Pine Log Creek Hydrologic Enhancements
(Estimated UMAM Credits)

15 September 2010 (IRT Consensus)

Polygon	Acres	L1	L2	W1	W1	C1	C2	W/Out Score	With Score	Raw Delta	Time Lag	PF Factor	Risk	Adjusted Delta	UMAM Credits
Polygon A (Road Removal Site 1, 3, 6, 7)	5.28	0	9	0	8	0	9	0.00	0.87	0.87	1.25	1	1.25	0.55	2.929
Polygon A (Road Removal Site 4 & 5)	6.45	0	8	0	8	0	6	0.00	0.73	0.73	1.25	1	1.00	0.59	3.784
Polygon B (Ditches - Site 1, 3, 6, 7)	3.96	7	9	6	8	4	9	0.57	0.87	0.30	1.25	1	1.25	0.19	0.760
Polygon B (Ditches - Site 4 & 5)	4.84	7	8	6	8	4	6	0.57	0.73	0.17	1.25	1	1.00	0.13	0.645
Polygon C (10 Low-Water-Crossings)	71.39	7	8	7	8	7	8	0.70	0.80	0.10	1.25	1	1.00	0.08	5.711
Polygon D (21 Culvert Modifications)	34.02	7	7	7	8	7	7	0.70	0.73	0.03	1	1	1.00	0.03	1.134
Polygon E (31 Ditch Plugs / Riser)	12.71	7	7	7	9	7	7	0.70	0.77	0.07	1	1	1.00	0.07	0.847
Polygon F (1 Bridge)	6.49	7	8	7	9	7	8	0.70	0.83	0.13	1	1	1.00	0.13	0.865
	--- 145.14														--- **16.68**

L1/L2 - Location and Landscape Support (L1 = Without Mitigation / L2 = W/Mitigation)

W1/ W2 - Water Environment (W1 = Without Mitigation / W2 = With Mitigation)

C1/C2 - Community Structure (C1 = Without Mitigation / C2 = With Mitigation)

Raw Delta = w/Mitigation Score - Without Mitigation Score

P = Preservation Factor (0 to 1; value is less than 1 ONLY for preservation-only mitigation)

Time Lag (T) = 1 (none) to 3.91 (>55 years)

Risk (R) = 1 (minimal) to 3 (high)

Adjusted Delta = (Raw Delta * PF) / (Time Lag * Risk)

UMAM Functional Gain = * Adjusted Delta * Acres

(Note: Site 2 Road-Removal Dropped)

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon A (Road Removal - Site 1, 3, 6, 7)**

FLUCCS code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (Vegetated Non-Forested)	**---**	**Mitigation**	**5.28 Acres**

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Apalachicola	**III**	**---**

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Component of Tates Hell Swamp with myriad connections to other wetlands and surface waters. However, hydrologic connections have been extensively modified by a network of logging roads and ditches.

Assessment area description

Road-fill (i.e., logging road) in historic wetland.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tates Hell State Forest	**Not unique.**

Functions	Mitigation for previous permit/other historic use
Water storage; water quality; floral and faunal habitat.	**None**

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
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Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)

Additional relevant factors

Assessment conducted by	Assessment date(s)
IRT Consensus	**9/15/2010**

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon A (Road Removal Site 1, 3, 6, 7)**
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	**NWFWMD Staff**	

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/out mit	w/mit	
.500(6)(a) Location and Landscape Support	0	9	**Without Mitigation** - Not a wetland (continued use as a forest access road). **With Mitigation** - Removal of road; natural regeneration of native wetland vegetation; improved connectivity between adjacent wetlands; restoration of natural hydrologic flows.
.500(6)(b)Water Environment (N/A for Uplands)	0	8	**Without Mitigation** - Not a wetland (continued existence of forest road and disruption of natural hydrologic flows). **With Mitigation** - Restoration of wetland hydrology.
.500(6)(c)Community structure Vegetation and/or Benthic Community	0	9	**Without Mitigation** - Not a wetland (continued existence as a forest road). **With Mitigation** - Reestablishment of native wetland vegetation via natural recruitment from adjacent wetlands.

