chance of impacting the cave, placing the cave under BCP management will assure that permit terms are continued, and that any impacts discovered can be mitigated. Under a new interlocal agreement with Lady Bird Johnson Wildflower Center, AW BCP staff initiated efforts in restoring and mapping a new cave named Lady Bird Lounge Cave (on going).	
Plant and Animal Control		
Fiant and Ammai Control		
Mammals	Staff continued efforts to trap and remove feral hogs (removed 3 this quarter).	
Red-imported fire ants and Tawny crazy ants (TCA)	Funded TCA research with Dr. Ed LeBrun under a 5-year Master Agreement with the University of Texas. Dr. LeBrun will continue to assess TCA and native ant populations and effectiveness of management strategies.	
Invasive plants	BCP staff and volunteers are continuing efforts to remove non-native plants on COA BCP tracts. Particular effort this quarter focused on killing larger, seed-bearing woody plants on the newly-acquired Carol Lee tract, the Vaught Ranch tract, and a branch of Panther Hollow on the Cortaña tract.	
Land Stewardship		
Habitat Restoration	Staff harvested Shin Oak acorns from a shinnery on the Cortaña tract and planted them in a Black-capped Vireo habitat creation area in the central part of that same tract. Few acorns were available again this year, but >300 were harvested and planted.	
	Staff and volunteers continued working on restoration projects on the JJ&T and Vireo Preserve tracts to promote water infiltration, slope stabilization, soil restoration, and reforestation on degraded sites to promote future habitat for GCWA and BCVI.	
	Collected and grew out over 300 native grass, forb, and woody plants in the nursery. Planted approx. 475 trees and shrubs, as well as native grasses and wildflowers.	
	Austin CCC assisted with tree planting on habitat restoration sites on the JJ&T tract.	
	Beau Brotherton produced a "one year later" video of the bioswale project (bit.ly/bcpBioswale) on the Vireo Preserve.	

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	Worked with TreeFolks, Development Services, City BCP, and County BCP to collect "hyperlocal" native woody plant seeds. Seeds were shipped to a vendor, who prepared (stratified and/or scarified) seeds for planting, and began growing out a subset to determine viability and for future planting. Treated seeds will be sown directly in the field.	
	Continued work on Chinese Privet removal with staff and volunteers at Long Canyon.	
	Executed a 5-year interlocal agreement with Northern Arizona University to investigate the role of mycorrhizal fungi in habitat management and restoration.	
	Executed a 5-year contract with Van Dyck Earthworks and Design to implement forest restoration projects.	
Fencing	Initial fencing of priority areas at recently acquired Bright Leaf Preserve was completed in November and December 2021. The initial areas were mandated in a court judgement transferring ownership to AW BCP, although additional mandated perimeter fencing will be conducted in the future as the preserve is further evaluated.	
Oak Wilt	BCP staff continues to inspect several known oak wilt centers.	
Wildfire Preparedness	Contractors directed by Wildland Conservation Division staff implemented shaded fuel breaks adjacent to neighborhoods on the JJ&T tract, and adjacent to RM 2244 on the Senna Hills tract. Shaded fuel breaks reduce the risk that fires originating in residential areas will spread into wildlands.	
Law Enforcement		
Trespass and Criminal Mischief	Continued patrols of Preserve boundaries.	
Outreach/Volunteers		
Staff worked with volunteers to promote forest restoration at JJT and Vireo Preserves, maintain demonstration gardens at Reicher Ranch, remove invasive plant species, and expand Live Fuel Moisture monitoring.		
Staff presented to the Audubon Outdoor Club of Corpus Christi in October a virtual program on findings of the BCP Golden-cheeked Warbler studies.		
	AW BCP hosted the National Cave and Karst Management Symposium, gave 6 presentations, and led 3 cave/ karst tours.	