CITY OF ORLANDO

Wetland Assessment Form

This Wetland Assessment Form is based on the Uniform Mitigation Assessment Method (UMAM) established under the Florida Administrative Code. Each indicator in 'Part II' below must be given a minimum point value of 1 and maximum of 5; see guidance sheet for descriptor details. When a development site has multiple wetlands, each wetland must be assessed individually. Wetland Assessment Forms must be completed by a qualified biologist, environmental scientist or those who are experienced in such assessments

Part I:

Project Name:	
Address/ Parcel ID #:	
Wetland (Site) ID:	
FLUCFCS:	
NWI Classification:	
Special Flood Hazardous Area (Zone):	
Regulatory Basin:	
Impaired/TMDL Basin:	
Acreage:	
Wetland Description (include vegetation, hydrology connections, geographic location):	
Significant or Unique Features Nearby (Lakes, Rivers, Parks, etc.):	
Previous Applications/Conservation Easements (if known):	
Assessment Completed By:	
Date of Assessment:	
Signature:	

Part II (min. point value between 1 and 5 required for each indicator):

A) Adjacent Lands (Upland Buffer, Open Land, and Wildlife Utilization and Support)

1. Does the wetland have an upland buffer with an average width of 25 feet?	
2. Do the adjacent uplands provide wildlife habitat?	
3. Does wildlife have access to the wetland by way of a wildlife corridor(s) that connects the wetland to other natural habitats?	
4. Do the adjacent lands have natural watercourses (stream connections, over land flow, etc.) that discharge water into or out of the wetland?	
5. What percentage of the wetland's regulatory basin is covered by impervious surfaces?	
Subtotal:	

B) Hydrology & Water Quality

1. Is the wetland hydrologically connected to other wetlands or wetland habitats?	
2. Is the wetland hydrologically connected to Waters of the US (WOTUS) or State waters?	
3. Is the wetland free of ditching, hydrologic impediments or flow restrictions?	
4. Does the wetland provide benefits to downstream habitats?	
5. Is the wetland free of visible water quality impacts (e.g., algal blooms, turbidity plumes, or erosion)?	
Subtotal:	

C) Wetland Vegetation Community

1. The wetland size in acres.	
2. Is the wetland well vegetated?	
3. Does the wetland contain nuisance and/or exotic species?	
4. Is the wetland community appropriate?	
5. Is the wetland vegetative community healthy?	
Subtotal:	

D) Other Wetland Functions and Values

1. Is the wetland unique or rare for the region?	
2. Is the wetland connected to historically or culturally significant systems (i.e. Orlando Wetlands Park or other parks)?	
3. Does the wetland have recreational value?	
4. Is the wetland utilized by protected species?	
5. Does the wetland contain natural topographic features (hummocks, channels, refugia, etc.)?	
Subtotal:	
Total Score out of 100:	

Part III:

Additional required items are as follows-

1. A narrative describing the wetland vegetative, soil type and hydrologic conditions, potential for threatened and endangered species, and any other environmental observations for each onsite wetland;

2. An aerial map of the property with wetland systems identified and delineated;

3. Accurate shapefiles depicting wetland delineation for each onsite wetland; and

4. A survey of any jurisdictional wetland boundary determination.

CITY OF ORLANDO

Wetland Assessment Form Guidance

This is the scoring guidance for the City of Orlando Wetland Assessment Form. Each indicator below must have a minimum point value between 1 and 5, with a score provided for every question to accurately assess the wetland. If a value falls between a 3 and 5, then the score may be a 4. Each wetland system must be assessed individually and the form(s) must be provided to the city with the applicable planning application(s).

Scoring Guidance for the Assessment Form

A) Adjacent Lands (Upland Buffer, Open Land, and Wildlife Utilization and Support)

1) Does the wetland have an upland buffer with an average width of 25 feet?

   i) The wetland buffer is intact, equal to or greater than 25 feet wide, not disturbed by agriculture, developed or other man-made activities, with less than 5% coverage of exotic species. (Point Value of 5)
   ii) The wetland buffer width is less than 25 feet but greater than 15 feet with minimal disturbance by agriculture, developed or other man-made activities, and less than 5% coverage of exotics. (Point Value of 3)
   iii) The wetland has no buffer. (Point Value of 1)

2) Do the adjacent uplands provide wildlife habitat?

   i) Adjacent uplands are conservation areas, park lands, or other lands protected from development, which show signs of wildlife utilization (nests, trees cavities, burrows, tracks, scat, etc.). (Point Value of 5)
   ii) Adjacent uplands are open land, agricultural lands, or other disturbed lands but have evidence of wildlife utilization (nests, trees cavities, burrows, tracks, scat, etc.). (Point Value of 3)
   iii) Adjacent uplands are developed or disturb lands with minimal evidence of wildlife usage. (Point Value of 1)

3) Does wildlife have access to the wetland by way of a wildlife corridor(s) that connects the wetland to other natural habitats?

   i) The wetland is directly connected to a designated wildlife corridor and/or other known wildlife movement corridors. (Point Value of 5)

ii) *The wetland shows signs of wildlife movement (trails and tracks) but is indirectly connected to designated wildlife corridor or other known wildlife movement areas. (Point Value of 3)*

iii) *The wetland is isolated with limited or no wildlife movement along a corridor to or from other natural systems. (Point Value of 1)*

4) Do the adjacent lands have natural watercourses (stream connections, over land flow, etc.) that discharges water into or out of the wetland?

i) *The adjacent land provides a natural watercourse or overland flow in and/or out of the wetland with minimal restrictions or disturbance. (Point Value of 5)*

ii) *The wetland watercourse/overland flow has been altered but flow in and/or out of the wetland is somewhat maintained. Alteration may include culverting, ditching, and channelization, etc. (Point Value of 3)*

iii) *The adjacent land has impounded or is dewatering the wetland. (Point Value of 1)*

