Mitigatio ORM Rc Coward Hydrolo 2.a Qualitative impact-mitigation comparison: 2.b Quantitative impact-mitigation comparison: 2.c Preservation (Table 2, step A) 3 Preservation (Table 2, step E) 4 Mitigation site location: Ratio ac PM just same w Ratio ac PM just same w Ratio ac PM just same w Ratio ac Ratio ac PM just same w Ratio ac Ratio	on A on Site Name: on Type: esource Type: in/HGM type: gy: ratio: djustment: e ratio: djustment from BAMI ure (attached): e ratio: djustment:	ORM Resource Type: Impact area : Tullay Creek establishment stream riverine intermittent 1.0 : 1.0 0.0 1.00 : 1.00 see Table 1 : : 1.00	Project Manager: stream 0.3 Column B Mitigation Site Name: Mitigation Type: ORM Resource Type: Cowardin/HGM type: Hydrology: Starting ratio: Ratio adjustment: Baseline ratio: PM justification: Ratio adjustment from BAMI procedure (attached): Baseline ratio: Ratio adjustment: PM justification: impact and m same watershed Ratio adjustment:	acres Impact dista Juniper Wetland Bank enhancement non-tidal wetland palustrine saturated 1.0 : 1.0 3.0 4.00 : 1.00 see Table 1 : : 1.00	Hydrology: Ince: Ince: Column C Mitigation Site Name: Mitigation Type: ORM Resource Type: Cowardin/HGM type: Hydrology: Starting ratio: Ratio adjustment: Baseline ratio: PM justification: Ratio adjustment from BAMI procedure (attached): Baseline ratio: Ratio adjustment: Ratio adjustment: Ratio adjustment:	1.00 : see	inear feet 1.0 1.00 1.00 1.00 1.00 1.00
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Baseline PM just and a surface area: Baseline Area and a surface area area area area area area.	ification: djustment from BAMI are (attached): e ratio: djustment: djustment: djustment: djustment and miti atershed djustment: djustment:	see Table 1 : : 1.00 0 igation would be within the	PM justification: Ratio adjustment from BAMI procedure (attached): Baseline ratio: Ratio adjustment: Ratio adjustment: PM justification: impact and m same watershed	see Table 1 : : 1.00	PM justification: Ratio adjustment from BAMI procedure (attached): Baseline ratio: Ratio adjustment: Ratio adjustment:	see	e Table 1
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2.c Preservation (Table 2, step A) Baseline Preservation (Table 2, step E) Ratio ac Mitigation site location: Net loss of aquatic resource surface area: PM just Type conversion: Ratio ac Ratio ac PM just Ratio ac PM just	e ratio: djustment: djustment: ification: impact and mitivatershed djustment: ification: establishment	0 igation would be within th	Baseline ratio: Ratio adjustment: Ratio adjustment: PM justification: impact and m same watershed	0	Baseline ratio: Ratio adjustment: Ratio adjustment:	:	1.00
Preservation (Table 2, step E) Ratio ac Mitigation site location: Ratio ac PM just same w Ratio ac Ratio ac Type conversion: Ratio ac PM just	djustment: djustment: ification: impact and miti ratershed djustment: ification: establishment	0 igation would be within th	Ratio adjustment: Ratio adjustment: PM justification: impact and m same watershed	0	Ratio adjustment: Ratio adjustment:		
Mitigation site location: Ratio ac PM just same w Net loss of aquatic resource surface area: PM just Type conversion: Ratio ac PM just	djustment: ification: impact and miti ratershed djustment: ification: establishment	igation would be within th	Ratio adjustment: PM justification: impact and m same watershed		Ratio adjustment:		
PM just same w Net loss of aquatic resource surface area: PM just PM just Ratio ac PM just Ratio ac PM just	ification: impact and miti ratershed djustment: ification: establishment	igation would be within th	PM justification: impact and m same watershed				
PM just same w Net loss of aquatic resource surface area: PM just PM just Ratio ac PM just Ratio ac PM just	ification: impact and miti ratershed djustment: ification: establishment	igation would be within th	PM justification: impact and m same watershed				
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surface area: PM just Type conversion: Ratio ac PM just	ification: establishment	0	Ratio adjustment:				
PM just 6 Type conversion: Ratio ac PM just			ratio adjustificht.	1	Ratio adjustment:		
7 Type conversion: Ratio ac PM just							
PM justi	di		PM justification: enhancement		PM justification:		
PM justi	ajustment:	0	Ratio adjustment:	0	Ratio adjustment:		
	ification: n,n: no differen	ce between impact and	PM justification: intermittent rip	parian (willow woodland) and	PM justification:		
		·	depressional wetlands not sub	stantially different in terms of			
	J., 1, p. 00		relative value.	otaritany amerena in terme e			
7 Risk and uncertainty: Ratio ac	djustment:	0.3	Ratio adjustment:	0	Ratio adjustment:		
		tee-responsible mitigation			PM justification:		
	mitigation site did not fo		generally not applicable.	in, dilocitality idoloio	i w jaounoation.		
	resource.	officity support target	generally not applicable.				
	djustment:	3	Ratio adjustment:	0	Ratio adjustment:		
PM just	ification: a: No planned of	delay, impact and	PM justification: bank, general	lly no delay	PM justification:		
mitigation	on constructed simultane	eously. b: Both include					
mature	willow canopy, +3 to acc	count for time to achieve					
full func	tions.						
Final mitigation ratio(s): Baseline	e ratio from 2.a, b or c:	1.00 : 1.	DO Baseline ratio from 2.a, b or c	: 4.00 : 1.00	Baseline ratio from 2.a, b or c:	0.00 :	1.00
Total ac	djustments (3-8):	3.30	Total adjustments (3-8):	1.00	Total adjustments (3-8):	0.0	00
Final ra	atio:	4.30 : 1.00	Final ratio:	5.00 : 1.00	Final ratio:	0.00 :	1.00
Propose	ed impact (total):	0.3 acres	Remaining impact:	0.23 acres	Remaining impact (acres):		acres
·		870 linear feet		668 linear feet	Remaining impact (linear feet):	#VALUE!	linear feet
to Resc	ource type:	stream	to Resource type:	stream	to Resource type:	stream	
	lin or HGM:	riverine	Cowardin or HGM:	riverine	Cowardin or HGM:	riverine	
		intermitten					
Hydrolo	gy:	t	Hydrology:	intermittent	Hydrology:	intermittent	
Require	ed Mitigation*:	1.29 acres	Required Mitigation*:	1.15 acres	Required Mitigation:	#VALUE!	acres
		3741.0 linear feet		3338.4 linear feet		#VALUE!	linear feet
	urce type:	stream	of Resource type:	non-tidal wetland	of Resource type:	0	
Coward	lin or HGM:	riverine	Cowardin or HGM:	palustrine	Cowardin or HGM:	0	
Hydrolo	gy:	intermittent	Hydrology:	saturated	Hydrology:	0	
5	ad Mitigation**	0.20	Dropped Mititi**		Dropood Mitigation**		00505
Propose	ed Mitigation**:	0.30 acres 870 linear feet	Proposed Mitigation**:	acres linear feet	Proposed Mitigation**:		acres linear feet
Impact	Unmitigated:	77 %	Impact Unmitigated:	%	Impact Unmitigated:		%
Impact	Ommigateu.	0.23 acres	impact Offillingated.	acres	Impact Offinitigated.		acres
Addition	nal PM comments: *Anni	licant proposed alternate	Additional PM comments: App		Additional PM comments:		20100
	mitigation to account for		acre of off-site enhancement		Additional Fivi comments.		
				,			
	ed (0.3 acre establishme		I've determined requirement s				
	ment using checklist (1.2		Applicant has agreed to provid				
	0.99 acre of Corps asse		enhancement credit at Juniper	r bank.			
10 Final red	00*100 = 77% 77% of in	$\frac{mnact unmitigated = 0.23}{(900) linear feet) of ones$	te riverine-intermittent stream (re-	alignment of Tullay Creek in	1 ature willow woodland) and 1.15 acre	of off-site enhan	ncement of
denrese	sional wetland through th		to monine intermittent stream (re-	angimient of Tullay Oreek, III	attaro willow woodianaj and 1.15 acre	or on site cirial	ioonioni di
i mai compensatory mitigation	nonai welianu linough li	CATZ IIIII gallon barik.					
requirements: Cur			.6-SPD Regulatory Progra				

Table 1: Qualitative comparison of functions (functional loss vs. gain) (instructions at bottom).

Functions (Column A)	Impact site	Mitigation site
Short- or long-term surface water storage	moderate	moderate
Subsurface water storage	moderate	moderate
Moderation of groundwater flow or discharge	moderate	moderate
Dissipation of energy	moderate	moderate
Cycling of nutrients	moderate	moderate
Removal of elements and compounds	low	low
Retention of particulates	low	low
Export of organic carbon	moderate	moderate
Maintenance of plant and animal communities	moderate	moderate

Function (Column B)	Impact site	Mitigation site
Short- or long-term surface water storage	moderate	no gain
Subsurface water storage	moderate	no gain
Moderation of groundwater flow or discharge	moderate	no gain
Dissipation of energy	moderate	no gain
Cycling of nutrients	moderate	no gain
Removal of elements and compounds	low	no gain
Retention of particulates	low	no gain
Export of organic carbon	moderate	low
Maintenance of plant and animal communities	moderate	low

Function (Column C)	Impact site	Mitigation site
Short- or long-term surface water storage		
Subsurface water storage		
Moderation of groundwater flow or discharge		
Dissipation of energy		
Cycling of nutrients		
Removal of elements and compounds		
Retention of particulates		
Export of organic carbon		
Maintenance of plant and animal communities		

Adjustificiti.	U
PM Justification	n: impact and mitigation are
within the sam	e water body, habitat type,
etc., so functio	nal gain and loss would be
equal.	

PM Justificatio	n: Functional loss is greater
than functional	gain since in this case, there
is total function	nal loss and only gain of
selected function	ons via enhancement
(invasive veget	ation removal).

Adjustment:

Adjustment:			
PM Justification	n:		

Instructions:

- 1. Describe amount of functional loss (impact) and gain (mitigation) in each respective column. Gain and loss can be
- 2. Note: alternate lists of functions may be used.
- 3. Note: a single adjustment should be used to account for all functions combined (see example 7 in attachment 12501.3)

