Estimated Unmanned Aerial System Pilot Program Costs 4/19/19						
<u>Item</u>	Units / Hours	Unit Cost	Total Cost	Comments		
Unmanned Aerial System	2	\$ 5,000.00	\$ 10,000.00	Purchase of two UAVs, batteries, chargers, cases Purchase of one DJI Phantom 4 RTK & one DJI Phantom 4 Pro		
Training	16	\$ 160.00	\$ 2,560.00	Review of Manual for 4 pilots Soft cost for existing certified pilots to read & acknowledge the manual		
Research & Preparation of Manual	200	\$ 160.00	\$ 32,000.00	Spent FY 15-18 Approximate hours spent to date based upon Board direction to prepare for use of this technology		
Program Oversight & Evaluation	80	\$ 160.00	\$ 12,800.00	6 Month Evaluation Report to the Board Anticipated costs to manage the pilot program		
Software	1	\$ 2,500.00	\$ 2,500.00	Purchased FY 18		
Pilot FAA Training Hours	54	\$ 160.00	\$ 8,640.00	Trained on personal time or with previous employer		
Pilot FAA Training	4	\$ 150.00	\$ 600.00	Trained on personal time or with previous employer		
Pilot FAA Certification Exam	4	\$ 150.00	\$ 600.00	Certified on personal time or with previous employer Approximate time/cost not charged to the District. These costs are to demonstrate the level of effort and costs that would be incurred if the program grows and additional pilots are needed.		
Insurance	0.5	\$ 14,000.00	\$ 7,000.00	Insurance premium for 6 months		
		Subtotal:	\$ 76,700.00			
	Total Estimated	Pilot Program Cost:	\$ 32,360.00	FY 19-20 funds		

Operating costs will be charged to the budget of individual project as regular survey time. Use of this technology is expected to reduce hours needed for certain tasks.

Actual Unmanned Aerial System Pilot Program Costs 2/07/20
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ltem	Units / Hours	Unit Cost	Total Cost	Comments
<u>item</u>	Onits / Hours	<u>Onit Cost</u>	<u>rotar cost</u>	Purchase of two UAVs, batteries, chargers, cases
Unmanned Aerial System	2	\$ 5,700.00	\$ 11.400.00	Two DJI Inspire 2 w/ Loki PPK GPS, batteries, cameras,
	-	5,700.00	12) 100100	controllers & cases
				One DII Phantom 4+ controller & case
Unmanned Aerial System	1	\$ 2,850.00	\$ 2,850.00	,
				iPad Purchase & Apps, Aircraft Radios
Additional Accessories	1	. \$ 1,200.00	\$ 1,200.00	Two iPad minis, apps for flight controls. Aircraft radios
				for monitoring manned air traffic
				Review of Manual for 6 pilots
Training	24	\$ 160.00	\$ 3,840.00	Started with 4 certified pilots, two additional employees
				obtained certification
				Spent FY 15-18
Research & Preparation of Manual	200	\$ 160.00	\$ 32,000.00	Manual was prepared prior to start of 6-month pilot
rescuren a reparation of Managar	200	5 100.00	32,000.00	program. No significant modifications found necessary.
				Moving forward in line with QEMS, procedures will be
				written for the safe planning & operation of UAVs.
Program Oversight & Evaluation	120	\$ 160.00	\$ 19,200.00	6 Month Evaluation Report to the Board
				18 1 18 1, 11 11 11 11 11 11, 11
				planning, FAA coordination
Software	1	\$ 2,500.00	\$ 2,500.00	Purchased FY 18
	_	-,	7 -,,,,,,,,	No additional software purchases were necessary
				Trained on personal time or with previous employer
Pilot FAA Training Hours	54	\$ 160.00	\$ 8,640.00	
				their personal time
				Trained on personal time or with previous employer
Pilot FAA Training	4	\$ 150.00	\$ 600.00	Employees interested in participating have trained on
				their personal time
				Certified on personal time or with previous employer
Pilot FAA Certification Exam	4	\$ 150.00	\$ 600.00	. ,
				exam on personal time/expense
Insurance	0.5	, , , , , , , , , , , , , , , , , , , ,	·	•
		Subtotal:	\$ 89,830.00	
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	Tota	Pilot Program Cost:	\$ 44,290.00	FY 21 funds Spent