Southwestern Riverside County Multi-Species Reserve Annual Report Fiscal Year 2019-2020





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December 1, 2020

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I. Introduction

The Southwestern Riverside County Multi-Species Reserve (Reserve) was established in October 1992 as mitigation for impacts to sensitive species resulting from the creation and operation of the reservoir "Diamond Valley Lake" (DVL) near Hemet, California. To this end, the Metropolitan Water District of Southern California (MWD) developed a Multi-Species Habitat Conservation Plan (MSHCP) which included the establishment of the Reserve, provisions for research and management funding, and a Cooperative Management Agreement (CMA) between the five agencies with interest in the Reserve: MWD, the Riverside County Habitat Conservation Agency (RCHCA), the Riverside County Regional Park and Open-Space District (RCRPOSD), the California Department of Fish and Wildlife (CDFW), and the U.S. Fish and Wildlife Service (USFWS) (Cooperative Management Agreement, 1992)

The Reserve MSHCP covers a 20,000-acre planning area including approximately 2,400 acres of previously conserved habitat (the Shipley Reserve), 6,600 acres of new conservation land, 8,600 acres dedicated to two reservoirs and water-related facilities, and 2,400 acres dedicated to recreation facilities at Diamond Valley Lake (previously "Domenigoni Valley Reservoir Project" or "Eastside Reservoir Project") and existing Lake Skinner. The Reserve was established by combining the Shipley Reserve, lands around Lake Skinner, and lands around DVL to create a contiguous Reserve of approximately 9,000 acres. Subsequent acquisitions have added to the Reserve and increased the size of the Reserve to approximately 14,000 acres (21 square miles). **(Southwestern Riverside County Multi-Species Reserve Management Plan, 2008).**

II. Multi-Species Reserve

A. Reserve Patrol & Management

1. <u>Patrol</u>

In order to fulfill the management objectives established in the Reserve Management Plan, the Reserve is patrolled by a full time Park Ranger employed by Parks (per SWRCMSR Service Contract). Additionally, two Parks Open-Space Rangers were crossed trained on Reserve boundaries and assist the Reserve Ranger on occasion. The majority of the Reserve is off limits to the general public due to its sensitive habitat and critical species residing within the Reserve. Routine patrols include the inspection of Reserve boundary fencing, removal of unauthorized people, and visitor interactions while on trails.

The foremost Reserve security issue this fiscal year was an arsonist that deliberately ignited ten fires in the north hills of Diamond Valley Lake in between September 29 and November 26 2019. The fires resulted in a loss of over 40 acres of coastal sage scrub habitat. The Reserve Ranger coordinated with MWD, CDFW, and Cal-Fire as they conducted their investigation. The offender was apprehended by authorities.

Other reoccurring issues this year included illegal dumping, and fence damage due to OHV and mountain bike trespass. The use of ArcGIS Collector was utilized to track these occurrences. This data will be used to highlight sections of the Reserve needing increased Ranger presence. A total of 1,244 patrol hours was conducted in FY 2019-2020.

2. <u>SCE Utility Pole Repair and Replacement</u>

Southern California Edison contracted Sturgeon to upgrade and replace existing utility poles on the Reserve, as well as replace transmission lines with coated wire that is less likely to cause wildfire. Reserve staff coordinated pre-construction field meetings with contractors and biological/archeological consultants, and provided assistance and oversight on construction days to ensure compliance.

3. <u>Trails</u>

Reserve coordinated with Calfire hand crews and Bill Wagner to conduct trail maintenance on approximately five miles of the Lake Skinner equestrian trail. The trail opened to the public in June, 2020 and will remain open until seasonal closure in spring 2021 to reduce impacts to Quino checkerspot butterfly *(Euphydryas editha quino)*. Reserve staff continue to maintain the trail as needed and keep water troughs available for equestrians.

4. <u>Maintenance</u>

Upgrading equipment to improve efficiency has been a priority during the reporting year. Staff replaced old hydraulic hoses on MSR tractor, replaced a front tractor tire, and all mower attachments were serviced to ensure longevity of the implements. Additionally, a leaking water pipe underneath the MSR field office was discovered, and bypassed with PVC. The Field Crew also built a trailer that holds a 100-gallon water tank that is used to water plants in Tucalota Creek and completed upgrades to the Alamos Schoolhouse.