1 Date: 20100524	Corps File No.:	SPL-2010-XYZ	Project Manager:	John Doe		
Impact Site Name:	Placer 530	ORM Resource Type:	non-tidal wetland		Hydrology:	seasonally flooded
Impact Cowardin or HGM type:	depressional	Impact area :	2.25 (combined)	acres Impact dista	nce: N/A	0 linear feet
	Column A	Direct Impact - 1.5 ac	Column B	Indirect Impact - 0.75 ac	Column C	
	Mitigation Site Name:	Limnanthes Ranch	Mitigation Site Name:	Limnanthes Ranch	Mitigation Site Name:	
	Mitigation Type:	re-establishment	Mitigation Type:	re-establishment	Mitigation Type:	
	ORM Resource Type:	non-tidal wetland	ORM Resource Type:	wetlands adj to non-RPWs	ORM Resource Type:	
	Cowardin/HGM type:	depressional	Cowardin/HGM type:	depressional	Cowardin/HGM type:	
	Hydrology:	seasonally flooded	Hydrology:	seasonally-flooded	Hydrology:	
2.a Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0
comparison:	Ratio adjustment:	0.2	Ratio adjustment:	0.3	Ratio adjustment:	
Combanson.	Baseline ratio:	1.20 : 1.00	Baseline ratio:	1.30 : 1.00	Baseline ratio:	1.00 : 1.00
	PM justification:		PM justification:		PM justification:	see Table 1
	Ratio adjustment from BAMI	000 Tubio	Ratio adjustment from BAMI	oce rable	Ratio adjustment from BAMI	ecc rubic r
2.b Quantitative impact-mitigation	-			_		_
comparison:	procedure (attached):	: 4.00	procedure (attached):	: 4.00	procedure (attached):	: 4.00
2.c Preservation (Table 2, step A)	Baseline ratio:	: 1.00	Baseline ratio:	: 1.00	Baseline ratio:	: 1.00
3 Preservation (Table 2, step E)	Ratio adjustment:		Ratio adjustment:		Ratio adjustment:	
4 Mitigation site location:	Ratio adjustment:	1	Ratio adjustment:	1	Ratio adjustment:	
	PM justification: Mitigation will of	ccur outside of the	PM justification: Mitigation will of	occur outside of the	PM justification:	
	watershed		watershed			
5 Net loss of aquatic resource	Ratio adjustment:	0	Ratio adjustment:	0	Ratio adjustment:	
surface area:	,		'		1	
	PM justification: re-establishme	nt	PM justification: re-establishme	ent	PM justification:	
	•		•		•	
6 Type conversion:	Ratio adjustment:	0	Ratio adjustment:	0	Ratio adjustment:	
	PM justification: mitigation will b	e in-kind	PM justification: mitigation will I	oe in-kind	PM justification:	
	,		,		•	
7 Risk and uncertainty:	Ratio adjustment:	0.4	Ratio adjustment:	0.4	Ratio adjustment:	
	PM justification: +0.2 for permit	tee-responsible mitigation,	PM justification: +0.2 for permit	tee-responsible mitigation,	PM justification:	
	+0.2 for difficult to replace reso		+0.2 for difficult to replace reso		•	
o Tamananal Isaa	D	4	5			
8 Temporal loss:	Ratio adjustment:	1	Ratio adjustment:	1.	Ratio adjustment:	
	PM justification: mitigation will of	ccur at time of impact,	PM justification: mitigation will of	occur at time of impact,	PM justification:	
	herbaceous species		herbaceous species			
9 Final mitigation ratio(s):	Baseline ratio from 2.a, b or c:	1.20 : 1.00	Baseline ratio from 2.a, b or c:	1.30 : 1.00	Baseline ratio from 2.a, b or c:	0.00 : 1.0
3	Total adjustments (3-8):	2.40	Total adjustments (3-8):	2.40	Total adjustments (3-8):	0.00
	Final ratio:	3.60 : 1.00	Final ratio:	3.70 : 1.00	Final ratio:	0.00 : 1.00
	Proposed impact (total):	1.5 acres	Remaining impact:	0.75 acres	Remaining impact (acres):	0.00 acres
		0 linear feet		0 linear feet	Remaining impact (linear feet):	0 linear feet
	to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetland
	Cowardin or HGM:	depressional	Cowardin or HGM:	depressional	Cowardin or HGM:	depressional
	Hydrology:	seasonally flooded	Hydrology:	seasonally	Hydrology:	seasonally
	.,,.,	coaccitally nooded	,	Coaconally	,	oodoonany
	Required Mitigation*:	5.40 acres	Required Mitigation*:	2.78 acres	Required Mitigation:	0.00 acres
		0.0 linear feet	. toquirod miligation .	0.0 linear feet		0.00 linear feet
	of Resource type:	non-tidal wetland	of Resource type:	wetlands adj to non-RPWs	of Resource type:	0.0 iiileai ieet
	Cowardin or HGM:	depressional	Cowardin or HGM:	depressional	Cowardin or HGM:	0
	Hydrology:	seasonally flooded	Hydrology:	seasonally-flooded	Hydrology:	0
	i iyarology.	ocasonany nooded	i iyaldiogy.	ocasonally nooded	i iyarology.	·
	Proposed Mitigation**:	5.40 acres	Proposed Mitigation**:	2.78 acres	Proposed Mitigation**:	acres
	Toposca minganon .	linear feet	1 Toposca ivilligation .	linear feet	i roposca minganon .	linear feet
	Impact Unmitigated:	0 %	Impact Unmitigated:	0 %	Impact Unmitigated:	%
	impact Offinitigated.	0.00 acres	impact Offinitigated.	0.00 acres	Impact Offiningated.	acres
	Additional PM comments: Total		Additional PM comments: Rem		Additional PM comments:	40.00
	John John Toldi		are indirect impacts to vernal p			
			a.onanoot impacto to vernai p	SS. Habitat		
10 Final compensatory mitigation	Final compensatory mitigation r	equirement for this impact s	site is 8.18 acres of vernal pool I	nabitat at the proposed off-si	te location. The applicant proposed	to mitigate direct impacts at a
requirements:					(2.7 acres of mitigation). The application	
. oquii omonio.			.48 acres over the 2.7 acres pro		, даноп, тто аррно	
	*At PM's discrption if applicant!	e proposed mitigation is les	e than chacklist requirement and	additional mitigation type/c	proposed, complete additional colu	mne se noodod

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 1: Qualitative comparison of functions (functional loss vs. gain) (instructions at bottom).

Functions (Column A)	Impact site	Mitigation site
Short- or long-term surface water storage		
Subsurface water storage		
Moderation of groundwater flow or discharge		
Dissipation of energy		
Cycling of nutrients		
Removal of elements and compounds		
Retention of particulates		
Export of organic carbon		
Maintenance of plant and animal communities		

Function (Column B)	Impact site	Mitigation site
Short- or long-term surface water storage		
Subsurface water storage		
Moderation of groundwater flow or discharge		
Dissipation of energy		
Cycling of nutrients		
Removal of elements and compounds		
Retention of particulates		
Export of organic carbon		
Maintenance of plant and animal communities		

Function (Column C)	Impact site	Mitigation site
Short- or long-term surface water storage		
Subsurface water storage		
Moderation of groundwater flow or discharge		
Dissipation of energy		
Cycling of nutrients		
Removal of elements and compounds		
Retention of particulates		
Export of organic carbon		
Maintenance of plant and animal communities		

Adjustment: 0.2

PM Justification: Due to differences between vernal pool inoculum in the different locations, the mitigation site is not expected to maintain the range of plant and animal communities (habitat functions) provided by the pre-project impact site.

Adjustment: 0.3

PM Justification: Indirectly impacted vernal pools are expected to have an approximately 50% decline in functions. Due to differences between vernal pool inoculum in the different locations, the mitigation site is not expected to attain the range of plant and animal communities provided by the pre-project impact site (less than 50% gain in habitat functions expected).

Adjustment:			
PM Justification	n:		

Instructions:

- 1. Describe amount of functional loss (impact) and gain (mitigation) in each respective column. Gain and loss can be
- 2. Note: alternate lists of functions may be used.
- 3. Note: a single adjustment should be used to account for all functions combined (see example 7 in attachment 12501.3)

1	Date: 20100517	Corps File No.:	SPL-2010-XYZ	Project Manager:	John Doe			
	Impact Site Name:	SF Impacted Wetland	ORM Resource Type:	non-tidal wetland		Hydrology:	seasonally floor	ded
	Impact Cowardin or HGM type:	palustrine - emergent	Impact area :	0.4	acres Impact dista			linear feet
		Column A	Permittee-Responsible	Column B	Mitigation Bank	Column C		
		Mitigation Site Name:	Project site	Mitigation Site Name:	SF Bank	Mitigation Site Name:		
		Mitigation Type:	establishment	Mitigation Type:	establishment	Mitigation Type:		
		ORM Resource Type:	non-tidal wetland	ORM Resource Type:	non-tidal wetland	ORM Resource Type:		
		Cowardin/HGM type:	palustrine - emergent	Cowardin/HGM type:	palustrine - emergent	Cowardin/HGM type:		
			seasonally flooded		seasonally flooded			
_		Hydrology:		Hydrology:		Hydrology:	40.	4.0
2.a	Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 :	1.0
	comparison:	Ratio adjustment:	0.0	Ratio adjustment:	0.0	Ratio adjustment:		
		Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 :	1.00
		PM justification:	see Table	PM justification:	see Table	PM justification:	see .	Table 1
2 h	Quantitative impact-mitigation	Ratio adjustment from BAMI		Ratio adjustment from BAMI		Ratio adjustment from BAMI		
2.0		procedure (attached):		procedure (attached):		procedure (attached):		
_	comparison:	. ,	: 1.00	. ,	: 1.00	, ,	-	1.00
2.c	Preservation (Table 2, step A)	Baseline ratio:	: 1.00	Baseline ratio:	: 1.00	Baseline ratio:	•	1.00
3	Preservation (Table 2, step E)	Ratio adjustment:	0.0	Ratio adjustment:	0.0	Ratio adjustment:		
3	reservation (rable 2, step 2)	ratio adjustificiti.	0.0	realio adjustificiti.	0.0	rtatio adjustificiti.		
4	Mitigation site location:	Ratio adjustment:	0	Ratio adjustment:	0	Ratio adjustment:		
1		PM justification: impact and miti		PM justification: impact and mit		PM justification:		
		same watershed	g	same watershed	· • • • • • • • • • • • • • • • • • • •	,,		
5	Net loss of aquatic resource		0		•	Datio adjustments		
5	-	Ratio adjustment:	U	Ratio adjustment:	0	Ratio adjustment:		
	surface area:							
		PM justification: establishment		PM justification: establishment		PM justification:		
_	T		0	5				
6	Type conversion:	Ratio adjustment:	· ·	Ratio adjustment:	0	Ratio adjustment:		
		PM justification: no difference be	etween impact and	PM justification: no difference b	etween impact and	PM justification:		
		mitigation types		mitigation types				
7	Risk and uncertainty:	Ratio adjustment:	0.4	Ratio adjustment:	0	Ratio adjustment:		
		PM justification: +0.1 for permitt	tee-responsible mitigation,	PM justification: mitigation bank	, uncertainty factors not	PM justification:		
		+0.2 as mitigation site did not for	rmerly support target	applicable.				
		aquatic resource, +0.1 for plann						
8	Temporal loss:	Ratio adjustment:	1.25	Ratio adjustment:	0	Ratio adjustment:		
		PM justification: Delay of 5 mon		PM justification: bank, no delay		PM justification:		
		mitigation construction, mitigation	on = herbaceous.					
9	Final mitigation ratio(s):	Baseline ratio from 2.a, b or c:	1.00 : 1.00	Baseline ratio from 2.a, b or c:	1.00 : 1.00	Baseline ratio from 2.a, b or c:	0.00 :	1.00
_	· ····································	Total adjustments (3-8):	1.65	Total adjustments (3-8):	0.00	Total adjustments (3-8):	0.00	
		Final ratio:	2.65 : 1.00	Final ratio:	1.00 : 1.00	Final ratio:	0.00 :	
			0.4 acres	Proposed impact (total):	0.40 acres	Remaining impact (acres):		acres
1			0.4 acres 0 linear feet	i Toposeu impaci (total).	#VALUE! linear feet	Remaining impact (acres).		linear feet
1				to Decourse time.				
1		to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetlan	
		Cowardin or HGM:	palustrine - emergent	Cowardin or HGM:	palustrine - emergent	Cowardin or HGM:	palustrine - eme	ergent
1		l	seasonally	l	seasonally	L	seasonally	
1		Hydrology:	flooded	Hydrology:	flooded	Hydrology:	flooded	
1		Demoised Misses (1)	4.00	Descripted Minimo (1) 14	0.40	Demoised Misses	0.00	
I		Required Mitigation*:	1.06 acres	Required Mitigation*:	0.40 acres	Required Mitigation:		acres
1			0.0 linear feet		#VALUE! linear feet			linear feet
1		of Resource type:	non-tidal wetland	of Resource type:	non-tidal wetland	of Resource type:	0	
I		Cowardin or HGM:	palustrine - emergent	Cowardin or HGM:	palustrine - emergent	Cowardin or HGM:	0	
1		Hydrology:	seasonally flooded	Hydrology:	seasonally flooded	Hydrology:	0	
1								
		Proposed Mitigation**:	0.00 acres	Proposed Mitigation**:	0.40 acres	Proposed Mitigation**:		acres
		· -	0 linear feet	_	linear feet	_		linear feet
I		Impact Unmitigated:	%	Impact Unmitigated:	0 %	Impact Unmitigated:		%
1		'	acres	'	0.00 acres	· · · · · · · · · · · · · · · · · · ·		acres
1		Additional PM comments: Propo		Additional PM comments: Mitiga		Additional PM comments:		
1		mitigation leaves 0.25 acres of i		alternative mitigation option).	and and an	, additional i in comments.		
1		mingation leaves 0.25 acres of t	impact unimitigateu.	ancmative mitigation option).				
				and he making to all her although a leit	a watland actablishment OF	hy nurchasing credits in a wetland	aatabliahmant han	k in the
10		The impact to 0.4 acre of fill in a	hallow seasonal wetland					
10		The impact to 0.4 acre of fill in a						
10	Final compensatory mitigation	same watershed/service area.	The final requirement for p	ermittee-responsbile on-site miti	gation would be 1.06 acres.	The final requirement for off-site w	etland bank credits	
10	Final compensatory mitigation requirements:	same watershed/service area. of establishment credits. After t	The final requirement for p further communication with	ermittee-responsbile on-site miti applicant, the final requirement v	gation would be 1.06 acres. vill be for 0.4 acre of off-site		etland bank credits bank.	

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 1: Qualitative comparison of functions (functional loss vs. gain) (instructions at bottom).

Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Mitigation site Adjustment: PM Justification: impacts and relates are the same habitat type, gain and loss would be equal. Mitigation site Adjustment: O PM Justification: impacts and relates are the same habitat type, gain and loss would be equal. Impact site Mitigation site Adjustment: O PM Justification: impacts and sites are the same habitat type, gain and loss would be equal. Impact site Mitigation site Mitigation site Mitigation site Adjustment: O PM Justification: impacts and sites are the same habitat type, gain and loss would be equal. Mitigation site Mitigation site Adjustment: PM Justification: Adjustment: PM Justification: PM Justification: PM Justification: Adjustment: PM Justification: Report of organic carbon Adjustment: PM Justification: PM Justification: PM Justification: Adjustment: PM Justification: PM Justification: PM Justification: Adjustment: PM Justification: PM Justification: PM Justification: Adjustment: PM Justification:	Functions (Column A)	Impact site	Mitigation site	
Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export or organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Function (Golumn B) Short- or long-term surface water storage Subsurface water storage Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Adjustment: PM Justification: impacts and sites are the same habitat type, gain and loss would be equal. Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Adjustment: PM Justification: Adjustment: PM Justification: Removal of elements and compounds Retention of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Export of organic carbon Export of organic carbon	Short- or long-term surface water storage	<u> </u>		Adjustment: 0
Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Function (Golumn B) Short- or long-term surface water storage Subsurface water storage Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Adjustment: PM Justification: impacts and sites are the same habitat type gain and loss would be equal. Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Adjustment: PM Justification: PM Justification: Adjustment: PM Justification: Removal of elements and compounds Retention of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Export of organic carbon Export of organic carbon	Subsurface water storage			PM Justification: impacts and r
Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Function of groundwater storage Subsurface water storage Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Mitigation site Function (Column C) Impact site Mitigation site Function of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Adjustment: PM Justification: Adjustment: Adjustmen	Moderation of groundwater flow or discharge			the state of the s
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Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Adjustment: PM Justification: impacts and sites are the same habitat type, gain and loss would be equal. Whitigation of energy gain and loss would be equal. Impact site Mitigation site Adjustment: PM Justification:	Cycling of nutrients			3
Export of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Adjustment: PM Justification: impacts and sites are the same habitat type, gain and loss would be equal. William of particulates Export of organic carbon Mitigation site Adjustment: PM Justification: Adjustment: PM Justification:	Removal of elements and compounds			
Function (Column B) Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Mitigation site Mitigation site Adjustment: Q PM Justification: impacts and sites are the same habitat type, gain and loss would be equal. Be again and loss would be equal. Whitigation site Function (Column C) Impact site Mitigation site Adjustment: PM Justification: Adjustment: PM Justification: Adjustment: PM Justification: Adjustment: PM Justification: PM Justification: Adjustment: PM Justification:	Retention of particulates			
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Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Adjustment: PM Justification: PM Justification: Adjustment: PM Justification: PM Justification: PM Justification:	Function (Column B)	Impact site	Mitigation site	-
Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon PM Justification: impacts and sites are the same habitat type, gain and loss would be equal. Mitigation site Mitigation site Mitigation site PM Justification: PM Justification:				Adjustment: 0
Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Function (column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon sites are the same habitat type, gain and loss would be equal. Mitigation site Adjustment: PM Justification:				PM Justification: impacts and r
Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon gain and loss would be equal. Mitigation Mitigation site Mitigation site PM Justification: Regulary Adjustment: PM Justification:				tara da la companya d
Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon				
Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Mitigation site Mitigation site PM Justification:	Cycling of nutrients			gam ana 1000 moana 20 oquam
Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Mitigation site Adjustment: PM Justification:	Removal of elements and compounds			
Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Mitigation site Adjustment: PM Justification:	Retention of particulates			
Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Adjustment: PM Justification:	Export of organic carbon			
Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Maintenance of plant and animal communities			
Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Function (Column C)	Impact site	Mitigation site	
Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Short- or long-term surface water storage	i i		Adjustment:
Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Subsurface water storage			PM Justification:
Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Moderation of groundwater flow or discharge			
Removal of elements and compounds Retention of particulates Export of organic carbon	Dissipation of energy			
Retention of particulates Export of organic carbon	Cycling of nutrients			
Export of organic carbon	Removal of elements and compounds			
	Retention of particulates			
Maintenance of plant and animal communities	Export of organic carbon			
	Maintenance of plant and animal communities			

Instructions:

- 1. Describe amount of functional loss (impact) and gain (mitigation) in each respective column. Gain and loss can be
- 2. Note: alternate lists of functions may be used.
- 3. Note: a single adjustment should be used to account for all functions combined (see example 7 in attachment 12501.3)

1	Date: 20100602	Corps File No.:	SPL-2010-XYZ	Project Manager:	Jane Dough				
	Impact Site Name:	Unnamed wash	ORM Resource Type:	River/stream			Hydrology:	ephemeral	
	Impact Cowardin or HGM type:	riverine	Impact area :	0.3	acres	Impact dista	nce:	1,276	linear feet
	•	Column A	•	Column B		·	Column C		
		Mitigation Site Name:	Powers Butte ILF site	Mitigation Site Name:			Mitigation Site Name:		
		Mitigation Type:	re-establishment	Mitigation Type:			Mitigation Type:		
		ORM Resource Type:	River/stream	ORM Resource Type:			ORM Resource Type:		
		Cowardin/HGM type:	riverine	Cowardin/HGM type:			Cowardin/HGM type:		
		Hydrology:	intermittent	Hydrology:			Hydrology:		
2.a	Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 :	1.0	Starting ratio:	1.0 :	1.0
	comparison:	Ratio adjustment:	-0.5	Ratio adjustment:			Ratio adjustment:		
	Combanson.	Baseline ratio:	1.00 : 1.50	Baseline ratio:	1.00 :	1.00	Baseline ratio:	1.00 :	1.00
		PM justification:	see Tab			see Table	PM justification:	see	e Table 1
2 h	Overtitative impact mitigation	Ratio adjustment from BAMI		Ratio adjustment from BAMI			Ratio adjustment from BAMI		
2.0	Quantitative impact-mitigation	procedure (attached):		procedure (attached):			procedure (attached):		
2.0	comparison: Preservation (Table 2, step A)	Baseline ratio:	: 1.00	Baseline ratio:		1.00	Baseline ratio:		1.00
2.0	Preservation (Table 2, Step A)	Baseline ratio.	. 1.00	baseline ratio.	-	1.00	baseline ratio.	-	1.00
3	Preservation (Table 2, step E)	Ratio adjustment:	0.0	Ratio adjustment:			Ratio adjustment:		
1	Mitigation site location:	Ratio adjustment:	0	Ratio adjustment:			Ratio adjustment:		
→	magation site iocation.	PM justification: impact and miti					PM justification:		
		same watershed	gadon would be within the	i w justilication.			i w justilication.		
5	Net loss of aquatic resource	Ratio adjustment:	0	Ratio adjustment:			Ratio adjustment:		
1	surface area:		, and the second						
		PM justification: The mitigation i	s re-establishment of the	PM justification:			PM justification:		
6	Type conversion:	Ratio adjustment:	0	Ratio adjustment:			Ratio adjustment:		
Ü	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	PM justification: Neither site sup	poorts highly valuable or	PM justification:			PM justification:		
		rare habitat types.	porto riigriiy valdabio oi	i w jasansaasii.			i w jaounoation.		
		rare riabitat types.							
7	Risk and uncertainty:	Ratio adjustment:	0	Ratio adjustment:			Ratio adjustment:		
		PM justification: Uncertainty for	in-lieu fee programs has	PM justification:			PM justification:		
		already been factored in to the I	LF Program proposal and						
		the cost per acre of credits.	3						
Ω	Temporal loss:	Ratio adjustment:	0	Ratio adjustment:			Ratio adjustment:		
٥		PM justification: Mitigation would	· ·	PM justification:			PM justification:		
		Much of the vegetation at the m		i w justineation.			i w justineation.		
		begun to be established.	ingation site has already						
		•	4.00		0.00	4.00	Describeration from One Income	0.00	4.00
9	Final mitigation ratio(s):	Baseline ratio from 2.a, b or c:		0 Baseline ratio from 2.a, b or c:			Baseline ratio from 2.a, b or c:	0.00 :	
		Total adjustments (3-8):	0.00	Total adjustments (3-8):		00	Total adjustments (3-8):	0.0	
		Final ratio:	0.67 : 1.00	Final ratio:	0.00	1.00	Final ratio:	0.00 :	
		Proposed impact (total):	0.3 acres 1276 linear feet	Remaining impact:	0	acres linear feet	Remaining impact (acres): Remaining impact (linear feet):	#VALUE!	acres linear feet
		to Resource type:	River/stream	to Resource type:	River/stream		to Resource type:	#VALUE! River/stream	illear reet
		Cowardin or HGM:	riverine	Cowardin or HGM:	riverine		Cowardin or HGM:	riverine	
		Hydrology:	ephemeral	Hydrology:	ephemeral		Hydrology:	ephemeral	
		Hydrology.	ерпешега	Hydrology.	epilemerai		Hydrology.	epnemerai	
		Required Mitigation*:	0.20 acres	Required Mitigation*:	#VALUE!	acres	Required Mitigation:	#VALUE!	acres
		_	850.7 linear feet		0.0	linear feet	_	#VALUE!	linear feet
		of Resource type:	River/stream	of Resource type:	0		of Resource type:	0	
		Cowardin or HGM:	riverine	Cowardin or HGM:	0		Cowardin or HGM:	0	
ł		Hydrology:	intermittent	Hydrology:	0		Hydrology:	0	
		Proposed Mitigation**:	0.30 acres	Proposed Mitigation**:		acres linear feet	Proposed Mitigation**:		acres linear feet
ı		Impact Unmitigated:	""" """ """ """ """ """ """ """ """ ""	Impact Unmitigated:		%	Impact Unmitigated:		"" %
			acres	paot oriningutou.		acres	F C		acres
		Additional PM comments: The cas 0.67:1, but without a function	al assessment, 1:1 is the	Additional PM comments:			Additional PM comments:		
10	Final compensatory mitigation	minimum ratio allowed under the		pact site is 0.3 acre of re-ostablis	hment at the D	owers Butto in	Lileu fee program site. Although the o	calculated ratio	was 0.67:1. a
10	requirements:	1:1 ratio was used, as step 2 b			initent at the P	Owers Dutte If	riica ise program site. Altilough the t	Salculateu TatiO V	was 0.07.1, d
		*At DAME dispertion if applicant		an the an absorblist as a decrease as	-ll-litili	··	proposed, complete additional colur		

At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.

**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 1: Qualitative comparison of functions (functional loss vs. gain) (instructions at bottom).

Functions (Column A)	Impact site	Mitigation site
Short- or long-term surface water storage	low	high
Subsurface water storage	low	high
Moderation of groundwater flow or discharge	low	high
Dissipation of energy	low	moderate
Cycling of nutrients	low	high
Removal of elements and compounds	low	moderate
Retention of particulates	low	moderate
Export of organic carbon	low	high
Maintenance of plant and animal communities	low	high

Function (Column B)	Impact site	Mitigation site
Short- or long-term surface water storage		
Subsurface water storage		
Moderation of groundwater flow or discharge		
Dissipation of energy		
Cycling of nutrients		
Removal of elements and compounds		
Retention of particulates		
Export of organic carbon		
Maintenance of plant and animal communities		

Impact site	Mitigation site
	Impact site

Adjustment:	-0.5
, .a.ja.o	0.0

PM Justification: Mitigation site is a riparian gallery with cottonwood, willows and adjacent wetlands (re-established from uplands). The mitigation site would provide more functional lift than the expected functional loss at the impact site (total loss of ephemeral wash). Therefore the adjustment was set at -0.5.

Adjustment:		
PM Justificatio	n:	

Adjustment:		
PM Justification	n:	

Instructions:

- 1. Describe amount of functional loss (impact) and gain (mitigation) in each respective column. Gain and loss can be
- 2. Note: alternate lists of functions may be used.
- 3. Note: a single adjustment should be used to account for all functions combined (see example 7 in attachment 12501.3)

1 Date: 20100617	Corps File No.:	SPL-2010-123-JBD	Project Manager:	Jane B. Doe		
Impact Site Name:	Yowza Fen	ORM Resource Type:	non-tidal wetland		Hydrology:	saturated
Impact Cowardin or HGM type:	palustrine	Impact area :	0.26	acres Impact dista	nce: N/A	0 linear feet
	Column A	•	Column B	•	Column C	
	Mitigation Site Name:	Ski Area Filled Fen	Mitigation Site Name:		Mitigation Site Name:	
	Mitigation Type:	rehabilitation	Mitigation Type:		Mitigation Type:	
	ORM Resource Type:	non-tidal wetland	ORM Resource Type:		ORM Resource Type:	
	Cowardin/HGM type:	palustrine	Cowardin/HGM type:		Cowardin/HGM type:	
	Hydrology:	saturated	Hydrology:		Hydrology:	
2.a Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0
comparison:	Ratio adjustment:	2.0	Ratio adjustment:		Ratio adjustment:	
Combanson.	Baseline ratio:	3.00 : 1.00	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00
	PM justification:		PM justification:	see Table	PM justification:	see Table 1
O. b. Occasidadios impact militardian	Ratio adjustment from BAMI	000 145.0	Ratio adjustment from BAMI	000 1 00.0	Ratio adjustment from BAMI	000 1 40.0 1
2.b Quantitative impact-mitigation	procedure (attached):		procedure (attached):		procedure (attached):	
comparison:	` '	: 1.00	1 /	: 1.00		: 1.00
2.c Preservation (Table 2, step A)	Baseline ratio:	: 1.00	Baseline ratio:	: 1.00	Baseline ratio:	: 1.00
0 B (Talla 0	Define Fortunal		Define Francis		Define Produced	
3 Preservation (Table 2, step E)	Ratio adjustment:		Ratio adjustment:		Ratio adjustment:	
4 Mitigation site location:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:	
	PM justification: impact and mit	tigation would be within the	PM justification:		PM justification:	
	same watershed					
5 Net loss of aquatic resource	Ratio adjustment:	1	Ratio adjustment:		Ratio adjustment:	
surface area:	. tato adjustment.		adjustitionit.		. tallo dajdolinoni.	
ourrado aroa.	PM justification: rehabilitation		PM justification:		PM justification:	
	i w justineation. renabilitation		i w justilication.		i w justinoation.	
6 Type conversion:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:	
0 1,61 10	PM justification: no difference b	netween impact and	PM justification:		PM justification:	
	mitigation types	octween impact and	i w justilication.		i w justineation.	
7 Risk and uncertainty:	Ratio adjustment:	0.4	Ratio adjustment:		Ratio adjustment:	
, mon and anotherny.	PM justification: +0.1 for permit	****	PM justification:		PM justification:	
	+0.3 mitigation site difficult-to-re		i w justilication.		i w justineation.	
	+0.5 miligation site difficult-to-th	epiace resource.				
8 Temporal loss:	Ratio adjustment:	1.4	Ratio adjustment:		Ratio adjustment:	
	PM justification: Delay of 8 mor	nths +0.4, herbaceous, +1.	PM justification:		PM justification:	
9 Final mitigation ratio(s):	Baseline ratio from 2.a, b or c:	3.00 : 1.00	Baseline ratio from 2.a, b or c:	0.00 : 1.00	Baseline ratio from 2.a, b or c:	0.00 : 1.0
5 Tillar lintigation ratio(o).	Total adjustments (3-8):	2.80	Total adjustments (3-8):	0.00	Total adjustments (3-8):	0.00
	Final ratio:	5.80 : 1.00	Final ratio:	0.00 : 1.00	Final ratio:	0.00 : 1.00
	Proposed impact (total):	0.26 acres	Remaining impact:	0.22 acres	Remaining impact (acres):	acres
	roposed impact (total).	0 linear feet	Tromaining impaot:	0 linear feet	Remaining impact (linear feet):	#VALUE! linear feet
	to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetland
	Cowardin or HGM:	palustrine	Cowardin or HGM:	palustrine	Cowardin or HGM:	palustrine
	Hydrology:	saturated	Hydrology:	saturated	Hydrology:	saturated
	, =.0.09,.		, , , , , , , , , , , , , , , , , , , ,		, 5.09,	
	Required Mitigation*:	1.51 acres	Required Mitigation*:	0.00 acres	Required Mitigation:	#VALUE! acres
		0.0 linear feet		0.00 linear feet		#VALUE! linear feet
	of Resource type:	non-tidal wetland	of Resource type:	0.0	of Resource type:	0
	Cowardin or HGM:	palustrine	Cowardin or HGM:	0	Cowardin or HGM:	0
	Hydrology:	saturated	Hydrology:	0	Hydrology:	0
	,		., 9, .	-	, 3, .	-
	Proposed Mitigation**:	0.26 acres	Proposed Mitigation**:	acres	Proposed Mitigation**:	acres
	,	linear feet	1	linear feet	,	linear feet
	Impact Unmitigated:	83 %	Impact Unmitigated:	%	Impact Unmitigated:	%
	,	0.22 acres		acres	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	acres
	Additional PM comments:		Additional PM comments:		Additional PM comments:	
10	Final requirement is for comper	nsatory mitigation for this im	pact site is 1.51 acres. Applica	nt will rehabilitate 1.51 acres	of fen wetland previously filled within	the resort area. After
1 **					al mitigation ratio to be 5.8:1 for the f	
Final compensatory mitigation					ehabilitation within the ski resort area	
requirements:		· ·			proposed, complete additional colu	
	"At PIVI'S discretion it applicant	s proposed mitigation is les	s than chacklist regulirement and	n anditional mitigation type(s	i proposed complete additional collii	mne ae naadad

