Ol backow	Functional Capacity Index (FCI)	apacity Ind	lex (FCI)	Impact	Functional Capacity Units (FCU)	Sapacity Ur	its (FCU)
Welland	TSSW	MPAC	RSEC	Acres	TSSW	MPAC	RSEC
W1	0.91	0.65	0.77	0.2	0.18	0.13	0.15
W2	1.00	1.00	0.82	2.4	2.40	2.40	1.96
W3	06.0	0.42	0.74	0.3	0.27	0.13	0.22
W4	0.91	0.65	0.77	4.9	4.47	3.21	3.79
W5	0.94	0.83	0.75	0.2	0.19	0.17	0.15
W6	0.91	0.65	0.77	1.0	0.91	0.65	0.77
W7	0.85	0.83	0.73	1.4	1.19	1.17	1.03
W8	06.0	0.75	0.74	0.2	0.18	0.15	0.15
6M	06.0	0.75	0.74	3.6	3.24	2.70	2.65
TOTALS	8.22	6.53	6.83	14.2	13.03	10.71	10.87
			!				
				Total FCUs	13	13	13
							39

Removal & Sequestrian of Elements & Compounds 0.7733 0.0000

pre post

1.00 0.10 0.50

/redox Vsorpt

Vdetritus

1.00

Vconnect

Impacted acres= FCU; FCI x wetland acres per WAA:

FCU; FCI x wetland acres per WAA:	IAA:	acres= 0.20
WAA#	Pre-project FCUs	Post Project FCUs
Temp Storage of Water	0.18	00.00
Maintain Plant & Animal	0.13	00:00
Removal of Elements	0.15	0.00

Variable Subindex

/freq

WAA# 2

Potential Functional Capacity Impacts or Improvements

canadam farandan maranana i maranana i	
Temp Storage of Water	-0.18
Maintain Plant & Animal	-0.13
Removal of Elements	-0.15

00.00 0

Vrich Vbasal

Vtopo Vcwd Vwood Vtree

Vdensity Vmid Vherb Vdetritus 0.00

Vsorpt Vconnect

/redox

alveston District iverine Forested HGM		Interir
eston D rine Fol		HGM
alves iverir	o o	ne Forested
O 12	Galves	Riverir

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		Wetland 1 (Forested)	Riverine Forested HGM Interim
Variable	Subindex	Description	Observations
Vdur	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecutive days	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)
Vfreq	1.00	Floods or pond annually 5 out of 5 years (floodway)	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)
Vtopo	1.00	Greater than 30% of the WAA is represented by dips, hummocks, channel sloughs and/or q50% or more of the WAA is represented by dips and sloughs.	50% or more of the WAA is represented by dips and sloughs.
Vcwd	1.00	More than 7 pieces of cwd greater than 3" diameter along 100' transect	Eight pices of cwd greater than 3" diameter along a 100' diameter were observed while performing the delineation onsite.
Vwood	0.50	34 to 66% of the WAA is covered with woody vegetation	Within the WAA, woody vegetation was observed covering approximately 65% of the wetland.
Vtree	0.30	Less than 20% of the stand is oak, hickory, cypress, maple and/or elm.	Less than 20% mast producers were observed within the WAA.
Vrich	09:0	Three tree species present	Three tree species were observed within the WAA.
Vbasal	0.40	The average basal area of the WAA is less than 60 square ft /acre	The average basal area, observed using a 10 factor prism, was approximately 50 square ft/acre.
Vdensity	0.60	The WAA averages a tree density of 250-500 trees/acre OR 50-100 trees/acre	Approximately 50 trees/acre were observed in the field (only including trees with a 3-inch diameter or greater).
Vmid	0.75	Midstory coverage of the WAA is between 31-50 %	Within the WAA, midstory coverage was limited, and ranged from 40%.
Vherb	0.30	Herbaceous cover in the WAA is less than 5% or greater than 50%	Within the WAA, herbaceous coverage was sparse, and ranged from 90%.
Vdetritus	1.00	Greater than 85% of the area possesses an O or A horizon	Based on soil samples, 95% of the WAA contained detritus in the upper soil layers.
Vredox	0.10	Redox features less than 20%	Based on soil samples, no redox composition was observed in the field.
Vsorpt	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non-montmorillonitic clays	Based on soil samples, the WAA was dominated by loamy soils (sandy loam).
Vconnect	1.00	Wetland plus four habitats and/or surrounded by forested	Based on GIS analysis, the WAA was surrounded by multiple habitats including emergent wetland, forested wetland, shrub/scrub wetland, lawn, and open water.