Score = sum of above scores/30 (if uplands, divide by 20)	w/out mit	w/mit
	0.00	0.87

Raw Delta = [w/mit - w/out mit]
0.87

Preservation Adjustment Factor (PF) =	**1**
Time Lag Factor (6-10 Years) =	**1.25**
Risk Factor =	**1.25**
Adjusted Delta [(Raw Delta * PF) / (T * R)] =	**0.55**

UMAM Functional Assessment	
Polygon Acreage =	**5.28**
Functional Gain w/Mitigation (Adjusted Delta * Acres) =	**2.93**

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon B (Ditches - Site 1, 3, 6, 7)**

FLUCCS code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (Vegetated Non-Forested)	**---**	**Mitigation**	**3.96 Acres**

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Apalachicola	**III**	**---**

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetlands adjacent and contiguous to Shoal River. Generally surrounded by natural buffers in need of ecological management.

Assessment area description

Ditch adjacent to logging road.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tates Hell State Forest	**Not unique.**

Functions	Mitigation for previous permit/other historic use
Water storage; water quality; floral and faunal habitat.	**None**

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)

Additional relevant factors

Assessment conducted by	Assessment date(s)
IRT Consensus	**9/15/2010**

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon B (Ditches - Site 1, 3, 6, 7)**
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	**NWFWMD Staff**	

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/out mit	w/mit	
.500(6)(a) Location and Landscape Support	7	9	**Without Mitigation** - Continued roadside ditch wetlands. **With Mitigation** - Elimination of ditches and adjacent road, restoration of native vegetation, and more natural hydrologic flows.
.500(6)(b)Water Environment (N/A for Uplands)	6	8	**Without Mitigation** - Rapid, unnatural drainage from continued existence of roadside ditches. **With Mitigation** - Restoration of more natural hydrologic flows.
.500(6)(c)Community structure Vegetation and/or Benthic Community	4	9	**Without Mitigation** - Roadside ditches. **With Mitigation** - Restoration of native vegeation via natural recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	w/out mit	w/mit
	0.57	0.87

Raw Delta = [w/mit - w/out mit]
0.30

Preservation Adjustment Factor (PF) =	**1**
Time Lag Factor (6-10 Years) =	**1.25**
Risk Factor =	**1.25**
Adjusted Delta [(Raw Delta * PF) / (T * R)] =	**0.19**

UMAM Functional Assessment	
Polygon Acreage =	**3.96**
Functional Gain w/Mitigation (Adjusted Delta * Acres) =	**0.76**

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon A (Road Removal - Site 4 & 5)**

FLUCCS code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (Vegetated Non-Forested)	**---**	**Mitigation**	**6.45 Acres**

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Apalachicola	**III**	**---**

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Component of Tates Hell Swamp with myriad connections to other wetlands and surface waters. However, hydrologic connections have been extensively modified by a network of logging roads and ditches.

Assessment area description

Road-fill (i.e., logging road) in historic wetland.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tates Hell State Forest	**Not unique.**

Functions	Mitigation for previous permit/other historic use
Water storage; water quality; floral and faunal habitat.	**None**

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
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Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)

Additional relevant factors

Assessment conducted by	Assessment date(s)
IRT Consensus	**9/15/2010**

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon A (Road Removal Site 4 & 5)**
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	**NWFWMD Staff**	

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/out mit	w/mit	
.500(6)(a) Location and Landscape Support	0	8	**Without Mitigation** - Not a wetland (continued use as a forest access road). **With Mitigation** - Removal of road; natural regeneration of native wetland vegetation; improved connectivity between adjacent wetlands; restoration of natural hydrologic flows.
.500(6)(b)Water Environment (N/A for Uplands)	0	8	**Without Mitigation** - Not a wetland (continued existence of forest road and disruption of natural hydrologic flows). **With Mitigation** - Restoration of wetland hydrology.
.500(6)(c)Community structure Vegetation and/or Benthic Community	0	6	**Without Mitigation** - Not a wetland (continued existence as a forest road). **With Mitigation** - Reestablishment of native wetland vegetation via natural recruitment from adjacent wetlands.

