WETLANDS AND OPEN WATERS
MITIGATION WORKSHEETS

ADVERSE IMPACT FACTORS

Factor	Options						
Dominant Effect	Fill 2.0	Dredge 1.8	Impound 1.6	Drain 1.4	Flood 1.2	Clear 1.0	Shade 0.5
Duration of Effects	7+ years 2.0	5-7 years 1.5	3-5 years 1.0	1-3 years 0.5	< 1 year 0.1		
Existing Condition	Class 1 2.0	Class 2 1.5	Class 3 1.0	Class 4 0.5	Class 5 0.1		
Lost Kind	Kind A 2.0	Kind B 1.5	Kind C 1.0	Kind D 0.5	Kind E 0.1		
Preventability	High 2.0	Moderate 1.0	Low 0.5	None 0			
Rarity Ranking	Rare 2.0	Uncommon 0.5	Common 0.1				

† These factors are determined on a case-by-case basis.

REQUIRED MITIGATION CREDITS WORKSHEET

Factor	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6
Dominant Effect						
Duration of Effect						
Existing Condition						
Lost Kind						
Preventability						
Rarity Ranking						
Sum of r Factors	$R_1 =$	$R_2 =$	$R_3 =$	$R_4 =$	$R_5 =$	$R_6 =$
Impacted Area	$AA_1 =$	$AA_2 =$	$AA_3 =$	$AA_4 =$	$AA_5 =$	$AA_6 =$
$R \times AA =$						

Total Required Credits $= \sum (R \times AA) =$

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ESTABLISHMENT (CREATION) MITIGATION FACTORS

Factor	Options				
Credit Schedule	Schedule 5 0	Schedule 4 0.1	Schedule 3 0.2	Schedule 2 0.3	Schedule 1 0.4
Hydrology	N. A. 0	Mechanical 0	Created 0.1	Natural 0.4	
Kind	Category 2 0.2	Category 1 0.6			
Maintenance	High 0	Moderate 0.1	Low 0.2	None 0.3	
Monitoring and Contingencies Plan	N/A 0	Minimum 0.1	Moderate 0.2	Substantial 0.3	Excellent 0.4
Control	RC 0.1	RC + CE or GPP 0.3	RC + CE + GPP 0.5		
Vegetation	N/A 0	Natural 0.1	Planted 0.4		

PROPOSED ESTABLISHMENT (CREATION) MITIGATION WORKSHEET

Factor	Area 1	Area 2	Area 3	Area 4	Area 5
Credit Schedule					
Hydrology					
Kind					
Maintenance					
Monitoring and Contingencies Plan					
Control					
Vegetation					
Sum of m Factors	$M_1 =$	$M_2 =$	$M_3 =$	$M_4 =$	$M_5 =$
Mitigation Area	$A_1 =$	$A_2 =$	$A_3 =$	$A_4 =$	$A_5 =$
M x A =					

Total Creation Credits $= \sum (M \times A) =$

WETLANDS AND OPEN WATERS
MITIGATION WORKSHEETS

RESTORATION/ENHANCEMENT MITIGATION FACTORS

Factor	Options				
Net Improvement Vegetation	Minimal Enhancement 0.1 ----------------------------- to ----------------------------- 1.4 Complete Restoration				
Net Improvement Hydrology	Minimal Enhancement 0.1 ----------------------------- to ----------------------------- 1.4 Complete Restoration				
Credit Schedule	Schedule 5 0	Schedule 4 0.1	Schedule 3 0.2	Schedule 2 0.3	Schedule 1 0.4
Kind	Category 2 0.2	Category 1 0.6			
Maintenance	High 0	Moderate 0.1	Low 0.2	None 0.3	
Monitoring and Contingencies Plan	N/A 0	Minimum 0.1	Moderate 0.2	Substantial 0.3	Excellent 0.4
Control	RC 0.1	RC + CE or GPP 0.3	RC + CE + GPP 0.5		

PROPOSED RESTORATION/ENHANCEMENT MITIGATION WORKSHEET

Factor	Area 1	Area 2	Area 3	Area 4	Area 5
Net Improvement Vegetation					
Net Improvement Hydrology					
Credit Schedule					
Kind					
Maintenance					
Monitoring and Contingencies Plan					
Control					
Sum of m Factors	$M_1 =$	$M_2 =$	$M_3 =$	$M_4 =$	$M_5 =$
Mitigation Area	$A_1 =$	$A_2 =$	$A_3 =$	$A_4 =$	$A_5 =$
$M \times A =$					

