

Wetland ID	Functional Capacity Index (FCI)			Impact Acres	Functional Capacity Units (FCU)		
	TSSW	MPAC	RSEC		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	0.90	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	0.90	0.75	0.74	0.2	0.18	0.15	0.15
W9	0.90	0.75	0.74	3.6	3.24	2.70	2.65
<b>TOTALS</b>	<b>8.22</b>	<b>6.53</b>	<b>6.83</b>	<b>14.2</b>	<b>13.03</b>	<b>10.71</b>	<b>10.87</b>
				<b>Total FCUs</b>	<b>13</b>	<b>13</b>	<b>13</b>
							<b>39</b>



**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 oxbow lakes	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 pieces 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	0.60	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.
Vsorp	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.

Galveston District  
Riverine Herbaceous/Shrub HGM Interim

Wetland 2 (Emergent - WAA 1)

WAA 1: Pre-Construction Scores

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

Temporary Storage & Detention of Storage Water

pre	1.0000
post	0.0000

Maintain Plant & Animal Communities

pre	1.0000
post	0.0000

Removal & Sequestration of Elements & Compounds

pre	0.8167
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
Vsorp	0.00
Vconnect	0.00

WAA#	Pre-project FCUs	Post Project FCUs	Impacted acres=
Temp Storage of Water	2.40	0.00	2.40
Maintain Plant & Animal	2.40	0.00	
Removal of Elements	1.96	0.00	

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
Vdur	1.00	In an average year at 80% of the WAA either floods and/or ponds for at least 14 consecutive years.	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 years.	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 mounds.	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 composition is assumed to be greater than 20%.
Vsorp	0.50	WAA is dominated by loamy (silt loams, very fine sandy loams, loam) or non-montmorillonitic clays	The mapped soil type, Soter-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**

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

**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	
<b>FCU: FCI x wetland acres per WAA:</b>		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	

**Potential Functional Capacity Impacts or Improvements**

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 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 consecutiv	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 c	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 composition is 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)		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 d	50% 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.
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.	No mast producers were observed within the WAA.
Vrich	0.60	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 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.
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.

**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**

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= 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

**Potential Functional Capacity Impacts or Improvements**

Temp Storage of Water	-0.19
Maintain Plant & Animal	-0.17
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 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 consecutiv	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 c	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)		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 d	50% 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.
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.	No mast producers were observed within the WAA.
Vrich	0.60	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 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.
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.

**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	
<b>FCU: FCI x wetland acres per WAA:</b>		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	

**Potential Functional Capacity Impacts or Improvements**

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

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 consecutiv	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 WAA: 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

**Potential Functional Capacity Impacts or Improvements**

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 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 consecutiv	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 c	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

**Potential Functional Capacity Impacts or Improvements**

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 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 c	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.