Score = sum of above scores/30 (if uplands, divide by 20)	w/out mit	w/mit
	0.00	0.73

Raw Delta = [w/mit - w/out mit]
0.73

Preservation Adjustment Factor (PF) =	**1**
Time Lag Factor (6-10 Years) =	**1.25**
Risk Factor =	**1**
Adjusted Delta [(Raw Delta * PF) / (T * R)] =	**0.59**

UMAM Functional Assessment	
Polygon Acreage =	**6.45**
Functional Gain w/Mitigation (Adjusted Delta * Acres) =	**3.78**

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon B (Ditches - Site 4 & 5)**

FLUCCS code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
640 (Vegetated Non-Forested)	**---**	**Mitigation**	**4.84 Acres**

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Apalachicola	**III**	**---**

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Wetlands adjacent and contiguous to Shoal River. Generally surrounded by natural buffers in need of ecological management.

Assessment area description

Ditch adjacent to logging road.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tates Hell State Forest	**Not unique.**

Functions	Mitigation for previous permit/other historic use
Water storage; water quality; floral and faunal habitat.	**None**

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)

Additional relevant factors

Assessment conducted by	Assessment date(s)
IRT Consensus	**9/15/2010**

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon B (Ditches - Site 4 & 5)**
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	**NWFWMD Staff**	

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/out mit	w/mit	
.500(6)(a) Location and Landscape Support	7	8	**Without Mitigation** - Continued roadside ditch wetlands. **With Mitigation** - Elimination of ditches and adjacent road, restoration of native vegetation, and more natural hydrologic flows.
.500(6)(b)Water Environment (N/A for Uplands)	6	8	**Without Mitigation** - Rapid, unnatural drainage from continued existence of roadside ditches. **With Mitigation** - Restoration of more natural hydrologic flows.
.500(6)(c)Community structure Vegetation and/or Benthic Community	4	6	**Without Mitigation** - Roadside ditches. **With Mitigation** - Restoration of native vegeation via natural recruitment.

Score = sum of above scores/30 (if uplands, divide by 20)	w/out mit	w/mit
	0.57	0.73

Raw Delta = [w/mit - w/out mit]
0.17

Preservation Adjustment Factor (PF) =	**1**
Time Lag Factor (6-10 Years) =	**1.25**
Risk Factor =	**1**
Adjusted Delta [(Raw Delta * PF) / (T * R)] =	**0.13**

UMAM Functional Assessment	
Polygon Acreage =	**4.84**
Functional Gain w/Mitigation (Adjusted Delta * Acres) =	**0.65**

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon C (Low-Water-Crossings)**

FLUCCS code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
621 / 625 / 626 / 627 / 630	**---**	**Mitigation**	**11 x 6.49ac (600' Dia) = 64.90 Acres**

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Apalachicola	**III**	**---**

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Component of Tates Hell Swamp with myriad connections to other wetlands and surface waters. However, hydrologic connections have been extensively modified by a network of logging roads and ditches.

Assessment area description

Low-Water-Crossing Site.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tates Hell State Forest	**Not unique.**

Functions	Mitigation for previous permit/other historic use
Water storage; water quality; floral and faunal habitat.	**None**

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
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Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)

Additional relevant factors

Assessment conducted by	Assessment date(s)
IRT Consensus	**9/15/2010**

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon C (10 Low-Water-Crossings)**
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	**NWFWMD Staff**	

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/out mit	w/mit	
.500(6)(a) Location and Landscape Support	7	8	**Without Mitigation** - Continued blockage of flows. **With Mitigation** - Low-water-crossing installed.
.500(6)(b)Water Environment (N/A for Uplands)	7	8	**Without Mitigation** - Continued blockage of flows. **With Mitigation** - Enhancement of hydrologic flows.
.500(6)(c)Community structure Vegetation and/or Benthic Community	7	8	**Without Mitigation** - Continued blockage of flows. **With Mitigation** - Low-water-crossing installed.

