

Appendix 5F

Data Entry Scoring Summary Table for FMPs

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

Project Name	FMP ID	General Project Data												
		Project Description	Flood Region	Project Type	FIUP Project Category	Project Watershed	Rural Applicant	Project Cost	Benefit Cost Ratio	Cost per Structure Removed	Pre-Project Level-of-Service	Post-Project Level-of-Service	# of Structures in 1% Annual Chance FP (Pre-Project)	Project Status
Small pond at San Elizario	143000003	Construct a new 0.34 ac-ft pond to relieve roadway flooding. Described as Alternative 3 from City of San Elizario "Drainage Feasibility Study" (2018).	14	Detention Pond	Category 2	Upper Rio Grande	N	\$224,000	0	N/A	Unknown	10% annual chance	0	Planning
SH20 Drainage Improvements from Doniphan Drive to Texas Avenue	143000005	Improvements to inlet and culvert capacities at 8 crossings, with cost estimates and prioritizations available.	14	Storm Drain	Category 4	Upper Rio Grande	N	\$3,745,000	0	N/A	<20% annual chance	10% annual chance	4	Planning
Install Flood Gates in Marfa and Monitoring Gage on North Alamito Creek and Highway 17	143000007	Add flood gates to roadways at 4 LWCs on Alamito Creek, and a monitoring gage/early detection on North Alamito Creek at Hwy 17 Bridge upstream of Marfa. This provides early warning for Emergency Management to deploy before imminent road flooding.	14	Preparedness	Category 4	Upper Rio Grande	Y	\$358,000	0	Not applicable, non-structural FMP (early warning)	<20% annual chance	Not applicable, non-structural FMP (early warning)	0	Planning
Develop and Implement Floodplain Ordinance to Regulate Development at Hudspeth County	143000009	Coordinate with Hudspeth County Commissioners, Road & Bridge Departments, Safety & Inspection Departments, & County Attorney to draft a floodplain ordinance (or modify existing subdivision ordinance) to regulate development standards in Hudspeth County.	14	Other	Category 1	Upper Rio Grande	N	\$50,000	0	Not applicable, non-structural FMP (regulatory)	Unknown	Not applicable, non-structural FMP (regulatory)	823	Planning
SSA4	143000011	Detention Basin SSA4	14	Detention Pond	Category 2	Upper Rio Grande	N	\$14,744,000	0.1	\$148,929	<1% annual chance	1% annual chance	185	Planning
SOC4	143000021	Sediment/Detention Basin at "Mankato Arroyo"	14	Detention Pond	Category 2	Upper Rio Grande	N	\$2,383,000	0.1	\$238,300	<1% annual chance	1% annual chance	10	Planning

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

Project Name	FMP ID	Score 1: Severity - Pre-Project Average Depth of Flooding (100-year)				Score 2: Severity - Community Need (% Population)						Score 3: Flood Risk Reduction			
		Average Flood Depth (100yr)	Notes	Severity Ranking: Pre-Project Average Depth of Flooding (100-year)	Score 1	Communities Served by Project	Community Population Served	Flood Plain Population	Notes 2	Severity Ranking: Community Need (% Population)	Score 2	# of Structures Removed from 1% Annual Chance FP	Notes 3	Flood Risk Reduction	Score 3
Small pond at San Elizario	143000003	0.3	Preliminary FEMA 2D model does not show 1% AC flood depths, but community reports localized flooding	Baseline average flood depth < 0.5ft	2	San Elizario city	10,116	0	0.00%	<25% of project community affected	1	0.00	100%	Reduced risk to 0 structures in floodplain	0
SH20 Drainage Improvements from Doniphan Drive to Texas Avenue	143000005	0.9	Preliminary FEMA 2D model does not show 1% AC flood depths at all crossing locations. Average depth is based on locations with flood depths shown in 2D model results.	Baseline average flood depth > 0.5ft	4	El Paso city	678,815	30	0.004%	<25% of project community affected	1	0.00	0%	Reduced risk to 0 structures in floodplain	0
Install Flood Gates in Marfa and Monitoring Gage on North Alamito Creek and Highway 17	143000007	9.2	Based on Fathom 1% annual chance depth grid	Baseline average flood depth > 9.2 ft	10	Marfa city	1,788	0	Not applicable, non-structural FMP (early warning)		0	0.00	Not applicable, non-structural FMP (early warning)		0
Develop and Implement Floodplain Ordinance to Regulate Development at Hudspeth County	143000009	0.47	Not applicable, non-structural FMP (regulatory)	Not applicable, non-structural FMP (regulatory)	0	Hudspeth County	3,913	1629	Not applicable, non-structural FMP (regulatory)		0	0.00	Not applicable, non-structural FMP (early warning)		0
SSA4	143000011	0.727		Baseline average flood depth > 0.5ft	4	Sorroco City, Sparks CDP	39,066	564	1.44%	<25% of project community affected	1	99.00	54%	Reduced risk to <75% of structures in floodplain	7
SOC4	143000021	0.598		Baseline average flood depth > 0.5ft	4	Sorroco City	34,306	26	0.08%	<25% of project community affected	1	10.00	100%	Reduced risk to >75% of structures in floodplain	10

