



Process to Amend Annual Program Budget & EcoModel Amendment





Process to Amend HCP Workplan and Funding Application

FMA Article Four; FMA § 6.1; IC OP Rules § 6.05 – 6.07

1. Implementing Committee Approval of amended WP & Budget
2. IC request EAA Board to consider amended FA
3. EAA Committee/Board Approval of amended FA
4. Budget Amendment by EAA Board



- The EcoModel Process/Budget is spanning calendar years
- The 2014 WP continued the 2013 BIOWEST Contract
- Allowed for an updated SOW to be added mid-year 2014

Target Performance Measures for 2014: Completion of the 2013 contract and execution of a second contract (or extension of the first) to complete recommendations and next steps identified

Methodology:

... Utilizing the provided ... recommendations of the initial contract ... develop a new Scope of Work to be reviewed by the Science Committee and Implementing Committee. The EAA may then either extend the contract already established with BIOWEST, or utilize the EAA competitive procurement process.



Schedule and Budget Estimate for Year-2 Scope of Work:

Task 1: Project Management Meetings: Monthly (\$37,765)

Task 2: Literature Review: November 1, 2014 (\$16,580)

Task 3: Fountain Darter Modeling: Aug. and Nov. 2014/ Feb. 2015 (\$154,755)

**Task 4: Aquatic Vegetation Modeling: Aug. and Nov. 2014/ Feb. 2015
Percent Cover/Biomass Report: November 1, 2014 (\$138,520)**

Task 5: Draft/Final Interim Status Report/Deliverables: May 15, 2015 (\$57,730)

Total Costs= \$405,350



Science Committee approved the recommendation of the scope of work on April 8th:

- Questions about emphasis on scouring and the effects of re-vegetation in the Comal system.
- Unanimous approval of new Scope of Work



Ecological Model Timeline and Budget - April 2014

Total Development	\$947,108		
Table 7.1 (Phase I)	\$950,000		Phase I Remaining Funds = \$2,892
Table 7.1 (Phase II)	\$200,000		Total Remaining Funds = \$202,892 Phase I and II

Ecological Model Timeline and Budget - April 2014

Year		\$\$	Annual Budget	Deliverables
2012		\$0		Technical Workgroup - brainstorming w/ subject experts
2013	Jan - May (actual)	\$16,758	\$70,006	Technical Memo - develop modeling plan and outline
	June - Dec (actual)	\$53,248		begin model development; agree to model platform; lit review
2014	Jan - May	\$116,752	\$316,752	begin model development; agree to model platform; lit review
	June - Dec	\$200,000		continue Fountain Darter and Vegetation model modules in two study reaches (City Park (San Marcos) and Old Channel (Comal))
2015	Dec - May	\$205,350	\$380,350	complete Fountain Darter and Vegetation model modules in two study reaches (City Park (San Marcos) and Old Channel (Comal))
	June - Dec	\$175,000		Expand Model to additional representative reaches in both Spring systems as appropriate; link model modules
2016	Dec - May	\$155,000	\$180,000	Expand Model to additional representative reaches in both Spring systems as appropriate; link model modules, provide documentation
	June - Dec	\$25,000		Staff Training on Model utilization and user manual development
2017	Jan - Dec	\$0	\$0	Model Runs by HCP Staff
2018	Jan - Dec	\$0	\$0	Model Runs by HCP Staff
2019	Jan - Dec	\$0	\$0	Model Runs by HCP Staff
		Total Development	\$947,108	
		Table 7.1 (Phase I)	\$950,000	Phase I Remaining Funds = \$2,892
		Table 7.1 (Phase II)	\$200,000	Total Remaining Funds = \$202,892 Phase I and II

- 2014 EcoModel Total = \$316,752
- Increase of = \$141,752
- Total EAA FA = \$17,065,529.38

EAHCP Mitigation No.	Description	Final Amount Requested	Selected Contractor
5.1.1	Refugia at National Fish Hatchery	\$ 1,678,597.00	USFWS
5.1.2	Voluntary Irrigation Suspension Program Option	\$ 4,172,000.00	EAA Staff
5.1.3	Regional Water Conservation	\$ 986,500.00	TAMU/Agrilife
5.5.1	Aquifer Storage and Recovery	\$ 6,953,000.00	SARA, SAWS
6.3.1	Biological Monitoring - Monitoring	\$ 400,000.00	TBD – Price to be set by Contract
6.3.1	Biological Monitoring – Data Analysis	\$ 50,000.00	TBD – Price to be set by Contract
5.7.2	Water Quality Monitoring	\$ 474,430.00	SWCA
6.3.3	Ecological Modeling	\$ 316,752.00	BIO-WEST
6.3.4.2	AR – Extended Low Flow Effects On Comal Springs Riffle Beetle	\$ 129,967.68	BIO-WEST
6.3.4.2	AR – Vegetation Decay and Water Quality Degradation Effect on Fountain Darter Movement	\$ 104,978.98	BIO-WEST
6.3.4.2	AR – Low Flow Effects on Fountain Darter Fecundity	\$ 41,751.19	BIO-WEST
6.3.4.2	AR – Predation on Fountain Darter Population Size at Various Flows	\$ 57,464.46	BIO-WEST
6.3.4.2	AR – Comal Springs Riffle Beetle Plastron Use/Function	\$ 58,400.00	USFWS-SMARC
6.3.4.2	AR – Comal Springs Riffle Beetle Collection Methods and Baseline Population	\$ 61,688.07	ZARA
6.3.4.2	AR – Freeman Aquatic Building Research Facility	\$ 400,000.00	TXSU
	Scientific Panel Review	\$ 430,000.00	NAS
	EAA Administrative Costs	\$ 750,000.00	EAA Staff
	Funding Request Total	\$17,065,529.38	



IC Needed Actions to Move Forward With EcoModel

1. Approve new Scope of Work
2. Approve the amended Program Budget
3. Request the EAA Board consider an amended Funding Application