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 1: Qualitative comparison of functions (functional loss vs. gain) (instructions at bottom).

Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Dissipation of energy Dissipation of permits and compounds Removal of elements and compounds Removal of elements and compounds Removal of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Mitigation site Mitigation site Adjustment: PM Justification: impact and mitigation within the same watershed, habitat type, but rehabilitation would result in partial fit gain compared with total functional loss impact site, so functional loss would be gain compared with total functional gain. Adjustment: PM Justification:	Functions (Column A)	Impact site	Mitigation site	
Moderation of groundwater flow or discharge Dissipation of energy Dissipation of energy Dissipation of energy Dissipation of graticulates Export of organic carbon Maintenance of plant and animal communities Punction (Column B) Impact site Mitigation site Adjustment: PM Justification: Adjustment: Function (Column C) Maintenance of plant and animal communities Function (Column C) Maintenance of plant and animal communities Impact site Mitigation site Adjustment: PM Justification:	Short- or long-term surface water storage			Adjustment: 2
Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column B) Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Function (Column B) Impact site Mitigation site Mitigation site Mitigation site Adjustment: PM Justification:	Subsurface water storage			PM Justification: impact and mitigation
Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Woderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Function (Golumn C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Subsurface water storage Moderation of groundwater flow or discharge Sibsurface water storage Subsurface water storage Witigation site Adjustment: PM Justification: PM Justification:	Moderation of groundwater flow or discharge			within the same watershed, habitat type,
Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Woderation of groundwater flow or discharge Dissipation of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Function (Column C) Impact site Mitigation site Function (Golumn C) Impact site Mitigation site Function (Golumn C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Dissipation of energy			but rehabilitation would result in partial fu
Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Short- or long-term surface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Mitigation site Adjustment: PM Justification: Impact site Mitigation site Mitigation site Mitigation site Adjustment: PM Justification: Adjustment: PM Justificati	Cycling of nutrients			
Export of organic carbon Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Mitigation site Adjustment: PM Justification:	Removal of elements and compounds			impact site, so functional loss would be g
Maintenance of plant and animal communities Function (Column B) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Mitigation site Mitigation site Adjustment: PM Justification:	Retention of particulates			than functional gain.
Function (Column B) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Export of organic carbon Retention of particulates Export of organic carbon	Export of organic carbon			
Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Maintenance of plant and animal communities			
Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Function (Column B)	Impact site	Mitigation site	
Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Mitigation site Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Short- or long-term surface water storage		J	Adjustment:
Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon				PM Justification:
Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon				
Removal of elements and compounds Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Majustment: PM Justification:	Dissipation of energy			
Retention of particulates Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Mitigation site Mitigation site PM Justification:	Cycling of nutrients			
Export of organic carbon Maintenance of plant and animal communities Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Mitigation site Mitigation site Adjustment: PM Justification:	Removal of elements and compounds			
Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Mitigation site Mitigation site Mitigation site Mitigation site Mitigation site Adjustment: PM Justification:	Retention of particulates			
Function (Column C) Impact site Mitigation site Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon Mitigation site Mitigation site Adjustment: PM Justification:	Export of organic carbon			
Short- or long-term surface water storage Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Maintenance of plant and animal communities			
Subsurface water storage Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Function (Column C)	Impact site	Mitigation site	
Moderation of groundwater flow or discharge Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Short- or long-term surface water storage			Adjustment:
Dissipation of energy Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Subsurface water storage			PM Justification:
Cycling of nutrients Removal of elements and compounds Retention of particulates Export of organic carbon	Moderation of groundwater flow or discharge			
Removal of elements and compounds Retention of particulates Export of organic carbon	Dissipation of energy			
Retention of particulates Export of organic carbon	Cycling of nutrients			
Export of organic carbon	Removal of elements and compounds			
	Retention of particulates			
Maintenance of plant and animal communities	Export of organic carbon			
	Maintenance of plant and animal communities			

Instructions:

- 1. Describe amount of functional loss (impact) and gain (mitigation) in each respective column. Gain and loss can be
- 2. Note: alternate lists of functions may be used.
- 3. Note: a single adjustment should be used to account for all functions combined (see example 7 in attachment 12501.3)

1 Date: 20120604	Corps File No.:	SPL-2012-345-IJ	Project Manager:	Indiana Jones				
Impact Site Name:	Haunted Wash	ORM Resource Type:	River/stream			Hydrology:	ephemeral	
Impact Cowardin or HGM type:	riverine	Impact area :	0.46	acres	Impact dista		13,579	linear feet
	Column A		Column B			Column C		
	Mitigation Site Name:	Realigned Ditch	Mitigation Site Name:			Mitigation Site Name:		
	Mitigation Type:	establishment	Mitigation Type:			Mitigation Type:		
	ORM Resource Type:	River/stream	ORM Resource Type:			ORM Resource Type:		
	Cowardin/HGM type:	riverine	Cowardin/HGM type:			Cowardin/HGM type:		
	Hydrology:	ephemeral	Hydrology:			Hydrology:		
2.a Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 :	1.0	Starting ratio:	1.0	1.0
	Ratio adjustment:	1.0 . 1.0	Ratio adjustment:	1.0	1.0	Ratio adjustment:	1.0	
comparison:	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 :	1.00	Baseline ratio:	1.00	1.00
				1.00 .				e Table 1
	PM justification:	See Table	PM justification:		see rable	PM justification:	se	e rable i
2.b Quantitative impact-mitigation	Ratio adjustment from BAMI		Ratio adjustment from BAMI			Ratio adjustment from BAMI		
comparison:	procedure (attached):	2.4 : 1.0	procedure (attached):	:		procedure (attached):		
2.c Preservation (Table 2, step A)	Baseline ratio:	: 1.00	Baseline ratio:	:	1.00	Baseline ratio:		1.00
3 Preservation (Table 2, step E)	Ratio adjustment:		Ratio adjustment:			Ratio adjustment:		
4 Mitigation site location:	Ratio adjustment:	0	Ratio adjustment:			Ratio adjustment:		
- winganon site location.	PM justification: impact and mit		PM justification:			PM justification:		
		gation would be within the	Fivi justification.			rivi justincation.		
Not less of smooths recovered	same watershed							
5 Net loss of aquatic resource	Ratio adjustment:	0	Ratio adjustment:			Ratio adjustment:		
surface area:								
	PM justification: establishment		PM justification:			PM justification:		
6 Type conversion:	Datia adicatas sat	0	Datia adicatas at			Datia adicatas aut.		
6 Type conversion:	Ratio adjustment:		Ratio adjustment:			Ratio adjustment:		
	PM justification: no difference b	etween impact and	PM justification:			PM justification:		
7 Risk and uncertainty:	mitigation types	0.3	Datia adicatas arti			Datia adicustas auto		
/ Kisk and uncertainty.	Ratio adjustment:		Ratio adjustment:			Ratio adjustment:		
	PM justification: +0.1 permittee		PM justification:			PM justification:		
	mitigation site did not support a	quatic resource						
8 Temporal loss:	Ratio adjustment:	0	Ratio adjustment:			Ratio adjustment:		
	PM justification: no temporal los	s, as mitigation site would	PM justification:			PM justification:		
	be built before impacts and all f		,			,		
	would be replaced.							
a Final antique (in (a)	· ·	2.35 : 1.00	Describes action from O. a. b. an ac	0.00 :	4.00	Describes action from O. a. b. anno.	0.00	1.00
9 Final mitigation ratio(s):	Baseline ratio from 2.a, b or c:		Baseline ratio from 2.a, b or c:			Baseline ratio from 2.a, b or c:		
	Total adjustments (3-8):	0.30	Total adjustments (3-8):	0.0		Total adjustments (3-8):		00
	Final ratio:	2.65 : 1.00	Final ratio:	0.00 :		Final ratio:	0.00	1.00
	Proposed impact (total):	0.46 acres	Remaining impact:		acres	Remaining impact (acres):		acres
	_	13579 linear feet	_		linear feet	Remaining impact (linear feet):	#VALUE!	linear feet
	to Resource type:	River/stream	to Resource type:	River/stream		to Resource type:	River/stream	
	Cowardin or HGM:	riverine	Cowardin or HGM:	riverine		Cowardin or HGM:	riverine	
	Hydrology:	ephemeral	Hydrology:	ephemeral		Hydrology:	ephemeral	
	Required Mitigation*:	1.22 acres	Required Mitigation*:		acres	Required Mitigation:	#VALUE!	acres
	1.5	35984.4 linear feet			linear feet		#VALUE!	linear feet
	of Resource type:	River/stream	of Resource type:	0		of Resource type:	0	
	Cowardin or HGM:	riverine	Cowardin or HGM:	0		Cowardin or HGM:	0	
	Hydrology:	ephemeral	Hydrology:	0		Hydrology:	0	
		4.00						
	Proposed Mitigation**:	1.22 acres	Proposed Mitigation**:		acres	Proposed Mitigation**:		acres
		linear feet			linear feet			linear feet
	Impact Unmitigated:	0 % 0.00 acres	Impact Unmitigated:		% acres	Impact Unmitigated:		% acres
	Additional PM comments:	0.00 acres	Additional PM comments:		acies	Additional PM comments:		acres
	Additional Pivi comments:		Additional Pivi comments:			Additional Pivi comments:		
10	Final requirement is for this imp	act site is 1.22 acres. App	licant will establish 1.22 acre of	ephemeral strea	mbed.			
Final compensatory mitigation								
requirements:								
. aquiromonto.	*At DM's discretion if applicant	o proposed mitigation is le	s than shocklist requirement an	d additional mitie	ration type(s)	proposed, complete additional colur	mne oe noodod	

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Step 3: Before-After-Mitigation-Impac	t (BAMI) proced	ure			(CRAM examp	ole)	
Functions/conditions	Impact _{Before}	Impact _{After}	Impact _{delta}	Mitigation _{Before}	Mitigation _{After}	Mitigation _{delta}	
4.1 Buffer and Landscape Context							
4.1.1 Landscape Connectivity	3	0	-3	3	3	0	
4.1.2 Percent of AA with Buffer	9	0	-9	9	9	0	
4.1.3 Average Buffer Width	6	0	-6	6	6	0	
4.1.4 Buffer Condition	12	0	-12	12	12	0	
RAW SCORE	12.4	0.0	-12	12.4	12.4	0	
FINAL SCORE	51.7	0.0	-52	51.7	51.7	0	
4.2 Attribute 2: Hydrology		-	-	-			-
4.2.1 Water Source	9	0	-9	0	9	9]
4.2.2 Hydroperiod or Channel Stability	12	0	-12	0	3	3]
4.2.3 Hydrologic Connectivity	12	0	-12	0	12	12	
RAW SCORE	33.0	0.0	-33	0.0	24.0	24	
FINAL SCORE	91.7	0.0	-92	0.0	66.7	67	
4.3 Attribute 3: Physical Structure							
4.3.1 Structural Patch Richness	3	0	-3	0	3	3	
4.3.2 Topographic Complexity	3	0	-3	0	3	3	
RAW SCORE	6.0	0.0	-6	0.0	6.0	6	
FINAL SCORE	25.0	0.0	-25	0.0	25.0	25	
4.4 Attribute 4: Biotic Structure							_
4.4.1 Number of Plant Layers	6	0	-6	0	0	0	
4.4.2 Co-Dominant Species	3	0	-3	0	0	0	
4.4.3 Percent Invasion	12	0	-12	0	0	0	
4.4.4 Interspersion/Zonation	6	0	-6	0	0	0	
4.4.5 Vertical Structure	3	0	-3	0	0	0	Quotient=ABS(M/
RAW SCORE	16	0	-16	0	0	0	23/54
FINAL SCORE	44.5	0.0	-45	0.0	0.0	0	Baseline ration
OVERALL SCORE	54.0	0.0	-54	13.0	36.0	23	2.35 : 1.0

Instructions:

- **1.** Choose functional method. Acceptable functional assessment methods must be aquatic resource-based, standardized, comparable from site to site, peer-reviewed, and must be approved by the applicable Corps District.
- 2. List functions/condition categories in leftmost column.
- 3. Utilize Before-After-Mitigation-Impact (BAMI) procedure above to calculate function deltas.
- **4.** Obtain absolute value (ABS*) of quotient of mitigation-delta over impact-delta for overall score (if method has no overall score, use median of quotients for function categories or individual functions). *Absolute value is the nonnegative number for any real number, so if your quotient is negative, simply drop the negative sign to get the ABS. For example: the ABS of -9/3 = 3.
- 5. To get baseline ratio: If quotient (Q) is less than 1, baseline ratio = 1/Q: 1; if quotient is greater than 1, baseline ratio = 1: Q.
- 6. Input Step 2.b baseline ratio into the checklist document.