WAA 1: Pre-Construction Scores

Wetland 2 (Emergent - WAA 1)

Galveston District Riverine Herbaceous/Shrub HGM Interim

Temporary Storage & Dentention of Storage Water 1.0000 0.0000

pre post

1.00 0.25

Vfred Vtopo

poom,

Maintain Plant & Animal Communities

1.0000 pre post

Removal & Sequestrian of Elements & Compounds 0.8167 0.0000

pre post

Vconnect

sorpt,

detritus redox WAA 1: Post Construction Scores Variable Subindex /herb /detritus /redox /sorpt /connect /topo /wood

Post Project FCUs 0.00 Impacted acres= Pre-project FCUs 2.40 FCU; FCI x wetland acres per WAA:
WAA# Temp Storage of Water Maintain Plant & Animal Removal of Elements

 Potential Functional Capacity Impacts or Improvements

 Temp Storage of Water
 -2.40

 Maintain Plant & Animal
 -2.40

 Removal of Elements
 -1.96

Variable	Subindex	Description	Observations
	1.00	The WAA is loc In an average vear at 80% of the WAA either floods and/or ponds for at least 14 consecutiv48339C0340H)	ated within the FEMA Mappe
Vfreq	1.00	The WAA is loc In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecutiv48339C0540H)	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)
Vtopo	1.00	Greater than 30% of the WAA is represented by dips, hummocks, channel sloughs and/or 480% of the WAA is represented by hummocks.	80% of the WAA is represented by hummocks.
Vwood	0.25	11 to 33% of the WAA is covered with woody vegetation	Within the WAA, woody vegetation was observed covering approximately 22% of the wetland.
Vmid	1.00	Midstory coverage of the WAA is more than 75%	Within the WAA, midstory coverage was 90%.
Vherb	1.00	Herbaceous cover in the WAA averages between 50-75%	Within the WAA, herbaceous coverage was 100%.
Vdetritus	1.00	Greater than 85% of the area possesses an O or A horizon	95% of the WAA contained detritus in the upper soil layers.
Vredox	1.00	Redox concentrations represent at least 20% of the pedon within the top 4 inches of the soil surface, or feature masked due to parent material but conditions are conducive to redoximorphic processes. (many mottles)	Soil samples could not be collected due to inundation, the redox compositionis assumed to be greater than 20%.
Vsorpt	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non-montmorillonitic clays	The mapped soil type, Sorter-Tarkington complex, 0-1 percent slopes, is a very fine sandy loam.
Vconnect	1.00	Wetland plus four habitats and/or surrounded by forested	Based on GIS analysis, the WAA was surrounded by multiple habitats within 600-feet including emergent wetland, forested wetland, shrub/scrub wetland, lawn, and open water.