Biological Surveys

1. <u>Quino checkerspot butterfly</u>

A total of six Quino checkerspot butterfly surveys were conducted by the Reserve Manager and Biological Monitoring Crew between 1/29/20 and 4/17/20. A total of 113 adult and four larvae Quino were observed during the presence-absence surveys. 20 Adults were observed nectaring on *Amsinckia sp.* and *Rhus Ovata*, and seven adults were observed ovipositing.



2. Engelmann Oak

Quino checkerspot butterfly nectaring on Rhus ovata

69 Existing Engelmann oak *(Quercus engelmannii)* adults and saplings in Lopez Canyon and Rawson rift were assessed for overall health, sign of insect pests, presence of acorns, and hybridization. Wood boring beetles Goldspotted Oak Borer (*Agrilus auroguttatus*) and Polyphagous Shot Hole Borer (*Euwallacea sp.*) have not been observed on the Reserve.

3. <u>Avian Surveys</u>

California gnatcatcher *(Polioptila californica californica)* surveys were conducted during the 2020 bird nesting season by the RCA Biological Monitoring Program Crew according to USGS protocol. They surveyed within seven plots within the Reserve and detected CAGN at five of those plots.

Observations of Burrowing owl *(Athene cunicularia)* were conducted in accordance with the Reserve Management Plan. Site inspections of artificial burrows were conducted

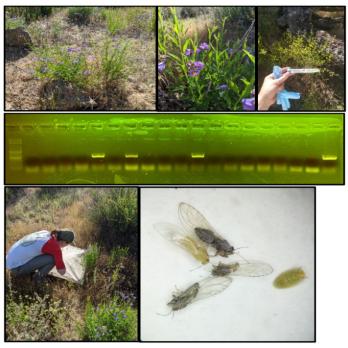
quarterly, and vegetation management around burrows was conducted throughout the year. Minor repairs and clearing of blocked burrow entrances were conducted on 26 sites.

The Biological Monitoring Program documented five white-tailed kite nesting attempts on the Reserve, three of which were documented to have successfully fledged (two fledglings, three fledglings, and one fledgling at those three nests).

In addition to focus surveys, the Reserve staff and the Biological Monitoring Program documented incidental observations of the following avian species protected under the SWRCMSR: bald eagle, Bell's sparrow, California horned lark, Cooper's hawk, great blue heron, loggerhead shrike, and southern California rufous-crowned sparrow.

4. Additional Research

During the reporting year, three MSR Research Proposals were submitted and have been approved by the Reserve Manager. Each researcher is in the process of completing their work and will provide the Reserve Manager with published results. In addition to the Biological Monitoring Program, Graduate student Tessa Shates from UCR has continued her project on the effects of crop associated viruses on native plant populations.



Tessa Shates conducting research at MSR

Additionally, CALFIRE has installed a permanent Remote Automated Weather Station (RAWS) on South Shore unit. The RAWS unit will provide detailed site-specific weather

data for Reserve management, and will provide archival data useful for establishing longterm climate trends in the future.

B. Vegetation Management

1. <u>Non-native grassland</u>

Reserve staff focused on managing non-native grassland in order to manage habitat for covered species and mitigate the risk of catastrophic wildfire on the Reserve. Staff mowed approximately 480 acres of non-native grasslands across multiple management units, and due to late season rains, some units were mowed re-mowed to reduce non-native grasses and eradicate invasive mustards. Additionally, reserve staff coordinated with CALFIRE as part of the 5 year Vegetation Management Plan to conduct prescribed burns on 98 acres across three burn units. Prescribed burns took place at Pig Farm (32 acres), East Bachelor (26 acres), and Domenigoni (40 acres) units. Low intensity burns removed the existing thatch layer with minimal harm to shrubs and trees.

2. <u>Tucalota Creek Restoration</u>

Reserve staff followed up on the previous year's removal of tamarisk by Cal-Fire crews in Tucalota Creek by installing native riparian species and a drip line irrigation system. Reserve staff propagated approximately 100 native plants this year, which included various riparian species. These plants were installed in the creek and placed on drip irrigation as part of the active restoration component of the project.