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects



Project Name	FMP ID	Score 4: Flood Damage Reduction						Score 5: Critical Facilities Damage Reduction			
		# of Structures with Reduced 1% Annual Chance Flood Risk	Pre-Project Damage \$	Post-Project Damage \$	Notes 4	Flood Damage Reduction	Score 4	# of Critical Facilities Removed from 1% Annual Chance FP	Notes 5	Reduction in Critical Facilities Flood Risk	Score 5
Small pond at San Elizario	143000003	0	\$0	\$0	Project does not have 1% annual chance Level of service		0	0	No Critical Facilities in Floodplain		0
SH20 Drainage Improvements from Doniphan Drive to Texas Avenue	143000005	0	\$355,136	\$355,136	Project does not have 1% annual chance Level of service		0	0	No Critical Facilities in Floodplain		0
Install Flood Gates in Marfa and Monitoring Gage on North Alamito Creek and Highway 17	143000007	0	\$0	\$0	Not applicable, non-structural FMP (early warning)		0	0	Not applicable, non-structural FMP (regulatory)		0
Develop and Implement Floodplain Ordinance to Regulate Development at Hudspeth County	143000009	N/A	\$0	\$0	Not applicable, non-structural FMP (regulatory)		0	0	Not applicable, non-structural FMP (regulatory)		0
SSA4	143000011	185	\$8,172,542	\$2,996,393	63.34%	Flood Damage Reduction > 50%	6	0	No Critical Facilities in Floodplain		0
SOC4	143000021	10	\$432,110	\$0	100.00%	Flood Damage Reduction > 95%	10	0	No Critical Facilities in Floodplain		0

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

Project Name	FMP ID	Score 6: Life and Safety				Score 7: Water Supply						Score 8: Social Vulnerability			
		Adjusted Injury Risk (%)	Notes 6	Life and Safety Ranking (Injury/ Loss of Life)	Score 6	Water Supply Benefit in Acre-Feet	SourceID	WMS_ID	Notes 7	Water Supply Yield Ranking	Score 7	SVI Score	Notes 8	Social Vulnerability Ranking	Score 8
Small pond at San Elizario	143000003	0.4		Life/injury risk percentage <20%	2	0				No impact on water supply	0	0.96		SVI between 0.75-1.00 (high vulnerability)	10
SH20 Drainage Improvements from Doniphan Drive to Texas Avenue	143000005	11.1		Life/injury risk percentage <20%	2	0				No impact on water supply	0	0.29		SVI between 0.25-0.5 (low to moderate vulnerability)	4
Install Flood Gates in Marfa and Monitoring Gage on North Alamo Creek and Highway 17	143000007	90.5		Life/injury risk percentage >50%	10	0				No impact on water supply	0	0.91		SVI between 0.01-0.25 (low vulnerability)	1
Develop and Implement Floodplain Ordinance to Regulate Development at Hudspeth County	143000009	0	Not applicable, non-structural FMP (regulatory)			N/A				No impact on water supply	0	0.56		SVI between 0.5-0.75 (moderate to high vulnerability)	7
SSA4	143000011	4.0		Life/injury risk percentage <20%		0				No impact on water supply	0	0.90		SVI between 0.75-1.00 (high vulnerability)	10
SOC4	143000021	2.7		Life/injury risk percentage <20%		0				No impact on water supply	0	0.94		SVI between 0.75-1.00 (high vulnerability)	10