1	Date: 20120531	Corps File No.:	SPL-2012-TK		Project Manager:	Takeshi Kitar	10			
	Impact Site Name:	Highland Stormdrain	ORM Resource Type	e:	river/stream			Hydrology:	intermittent	
	Impact Cowardin or HGM type:	riverine	Impact area :		2.46	acres	Impact dista	nce: 3814	0	linear feet
	,	Column A			Column B			Column C		
		Mitigation Site Name:	San Ramon Bank		Mitigation Site Name:			Mitigation Site Name:		
		Mitigation Type:	re-establishment		Mitigation Type:			Mitigation Type:		
		ORM Resource Type:	river/stream		ORM Resource Type:			ORM Resource Type:		
		Cowardin/HGM type:	riverine		Cowardin/HGM type:			Cowardin/HGM type:		
		Hydrology:	intermittent		Hydrology:			Hydrology:		
2.a	Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0		Starting ratio:	1.0 :	1.0	Starting ratio:	1.0	: 1.0
	comparison:	Ratio adjustment:	-2.0		Ratio adjustment:			Ratio adjustment:		
	COMBANSON.	Baseline ratio:	1.00 : 3.00		Baseline ratio:	1.00 :	1.00	Baseline ratio:	1.00	: 1.00
		PM justification: Functional gair		ily	PM justification:	,	see Table 1	PM justification:	,	see Table 1
		more than the expected function	nal loss (see table 1).							
2.b	Quantitative impact-mitigation	Ratio adjustment from BAMI			Ratio adjustment from BAMI			Ratio adjustment from BAMI		
	comparison:	procedure (attached):			procedure (attached):			procedure (attached):		:
2.0	Preservation (Table 2, step A)	Baseline ratio:	: 1.00		Baseline ratio:		1.00	Baseline ratio:		: 1.00
2.0	rieservation (Table 2, Step A)	baseline ratio.	. 1.00		Daseille fatto.		1.00	Baseline ratio.		. 1.00
3	Preservation (Table 2, step E)	Ratio adjustment:			Ratio adjustment:			Ratio adjustment:		
4	Mitigation site location:	Ratio adjustment:	0		Ratio adjustment:			Ratio adjustment:		
, ,	magaaon site location.			in the						
		PM justification: impact and mit	igation would be withi	iii trie	PM justification:			PM justification:		
		same watershed								
-	Net loss of aquatic resource	Ratio adjustment:	0		Ratio adjustment:			Ratio adjustment:		
	surface area:	PM justification: re-establishme	nt		PM justification:			PM justification:		
		i w justilication, re-establishme	TIL.		r ivi justinication.			i w justilication.		
6	Type conversion:	Ratio adjustment:	0		Ratio adjustment:			Ratio adjustment:		
-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	PM justification: mitigation is in-	kind		PM justification:			PM justification:		
		i iii jaaliiiaalia ii iiiligalia ii ia iii			· ··· juouniounioni			in judaneuron		
7	Risk and uncertainty:	Ratio adjustment:	0		Ratio adjustment:			Ratio adjustment:		
•	and anternanty.	PM justification: mitigation bank		not	PM justification:			PM justification:		
1			, uncertainty factors r	iot	i w justilication.			i w justincation.		
		applicable.								
Ω	Temporal loss:	Ratio adjustment:	0		Ratio adjustment:			Ratio adjustment:		
U	Tomporarioss.									
		PM justification: mitigation bank			rivi justification:			PM justification:		
		and performance standards me	t, assuming no delay.							
0	Final mitigation ratio(s):	Baseline ratio from 2.a, b or c:	1.00 :	3.00	Baseline ratio from 2.a, b or c:	0.00 :	1.00	Baseline ratio from 2.a, b or c:	0.00	: 1.0
9	i mai miliyalion ralio(s).			3.00						
		Total adjustments (3-8):	0.00		Total adjustments (3-8):		00	Total adjustments (3-8):		.00
		Final ratio:	0.33 : 1.00		Final ratio:	0.00 :		Final ratio:	0.00	: 1.00
		Proposed impact (total):	2.46 acres		Remaining impact:	0.00	acres	Remaining impact (acres):		acres
			0 linear	feet		0	linear feet	Remaining impact (linear feet):	#VALUE!	linear feet
		to Resource type:	river/stream		to Resource type:	river/stream		to Resource type:	river/stream	
		Cowardin or HGM:	riverine		Cowardin or HGM:	riverine		Cowardin or HGM:	riverine	
		CONGRAIN OF FIGURE	intermitten		Condition Figure			Consider of Figure	114011110	
		Hydrology:	t		Hydrology:	intermittent		Hydrology:	intermittent	
			•		-					
		Required Mitigation*:	2.46 acres		Required Mitigation*:	0.00	acres	Required Mitigation:	#VALUE!	acres
		_	0.0 linear	feet	-	0.0	linear feet	_	#VALUE!	linear feet
		of Resource type:	river/stream		of Resource type:	0		of Resource type:	0	
		Cowardin or HGM:	riverine		Cowardin or HGM:	0		Cowardin or HGM:	0	
						0				
		Hydrology:	intermittent		Hydrology:	U		Hydrology:	0	
		Proposed Mitigation**:	2.46 acres		Proposed Mitigation**:		acres	Proposed Mitigation**:		acres
			linear				linear feet			linear feet
		Impact Unmitigated:	0 %		Impact Unmitigated:		%	Impact Unmitigated:		%
		gatod.	0.00 acres				acres			acres
		Additional PM comments: *Calc			Additional PM comments:			Additional PM comments:		
		0.33:1), but without functional a	The second secon							
				Tallo						
10	Final compensatory mitigation	allowed under 2008 mitigation r	ule	so of m	sitigation hank cradit for the re-	etabliebmant a	of 2.46 pares	of riparian stream habitat (1:1 ratio).		
		rinai requirement is for this imp	act site is the purchas	se oi m	illigation bank credit for the re-e	stablistitient (JI 2.46 acres	or riparian stream riabitat (1:1 ratio).		
	requirements:									
		*At PM's discretion, if applicant	s proposed mitigation	n is less	than checklist requirement and	d additional mit	tigation type(s) proposed, complete additional colu	mne se naadad	

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.

**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 1: Qualitative comparison of functions (functional loss vs. gain) (instructions at bottom).

Functions (Column A)	Impact site	Mitigation site
Short- or long-term surface water storage	small loss	large gain
Subsurface water storage	small loss	large gain
Moderation of groundwater flow or discharge	small loss	large gain
Dissipation of energy	small loss	large gain
Cycling of nutrients	small loss	large gain
Removal of elements and compounds	no loss	large gain
Retention of particulates	no loss	large gain
Export of organic carbon	moderate loss	large gain
Maintenance of plant and animal communities	small loss	large gain
Function (Column B)	Impact site	Mitigation site
Short- or long-term surface water storage		
Subsurface water storage		
Moderation of groundwater flow or discharge		
Dissipation of energy		
Cycling of nutrients		
Removal of elements and compounds		

Function (Column C)	Impact site	Mitigation site
Short- or long-term surface water storage		
Subsurface water storage		
Moderation of groundwater flow or discharge		
Dissipation of energy		
Cycling of nutrients		
Removal of elements and compounds		
Retention of particulates		
Export of organic carbon		
Maintenance of plant and animal communities		

nent:			
ificatio	n:		
		nent: ification:	

Instructions:

Retention of particulates
Export of organic carbon

- 1. Describe amount of functional loss (impact) and gain (mitigation) in each respective column. Gain and loss can be
- 2. Note: alternate lists of functions may be used.

Maintenance of plant and animal communities

3. Note: a single adjustment should be used to account for all functions combined (see example 7 in attachment 12501.3)

1	Date: 20120531	Corps File No.:	SPL-2012-TK	Project Manager:	Takeshi Kitano			
	Impact Site Name:	Highland Stormdrain	ORM Resource Type:	river/stream		Hydrology:	intermittent	
	Impact Cowardin or HGM type:	riverine	Impact area :	2.46	acres Impact dista		<u>0</u>	linear feet
		Column A		Column B		Column C		
		Mitigation Site Name:	San Ramon Bank	Mitigation Site Name:		Mitigation Site Name:		
		Mitigation Type:	re-establishment	Mitigation Type:		Mitigation Type:		
		ORM Resource Type:	river/stream	ORM Resource Type:		ORM Resource Type:		
		Cowardin/HGM type:	riverine	Cowardin/HGM type:		Cowardin/HGM type:		
		Hydrology:	intermittent	Hydrology:		Hydrology:		
2.a	Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0	: 1.0
	comparison:	Ratio adjustment:		Ratio adjustment:		Ratio adjustment:		
	COMBANSON.	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00	: 1.00
		PM justification:		PM justification:	see Table 1	PM justification:		see Table 1
0.1	0	Ratio adjustment from BAMI		Ratio adjustment from BAMI	000 1 0010 1	Ratio adjustment from BAMI		1 4510 1
2.b	Quantitative impact-mitigation		40.44			•		
_	comparison:	procedure (attached):	1.0 : 4.4	procedure (attached):	: 4.00	procedure (attached):		4.00
2.c	Preservation (Table 2, step A)	Baseline ratio:	: 1.00	Baseline ratio:	: 1.00	Baseline ratio:		: 1.00
_				5		5		
3	Preservation (Table 2, step E)	Ratio adjustment:		Ratio adjustment:		Ratio adjustment:		
4	Mitigation site location:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:		
i	=	PM justification: impact and mit		PM justification:		PM justification:		
		same watershed	J	,		,		
5	Net loss of aquatic resource	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:		
	surface area:	radio adjustinont.	U	Trado adjustiništit.		Tatio adjustitioni.		
		PM justification: re-establishme	nt	PM justification:		PM justification:		
		i w justilication. re-establishine	i it	i w justilication.		i w justilication.		
6	Type conversion:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:		
	21	PM justification: mitigation is in-		PM justification:		PM justification:		
		i iii jadandaadiii iinagaadii id iii		· ··· juounounoin		i iii jaciiiicaaiciii		
7	Risk and uncertainty:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:		
-	•	PM justification: mitigation bank	uncertainty factors not	PM justification:		PM justification:		
		applicable.	,	,		,,		
		арріїсавіс.						
8	Temporal loss:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:		
		PM justification: mitigation bank		PM justification:		PM justification:		
		and performance standards me	t, assuming no delay.					
q	Final mitigation ratio(s):	Baseline ratio from 2.a, b or c:	1.00 : 4.40	Baseline ratio from 2.a, b or c:	0.00 : 1.00	Baseline ratio from 2.a, b or c:	0.00	: 1.0
ľ		Total adjustments (3-8):	0.00	Total adjustments (3-8):	0.00	Total adjustments (3-8):		00
		Final ratio:	0.23 : 1.00	Final ratio:	0.00 : 1.00	Final ratio:		: 1.00
		Proposed impact (total):	2.46 acres	Remaining impact:	0.00 acres	Remaining impact (acres):	0.00	acres
		r repeded impact (total).	0 linear feet	rtorriaming impacti	0 linear feet	Remaining impact (linear feet):	#VALUE!	linear feet
		to Resource type:	river/stream	to Resource type:	river/stream	to Resource type:	river/stream	iii loai 100t
		Cowardin or HGM:	riverine	Cowardin or HGM:	riverine	Cowardin or HGM:	riverine	
		Cowardin or From:	intermitten	Cowardin of Ficini.	TIVETITIE	Cowardin or Ficini.	HVCHHC	
		Hydrology:	t	Hydrology:	intermittent	Hydrology:	intermittent	
				-				
		Required Mitigation*:	0.56 acres	Required Mitigation*:	0.00 acres	Required Mitigation:	#VALUE!	acres
			0.0 linear feet		0.0 linear feet		#VALUE!	linear feet
		of Resource type:	river/stream	of Resource type:	0	of Resource type:	0	
		Cowardin or HGM:	riverine	Cowardin or HGM:	0	Cowardin or HGM:	0	
		Hydrology:	intermittent	Hydrology:	0	Hydrology:	0	
			0.00					
		Proposed Mitigation**:	0.00 acres	Proposed Mitigation**:	acres	Proposed Mitigation**:		acres
			linear feet		linear feet			linear feet
		Impact Unmitigated:	0 %	Impact Unmitigated:	%	Impact Unmitigated:		%
		A LEG LEM	0.00 acres	A LIVE A LIDA	acres	A LEG LDM		acres
		Additional PM comments:		Additional PM comments:		Additional PM comments:		
10	Final compensatory mitigation	Final requirement is for this imp	act site is the purchase of	I mitigation bank credit for the re-	establishment of 0.56 acres	of riparian stream habitat		
	requirements:	roquiromonicio foi tino imp	act site is the purchase of	gation bank ordak for the re-c	Johannon Tone Of 0.00 acres	opanan ou oam nabitat.		
	requirements.							
		* A + DM/o dispretion if applicant	a proposad mitigation is lar	a than absolutiot requirement on	d additional mitigation type/s	a) proposed, complete additional colu	hoboon oo oom	