Wetland 3 (Emergent - WAA 1)

Galveston District Riverine Herbaceous/Shrub HGM Interim

WAA 1: Pre-Construction Scores

Subindex
1.00
1.00
1.00
0.10
0.25
1.00
1.00
1.00
0.50

Temporary Storage & Dentention of Storage Water

pre 0.9014 post 0.0000

Maintain Plant & Animal Communities

pre 0.4167 post 0.0000

Removal & Sequestrian of Elements & Compounds

pre 0.7367 post 0.0000

WAA 1: Post Construction Scores

Variable	Subindex
Vdur	0.00
Vfreq	0.00
Vtopo	0.00
Vwood	0.00
Vmid	0.00
Vherb	0.00
Vdetritus	0.00
Vredox	0.00
Vsorpt	0.00
Vconnect	0.00

Impacted

FCU; FCI x wetland acres per W	/AA:	acres=	0.30
WAA#	Pre-project FCUs	Post Project FCUs	
Temp Storage of Water	0.27	0.00	
Maintain Plant & Animal	0.13	0.00	
Removal of Elements	0.22	0.00	

Temp Storage of Water	-0.27
Maintain Plant & Animal	-0.13
Removal of Elements	-0.22

Variable	Subindex	Description	Observations
Vdur	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecuti	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)
Vfreq	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecutive	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)
Vtopo	1.00	Greater than 30% of the WAA is represented by dips, hummocks, channel sloughs and/or	The WAA is a channel feature.
Vwood	0.10	0-10% if the WAA is covered with woody vegetation	Within the WAA, woody vegetation was not observed.
Vmid	0.25	Midstory coverage of the WAA is between 1-25%	Within the WAA, midstory coverage was 10%.
Vherb	1.00	Herbaceous cover in the WAA averages greater than 75%	Within the WAA, herbaceous coverage was 100%.
Vdetritus	1.00	Greater than 85% of the area possesses an O or A horizon	100% of the WAA contained detritus in the upper soil layers.
Vredox	1.00	Redox concentrations represent at least 20% of the pedon within the top 4 inches of the soil surface, or feature masked due to parent material but conditions are conducive to redoximorphic processes. (many mottles)	Soil samples could not be collected due to inundation, the redox compositionis assumed to be greater than 20%.
Vsorpt	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non- montmorillonitic clays	The mapped soil type, Sorter-Tarkington complex, 0-1 percent slopes, is a very fine sandy loam.
Vconnect	1.00	Wetland plus four habitats and/or surrounded by forested	Based on GIS analysis, the WAA was surrounded by multiple habitats including emergent wetland, forested wetland, shrub/scrub wetland, lawn, and open water.

Wetland 4 (Forested - WAA 1)

WAA 2 Alternate Debit Analysis: Medium Quality

Temporary Storage & Dentention of Storage Water 0.9129 pre 0.0000 post

Maintain Plant & Animal Communities

0.6542 post 0.0000

Removal & Sequestrian of Elements & Compounds

0.7733 pre 0.0000 post

0.10

FCU; FCI x wetland acres per WAA:

acres= 4.90 Post Project FCUs

Impacted

Galveston District

Riverine Forested HGM Interim

WAA# Pre-project FCUs Temp Storage of Water 4.47 0.00 Maintain Plant & Animal 0.00 3.21 Removal of Elements 0.00 3.79

Potential Functional Capacity Impacts or Improvements

Temp Storage of Water	-4.47
Maintain Plant & Animal	-3.21
Removal of Elements	-3.79

Variable	Subindex
Vdur	1.00
Vfreq	1.00
Vtopo	1.00
Vcwd	1.00
Vwood	0.50
Vtree	0.30
Vrich	0.60
Vbasal	0.40
Vdensity	0.60
Vmid	0.75

pre

Vherb 0.30

Vdetritus 1.00 Vredox Vsorpt 0.50

Vconnect 1.00

WAA# 2

Vconnect

Variable Subindex Vdur 0.00 Vfreq 0.00 Vtopo 0.00 Vcwd 0.00 Vwood 0.00 Vtree 0.00 Vrich 0.00 0.00 Vbasal Vdensity 0.00 Vmid 0.00 0.00 Vherb Vdetritus 0.00 0.00 Vredox 0.00 Vsorpt

0.00

Wetland 4 (Forested)