Total Restoration/Enhancement Credits = $\sum$ (M × A) =

WETLANDS AND OPEN WATERS
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PRESERVATION MITIGATION FACTORS

Factor	Options			
Degree of Threat	None 0	Low 0.1	Moderate 0.3	High 0.5
Kind	Category 2 0.2	Category 1 0.6		
Control	RC 0.1	RC + CE or GPP 0.3	RC + CE + GPP 0.5	

PROPOSED PRESERVATION MITIGATION WORKSHEET

Factor	Area 1	Area 2	Area 3	Area 4	Area 5
Degree of Threat					
Kind					
Control					
Sum of m Factors	$M_1=$	$M_2=$	$M_3=$	$M_4=$	$M_5=$
Mitigation Area	$A_1=$	$A_2=$	$A_3=$	$A_4=$	$A_5=$
M x A =					

Total Preservation Credits = $\sum$ (M x A) =

WETLANDS AND OPEN WATERS
MITIGATION WORKSHEETS

MINIMUM UPLAND BUFFER WIDTHS FOR MITIGATION CREDIT [†]

Adjacent Land Use Category	Minimum Width
Single Family Residential	50 feet
Multi-Family	75 feet
Commercial	75 feet
Industrial	100 feet
Landfill	100 feet
Other Categories	case-by-case

[†] widths are based on linear, constant elevation measurement

BUFFER MITIGATION FACTORS

Factors	Options				
Upland Buffer Factor (U1)	>95% 1.0	68% to 95% 0.8	50% to 67% 0.6	33% to 49% 0.3	<33% 0.1
Buffer Enhancement Factor (U2)	>95% 0.15	50% to 95% 0.1	<50% 0.05		

UPLAND BUFFER CREDIT WORKSHEET

	Area 1	Area 2	Area 3	Area 4	Area 5
Total Jurisdictional Boundary (B1)*					
Buffered Jurisdictional Boundary (B2)*					
(B2 ÷ B1) x 100 = % Buffered					
Acres of Upland Buffer (A1)					
Upland Buffer Factor (U1)					
A1 x U1 = C1					
Aquatic Mitigation Area Acres (A2)					
Buffer Enhancement Factor (U2)					
A2 x U2 = C2					
C1 + C2 = D	$D_1=$	$D_2=$	$D_3=$	$D_4=$	$D_5=$

Total Buffer Credit = $\sum D_{1-5}=$ [   ]

* B1 = Total linear feet of jurisdictional boundary of each proposed restoration, enhancement, preservation and/or creation area.
* B2 = Total linear feet of jurisdictional boundary proposed to be buffered for each restoration, enhancement, preservation and/or creation area.

WETLANDS AND OPEN WATERS
MITIGATION WORKSHEETS

Mitigation Summary Worksheet For Permit Application #_____

I. Required Mitigation

A. Total Required Mitigation Credits =

II. **Mitigation Credit Summary**	**Credits**	**Acres**
B. Mitigation Bank		
C. Restoration and/or Enhancement		
D. Creation		
E. Functional Replacement Mitigation = B + C + D		
F. Upland Buffer		
G. Preservation		
H. Total Proposed Non-Bank Mitigation = E + F + G		

The following criteria must be satisfied for the mitigation proposal to meet minimum SOP requirements:

1. Total Proposed Mitigation (Row H) must be greater than or equal to Total Required Mitigation Credits (Row A).

2. Functional Replacement Mitigation (Row E) must be at least 50% of Row A.

3. Preservation Mitigation (Row G) can be up to, but not more than 50% of Row A, if no Upland Buffer Credits are proposed. If Upland Buffer Credits are proposed, then Preservation Mitigation may be reduced to 30% of the Total Required Mitigation Credits.

4. Upland Buffer (Row F) cannot exceed 20% of the Total Required Mitigation (Row A). The following table provides examples of how Preservation and Upland Buffer Mitigation can be used in combination:

Total Required Mitigation Credits	Functional Replacement Credits	Preservation Credits	Upland Buffer Credits
100	50	50	0
100	50	40	10
100	50	30	20