Tucalota creek restoration area

3. <u>Bassia/Stinknet</u>

Adaptive management practices continue to be utilized to control the invasive weed species Five-hook bassia *(Bassia hyssopifolia)* in an eight acre area along the east dam. The management plan developed by UCANR Inland and Desert Natural Resources Advisor Dr. Chris McDonald and the Reserve Manager continues to be implemented to prevent the spread of the noxious weed. The eight acre bassia plot outside of the east dam has seen a reduction in vegetation density since treatment started two years ago.

Reserve staff continue to monitor stinknet *(Oncosiphon piluliferumhas)* on the Reserve, mapping new populations and treating known occurrences. Diamond Valley Lake and Domingoni Hills remain an area of concern due to large populations of stinknet north of the Reserve. Additionally, small populations have been documented in the interior of the Reserve and continue to be mapped and treated. Reserve staff will continue to monitor and log occurrences in ArcGIS Collector.

C. Habitat and Species Management

1. Burrowing Owl

The Reserve Manager continues to participate in the burrowing owl regional working group, which include members from San Diego Zoo, California Department of Fish and Wildlife, U.S Fish and Wildlife Service, Western Riverside County Regional Conservation Authority, and Center for Natural Lands Management. Additionally, site inspections of artificial burrows were conducted quarterly, and vegetation management around burrows was conducted throughout the year. Minor repairs and clearing of blocked burrow entrances were conducted on 26 sites.

2. Engelman Oaks

In addition to Collection of Engelmann oak acorns that would be used for propagation did not take place during this reporting period. Even with high rainfall totals this season, acorn production was minimal. A total of 25 acorns that were collected last year were potted in one gallon pots and held at the MSR field office nursery. Many of the sprouted seedlings were subject to herbivory and only two viable seedlings remain.

3. Stephens Kangaroo Rat

Reserve staff have managed 578 acres of suitable habitat for Stephens' kangaroo rat *(Dipodomys stephensi)*. Management activities include mowing, herbicide treatment, and prescribe burns. Additionally, the Las Mananitas Ranch 200-acre easement was inspected by the Reserve Manager and found that the landowner was actively mowing the property to increase Stephens' kangaroo rat habitat and has expanded his operation by mowing additional acres on the property.

4. Brown-headed cowbird trapping

Brown-headed cowbird trapping was conducted on the Reserve this year from March – June 2020. Traps were operated in three locations throughout the Reserve. 61 individuals were captured and euthanized this season compared to 37 last season - consistent with a region wide increase in BHCO numbers this year.

III. Alamos Schoolhouse Nature Center

A. Interpretive

County wide Covd-19 restrictions were enacted in March 2020 resulting in an indefinite closure of the Alamos Schoolhouse Nature Center to the public.

A total of 1,067 visitors came to the Alamos Schoolhouse Nature Center over the fiscal year. 147 visitors attended one of four campfire speaker programs, and 32 visitors attended bird walks lead by the interpreter.

The Reserve Interpreter developed a new brochure that focuses on various protected species in the Reserve. The new MSR brochure has been printed and was distributed to the public starting December 2019.

Reserve Staff made other improvements to the Schoolhouse including repairing the foot bridge over the creek in front of the Schoolhouse, and creating new outdoor program area adjacent to the nature center that has the potential to be used for socially distanced interpretive programs when they are available.

B. Volunteers

A Girl Scout Troop has installed 18 native plants in front of the Alamos Schoolhouse. And installed interpretive signage for the project.



Girl Scout troop installing native plants at Alamos Schoolhouse

An AmeriCorps NCCC crew was also utilized in March 2020 to perform restoration projects and roadside weed abatement on interior Reserve roads and around the Alamos Schoolhouse. Unfortunately, their work was cut short after five days due to Covid-19 restrictions.

IV. Budget

The annual budget for FY 2019-2020 was **\$399,922**. Reserve management used **\$384,875** of this approved amount on all operations indicated in this report and the Southwestern Riverside County Multi-Species Reserve 2019-2020 Annual Work Plan. Budget actuals for fiscal year 2019 - 2020 expenditures can be referenced in Appendix B.