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

Project Name	FMP ID	Score 9: Nature-Based Solution				Score 10: Multiple Benefites				Score 11: O&M			
		% Nature Based Solution by Cost	Notes 9	Nature-Based Solutions Ranking	Score 9	Multiple Benefits Description	Notes 10	Multiple Benefit Ranking	Score 10	O&M Cost (Annual)	Notes 11	Operations and Maintenance Ranking	Score 11
Small pond at San Elizario	14300003	0%			0		Transportation benefit	Project delivers benefits in only 1 wider benefit category	1	\$2,000	sediment/trash/debris removal	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
SH20 Drainage Improvements from Doniphan Drive to Texas Avenue	14300005	0%			0		Transportation benefit	Project delivers benefits in only 1 wider benefit category	1	\$2,000	sediment/trash/debris removal	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
Install Flood Gates in Marfa and Monitoring Gage on North Alamo Creek and Highway 17	14300007	0%			0		Transportation benefit	Project delivers benefits in only 1 wider benefit category	1	\$21,650	One time training course is available to train City staff on annual maintenance requirements for \$3,500. To contract out annual maintenance is \$21,650 annually.	Project will require ongoing operation and maintenance outside of the owner's regular maintenance practices; long-term O&M requirements are undefined; and/or high annual O&M cost > 1% of project (high);	4
Develop and Implement Floodplain Ordinance to Regulate Development at Hudspeth County	14300009		Not applicable, non-structural FMP (regulatory)					Not applicable, non-structural FMP (regulatory)			Ongoing operation costs of new program to regulate development are currently unknown.	Project will require ongoing operation and maintenance outside of the owner's regular maintenance practices; long-term O&M requirements are undefined; and/or high annual O&M cost > 1% of project (high);	4
SSA4	14300011	0%			0		Agricultural benefit	Project delivers benefits in only 1 wider benefit category	1	\$10,000	Sediment Clearing	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
SOC4	14300021	0%			0		Transportation and agricultural benefits	Project delivers benefits in 2 wider benefit categories	4	\$10,000	Sediment Clearing	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

Project Name	FMP ID	Score 12: Admin, Regulatory Obstacles			Score 13: Environmental Benefit			Score 14: Environmental Impact			Score 15: Mobility			
		Notes 12	Administrative, Regulatory and Other Obstacle Ranking	Score 12	Notes 13	Environmental Benefit Ranking	Score 13	Notes 14	Environmental Impact Ranking	Score 14	Traffic Count for LWC Project	Notes 15	Mobility Ranking	Score 15
Small pond at San Elizario	143000003	Potential stream and cultural resources impacts. National Register district compliance.	Project has a typical number of administrative, regulatory and limitations / requirements	6	Captures sediment and trash, improving water quality. Slows velocities by adding storage volume to the system.	Project will deliver a low level of environmental benefits (benefits in only 1 category)	3	Impacts to cultural heritage. Two National Register Districts and five archaeological sites are located within and /or adjacent to the proposed project area.	Project will have adverse environmental impacts in 1 environmental category	6			Project provides no change to major, minor, or emergency access routes in the project area.	0
SH20 Drainage Improvements from Doniphan Drive to Texas Avenue	143000005	Potential for impacts to stream channels.	Project has a typical number of administrative, regulatory and limitations / requirements	6	Improvements to inlet and culvert capacities will help facilitate flow of stormwater in the drainage system, reducing erosion caused by stormwater overflowing from the system.	Project will deliver a low level of environmental benefits (benefits in only 1 category)	3	Low potential for impacts to protected species. No cultural resources are located within or immediately adjacent to the project areas.	Project has no adverse environmental impacts	10			Project provides no change to major, minor, or emergency access routes in the project area.	0
Install Flood Gates in Marfa and Monitoring Gage on North Alamo Creek and Highway 17	143000007	Low potential for impacts to protected species.	Project has few administrative, regulatory and implementation limitations / requirements	10		Project does not provide any environmental benefits	0	non-structural FMP (early warning)	Project has no adverse environmental impacts	10		Project would provide early warning to deploy road closures and would prevent drivers from injury/fatalities associated with crossing low water crossings during a flood.	Project will protect some major access routes in floodplain and the majority (>50%) of emergency service access. Some major and many minor access routes will remain flooded, and emergency services access may be restricted in some areas (i.e. >50% of floodplain by area inaccessible).	4
Develop and Implement Floodplain Ordinance to Regulate Development at Hudspeth County	143000009	Not applicable, non-structural FMP (regulatory)			Expected to increase Section 404 permitting/regulatory compliance	Project will deliver a moderate level of environmental benefits (benefits in 2-3 categories)	6	Non-structural FMP (regulatory), FMP would reduce impacts on jurisdictional waters of the U.S. by improving regulation.	Project has no adverse environmental impacts	10		Not applicable, non-structural FMP (regulatory)		
SSA4	143000011	Moderate bird nesting, mammal, and reptile potential habitat adjacent to arroyo. Federally listed southwestern willow flycatcher and western yellow-billed cuckoo could occur in riparian habitats	Project has a typical number of administrative, regulatory and limitations / requirements	6	Mitigate flooding events and keep sediment and/or trash from washing downstream during severe storms.	Project will deliver a moderate level of environmental benefits (benefits in 2-3 categories)	6	Potential for impacts to protected species	Project will have adverse environmental impacts in 1 environmental category	6			Project provides no change to major, minor, or emergency access routes in the project area.	0
SOC4	143000021	Federally listed southwestern willow flycatcher and western yellow-billed cuckoo could occur in riparian habitats. National Register district compliance.	Project has a typical number of administrative, regulatory and limitations / requirements	6	Captures sediment coming down the arroyos reducing sedimentation, slowing velocities (erosion), and promotes infiltration. Agricultural Properties removed from flooding.	Project will deliver a moderate level of environmental benefits (benefits in 2-3 categories)	6	Federally listed southwestern willow flycatcher and western yellow-billed cuckoo could occur in riparian habitats. Located within the EPCWID1 National Register District, requiring cultural resources survey.	Project will have adverse environmental impacts in 2-3 environmental categories	3			Project will protect major and minor access routes in floodplain and emergency service access to EMS, police stations, and fire stations. Allows emergency services access to the entire administrative area.	10