Score = sum of above scores/30 (if uplands, divide by 20)	w/out mit	w/mit
	0.70	0.80

Raw Delta = [w/mit - w/out mit]
0.10

Preservation Adjustment Factor (PF) =	**1**
Time Lag Factor =	**1.25**
Risk Factor =	**1**
Adjusted Delta [(Raw Delta * PF) / (T * R)] =	**0.08**

UMAM Functional Assessment	
Polygon Acreage =	**71.39**
Functional Gain w/Mitigation (Adjusted Delta * Acres) =	**5.71**

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon D (Culverts)**

FLUCCS code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
621 / 625 / 626 / 627 / 630	**---**	**Mitigation**	**21 x 1.62ac (300' Dia) = 34.02 Acres**

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Apalachicola	**III**	**---**

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Component of Tates Hell Swamp with myriad connections to other wetlands and surface waters. However, hydrologic connections have been extensively modified by a network of logging roads and ditches.

Assessment area description

Culvert modification site (either new culvert, replacement, or removal).

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tates Hell State Forest	**Not unique.**

Functions	Mitigation for previous permit/other historic use
Water storage; water quality; floral and faunal habitat.	**None**

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
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Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)

Additional relevant factors

Assessment conducted by	Assessment date(s)
IRT Consensus	**9/15/2010**

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon D (21 Culvert Modifications)**
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	**NWFWMD Staff**	

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/out mit	w/mit	
.500(6)(a) Location and Landscape Support	7	7	**Without Mitigation** - Continued hydrologic alteration. **With Mitigation** - Culvert modification.
.500(6)(b)Water Environment (N/A for Uplands)	7	8	**Without Mitigation** - Continued hydrologic alteration. **With Mitigation** - Enhancement of hydrologic flows.
.500(6)(c)Community structure Vegetation and/or Benthic Community	7	7	**Without Mitigation** - Continued hydrologic alteration. **With Mitigation** - Enhancement of hydrologic flows.

Score = sum of above scores/30 (if uplands, divide by 20)	w/out mit	w/mit
	0.70	0.73

Raw Delta = [w/mit - w/out mit]
0.03

Preservation Adjustment Factor (PF) =	**1**
Time Lag Factor =	**1**
Risk Factor =	**1**
Adjusted Delta [(Raw Delta * PF) / (T * R)] =	**0.03**

UMAM Functional Assessment	
Polygon Acreage =	**34.02**
Functional Gain w/Mitigation (Adjusted Delta * Acres) =	**1.13**

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon E (Ditch Plugs / Risers)**

FLUCCS code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
621 / 625 / 626 / 627 / 630	**---**	**Mitigation**	**31 x 0.41ac (150' Dia) = 12.71 Acres**

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Apalachicola	**III**	**---**

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Component of Tates Hell Swamp with myriad connections to other wetlands and surface waters. However, hydrologic connections have been extensively modified by a network of logging roads and ditches.

Assessment area description

Ditch plug or culvert riser site.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tates Hell State Forest	**Not unique.**

Functions	Mitigation for previous permit/other historic use
Water storage; water quality; floral and faunal habitat.	**None**

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
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Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)

Additional relevant factors

Assessment conducted by	Assessment date(s)
IRT Consensus	**9/15/2010**

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon E (31 Ditch Plugs / Riser)**
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	**NWFWMD Staff**	

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

	w/out mit	w/mit	
.500(6)(a) Location and Landscape Support	7	7	**Without Mitigation** - Continued hydrologic alteration. **With Mitigation** - Enhancement of hydrologic flows.
.500(6)(b)Water Environment (N/A for Uplands)	7	9	**Without Mitigation** - Continued hydrologic alteration. **With Mitigation** - Enhancement of hydrologic flows.
.500(6)(c)Community structure Vegetation and/or Benthic Community	7	7	**Without Mitigation** - Continued hydrologic alteration. **With Mitigation** - Enhancement of hydrologic flows.