V. Reserve Management Committee Approvals

During FY 2019/2020 the RMC hosted three management committee meetings. Complete meeting notes are provided below (**RMC Minutes, 2019-2020**):

A. RMC Meeting - December 4, 2019

RMC Members Present

Kyla Brown (Riverside County Regional Park and Open-Space District/Parks) Jim Theide (U.S. Fish and Wildlife Service/USFWS) – via phone Richard Kim (California Department of Fish and Wildlife/CDFW) Alex Marks (Metropolitan Water District of Southern California/MWD) Brian Shomo (Riverside County Habitat Conservation Agency/RCHCA)

Other Attendees

Gail Barton (public), Tania Asef (MWD), Robert Williams (Reserve Manager, Parks), Dustin McLain (Parks), Bill Wagner, Lily Bostrom (Ascent), James Powell (Alta Consultants), Sam Ticas (MWD)

1. Approval of meeting notes – June 20, 2019 meeting notes were presented and discussed.

MOTION to approve the meeting notes as presented for the June meeting. Motion – Brian Shomo; Second – Richard Kim; Motion approved

- 2. Reserve Manager Report The Reserve manager will present the annual report for 2018-2019 and Reserve management activities report addressing (a) natural resources management, (b) patrol, (c) maintenance, and (d) interpretative program. Robert first presented the September 2019-December 2019 quarterly reserve management report. Highlights from the written report were as follows.
- Several camera traps have been installed in key locations of the reserve and a mountain lion, coyote, and several deer have been filmed. The cameras are being checked every few weeks.
- An arsonist has caused fires in the northern section of the reserve. The Reserve Ranger, MWD, CDFW, and Cal-Fire are patrolling the area and have installed cameras to assist with identifying the arsonist if the person returns.
- The field crew created a shade shelter near the old MSR office to cover the MSR tractors and mower attachment and built a trailer that holds a water tank to be used to water plants in Tucalota Creek restoration site.
- The Alamos schoolhouse had 261 visitors this quarter, 77 visitors attended one of four campfire/special speaker programs, four new displays were created for the nature center, and a Girl Scout project installed 15 native plants in front of the Alamos Schoolhouse.

Following the quarterly report discussion, Robert presented the annual report for 2018-2019. Highlights from the written report were as follows:

- 1,280 patrol hours were conducted in the reserve.
- A new brochure was created with information about the Reserve to be distributed at the Alamos Schoolhouse and Lake Skinner entrance kiosk.
- The Reserve Manager obtained his Qualified Applicators License and the Reserve Ranger recertified his Qualified Applicators Certificate.
- Three research proposals were approved by the Reserve Manager and graduate student Tessa Shates published her research regarding insect-vectored crop viruses and whether they may threaten California native plants.
- 64 Engelmann Oak trees were identified and assessed in the Lopez Canyon and Rawson Rift.
- Vegetation management included conducting prescribed burns on 425 acres were burned, 200 acres of mowing, 11 miles of roadside weed abatement, and 8 acres of Bassia management.
- 400 acres of land were managed for Stephen's kangaroo rat (and burrowing owl), which included mowing, herbicide treatment, prescribed burns.
- The Alamos Schoolhouse was open 122 days, with 2,924 visitors, 126 people attended the second annual Earth Day special event, and one volunteer dedicated to the Nature Center worked 576 volunteer hours conducting hikes, daily interactions, and programs.

3. Trails Update - MWD will provide the completed trails plan. The RMC is requested to

approve the plan. Alex introduced the item and Lily Bostrom and James Powell, MWD's consultants preparing the trails plan. Copies of the trails plan were distributed to the RMC members and a PowerPoint presentation of the project followed. Alex indicated that the plan included four trails, which were approved at the RMC meeting on December 4, 2018, the San Diego Canal Trail (SDCT), Lake Skinner East Interpretive Trail (LSET), Lake Skinner West Interpretive Trail (LSWT), and the San Diego Canal/ Lake Skinner Equestrian Trail Connector Trail (SDCCT). He reiterated, from the 2018 meeting, that the four proposed trails were the result of further study by MWD of the alignments approved by the RMC at the March 10, 2017 RMC to reduce the potential impact of trails construction on the reserve and that the SCDT was included in the Southwestern Riverside County Multispecies Habitat Conservation Plan and the Eastside Reservoir (DVL) Project EIR project descriptions and that the LSWT was previously supported by the RMC and included in Addendum #7 to the DVL EIR in 2002. Alex noted that the Trails Plan incorporated the USFWS trail planning guidelines previously provided by Geary Hund. Lily and James then presented the details of the individual trails and components of the trails plan. Following RMC member discussion, the USFWS indicated that while cautiously optimistic about the trails plan, Jim requested further opportunity for the Service to review environmental and reserve information prior to approving the plan. Thus, approval of the plan was tabled to a future meeting pending USFWS review of environmental and reserve related information to be provided by MWD.