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Step 3: Before-After-Mitigation-Impac	t (BAMI) proced	ure			(CRAM example	e)	
Functions/conditions	Impact _{Before}	Impact _{After}	Impact _{delta}	Mitigation _{Before}	Mitigation _{After}	Mitigation _{delta}	
4.1 Buffer and Landscape Context							
4.1.1 Landscape Connectivity	3	3	0	9	9	0	
4.1.2 Percent of AA with Buffer	3	3	0	9	9	0	
4.1.3 Average Buffer Width	3	3	0	9	9	0	
4.1.4 Buffer Condition	3	3	0	9	9	0	
RAW SCORE	6.0	6.0	0	18.0	18.0	0	
FINAL SCORE	25.0	25.0	0	75.0	75.0	0	
4.2 Attribute 2: Hydrology		-	-	-	-		-
4.2.1 Water Source	6	6	0	9	9	0	
4.2.2 Hydroperiod or Channel Stability	6	6	0	9	9	0	
4.2.3 Hydrologic Connectivity	3	3	0	3	9	6	
RAW SCORE	15.0	15.0	0	21.0	27.0	6	
FINAL SCORE	41.7	41.7	0	58.4	75.0	17	
4.3 Attribute 3: Physical Structure							
4.3.1 Structural Patch Richness	6	3	-3	0	9	9	
4.3.2 Topographic Complexity	3	3	0	0	12	12	
RAW SCORE	9.0	6.0	-3	0.0	21.0	21	
FINAL SCORE	37.5	25.0	-13	0.0	87.5	88	
4.4 Attribute 4: Biotic Structure							<u></u>
4.4.1 Number of Plant Layers	6	3	-3	9	9	0	
4.4.2 Co-Dominant Species	6	3	-3	12	12	0	
4.4.3 Percent Invasion	6	3	-3	9	9	0	
4.4.4 Interspersion/Zonation	6	3	-3	6	12	6	
4.4.5 Vertical Structure	3	3	0	6	12	6	Quotient=ABS(M/
RAW SCORE	15	9	-6	22	34	12	4 3/8
FINAL SCORE	41.7	25.0	-17	61.2	94.5	33	Baseline ration
OVERALL SCORE	37.0	30.0	-8	49.0	83.0	35	1: 4.4

Instructions:

- **1.** Choose functional method. Acceptable functional assessment methods must be aquatic resource-based, standardized, comparable from site to site, peer-reviewed, and must be approved by the applicable Corps District.
- 2. List functions/condition categories in leftmost column.
- 3. Utilize Before-After-Mitigation-Impact (BAMI) procedure above to calculate function deltas.
- **4.** Obtain absolute value (ABS*) of quotient of mitigation-delta over impact-delta for overall score (if method has no overall score, use median of quotients for function categories or individual functions). *Absolute value is the nonnegative number for any real number, so if your quotient is negative, simply drop the negative sign to get the ABS. For example: the ABS of -9/3 = 3.
- 5. To get baseline ratio: If quotient (Q) is less than 1, baseline ratio = 1/Q: 1; if quotient is greater than 1, baseline ratio = 1: Q.
- 6. Input Step 2.b baseline ratio into the checklist document.

1 Date: 20160607	Corps File No.:	SPL-2013-NNN	Project Manager:	Joe Regulator		
Impact Site Name:	Unnamed road crossing	ORM Resource Type:	stream		Hydrology:	ephemeral
Impact Cowardin or HGM type:	riverine	Impact area :	0.35	acres Impact dista		275 linear feet
7	Column A		Column B		Column C	
	Mitigation Site Name:	Golden Valley	Mitigation Site Name:	Golden Valley	Mitigation Site Name:	
	Mitigation Type:	Preservation	Mitigation Type:	Preservation	Mitigation Type:	
	ORM Resource Type:	Stream	ORM Resource Type:	Upland buffer	ORM Resource Type:	
	Cowardin/HGM type:	Riverine	Cowardin/HGM type:	Riverine	Cowardin/HGM type:	
	Hydrology:	Ephemeral	Hydrology:	Ephemeral buffer	Hydrology:	
2.a Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0
comparison:	Ratio adjustment:		Ratio adjustment:		Ratio adjustment:	
	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00
	PM justification:	see tab 2	PM justification:	see tab 2	PM justification:	see tab 2 or 3
2.b Quantitative impact-mitigation	Ratio adjustment from BAMI		Ratio adjustment from BAMI		Ratio adjustment from BAMI	
comparison:	procedure (attached):		procedure (attached):		procedure (attached):	
2.c Preservation (Table 2, step A)	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00	Baseline ratio:	: 1.00
2.0 Preservation (Table 2, Step A)	baseline ratio.	1.00	Baseline ratio.	1.00	Baseline ratio.	. 1.00
2 Processing (Table 2 stee 5)	Datia adicatas sati	9.0	Datia adicatas auto	11.0	Datia adicatas auto	
3 Preservation (Table 2, step E)	Ratio adjustment:	9.0	Ratio adjustment:	11.0	Ratio adjustment:	
4 Mitigation site leastion	Define Fortunal		D. C F I		Dog - Farmer	
4 Mitigation site location:	Ratio adjustment:	0	Ratio adjustment:	0	Ratio adjustment:	
	PM justification: Same 8-digit H	IUC watershed	PM justification: Same 8-digit F	HUC watershed	PM justification:	
5 Net loss of aquatic resource	Ratio adjustment:	1	Ratio adjustment:	1	Ratio adjustment:	
surface area:		•	,		1	
	PM justification: Preservation re	eculte in not loss	PM justification: Preservation r	esults in not loss	PM justification:	
	i w justineation. I reservation re	23413 111161 1033.	I W justification. I reservation i	could in fict loos.	i w justineation.	
6 Type conversion:	Ratio adjustment:	0	Ratio adjustment:	1	Ratio adjustment:	
o Type conversion.						
	PM justification: Same stream t	.ypes.	PM justification: Impacted ephe		PM justification:	
7 Diek and uncertaints:	Define Fortunal	0	valuable than preserved upland		Defends to the set	
7 Risk and uncertainty:	Ratio adjustment:		Ratio adjustment:	. 0	Ratio adjustment:	_
	PM justification: n/a since prese	ervation.	PM justification: n/a since pres	ervation.	PM justification:	
8 Temporal loss:	Datia adicustra anti	0	Datia adicatas satu		Datia adicatas aut.	
8 Temporal loss.	Ratio adjustment:		Ratio adjustment:	0	Ratio adjustment:	_
	PM justification: n/a since prese	ervation.	PM justification: n/a since pres	ervation.	PM justification:	
9 Final mitigation ratio(s):	Baseline ratio from 2.a, b or c:	1.00 : 1.00	Baseline ratio from 2.a, b or c:	1.00 : 1.00	Baseline ratio from 2.a, b or c:	0.00 : 1.00
3	Total adjustments (3-8):	10.00	Total adjustments (3-8):	13.00	Total adjustments (3-8):	0.00
	Final ratio:	11.00 : 1.00	Final ratio:	14.00 : 1.00	Final ratio:	0.00 : 1.00
	Proposed impact (total):	0.35 acres	Remaining impact:	0.19 acres	Remaining impact (acres):	0.00 acres
	Toposca impact (total).	275 linear feet	rtemaining impact.	150 linear feet	Remaining impact (deres):	0 linear feet
	to Resource type:	stream	to Resource type:	stream	to Resource type:	stream
	Cowardin or HGM:		Cowardin or HGM:		Cowardin or HGM:	
		riverine		riverine		riverine
	Hydrology:	ephemeral	Hydrology:	ephemeral	Hydrology:	ephemeral
	B	0.05	B	0.07	Book to IARROW	0.00
	Required Mitigation*:	3.85 acres	Required Mitigation*:	2.67 acres	Required Mitigation:	0.00 acres
		3025.0 linear feet		2100.0 linear feet		0.0 linear feet
	of Resource type:	Stream	of Resource type:	Upland buffer	of Resource type:	0
	Cowardin or HGM:	Riverine	Cowardin or HGM:	Riverine	Cowardin or HGM:	0
	Hydrology:	Ephemeral	Hydrology:	Ephemeral buffer	Hydrology:	0
	Proposed Mitigation**:	1.75 acres	Proposed Mitigation**:	2.67 acres	Proposed Mitigation**:	acres
		2200 linear feet	'	linear feet		linear feet
	Impact Unmitigated:	55 %	Impact Unmitigated:	0 %	Impact Unmitigated:	%
		0.19 acres	, - 13	0.00 acres	,	acres
	Additional PM comments:		Additional PM comments:		Additional PM comments:	40.00
	Additional FW Comments.		Additional Five Comments.		Additional Five Confinients.	
10	Final requirement is for	ection of 1.75 core of	aral atraom and 2.67 asf	hamaral atraom buffs		
10	rinal requirement is for preserv	auon of 1.75 acre of epnem	eral stream and 2.67 acre of ep	memerai stream burier.		
Final compensatory mitigation						
requirements:						
	*At PM's discretion if applicant		- thhlilisti	-ll-litilititi t /	nronosed complete additional colur	

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 2: Starting and base ratio determination for preservation (instructions at bottom).

Steps (Column A)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):	1:1	Impacts to low-functioning aquatic resource
			Moderately high aquatic resource functions, high
B.	Functions adjustment (5, 3, or 1):	3	quality ephemeral
C.	Threat adjustment (5, 3, or 1):	3	Medium due to maintenance costs
D.	Degree of protection adjustment (5, 3, or 1):	3	Restrictive covenant
E. (for step 3)	Total adjustment (add steps B-D):	9	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		
•		•	

Steps (Column B)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):		Impacts to low-functioning aquatic resource
			Least high aquatic resource functions, upland
B.	Functions adjustment (5, 3, or 1):	5	buffer to high quality ephemeral
C.	Threat adjustment (5, 3, or 1):	3	Medium due to maintenance costs
D.	Degree of protection adjustment (5, 3, or 1):	3	Restrictive covenant
E. (for step 3)	Total adjustment (add steps B-D):	11	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

Steps (Column C)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):		
B.	Functions adjustment (5, 3, or 1):		
C.	Threat adjustment (5, 3, or 1):		
D.	Degree of protection adjustment (5, 3, or 1):		
E. (for step 3)	Total adjustment (add steps B-D):	0	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