Riverine Forested HGM Interim

		wetiand 4 (Forested)	Riverine Forested HGM Interim
Variable	Subindex	Description	Observations
		In an average year at 80% of the WAA either floods and/or ponds for at least 14	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel
Vdur	1.00	consecutive days	48339C0530G and 48339C0540H)
			The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel
Vfreq	1.00	Floods or pond annually 5 out of 5 years (floodway)	48339C0530G and 48339C0540H)
\/topo	1.00	Greater than 30% of the WAA is represented by dips, hummocks, channel sloughs and/or or	E00% of the WAA is represented by dips and sloughs
Vtopo	1.00	Stream than 50 % of the WAA is represented by dips, humiliocks, chainler sloughs and/or t	30 % of the WAA is represented by dips and sloughs.
Vcwd	1.00	More than 7 pieces of cwd greater than 3" diameter along 100' transect	Eight pices of cwd greater than 3" diameter along a 100' diameter were observed.
VCWU	1.00	Involve than 7 pieces of two greater than 3 diameter along 100 transect	Light pices of cwd greater than 3 diameter along a 100 diameter were observed.
			Within the WAA, woody vegetation was observed covering approximately 65% of the
Vwood	0.50	34 to 66% of the WAA is covered with woody vegetation	wetland.
Vtree	0.30	Less than 20% of the stand is oak, hickory, cypress, maple and/or elm.	No mast producers were observed within the WAA.
		7 77 1	·
Vrich	0.60	Three tree species present	Three tree species were observed within the WAA.
			The average basal area, observed using a 10 factor prism, was approximately 50 square
Vbasal	0.40	The average basal area of the WAA is less than 60 square ft /acre	ft/acre.
			Approximately 50 trees/acre were observed in the field (only including trees with a 3-
Vdensity	0.60	The WAA averages a tree density of 250-500 trees/acre OR 50-100 trees/acre	inch diameter or greater).
Vmid	0.75	Midstory coverage of the WAA is between 31-50 %	Within the WAA, midstory coverage was limited, and was 40%.
Vherb	0.30	Herbaceous cover in the WAA is less than 5% or greater than 50%	Within the WAA, herbaceous coverage was sparse, and was 90%.
Vdetritus	1.00	Greater than 85% of the area possesses an O or A horizon	Based on soil samples, 95% of the WAA contained detritus in the upper soil layers.
) (a.e. al	0.40	Deduction to the control of the cont	December with a second constant of the second
Vredox	0.10	Redox features less than 20%	Based on soil samples, no redox composition was observed in the field.
\/a===+	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non-	December and community that WAA was demains to the last constant.
Vsorpt	0.50	montmorillonitic clays	Based on soil samples, the WAA was dominated by loamy soils (sandy loam).
Vconnect	1.00	Wetland plus four habitats and/or surrounded by forested	Based on GIS analysis, the WAA was surrounded by multiple habitats including emergent wetland, forested wetland, shrub/scrub wetland, lawn, and open water.
V COITICCE	1.00	1 Tradition place four fluoritate and/or suffounded by forested	John Gorit Wottand, 10/05/00 Wottand, 5/1/10/50/10 Wottand, 10/07/1, and Open Water.

Wetland 5 (Emergent - WAA 1)

Galveston District Riverine Herbaceous/Shrub HGM Interim

WAA 1: Pre-Construction Scores

Variable	Subindex
Vdur	1.00
Vfreq	1.00
Vtopo	1.00
Vwood	0.10
Vmid	0.50
Vherb	1.00
Vdetritus	1.00
Vredox	1.00
Vsorpt	0.50
Vconnect	1.00

Temporary Storage & Dentention of Storage Water

pre 0.9354 post 0.0000

Maintain Plant & Animal Communities

pre 0.8333 post 0.0000

Removal & Sequestrian of Elements & Compounds

pre 0.7533 post 0.0000

WAA 1: Post Construction Scores

Subindex
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00

Impacted

FCU; FCI x wetland acres per WAA:		acres=	0.20
WAA#	Pre-project FCUs	Post Project FCUs	
Temp Storage of Water	0.19	0.00	
Maintain Plant & Animal	0.17	0.00	
Removal of Elements	0.15	0.00	