Score = sum of above scores/30 (if uplands, divide by 20)	w/out mit	w/mit
	0.70	0.77

Raw Delta = [w/mit - w/out mit]
0.07

Preservation Adjustment Factor (PF) =	**1**
Time Lag Factor =	**1**
Risk Factor =	**1**
Adjusted Delta [(Raw Delta * PF) / (T * R)] =	**0.07**

UMAM Functional Assessment	
Polygon Acreage =	**12.71**
Functional Gain w/Mitigation (Adjusted Delta * Acres) =	**0.85**

PART I – Qualitative Description
(See Section 62-345.400, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon F (Bridge)**

FLUCCS code	Further classification (optional)	Impact or Mitigation Site?	Assessment Area Size
621 / 625 / 626 / 627 / 630	**---**	**Mitigation**	**1 x 6.49ac (600' Dia) = 6.49 Acres**

Basin/Watershed Name/Number	Affected Waterbody (Class)	Special Classification (i.e.OFW, AP, other local/state/federal designation of importance)
Apalachicola	**III**	**---**

Geographic relationship to and hydrologic connection with wetlands, other surface water, uplands

Component of Tates Hell Swamp with myriad connections to other wetlands and surface waters. However, hydrologic connections have been extensively modified by a network of logging roads and ditches.

Assessment area description

Bridge site.

Significant nearby features	Uniqueness (considering the relative rarity in relation to the regional landscape.)
Tates Hell State Forest	**Not unique.**

Functions	Mitigation for previous permit/other historic use
Water storage; water quality; floral and faunal habitat.	**None**

Anticipated Wildlife Utilization Based on Literature Review (List of species that are representative of the assessment area and reasonably expected to be found)	Anticipated Utilization by Listed Species (List species, their legal classification (E, T, SSC), type of use, and intensity of use of the assessment area)
---	**---**

Observed Evidence of Wildlife Utilization (List species directly observed, or other signs such as tracks, droppings, casings, nests, etc.)

Additional relevant factors

Assessment conducted by	Assessment date(s)
IRT Consensus	**9/15/2010**

PART II – Quantification of Assessment Area (impact or mitigation)
(See Sections 62-345.500 and .600, F.A.C.)

Site/Project Name	Application Number	Assessment Area Name or Number
Pine Log Creek Basin (Tates Hell)	**Not Applicable**	**Polygon F (1 Bridge)**
Impact or Mitigation	Assessment conducted by:	Assessment date:
Mitigation	**NWFWMD Staff**	

Scoring Guidance	**Optimal (10)**	**Moderate(7)**	**Minimal (4)**	**Not Present (0)**
The scoring of each indicator is based on what would be suitable for the type of wetland or surface water assessed	Condition is optimal and fully supports wetland/surface water functions	Condition is less than optimal, but sufficient to maintain most wetland/surface waterfunctions	Minimal level of support of wetland/surface water functions	Condition is insufficient to provide wetland/surface water functions