1	Date: 20160607	Corps File No.:	<u>SPL-2013-NNN</u>	Project Manager:	Jane Regulator		
	Impact Site Name:	Bay wetland 1	ORM Resource Type:	non-tidal wetland		Hydrology:	seasonally flooded
	Impact Cowardin or HGM type:	<u>paulstrine</u>	Impact area :	1.27	acres Impact dista		linear feet
		Column A		Column B		Column C	
		Mitigation Site Name:	Hatty Smith Marsh	Mitigation Site Name:		Mitigation Site Name:	
		Mitigation Type:	preservation	Mitigation Type:		Mitigation Type:	
		ORM Resource Type:	tidal marsh	ORM Resource Type:		ORM Resource Type:	
		Cowardin/HGM type:	estuarine	Cowardin/HGM type:		Cowardin/HGM type:	
		Hydrology:	permanently flooded	Hydrology:		Hydrology:	
2.a	Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0
	comparison:	Ratio adjustment:		Ratio adjustment:		Ratio adjustment:	
		Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00
		PM justification:	see tab 2		see tab 2	PM justification:	see tab 2 or 3
2.b	Quantitative impact-mitigation	Ratio adjustment from BAMI		Ratio adjustment from BAMI		Ratio adjustment from BAMI	
	comparison:	procedure (attached):	:	procedure (attached):	:	procedure (attached):	:
2.c	Preservation (Table 2, step A)	Baseline ratio:	3.00 : 1.00	Baseline ratio:	: 1.00	Baseline ratio:	: 1.00
3	Preservation (Table 2, step E)	Ratio adjustment:	7.0	Ratio adjustment:		Ratio adjustment:	
_	Mitigation site leastion	D.C. L.		Define Fortunal		Define Fortunal	
4	Mitigation site location:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:	
		PM justification: Same 8-digit H	UC watersned	PM justification:		PM justification:	
5	Net loss of aquatic resource	Ratio adjustment:	1	Ratio adjustment:		Ratio adjustment:	
	surface area:					·	
		PM justification: Preservation re	sults in net loss.	PM justification:		PM justification:	
6	Type conversion:	Ratio adjustment:	-2	Ratio adjustment:		Ratio adjustment:	
	•	PM justification: Tiidal wetlands	more rare in watershed	PM justification:		PM justification:	
		than seasonal wetlands.					
7	Risk and uncertainty:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:	
		PM justification: n/a since prese		PM justification:		PM justification:	
8	Temporal loss:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:	
0	Final mitigation ratio(s):	PM justification: n/a since prese	3.00 : 1.00	PM justification: Baseline ratio from 2.a, b or c:	0.00 : 1.00	PM justification: Baseline ratio from 2.a, b or c:	0.00 : 1.000
9	i mai mitigation ratio(s).	Total adjustments (3-8):	6.00	Total adjustments (3-8):	0.00	Total adjustments (3-8):	0.00
		Final ratio:	9.00 : 1.00	Final ratio:	0.00 : 1.00	Final ratio:	0.00 : 1.00
		Proposed impact (total):	1.27 acres	Remaining impact:	acres	Remaining impact (acres):	acres
		Troposed impact (total).	0 linear feet	rtemaining impact.	#VALUE! linear feet	Remaining impact (linear feet):	#VALUE! linear feet
		to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetland
		Cowardin or HGM:	paulstrine	Cowardin or HGM:	paulstrine	Cowardin or HGM:	paulstrine
			seasonally	0011011011101111	seasonally		seasonally
		Hydrology:	flooded	Hydrology:	flooded	Hydrology:	flooded
		Required Mitigation*:	11.43 acres	Required Mitigation*:	#VALUE! acres	Required Mitigation:	#VALUE! acres
1			0.0 linear feet		#VALUE! linear feet	l	#VALUE! linear feet
		of Resource type:	tidal marsh	of Resource type:	0	of Resource type:	0
		Cowardin or HGM:	estuarine	Cowardin or HGM:	0	Cowardin or HGM:	0
		Hydrology:	permanently flooded	Hydrology:	0	Hydrology:	0
		Proposed Mitigation**:	acres linear feet	Proposed Mitigation**:	acres linear feet	Proposed Mitigation**:	acres linear feet
		Impact Unmitigated:	%	Impact Unmitigated:	%	Impact Unmitigated:	%
			acres		acres		acres
		Additional PM comments:		Additional PM comments:		Additional PM comments:	
10		Final requirement is for preserv	ation of 11 43 acres of tidal	marsh			
10	Final community of the state of	i mai requirement is for preserv	allon or 11.70 acres or lludi	maroll.			
	Final compensatory mitigation						
	requirements:	44.51					
		"At PM's discretion if applicant"	s proposed mitigation is les	s than checklist requirement and	anditional mitigation type(s)	proposed, complete additional colu	imns as needed

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 2: Starting and base ratio determination for preservation (instructions at bottom).

Steps (Column A)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):	3:1	Impact to moderate quality seasonal wetlands
B.	Functions adjustment (5, 3, or 1):	1	high quality tidal marsh
C.	Threat adjustment (5, 3, or 1):	5	low threat
D.	Degree of protection adjustment (5, 3, or 1):	1	conservation easement
E. (for step 3)	Total adjustment (add steps B-D):	7	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

Steps (Column B)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):		
B.	Functions adjustment (5, 3, or 1):		
C.	Threat adjustment (5, 3, or 1):		
D.	Degree of protection adjustment (5, 3, or 1):		
E. (for step 3)	Total adjustment (add steps B-D):	0	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

Steps (Column C)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):		
B.	Functions adjustment (5, 3, or 1):		
C.	Threat adjustment (5, 3, or 1):		
D.	Degree of protection adjustment (5, 3, or 1):		
E. (for step 3)	Total adjustment (add steps B-D):	0	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

Table 2 (Steps 2.c and 3) instructions:

A. Baseline ratio based on expected functional loss at impact site (1:1 low; 3:1 Moderate; 5:1 high). Copy to step 2.c in checklist.

1	Date: 20160607	g	SPL-2013-NNN	Project Manager:	Joe Regulator		
	Impact Site Name:	Vernal Pool A	ORM Resource Type:	non-tidal wetland		Hydrology:	seasonally-flooded
	Impact Cowardin or HGM type:	paulstrine	Impact area :	0.74	acres Impact dista		linear feet
		Column A		Column B		Column C	
		Mitigation Site Name:	Williams Meadow	Mitigation Site Name:		Mitigation Site Name:	
		Mitigation Type:	Preservation	Mitigation Type:		Mitigation Type:	
		ORM Resource Type:	Non-tidal wetland	ORM Resource Type:		ORM Resource Type:	
		Cowardin/HGM type:	Palustrine	Cowardin/HGM type:		Cowardin/HGM type:	
		Hydrology:	Seasonally flooded	Hydrology:		Hydrology:	
2.a	Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0	Starting ratio:	1.0 : 1.0
	comparison:	Ratio adjustment:		Ratio adjustment:		Ratio adjustment:	
		Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00	Baseline ratio:	1.00 : 1.00
		PM justification:	see tab 2	PM justification:	see tab 2	PM justification:	see tab 2 or 3
2 h	Quantitative impact-mitigation	Ratio adjustment from BAMI		Ratio adjustment from BAMI		Ratio adjustment from BAMI	
~	comparison:	procedure (attached):		procedure (attached):		procedure (attached):	:
2 c	Preservation (Table 2, step A)	Baseline ratio:	5.00 : 1.00	Baseline ratio:	: 1.00	Baseline ratio:	: 1.00
	Treservation (rabio 2; step A)	Bacomio ratio.		Dacomio rano:		Dadomio ralio.	
3	Preservation (Table 2, step E)	Ratio adjustment:	7.0	Ratio adjustment:		Ratio adjustment:	
4	Mitigation site location:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:	
1		PM justification: Same 8-digit H	UC watershed	PM justification:		PM justification:	
		,		ŕ			
5	Net loss of aquatic resource	Ratio adjustment:	1	Ratio adjustment:		Ratio adjustment:	
	surface area:	ĺ		ĺ		,	
		PM justification: Preservation re	esults in net loss.	PM justification:		PM justification:	
6	Type conversion:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:	
١	., po com c.c.c	PM justification: Impact and mit		PM justification:		PM justification:	
		quality vernal pools.	igation sites both high	i ivi justinoation.		i w justineation.	
7	Risk and uncertainty:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:	
	•	PM justification: n/a since prese	ervation.	PM justification:		PM justification:	
	Townseller						
8	Temporal loss:	Ratio adjustment:	0	Ratio adjustment:		Ratio adjustment:	
	Final militarian militaria	PM justification: n/a since prese	5.00 : 1.00	PM justification:	0.00 : 1.00	PM justification: Baseline ratio from 2.a, b or c:	0.00 : 1.00
9	Final mitigation ratio(s):	Baseline ratio from 2.a, b or c: Total adjustments (3-8):	8.00	Baseline ratio from 2.a, b or c: Total adjustments (3-8):	0.00 . 1.00	Total adjustments (3-8):	0.00 . 1.00
		Final ratio:	13.00 : 1.00	Final ratio:	0.00 : 1.00	Final ratio:	0.00 0.00 : 1.00
		Proposed impact (total):	0.74 acres	Remaining impact:	0.00 : 1.00 0.00 acres		0.00 : 1.00 acres
		Proposed impact (total).	0.74 acres 0 linear feet	Remaining impact.	0.00 acres 0 linear feet	Remaining impact (acres): Remaining impact (linear feet):	#VALUE! linear feet
		to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetland	to Resource type:	non-tidal wetland
		Cowardin or HGM:	paulstrine	Cowardin or HGM:	paulstrine	Cowardin or HGM:	paulstrine
		Cowardin of HGIVI.	seasonally-	Cowardin of Figure	seasonally-	Cowardin or Figur.	seasonally-
		Lhudrologuu	flooded	Lh idrology ii	flooded	Lhudrala mu	flooded
		Hydrology:	nooded	Hydrology:	nooded	Hydrology:	nooded
		Required Mitigation*:	9.62 acres	Required Mitigation*:	0.00 acres	Required Mitigation:	#VALUE! acres
1			0.0 linear feet		0.0 linear feet		#VALUE! linear feet
		of Resource type:	Non-tidal wetland	of Resource type:	0.0	of Resource type:	0
1		Cowardin or HGM:	Palustrine	Cowardin or HGM:	0	Cowardin or HGM:	0
1		Hydrology:	Seasonally flooded	Hydrology:	0	Hydrology:	0
		,	July 1100000	,	•	, a. a. ag, .	•
		Proposed Mitigation**:	9.62 acres	Proposed Mitigation**:	acres	Proposed Mitigation**:	acres
1		1.	linear feet		linear feet	l	linear feet
		Impact Unmitigated:	0 % 0.00 acres	Impact Unmitigated:	% acres	Impact Unmitigated:	% acres
		Additional PM comments:	0.00	Additional PM comments:	40103	Additional PM comments:	dores
10		Applicant initially proposed less	er amount, then agreed to h	I	for preservation of 9.62 acre	es of high quality vernal pool.	
	Final compensatory mitigation	,,	. ,		,	<u> </u>	
1							
Щ_	requirements:	*At DM's dispretion if annihilation	a proposed mitigation in In-	a than abacklist requirement	d additional mitigation to = -(-)) proposed, complete additional colu	impo ao paodad

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 2: Starting and base ratio determination for preservation (instructions at bottom).

Steps (Column A)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):	5:1	Impact to high quality vernal pool
B.	Functions adjustment (5, 3, or 1):	1	high quality vernal pool
C.	Threat adjustment (5, 3, or 1):	5	low threat
D.	Degree of protection adjustment (5, 3, or 1):	1	conservation easement
E. (for step 3)	Total adjustment (add steps B-D):	7	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

Steps (Column B)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):		
B.	Functions adjustment (5, 3, or 1):		
C.	Threat adjustment (5, 3, or 1):		
D.	Degree of protection adjustment (5, 3, or 1):		
E. (for step 3)	Total adjustment (add steps B-D):	0	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

Steps (Column C)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):		
B.	Functions adjustment (5, 3, or 1):		
C.	Threat adjustment (5, 3, or 1):		
D.	Degree of protection adjustment (5, 3, or 1):		
E. (for step 3)	Total adjustment (add steps B-D):	0	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

Table 2 (Steps 2.c and 3) instructions:

A. Baseline ratio based on expected functional loss at impact site (1:1 low; 3:1 Moderate; 5:1 high). Copy to step 2.c in checklist.