No action was taken on the Trails Plan

4. Reserve Management RFP Process - MWD will provide information and request RMC approval of their procedures for soliciting and reviewing responsive RFP proposals. Alex provided an update on the RFP for reserve management services and presented MWD's procedures the solicitation and review of responsive RFP proposals by the RMC members. He indicated that the RFP was still under review by MWD and that he anticipated it being released in January 2020. Alex distributed copies of MWD's procedures for solicitation and review of RFP proposals and stated that the contract process will be subject to MWD guidelines and that all submittals are considered confidential. There was discussion by RMC members about whether members of the RMC serving on the RFP evaluation committee could discuss submittals with their agency colleagues. Subsequently, the RMC members suggesting revising item four in the proposed procedures to allow members to discuss RFP submittals with their agency colleagues.

MOTION to approve Reserve Management RFP Procedures for soliciting and reviewing responsive RFP proposals as amended. Motion – Kyla Brown; Second – Jim Thiede; Motion approved

- 7. Status of Reserve Office Building: RCHCA will request RMC approval of their offer, on behalf of the RMC, to solicit quotes/bids for the construction and/or purchase of a building/shop for use by Reserve staff. Brian introduced the item and that it was a follow up to the RMC's June 20 meeting discussion. He indicated that RCHCA was still willing to solicit a request for qualifications to obtain a contractor to design and build the building. Alex stated that while appreciative of RCHCA's offer, the office building project needed to be delayed pending completion of the RFP process for reserve management. No action was taken on the item.
- Roundtable RMC members will provide updates on Reserve-related activities of their agencies – (a) Brian said that the RCHA received \$600,000 BLM grant for SKR management. (b) Richard stated that CDFW is seeking to train volunteers about SKR and nesting birds.
- 8. Adjourn The meeting was adjourned at 2:37

B. RMC Meeting - March 4, 2020

RMC Members Present

Dustin McLain (Riverside County Regional Park and Open-Space District/Parks) Richard Kim (California Department of Fish and Wildlife/CDFW) Alex Marks (Metropolitan Water District of Southern California/MWD) Brian Shomo (Riverside County Habitat Conservation Agency/RCHCA)

Other Attendees

Gail Barton (public), Tania Asef (MWD), Robert Williams (Reserve Manager, Parks), Dustin McLain (Parks), Bill Wagner

- 1. Call to order and introductions The meeting was called to order at 1:03 pm.
- 2. Public comments No comments.
- **3.** Approval of meeting notes December 4, 2019 meeting notes were presented and discussed.

MOTION to approve the meeting notes as presented for the June meeting. Motion – Dustin McLain; Second – Richard Kim; Motion approved

- 4. Reserve Manager Report The Reserve manager will present the quarterly report on Reserve management activities report addressing (a) natural resources management, (b) patrol, (c) maintenance, and (d) interpretative program. Robert presented the January 2020 - March 2020 quarterly reserve management report. Highlights from the written report were as follows.
- Reserve staff continued progress on the Tucalota Creek habitat restoration project including treating new tamarisk shoots.
- The arsonist that was setting fires in section of the reserve north of DVL has been arrested.
- Southern California Edison continues to replace power poles that are on the Reserve and giving Reserve staff at least a 48 hour notice prior to completing work. Additionally, a biologist and archeologist have been required to be onsite for all activities.
- Charity has been preparing for the upcoming Earth Day Special Event on April 25th. She has also created a new brochure that will be distributed at the Alamo Schoolhouse once the draft is approved.
- 5. Round Table: RMC members will provide updates on Reserve-related activities of their agencies (a) Brian discussed a BLM grant for funding signage, that RCHCA would be sending invitations to join an SKR Recovery Effort Working Group, and that RCHCA would be hosting Earth Day and tree planting events. (b) Richard announced his promotion to Senior Environmental Scientist. (c) Alex announced the opening of the Wildflower Trail and that the RFP was moving forward, and Bill indicated that maintenance on the Skinner Equestrian Trail was anticipated in May. (d) Robert gave an update on bald eagles nesting in Crown Valley and observation of white tailed kites and golden eagles.
- 6. Adjourn The meeting was adjourned at 1:50 PM.