Temp Storage of Water	-0.19
Maintain Plant & Animal	-0.17
Removal of Elements	-0.15

M - 2-1-1-	0.1.11	Burgan	01
Variable	Subindex	Description	Observations
Vdur	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecuti	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)
Vfreq	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecuti	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)
Vtopo	1.00	Greater than 30% of the WAA is represented by dips, hummocks, channel sloughs and/or	The WAA is a channel feature.
Vwood	0.10	0-10% if the WAA is covered with woody vegetation	Within the WAA, woody vegetation was observed covering approximately 10% of the wetland.
Vmid	0.50	Midstory coverage of the WAA is between 25-50%	Within the WAA, midstory coverage was 35%.
Vherb	1.00	Herbaceous cover in the WAA averages greater than 75%	Within the WAA, herbaceous coverage was 100%.
Vdetritus	1.00	Greater than 85% of the area possesses an O or A horizon	90% of the WAA contained detritus in the upper soil layers.
Vredox	1.00	Redox concentrations represent at least 20% of the pedon within the top 4 inches of the soil surface, or feature masked due to parent material but conditions are conducive to redoximorphic processes. (many mottles)	Soil samples could not be collected due to inundation, the redox compositionis assumed to be greater than 20%.
Vsorpt	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non-montmorillonitic clays	The mapped soil type, Sorter-Tarkington complex, 0-1 percent slopes, is a very fine sandy loam.
Vconnect	1.00	Wetland plus four habitats and/or surrounded by forested	Based on GIS analysis, the WAA was surrounded by multiple habitats including emergent wetland, forested wetland, shrub/scrub wetland, lawn, and open water.

Wetland 6 (Forested - WAA 1)

WAA 2 Alternate Debit Analysis: Medium Quality

Variable	Subindex		Temporary Storage & Dentention of Storage Water
Vdur	1.00	pre	0.9129
Vfreq	1.00	post	0.0000
Vtopo	1.00		
Vcwd	1.00		
Vwood	0.50		Maintain Plant & Animal Communities

0.30 0.6542 pre 0.60 post 0.0000 0.40

Removal & Sequestrian of Elements & Compounds

0.7733 pre 0.0000

1.00 Vdetritus post Vredox 0.10

WAA# 2

Vtree

Vrich

Vbasal Vdensity

Vmid

Vherb

Vsorpt

Vconnect

0.60

0.75

0.30

0.50

1.00

Variable	Subindex
Vdur	0.00
Vfreq	0.00
Vtopo	0.00
Vcwd	0.00
Vwood	0.00
Vtree	0.00
Vrich	0.00
Vbasal	0.00
Vdensity	0.00
Vmid	0.00
Vherb	0.00
Vdetritus	0.00
Vredox	0.00
Vsorpt	0.00
Vconnect	0.00

Impacted FCU; FCI x wetland acres per WAA: acres=

FCU; FCI x wetland acres per WAA:		acres=	1.00
WAA#	Pre-project FCUs	Post Project FCUs	
Temp Storage of Water	0.91	0.00	
Maintain Plant & Animal	0.65	0.00	
Removal of Elements	0.77	0.00	

Potential Functional Capacity Impacts or Improvements

Temp Storage of Water	-0.91
Maintain Plant & Animal	-0.65
Removal of Elements	-0.77

Galveston District Riverine Forested HGM Interim

Wetland 6 (Forested)