1 Date: 20160607	Corps File No.:	SPL-2013-NNN		Project Manager:	Jane Regulat	<u>or</u>			
Impact Site Name:	Badlands Stream	ORM Resource Ty	pe:	stream			Hydrology:	<u>ephemeral</u>	
Impact Cowardin or HGM type:	riverine	Impact area :		4.2	acres	Impact dista	nce:	11,200	linear feet
	Column A			Column B		·	Column C		
	Mitigation Site Name:	Charate Wash		Mitigation Site Name:			Mitigation Site Name:		
	Mitigation Type:	Preservation		Mitigation Type:			Mitigation Type:		
	ORM Resource Type:			ORM Resource Type:			ORM Resource Type:		
		stream							
	Cowardin/HGM type:	riverine		Cowardin/HGM type:			Cowardin/HGM type:		
	Hydrology:	perennial		Hydrology:			Hydrology:		
2.a Qualitative impact-mitigation	Starting ratio:	1.0 : 1.0		Starting ratio:	1.0 :	1.0	Starting ratio:	1.0	: 1.0
comparison:	Ratio adjustment:			Ratio adjustment:			Ratio adjustment:		
	Baseline ratio:	1.00 : 1.00		Baseline ratio:	1.00 :	1.00	Baseline ratio:	1.00	: 1.00
	PM justification:	se	e tab 2	PM justification:		see tab 2	PM justification:	S€	ee tab 2 or 3
2.b Quantitative impact-mitigation	Ratio adjustment from BAMI			Ratio adjustment from BAMI			Ratio adjustment from BAMI		
comparison:	procedure (attached):			procedure (attached):			procedure (attached):		1.
2.c Preservation (Table 2, step A)	Baseline ratio:	3.00 : 1.00		Baseline ratio:		1.00	Baseline ratio:		: 1.00
Z.C Freservation (Table 2, Step A)	baseline ratio.			Daseille fatto.		1.00	Daseille fatto.		. 1.00
3 Preservation (Table 2, step E)	Ratio adjustment:	9.0		Ratio adjustment:			Ratio adjustment:		
4 Mitigation site location:	Ratio adjustment:	0		Ratio adjustment:			Ratio adjustment:		
- imagation site location.									
	PM justification: Same 8-digit H	ioc watersned		PM justification:			PM justification:		
- Not loop of or attached	5			B .: .:			5		
5 Net loss of aquatic resource	Ratio adjustment:	1		Ratio adjustment:			Ratio adjustment:		
surface area:									
	PM justification: Preservation re	esults in net loss.		PM justification:			PM justification:		
	=								
6 Type conversion:	Ratio adjustment:	-3.5		Ratio adjustment:			Ratio adjustment:	_	
	PM justification: Perennial stream		gher	PM justification:			PM justification:		
	value than ephemeral, unveget	ated stream to be							
7 Risk and uncertainty:	Ratio adjustment:	0		Ratio adjustment:			Ratio adjustment:		
	PM justification: n/a since prese	ervation.		PM justification:			PM justification:		
8 Temporal loss:	Datia adicatas aut	0		Datia adicatas aut			Datia adicatas aut		
8 Temporarioss.	Ratio adjustment:			Ratio adjustment:			Ratio adjustment:		
	PM justification: n/a since prese	ervation.		PM justification:			PM justification:		
9 Final mitigation ratio(s):	Baseline ratio from 2.a, b or c:	3.00:	1.00	Baseline ratio from 2.a, b or c:	0.00 :	1.00	Baseline ratio from 2.a, b or c:	0.00	: 1.0
	Total adjustments (3-8):	6.50		Total adjustments (3-8):	0.	00	Total adjustments (3-8):	0	0.00
	Final ratio:	9.50 : 1.00		Final ratio:	0.00 :	1.00	Final ratio:	0.00	: 1.00
	Proposed impact (total):	4.2 acre	s	Remaining impact:	0.00	acres	Remaining impact (acres):		acres
			r feet	J , 222	0	linear feet	Remaining impact (linear feet):	#VALUE!	linear feet
	to Resource type:	stream		to Resource type:	stream		to Resource type:	stream	
	Cowardin or HGM:	riverine		Cowardin or HGM:	riverine		Cowardin or HGM:	riverine	
							Hydrology:		
	Hydrology:	ephemeral		Hydrology:	ephemeral		Hydrology.	ephemeral	
	Required Mitigation*:	39.90 acre	•	Required Mitigation*:	0.00	ooroo	Required Mitigation:	#VALUE!	coroc
	Required Mittigation":			Required Mitigation":		acres	Required Mittigation:		acres
	1.5		ır feet		0.0	linear feet		#VALUE!	linear feet
	of Resource type:	stream		of Resource type:	0		of Resource type:	0	
	Cowardin or HGM:	riverine		Cowardin or HGM:	0		Cowardin or HGM:	0	
	Hydrology:	perennial		Hydrology:	0		Hydrology:	0	
		00.00							1
	Proposed Mitigation**:	39.90 acre		Proposed Mitigation**:		acres	Proposed Mitigation**:		acres
	1.		ır feet	l		linear feet	l		linear feet
	Impact Unmitigated:	0 %		Impact Unmitigated:		%	Impact Unmitigated:		%
		0.00 acre	s			acres			acres
	Additional PM comments:			Additional PM comments:			Additional PM comments:		
10	Applicant agreed to higher ratio	. Final requirement	is for pre	eservation of 58.8 acres of high	quality vernal	oool.			
	,, 3	1223.11			, . ,				
Final compensatory mitigation									
requirements:	*At DMIs disperties "Court"	In annual 1 1 1971 1971		a than abandulat our live of	a a a a a l'altre de la constantina	danatan tari) proposed, complete additional colu		
	AL PIVES DISCRETION IT ANNICANT	s oronosea milidatio	291 21 111						

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 2: Starting and base ratio determination for preservation (instructions at bottom).

Steps (Column A)	Criteria	Results	PM Justification
			Impact: Ephemeral badland streams, either no or
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):	3:1	upland vegetation only
			Preservation: Moderately high-functioning perennial
B.	Functions adjustment (5, 3, or 1):	3	wash with riparian vegetation
C.	Threat adjustment (5, 3, or 1):	3	moderate threat
D.	Degree of protection adjustment (5, 3, or 1):	3	restrictive convenant
E. (for step 3)	Total adjustment (add steps B-D):	9	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		
		·	

Steps (Column B)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):		
B.	Functions adjustment (5, 3, or 1):		
C.	Threat adjustment (5, 3, or 1):		
D.	Degree of protection adjustment (5, 3, or 1):		
E. (for step 3)	Total adjustment (add steps B-D):	0	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

Steps (Column C)	Criteria	Results	PM Justification
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):		
B.	Functions adjustment (5, 3, or 1):		
C.	Threat adjustment (5, 3, or 1):		
D.	Degree of protection adjustment (5, 3, or 1):		
E. (for step 3)	Total adjustment (add steps B-D):	0	
	Supporting	information:	
	Impacted aquatic resource(s):		
	Preserved aquatic resource(s)/site(s):		
	Threat:		
	Protection type:		

1 Date: 20160607	Corps File No.:	SPL-2013-NNN	l	Project Manager:	Jane Regulato	or			
Impact Site Name:	Hollybell Creek	ORM Resource	Type:	stream			Hydrology:	ephemeral	
Impact Cowardin or HGM type:	riverine	Impact area:	,,	1.66	acres	Impact dista		1,560	linear feet
7	Column A			Column B			Column C		
	Mitigation Site Name:	Skyway Ranch		Mitigation Site Name:	Skyway Ranc	h	Mitigation Site Name:	Skyway (verna	l nool)
	Mitigation Type:	preservation		Mitigation Type:	preservation		Mitigation Type:	Preservation	ii pooi)
	ORM Resource Type:			ORM Resource Type:			ORM Resource Type:	non-tidal wetla	
		stream			upland stream	i buller			na
	Cowardin/HGM type:	riverine		Cowardin/HGM type:	uplands		Cowardin/HGM type:	palustrine	
	Hydrology:	ephemeral		Hydrology:	n/a		Hydrology:	seasonally floo	
2.a Qualitative impact-mitigation	Starting ratio:	1.0 : 1.	.0	Starting ratio:	1.0 :	1.0	Starting ratio:	1.0 :	1.0
comparison:	Ratio adjustment:			Ratio adjustment:			Ratio adjustment:		
	Baseline ratio:	1.00 : 1.	.00	Baseline ratio:	1.00 :	1.00	Baseline ratio:	1.00 :	1.00
	PM justification:		see tab 2	PM justification:		see tab 2	PM justification:	see	tab 2 or 3
2.b Quantitative impact-mitigation	Ratio adjustment from BAMI		000 100 2	Ratio adjustment from BAMI		COO LUD E	Ratio adjustment from BAMI	000	100 2 01 0
	procedure (attached):			procedure (attached):			procedure (attached):		
comparison:		1.00 : 1.	00		1.00 :	1.00		1.00 :	1.00
2.c Preservation (Table 2, step A)	Baseline ratio:	1.00 : 1.	.00	Baseline ratio:	1.00	1.00	Baseline ratio:	1.00	1.00
3 Preservation (Table 2, step E)	Ratio adjustment:	11.0		Ratio adjustment:	11	.0	Ratio adjustment:	7.	0
4 Mitigation site location:	Ratio adjustment:	0		Ratio adjustment:	C		Ratio adjustment:		
	PM justification: Same 8-digit H	UC watershed		PM justification: Same 8-digit H	IUC watershed		PM justification: Same 8-digit HUC v	vatershed	
5 Net loss of aquatic resource	Ratio adjustment:	1		Ratio adjustment:	1		Ratio adjustment:	1	
surface area:	ratio adjustitioni.	•		ratio adjustificiti.			rtatio adjustinoni.		
Surface area.	DM instification. Decreased in a			DM instification. Decreased in		_	DM institution December 1		
	PM justification: Preservation re	esuits in net ioss.		PM justification: Preservation re	esuits in net ios	is.	PM justification: Preservation results	in net ioss.	
C. Tumo comparations	Define Fortunal	0		Datie a Produced			Define Francisco		
6 Type conversion:	Ratio adjustment:	_		Ratio adjustment:	1.		Ratio adjustment:		<i>2</i>
	PM justification: Impact and mit	igation sites both	า	PM justification: Impacted ephe		more	PM justification: Impacted ephemera	al stream much	ess valuable
	ephemeral streams.			valuable than preserved upland			than preserved vernal pool.		
7 Risk and uncertainty:	Ratio adjustment:	0		Ratio adjustment:	C)	Ratio adjustment:	()
	PM justification: n/a since prese			PM justification: n/a since prese	ervation.		PM justification: n/a since preservati	on.	
8 Temporal loss:	Ratio adjustment:	0		Ratio adjustment:	C)	Ratio adjustment:	C	
Circl without or retir(s).	PM justification: n/a since prese	1.00 :	1.00	PM justification: n/a since presented by Justification: n/a since pres	1.00 :	1.00	PM justification: n/a since preservati Baseline ratio from 2.a, b or c:	on. 1.00 :	1.0
9 Final mitigation ratio(s):									
	Total adjustments (3-8):	12.00		Total adjustments (3-8):	13.		Total adjustments (3-8):	5.0	
	Final ratio:	13.00 : 1.		Final ratio:	14.50 :		Final ratio:	6.00 :	
	Proposed impact (total):		cres	Remaining impact:	1.47	acres	Remaining impact (acres):	0.68	acres
		1560 lir	near feet		1379	linear feet	Remaining impact (linear feet):	640	linear feet
	to Resource type:	stream		to Resource type:	stream		to Resource type:	stream	
	Cowardin or HGM:	riverine		Cowardin or HGM:	riverine		Cowardin or HGM:	riverine	
	Hydrology:	ephemeral		Hydrology:	ephemeral		Hydrology:	ephemeral	
	,	•		, 0,	•		, 0,	•	
	Required Mitigation*:	21.58 a	cres	Required Mitigation*:	21.28	acres	Required Mitigation:	4.09	acres
			near feet		19999.5	linear feet		3842.6	linear feet
	of Possuros turs:		icai ieel	of Bosouroo tyro:	upland stream		of Possuros type:	non-tidal wetla	
	of Resource type:	stream		of Resource type:		i builer	of Resource type:		iiu
	Cowardin or HGM:	riverine		Cowardin or HGM:	uplands		Cowardin or HGM:	palustrine	
	Hydrology:	ephemeral		Hydrology:	n/a		Hydrology:	seasonally floo	oded
	Proposed Mitigation**:	2.50 ac	cres	Proposed Mitigation**:	11.40	acres	Proposed Mitigation**:	4.09	acres
			near feet	1		linear feet			linear feet
	Impact Unmitigated:	88 %		Impact Unmitigated:	46	%	Impact Unmitigated:	0	%
	Impact Offinitigated.		cres	impact Offinitigated.	0.68	acres	Impact Offiningatou.	0.00	acres
	Additional PM comments:	1. 7 1 di	0100	Additional DM comments:	0.00	u0169	Additional DM comments	0.00	acita
	Additional PIVI comments:			Additional PM comments:			Additional PM comments:		
10	Final requirement is for Applica	nt initially proper	ed only pro	servation of anhamoral atream	and huffor Sun	nlemented pr	onosal with additional property of an of	vernal pool. Fin	al
Final compensatory mitigation				servation of ephemeral stream a stream, 11.4 acres of upland buff			oposal with additional preservation of nd 4.09 acres of vernal pool.	vernai pooi. Fin	ai
requirements:					, ,				
•	*At PM's discretion if applicant	e proposed mitig	ation is les	e than checklist requirement and	d additional mit	igation type/s	proposed, complete additional colun	one oe noodod	

^{*}At PM's discretion, if applicant's proposed mitigation is less than checklist requirement and additional mitigation type(s) proposed, complete additional columns as needed.
**Only enter proposed mitigation into spreadsheet if accepting applicant's lower (than required ratio) proposal.

Table 2: Starting and base ratio determination for preservation (instructions at bottom).

Steps (Column A)	Criteria	Results	PM Justification	
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):	1:1	Impact: Ephemeral stream, unvegetated	
			Preservation: ephemeral stream, unvegetated,	
B.	Functions adjustment (5, 3, or 1):	5	within high quality habitat parcel	
C.	Threat adjustment (5, 3, or 1):	3	moderate threat	
D.	Degree of protection adjustment (5, 3, or 1):	3	restrictive convenant	
E. (for step 3)	Total adjustment (add steps B-D):	11		
Supporting information:				
	Impacted aquatic resource(s):			
	Preserved aquatic resource(s)/site(s):			
	Threat:			
	Protection type:			

Steps (Column B)	Criteria	Results	PM Justification		
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):	1:1	Impact: Ephemeral stream, unvegetated		
B.	Functions adjustment (5, 3, or 1):	5	Preservation: upland buffer of ephemeral stream		
C.	Threat adjustment (5, 3, or 1):	3	moderate threat		
D.	Degree of protection adjustment (5, 3, or 1):	3	restrictive convenant		
E. (for step 3)	Total adjustment (add steps B-D):	11			
Supporting information:					
	Impacted aquatic resource(s):				
	Preserved aquatic resource(s)/site(s):				
	Threat:				
	Protection type:				

Steps (Column C)	Criteria	Results	PM Justification		
A. (for step 2.c)	Baseline ratio (5:1, 3:1, or 1:1):	1:1	Impact: Ephemeral stream, unvegetated		
			Preservation: high quality vernal pool (high aquatic		
B.	Functions adjustment (5, 3, or 1):	1	resource functions)		
C.	Threat adjustment (5, 3, or 1):	3	moderate threat		
D.	Degree of protection adjustment (5, 3, or 1):	3	restrictive convenant		
E. (for step 3)	Total adjustment (add steps B-D):	7			
Supporting information:					
Impacted aquatic resource(s):					
	Preserved aquatic resource(s)/site(s):				
	Threat:				
	Protection type:				