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Project Name	FMP ID	General Project Data												
		Project Description	Flood Region	Project Type	FIUP Project Category	Project Watershed	Rural Applicant	Project Cost	Benefit Cost Ratio	Cost per Structure Removed	Pre-Project Level-of-Service	Post-Project Level-of-Service	# of Structures in 1% Annual Chance FP (Pre-Project)	Project Status
MON3	143000024	Sediment/Retention Basin	14	Detention Pond	Category 2	Upper Rio Grande	N	\$27,033,000	0.2	\$82,670	<1% annual chance	1% annual chance	756	Planning
HAC3	143000025	Sediment/Retention Basin	14	Detention Pond	Category 2	Upper Rio Grande	N	\$4,619,000	0	\$461,900	<1% annual chance	1% annual chance	10	Planning
NW16	143000097	Expand channel from Village Ct to Doniphan Dr	14	Channel	Category 2	Upper Rio Grande	N	\$1,570,000	0	\$523,333	<1% annual chance	1% annual chance	3	Planning
NE3B	143000100	Alcan Pond: new catch basin to capture FP15 upstream	14	Detention Pond	Category 2	Upper Rio Grande	N	\$21,234,000	0.1	\$393,222	<1% annual chance	1% annual chance	136	Planning
EA10A	143000105	Build sediment/detention basin upstream of Paseo del Este Drive	14	Detention Pond	Category 2	Upper Rio Grande	N	\$9,647,000	0	\$9,647,000	<1% annual chance	0.2% annual chance	17	Preliminary Design
NW3	143000111	Construction of new larger capacity Doniphan Pump Station to replace PS1, with new force main directly to the Rio Grande. Install new catch basin with mechanical bar screen upstream of PS2.	14	Detention Pond	Category 2	Upper Rio Grande	N	\$16,132,000	0	\$2,688,667	<1% annual chance	1% annual chance	6	Planning
NW26	143000113	Acquire land, construct a permanent wetland, install a storm drain system to Doniphan Drive, construct pipeline to Doniphan Pump Station and build new pump station to control flood levels.	14	Detention Pond	Category 2	Upper Rio Grande	N	\$35,568,000	0	N/A	<1% annual chance	1% annual chance	6	Planning
EA9A	143000116	Build sediment/detention basin upstream of Paseo del Este Drive	14	Detention Pond	Category 2	Upper Rio Grande	N	\$11,897,000	0	\$915,154	<1% annual chance	0.2% annual chance	17	Preliminary Design