Riverine Forested HGM Interim

		wetland 6 (Forested)	Riverine Forested HGM Interim
Variable	Subindex	Description	Observations
		In an average year at 80% of the WAA either floods and/or ponds for at least 14	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel
Vdur	1.00	consecutive days	48339C0530G and 48339C0540H)
			The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel
Vfreq	1.00	Floods or pond annually 5 out of 5 years (floodway)	48339C0530G and 48339C0540H)
Vtopo	1.00	Greater than 30% of the WAA is represented by dips, hummocks, channel sloughs and/or or	50% of the WAA is represented by dins and sloughs
ντορο	1.00	oreated than 50% of the WAA is represented by dips, numinous, chamile sloughs and/or t	30 % of the WAA is represented by this and sloughts.
Vcwd	1.00	More than 7 pieces of cwd greater than 3" diameter along 100' transect	Eight pices of cwd greater than 3" diameter along a 100' diameter were observed.
VCWU	1.00	INDICE HIGHTY PICCOS OF OWN GROAD HIGHTO GIAINISTO GIAIN	Eight ploop of own greater than o mainteer along a 100 diameter were observed.
			Within the WAA, woody vegetation was observed covering approximately 65% of the
Vwood	0.50	34 to 66% of the WAA is covered with woody vegetation	wetland.
Vtree	0.30	Less than 20% of the stand is oak, hickory, cypress, maple and/or elm.	No mast producers were observed within the WAA.
Vrich	0.60	Three tree species present	Three tree species were observed within the WAA.
			The average basal area, observed using a 10 factor prism, was approximately 50 square
Vbasal	0.40	The average basal area of the WAA is less than 60 square ft /acre	ft/acre.
			Approximately 50 trees/acre were observed in the field (only including trees with a 3-
Vdensity	0.60	The WAA averages a tree density of 250-500 trees/acre OR 50-100 trees/acre	inch diameter or greater).
Vmid	0.75	Midstory coverage of the WAA is between 31-50 %	Within the WAA, midstory coverage was limited, and was 40%.
Vherb	0.30	Herbaceous cover in the WAA is less than 5% or greater than 50%	Within the WAA, herbaceous coverage was sparse, and was 90%.
Vdetritus	1.00	Greater than 85% of the area possesses an O or A horizon	Based on soil samples, 95% of the WAA contained detritus in the upper soil layers.
\ /ma al	0.40	Deday feet was less them 200/	December and community and analysis of the second state of the sec
Vredox	0.10	Redox features less than 20%	Based on soil samples, no redox composition was observed in the field.
Voornt	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non-	Record on coil complex, the WAA was dominated by Jacomy coils (complex)
Vsorpt	0.50	montmorillonitic clays	Based on soil samples, the WAA was dominated by loamy soils (sandy loam).
			December 200 and the WAA are a surrounded by modified by by
Vconnect	1.00	Wetland plus four habitats and/or surrounded by forested	Based on GIS analysis, the WAA was surrounded by multiple habitats including emergent wetland, forested wetland, shrub/scrub wetland, lawn, and open water.
	1.00	The state and the state of the	Single House, 10.0000 Houself Houself Houself Houself Houself Houself Houself

Wetland 7 (Emergent - WAA 1)

Galveston District Riverine Herbaceous/Shrub HGM Interim

WAA 1: Pre-Construction Scores

Variable	Subindex	
Vdur	1.00	
Vfreq	1.00	
Vtopo	0.70	
Vwood	0.10	
Vmid	0.50	
Vherb	1.00	
Vdetritus	1.00	
Vredox	1.00	
Vsorpt	0.50	
Vconnect	1.00	

Temporary Storage & Dentention of Storage Water

pre 0.8515 post 0.0000

Maintain Plant & Animal Communities

pre 0.8333 post 0.0000

Removal & Sequestrian of Elements & Compounds

pre 0.7333 post 0.0000

WAA 1: Post Construction Scores

Variable	Subindex
Vdur	0.00
Vfreq	0.00
Vtopo	0.00
Vwood	0.00
Vmid	0.00
Vherb	0.00
Vdetritus	0.00
Vredox	0.00
Vsorpt	0.00
Vconnect	0.00