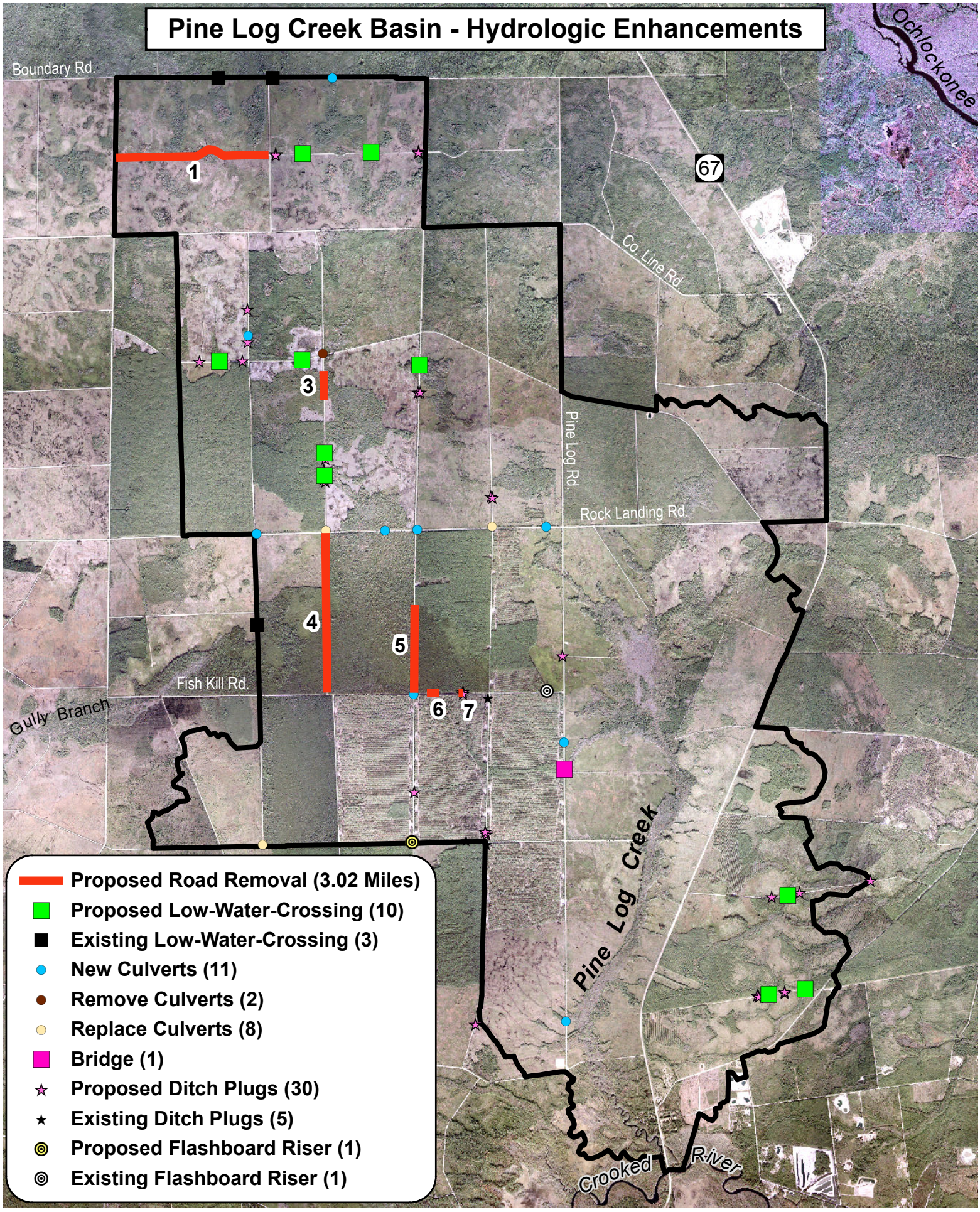
	w/out mit	w/mit	
.500(6)(a) Location and Landscape Support	7	8	**Without Mitigation** - Not a wetland (continued use as a forest access road). **With Mitigation** - Removal of road; natural regeneration of native wetland vegetation; improved connectivity between adjacent wetlands; restoration of natural hydrologic flows.
.500(6)(b)Water Environment (N/A for Uplands)	7	9	**Without Mitigation** - Not a wetland (continued existence of forest road and disruption of natural hydrologic flows). **With Mitigation** - Restoration of wetland hydrology.
.500(6)(c)Community structure Vegetation and/or Benthic Community	7	8	**Without Mitigation** - Not a wetland (continued existence as a forest road). **With Mitigation** - Reestablishment of native wetland vegetation via natural recruitment from adjacent wetlands.

Score = sum of above scores/30 (if uplands, divide by 20)	w/out mit	w/mit
	0.70	0.83

Raw Delta = [w/mit - w/out mit]
0.13

Preservation Adjustment Factor (PF) =	**1**
Time Lag Factor =	**1**
Risk Factor =	**1**
Adjusted Delta [(Raw Delta * PF) / (T * R)] =	**0.13**

UMAM Functional Assessment	
Polygon Acreage =	**6.49**
Functional Gain w/Mitigation (Adjusted Delta * Acres) =	**0.87**


Pine Log Creek Basin - Hydrologic Enhancements
Boundary Rd.
Ochlocknee
67
Co. Line Rd.
Pine Log Rd.
Rock Landing Rd.
Fish Kill Rd.
Gully Branch
Pine Log Creek
Crooked River
1
3
4
5
6
7
Proposed Road Removal (3.02 Miles)
Proposed Low-Water-Crossing (10)
Existing Low-Water-Crossing (3)
New Culverts (11)
Remove Culverts (2)
Replace Culverts (8)
Bridge (1)
Proposed Ditch Plugs (30)
Existing Ditch Plugs (5)
Proposed Flashboard Riser (1)
Existing Flashboard Riser (1)
0
2.5
5
Miles