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

Project Name	FMP ID	Score 1: Severity - Pre-Project Average Depth of Flooding (100-year)				Score 2: Severity - Community Need (% Population)						Score 3: Flood Risk Reduction			
		Average Flood Depth (100yr)	Notes	Severity Ranking: Pre-Project Average Depth of Flooding (100-year)	Score 1	Communities Served by Project	Community Population Served	Flood Plain Population	Notes 2	Severity Ranking: Community Need (% Population)	Score 2	# of Structures Removed from 1% Annual Chance FP	Notes 3	Flood Risk Reduction	Score 3
MON3	143000024	1.373		Baseline average flood depth > 1ft	6	Homestead Meadows North CDP, Homestead Meadows South CDP	12,352	1977	16.01%	<25% of project community affected	1	327.00	43%	Reduced risk to <50% of structures in floodplain	4
HAC3	143000025	0.150		Baseline average flood depth < 0.5ft	2	Morning Glory CDP	522	23	4.41%	<25% of project community affected	1	10.00	100%	Reduced risk to >75% of structures in floodplain	10
NW16	143000097	1.316		Baseline average flood depth > 1ft	6	El Paso City	678,815	12	0.00%	<25% of project community affected	1	3.00	100%	Reduced risk to >75% of structures in floodplain	10
NE3B	143000100	0.704		Baseline average flood depth > 0.5ft	4	El Paso city	678,815	615	0.09%	<25% of project community affected	1	54.00	40%	Reduced risk to <50% of structures in floodplain	4
EA10A	143000105	1.147		Baseline average flood depth > 1ft	6	El Paso city, Sorroco city	713,121	287	0.04%	<25% of project community affected	1	1.00	6%	Reduced risk to <10% of structures in floodplain	1
NW3	143000111	0.618		Baseline average flood depth > 0.5ft	4	El Paso city	678,815	37	0.01%	<25% of project community affected	1	6.00	100%	Reduced risk to >75% of structures in floodplain	10
NW26	143000113	0.618		Baseline average flood depth > 0.5ft	4	El Paso city	678,815	37	0.01%	<25% of project community affected	1	0.00	100%	Reduced risk to 0 structures in floodplain	10
EA9A	143000116	1.147		Baseline average flood depth > 1ft	6	El Paso city, Sorroco city	713,121	287	0.04%	<25% of project community affected	1	13.00	76%	Reduced risk to >75% of structures in floodplain	10

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

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Project Name	FMP ID	Score 4: Flood Damage Reduction						Score 5: Critical Facilities Damage Reduction			
		# of Structures with Reduced 1% Annual Chance Flood Risk	Pre-Project Damage \$	Post-Project Damage \$	Notes 4	Flood Damage Reduction	Score 4	# of Critical Facilities Removed from 1% Annual Chance FP	Notes 5	Reduction in Critical Facilities Flood Risk	Score 5
MON3	143000024	655	\$30,463,281	\$14,206,208	53.37%	Flood Damage Reduction > 50%	6	0	No Critical Facilities in Floodplain		0
HAC3	143000025	10	\$104,579	\$0	100.00%	Flood Damage Reduction > 95%	10	0	No Critical Facilities in Floodplain		0
NW16	143000097	11	\$225,771	\$0	100.00%	Flood Damage Reduction > 95%	10	0	No Critical Facilities in Floodplain		0
NE3B	143000100	98	\$7,162,935	\$3,198,310	55.35%	Flood Damage Reduction > 50%	6	0	No Critical Facilities in Floodplain		0
EA10A	143000105	8.00	\$214,923	\$121,861	43.30%	Flood Damage Reduction > 25%	4	0	No Critical Facilities in Floodplain		0
NW3	143000111	6	\$230,709	\$0	100.00%	Flood Damage Reduction > 95%	10	1	100%	Critical Facilities reduction >95%	10
NW26	143000113	0	\$312,687	\$269,098	13.94%	Flood Damage Reduction < 25%	2	0	Does not remove critical facility from floodplain	Critical facilities reduction <25%	2
EA9A	143000116	17	\$856,243	\$86,910	89.85%	Flood Damage Reduction > 75%	8	0	No Critical Facilities in Floodplain		0