Impacted

FCU; FCI x wetland acres per W	/AA:	acres=	1.40
WAA#	Pre-project FCUs	Post Project FCUs	
Temp Storage of Water	1.19	0.00	
Maintain Plant & Animal	1.17	0.00	
Removal of Elements	1.03	0.00	

Temp Storage of Water	-1.19
Maintain Plant & Animal	-1.17
Removal of Elements	-1.03

	Nemotia of Elomenta 1.00			
Variable	Subindex	Description	Observations	
Vdur	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecutiv	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)	
Vfreq	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecutive	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)	
Vtopo	0.70	15 - 30% of the WAA is represented by dips, hummocks, channel sloughs and/or other top	20% of the WAA is represented by topographic features.	
Vwood	0.10	0-10% if the WAA is covered with woody vegetation	Within the WAA, woody vegetation was not observed.	
Vmid	0.50	Midstory coverage of the WAA is equal to or less than1%	Within the WAA, no midstory coverage was observed.	
Vherb	1.00	Herbaceous cover in the WAA averages greater than 75%	Within the WAA, herbaceous coverage was 80%.	
Vdetritus	1.00	Greater than 85% of the area possesses an O or A horizon	100% of the WAA contained detritus in the upper soil layers.	
Vredox	1.00	Redox concentrations represent at least 20% of the pedon within the top 4 inches of the soil surface, or feature masked due to parent material but conditions are conducive to redoximorphic processes. (many mottles)	Soil samples could not be collected due to inundation, the redox compositionis assumed to be greater than 20%.	
Vsorpt	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non- montmorillonitic clays	The mapped soil type, Sorter-Tarkington complex, 0-1 percent slopes, is a very fine sandy loam.	
Vconnect	1.00	Wetland plus four habitats and/or surrounded by forested	Based on GIS analysis, the WAA was surrounded by multiple habitats including emergent wetland, forested wetland, shrub/scrub wetland, lawn, and open water.	

Wetland 8 (Shrub/Scrub - WAA 1)

Galveston District Riverine Herbaceous/Shrub HGM Interim

WAA 1: Pre-Construction Scores

Variable	Subindex
Vdur	1.00
Vfreq	1.00
Vtopo	1.00
Vwood	0.10
Vmid	1.00
Vherb	0.25
Vdetritus	1.00
Vredox	1.00
Vsorpt	0.50
Vconnect	1.00

Temporary Storage & Dentention of Storage Water

pre 0.9014 post 0.0000

Maintain Plant & Animal Communities

pre 0.7500 post 0.0000

Removal & Sequestrian of Elements & Compounds

pre 0.7367 post 0.0000

WAA 1: Post Construction Scores

Variable	Subindex
Vdur	0.00
Vfreq	0.00
Vtopo	0.00
Vwood	0.00
Vmid	0.00
Vherb	0.00
Vdetritus	0.00
Vredox	0.00
Vsorpt	0.00
Vconnect	0.00

Impacted

FCU; FCI x wetland acres per W	/AA:	acres=	0.20
WAA#	Pre-project FCUs	Post Project FCUs	
Temp Storage of Water	0.18	0.00	
Maintain Plant & Animal	0.15	0.00	
Removal of Elements	0.15	0.00	

Temp Storage of Water	-0.18
Maintain Plant & Animal	-0.15
Removal of Elements	-0.15