C. June 3, 2020

Minutes are under review and pending approval by the committee.

VI. References

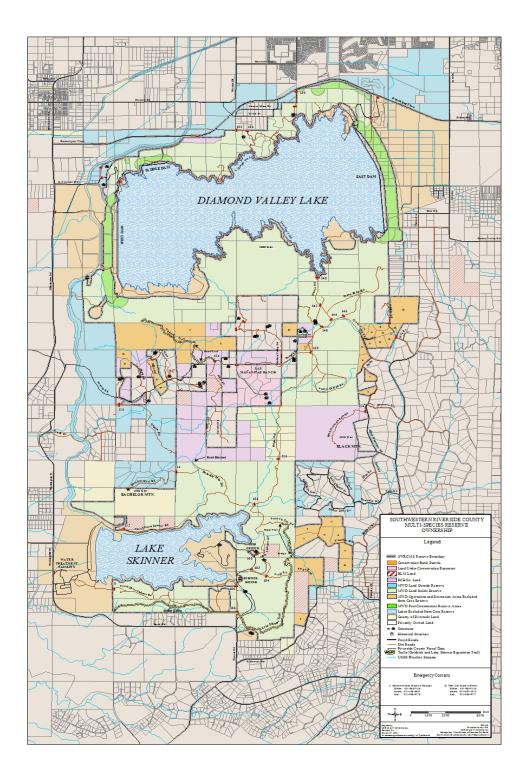
Cooperative Management Agreement. (1992). California Department of Fish and Wildlife, Metropolitan Water District of Southern California, Riverside County Habitat Conservation Agency, Riverside County Regional Park and Open-Space District, and U.S. Fish and Wildlife Service.

Reserve Management Committee Minutes. (August 2, 2017. November 1, 2017. February 7, 2017. May 2, 2018) The Reserve Management Committee.

Southwestern Riverside County Multi-Species Reserve Management Plan. (September 3, 2008). Moen, C.

VII. Appendices

A. Reserve Map



B. RivCo Parks FY 19-20 Budget Actuals

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Description		<u>_T001</u> <u>Reserve Admin</u>		<u>T002</u> SKR Habitat Maintenance		<u>T003</u> <u>Habitat &</u> <u>Species</u> Management		<u>T004</u> <u>Weed</u> <u>Management</u>		<u>T005</u> <u>Habitat</u> <u>Restoration</u>		<u>T006</u> <u>Habitat</u> <u>Restoration</u>		<u>_T007</u> <u>Reserve Patrol &</u> <u>Mgmt</u>		<u>T008</u> <u>Research</u>		TOTAL ACTUAL	
PERSONNEL						nagement		-											
Total Personnel	\$	41,303	\$	-	\$	32,409	\$	99,442	\$	18,116	\$	20,583	\$	67,016	\$	21,722	\$	300,59	
SUPPLIES & OTHER																			
Total Supplies & Other	\$	14,422	\$	-	\$	143	\$	6,880	\$	3,042	\$	1,527	\$	186	\$	-	\$	26,20	
ADMINISTRATIVE OVERHEAD																			
Admin Overhead @ 12.5%	\$	8,356	\$	-	\$	4,883	\$	15,948	\$	3,174	\$	3,316	\$	10,080	\$	3,258	\$	49,01	
MILEAGE REIMBURSEMENT																			
2019 Mileage		124				225		2,151		164		394		4,492		-			
2019 IRS Mileage Rate	\$	0.580	\$	0.580	\$	0.580	\$	0.580	\$	0.580	\$	<mark>0.580</mark>	\$	0.580	\$	0.580			
2020 Mileage						1,576		2,261		114		446		3,719		41			
2020 IRS Mileage Rate	\$	0.575	\$	0.575	\$	0.575	\$	0.575	\$	0.575	\$	<mark>0</mark> .575	\$	0.575	\$	0.575			
Mileage Reimbursement	\$	72	\$	-	\$	1,037	\$	2,548	\$	161	\$	485	\$	4,744	\$	24	\$	9,06	
FY19-20 TOTAL COSTS	¢	64,153	\$	_	¢	38,472	¢	124,818	\$	24,492	¢	25,911	¢	82,026	¢	25,004	\$	384,87	