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

Project Name	FMP ID	Score 6: Life and Safety				Score 7: Water Supply						Score 8: Social Vulnerability			
		Adjusted Injury Risk (%)	Notes 6	Life and Safety Ranking (Injury/Loss of Life)	Score 6	Water Supply Benefit in Acre-Feet	SourceID	WMS_ID	Notes 7	Water Supply Yield Ranking	Score 7	SVI Score	Notes 8	Social Vulnerability Ranking	Score 8
MON3	143000024	13.5		Life/injury risk percentage <20%		0				No impact on water supply	0	0.74		SVI between 0.5-0.75 (moderate to high vulnerability)	7
HAC3	143000025	2.0		Life/injury risk percentage <20%		0				No impact on water supply	0	0.99		SVI between 0.75-1.00 (high vulnerability)	10
NW16	143000097	5.9		Life/injury risk percentage <20%		0				No impact on water supply	0	0.89		SVI between 0.75-1.00 (high vulnerability)	10
NE3B	143000100	9.0		Life/injury risk percentage <20%		0				No impact on water supply	0	0.78		SVI between 0.75-1.00 (high vulnerability)	10
EA10A	143000105	2.6		Life/injury risk percentage <20%		0				No impact on water supply	0	0.64		SVI between 0.5-0.75 (moderate to high vulnerability)	7
NW3	143000111	12.7		Life/injury risk percentage <20%		0				No impact on water supply	0	0.79		SVI between 0.75-1.00 (high vulnerability)	10
NW26	143000113	12.7		Life/injury risk percentage <20%		0				No impact on water supply	0	0.79		SVI between 0.75-1.00 (high vulnerability)	10
EA9A	143000116	2.6		Life/injury risk percentage <20%		0				No impact on water supply	0	0.64		SVI between 0.5-0.75 (moderate to high vulnerability)	7

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

Project Name	FMP ID	Score 9: Nature-Based Solution				Score 10: Multiple Benefites				Score 11: O&M			
		% Nature Based Solution by Cost	Notes 9	Nature-Based Solutions Ranking	Score 9	Multiple Benefits Description	Notes 10	Multiple Benefit Ranking	Score 10	O&M Cost (Annual)	Notes 11	Operations and Maintenance Ranking	Score 11
MON3	14300024	0%			0		Transportation benefit	Project delivers benefits in only 1 wider benefit category	1	\$10,000	Sediment Clearing	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
HAC3	14300025	0%			0		Transportation and agricultural benefits	Project delivers benefits in 2 wider benefit categories	2	\$10,000	Sediment Clearing	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
NW16	14300097	0%			0			Project does not deliver any wider benefits	0	\$1,000	sediment/trash/debris removal	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
NE3B	14300100	0%			0		Transportation benefit	Project delivers benefits in only 1 wider benefit category	1	\$5,000	Sediment/trash removal	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
EA10A	14300105	0%			0		Agricultural benefit	Project delivers benefits in only 1 wider benefit category	1	\$10,000	Sediment Clearing	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
NW3	14300111	0%			0		Transportation benefit	Project delivers benefits in only 1 wider benefit category	1	\$5,000	Pump Maintenance	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
NW26	14300113	1%	1% of the project cost is associated with a nature-based solution (constructed wetland)	< 25% of the project cost is nature-based	1		Transportation benefit	Project delivers benefits in only 1 wider benefit category	1	\$5,000	Pump Maintenance	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7
EA9A	14300116	0%			0		Transportation and agricultural benefits	Project delivers benefits in 2 wider benefit categories	2	\$10,000	Sediment Clearing	Project requires regular, ongoing operation and maintenance; and/or O&M requirements are well defined (Regular)	7