Variable	Subindex	Description	Observations	
Vdur	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecuti	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)	
Vfreq	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecuti	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)	
Vtopo	1.00	Greater than 30% of the WAA is represented by dips, hummocks, channel sloughs and/or	90% of the WAA is represented by topographic features.	
Vwood	0.10	0-10% if the WAA is covered with woody vegetation	Within the WAA, woody vegetation was observed covering approximately 10% of the wetland.	
Vmid	1.00	Midstory coverage of the WAA is more than 75%	Within the WAA, midstory coverage was 80%.	
Vherb	0.25	Herbaceous cover in the WAA average is between 1-25%	Within the WAA, herbaceous coverage was 10%.	
Vdetritus	1.00	Greater than 85% of the area possesses an O or A horizon	95% of the WAA contained detritus in the upper soil layers.	
Vredox	1.00	Redox concentrations represent at least 20% of the pedon within the top 4 inches of the soil surface, or feature masked due to parent material but conditions are conducive to redoximorphic processes. (many mottles)	Soil samples could not be collected due to inundation, the redox compositionis assumed to be greater than 20%.	
Vsorpt	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non- montmorillonitic clays	The mapped soil type, Sorter-Tarkington complex, 0-1 percent slopes, is a very fine sandy loam.	
Vconnect	1.00	Wetland plus four habitats and/or surrounded by forested	Based on GIS analysis, the WAA was surrounded by multiple habitats including emergent wetland, forested wetland, shrub/scrub wetland, lawn, and open water.	

Wetland 9 (Shrub/Scrub - WAA 1)

Galveston District Riverine Herbaceous/Shrub HGM Interim

WAA 1: Pre-Construction Scores

Variable	Subindex	
Vdur	1.00	
Vfreq	1.00	
Vtopo	1.00	
Vwood	0.10	
Vmid	1.00	
Vherb	0.25	
Vdetritus	1.00	
Vredox	1.00	
Vsorpt	0.50	
Vconnect	1.00	

Temporary Storage & Dentention of Storage Water

pre 0.9014 post 0.0000

Maintain Plant & Animal Communities

pre 0.7500 post 0.0000

Removal & Sequestrian of Elements & Compounds

pre 0.7367 post 0.0000

WAA 1: Post Construction Scores

Variable	Subindex
Vdur	0.00
Vfreq	0.00
Vtopo	0.00
Vwood	0.00
Vmid	0.00
Vherb	0.00
Vdetritus	0.00
Vredox	0.00
Vsorpt	0.00
Vconnect	0.00

Impacted

FCU; FCI x wetland acres per WAA:		acres=	3.60
WAA#	Pre-project FCUs	Post Project FCUs	
Temp Storage of Water	3.24	0.00	
Maintain Plant & Animal	2.70	0.00	
Removal of Elements	2.65	0.00	

Temp Storage of Water	-3.24
Maintain Plant & Animal	-2.70
Removal of Elements	-2.65

Variable	Subindex	Description	Observations		
Vdur	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecuti	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)		
Vfreq	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecutive	The WAA is located within the FEMA Mapped 100-year floodplain (FIRM Panel 48339C0530G and 48339C0540H)		
Vtopo	1.00	Greater than 30% of the WAA is represented by dips, hummocks, channel sloughs and/or	90% of the WAA is represented by topographic features.		
Vwood	0.10	0-10% if the WAA is covered with woody vegetation	Within the WAA, woody vegetation was observed covering approximately 10% of the wetland.		
Vmid	1.00	Midstory coverage of the WAA is more than 75%	Within the WAA, midstory coverage was 80%.		
Vherb	0.25	Herbaceous cover in the WAA average is between 1-25%	Within the WAA, herbaceous coverage was 10%.		
Vdetritus	1.00	Greater than 85% of the area possesses an O or A horizon	95% of the WAA contained detritus in the upper soil layers.		
Vredox	1.00	Redox concentrations represent at least 20% of the pedon within the top 4 inches of the soil surface, or feature masked due to parent material but conditions are conducive to redoximorphic processes. (many mottles)	Soil samples could not be collected due to inundation, the redox compositionis assumed to be greater than 20%.		
Vsorpt	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non- montmorillonitic clays	The mapped soil type, Sorter-Tarkington complex, 0-1 percent slopes, is a very fine sandy loam.		
Vconnect	1.00	Wetland plus four habitats and/or surrounded by forested	Based on GIS analysis, the WAA was surrounded by multiple habitats including emergent wetland, forested wetland, shrub/scrub wetland, lawn, and open water.		