Appendix 5F - Data Entry Table for TWDB Scoring of Flood Mitigation Projects

Project Name	FMP ID	Score 12: Admin, Regulatory Obstacles			Score 13: Environmental Benefit			Score 14: Environmental Impact			Score 15: Mobility			
		Notes 12	Administrative, Regulatory and Other Obstacle Ranking	Score 12	Notes 13	Environmental Benefit Ranking	Score 13	Notes 14	Environmental Impact Ranking	Score 14	Traffic Count for LWC Project	Notes 15	Mobility Ranking	Score 15
MON3	14300024	High bird nesting, reptile, and mammal habitat potential throughout project area. Low amphibian habitat potential in low, depression areas. Federally listed southwestern willow flycatcher and western yellow-billed cuckoo could occur in riparian habitats.	Project has a typical number of administrative, regulatory and limitations / requirements	6	Captures sediment coming down the arroyos reducing sedimentation, slowing velocities (erosion), and promotes infiltration.	Project will deliver a low level of environmental benefits (benefits in only 1 category)	3	Potential for impacts to protected species and stream channels. One prehistoric archaeological site is located within the proposed project area with undetermined NRHP eligibility, recommend structured cultural resources survey	Project will have adverse environmental impacts in 2-3 environmental categories	3			Project provides no change to major, minor, or emergency access routes in the project area.	0
HAC3	14300025	Potential for impacts to protected species and stream channels. National Register district compliance.	Project has a typical number of administrative, regulatory and limitations / requirements	6	Captures sediment coming down the arroyos reducing sedimentation, slowing velocities (erosion), and promotes infiltration. Agricultural Properties removed from flooding.	Project will deliver a moderate level of environmental benefits (benefits in 2-3 categories)	6	The state threatened Texas horned lizard may be present in open habitats. Located within the EPCWID1 National Register District, requiring cultural resources survey.	Project will have adverse environmental impacts in 2-3 environmental categories	3			Project provides no change to major, minor, or emergency access routes in the project area.	0
NW16	14300097	Low potential for impacts to protected species. National Register district compliance.	Project has few administrative, regulatory and implementation limitations / requirements	10		Project does not provide any environmental benefits	0	Low potential for impacts to protected species.	Project will have adverse environmental impacts in 1 environmental category	6			Project provides no change to major, minor, or emergency access routes in the project area.	0
NE3B	14300100	No state or federally listed species are likely to occur within or adjacent to the project area.	Project has few administrative, regulatory and implementation limitations / requirements	10	Captures sediment and trash, improving water quality. Slows velocities by adding storage volume to the system.	Project will deliver a low level of environmental benefits (benefits in only 1 category)	3	Low potential for impacts based on desktop analysis and available information.	Project has no adverse environmental impacts	10			Project provides no change to major, minor, or emergency access routes in the project area.	0
EA10A	14300105	Federally listed southwestern willow flycatcher and western yellow-billed cuckoo could occur in riparian habitats.	Project has a typical number of administrative, regulatory and limitations / requirements	6	Captures sediment coming down the arroyos reducing sedimentation, slowing velocities (erosion), and promotes infiltration. Agricultural Properties removed from flooding.	Project will deliver a moderate level of environmental benefits (benefits in 2-3 categories)	6	Federally listed southwestern willow flycatcher and western yellow-billed cuckoo could occur in riparian habitats.	Project will have adverse environmental impacts in 1 environmental category	6			Project provides no change to major, minor, or emergency access routes in the project area.	0
NW3	14300111	Low bird nesting potential along proposed new force main.	Project has a typical number of administrative, regulatory and limitations / requirements	6	Catch screen will filter out trash and debris from drainage.	Project will deliver a low level of environmental benefits (benefits in only 1 category)	3	Low bird nesting potential along proposed new force main.	Project has no adverse environmental impacts	10			Project will protect major and minor access routes in floodplain and emergency service access to EMS, police stations, and fire stations. Allows emergency services access to the entire administrative area.	10
NW26	14300113	Moderate bird nesting, mammal, and reptile potential habitat adjacent to Rio Grande River. Federally listed southwestern willow flycatcher and western yellow-billed cuckoo could occur in riparian habitats.	Project has a typical number of administrative, regulatory and limitations / requirements	6	Construction of artificial wetland will improve wildlife habitat and water quality in the area.	Project will deliver a moderate level of environmental benefits (benefits in 2-3 categories)	6	Proposed constructed wetland is directly adjacent to but not connected to Segment 2314 of the Rio Grande River, TCEQ classifies this portion of the river as impaired due to bacteria in water. Cultural resource survey recommended due to close proximity (0.2 mi) to Elephant Butte Irrigation National Register District.	Project will have adverse environmental impacts in 2-3 environmental categories	3			Project will protect major and minor access routes in floodplain and emergency service access to EMS, police stations, and fire stations. Allows emergency services access to the entire administrative area.	10
EA9A	14300116	Low potential for impacts to protected species; cultural resources due diligence survey recommended	Project has a typical number of administrative, regulatory and limitations / requirements	6	Captures sediment coming down the arroyos reducing sedimentation, slowing velocities (erosion), and promotes infiltration. Agricultural Properties removed from flooding.	Project will deliver a moderate level of environmental benefits (benefits in 2-3 categories)	6	Low potential for impacts based on desktop analysis and available information.	Project has no adverse environmental impacts	10			Project provides no change to major, minor, or emergency access routes in the project area.	0