5) What percentage of the wetland's regulatory basin is covered by impervious surfaces? (Use current SFWMD and SJRWMD FLUCFCS data for this calculation) *

i) *The wetland is located within a regulatory basin with less than 10% of the basin covered by impervious surfaces. (Point Value of 5)*

ii) *The wetland is located within a regulatory basin with greater than 10% but less 25% covered by impervious surfaces. (Point Value of 3)*

iii) *The wetland is located within a regulatory basin with greater than 25% of the basin covered by impervious surfaces. (Point Value of 1)*

B) Hydrology & Water Quality

1) Is the wetland hydrologically connected to other wetlands or wetland habitats?

i) *The wetland is directly connected to or abutting other wetlands that are under a conservation easement, in a park, or on other lands protected from development. The wetland is a naturally occurring isolated system (cypress dome, bay/gum swamps, isolated marshes, etc.) that is directly connected to or abutting lands that are under a conservation easement, in a park, or on other lands protected from development. (Point Value of 5)*

ii) *The wetland is indirectly connected to other wetlands via surface waters, canals, or ditches that are under a conservation easement, in a park, or on other lands protected from development. The wetland is a naturally occurring isolated system (cypress dome, bay/gum swamps, isolated marshes, etc.) that is indirectly connected to lands that are under a conservation easement, in a park, or on other lands protected from development. (Point Value of 3)*

iii) *The wetland has been isolated from other wetlands systems and hydrology has been altered by development or other man-made disturbances. The wetland is a naturally occurring isolated system (cypress dome, bay/gum swamps, isolated marshes, etc.) and the hydrology has been altered (either by dewatering or increase water into the system) by development or other man-made disturbance. (Point Value of 1)*

2) Is the wetland hydrologically connected to Waters of the US (WOTUS) or State waters?

   i) *The wetland is directly connected through riparian wetlands along a named river(s) or stream(s) with minimal hydrological disturbance. The wetland is a naturally occurring isolated system (cypress dome, bay/gum swamps, isolated marshes, etc.) and is within 100 feet of WOTUS or State Waters. (Point Value of 5)*
   ii) *The wetland is indirectly connected through surface waters, canals, or ditches. The wetland is a naturally occurring isolated system (cypress dome, bay/gum swamps, isolated marshes, etc.) and is greater than 100 feet but less than 500 feet from WOTUS or State Waters. (Point Value of 3)*
   iii) *The wetland is not connected through surface waters, canals, or ditches and has significant hydrological disturbance. The wetland is a naturally occurring isolated system (cypress dome, bay/gum swamps, isolated marshes, etc.) and is greater than 500 feet of WOTUS or State waters with evidence of significant hydrological disturbance. (Point Value of 1)*

3) Is the wetland free of ditching, hydrologic impediments or flow restrictions?

   i) *The wetland is relatively free of ditching, flow restrictions or impediments, and the hydrological function is appropriate. (Point Value of 5)*
   ii) *The wetland has some ditching and/or, flow restrictions or impediments, but the hydrological function is somewhat maintained. (Point Value of 3)*
   iii) *The wetland shows evidence of hydrological disturbance that has altered hydrology, causing a shift in the vegetative community. (Point Value of 1)*

4) Does the wetland provide benefits to downstream habitats?

   i) *The wetland provides significant benefit to downstream habitats through nutrient transport and water quality. (Point Value of 5)*
   ii) *The wetland provides some benefit to downstream habitats through nutrient transport and water quality. (Point Value of 3)*
   iii) *The wetland provides minimal benefit to downstream habitats through nutrient transport and water quality. (Point Value of 1)*

5) Is the wetland free of visible water quality impacts e.g., algal blooms, turbidity plumes, or erosion?

i) The wetland is not receiving untreated stormwater from adjacent land uses. No evidence of erosion and/or sedimentation. The water in the wetland shows no evidence of unusual turbidity algal blooms, sheen, or other observational indicators of water quality. (Point Value of 5)

ii) The wetland receives minimal amounts of untreated stormwater from areas adjacent land uses and/or there is some evidence of erosion and/or sedimentation, and/or the water in the wetland is slightly turbid, moderate evidence of algal blooms, moderate sheen, or other observational indicators of water quality. (Point Value of 3)

iii) The wetland is receiving significant amounts of untreated stormwater runoff, and/or shows erosion and sedimentation, and/or the water is turbid, significant evidence of algal blooms, or other observational indicators of water quality. (Point Value of 1)

C) Wetland Vegetation Community

1) The wetland size.

i) The wetland is greater than five acres. (Point Value of 5)

ii) The wetland is less than five acres, but more than one acre. (Point Value of 3)

iii) The wetland is less than one acre. (Point Value of 1)

2) Is the wetland well vegetated?

If Forested:

i) The wetland exhibits canopy closure greater than 75% during the growing season. (Point Value of 5)

ii) The canopy is partially closed with less than 75% but more than 50% closure during the growing season. (Point Value of 3)

iii) The canopy is open with less than 50% canopy closure during the growing season. (Point Value of 1)

If Herbaceous/Shrub:

i) The wetland exhibits ground or shrub cover greater than 75% during the growing season. (Point Value of 5)

ii) The wetland exhibits partial ground or shrub cover less than 75% but more than 50% during the growing season. (Point Value of 3)

iii) The wetland is open with less than 50% ground cover during the growing season. (Point Value of 1)

3) Does the wetland contain nuisance and/or exotic species?

i) *The wetland contains less than 5% coverage of nuisance and/or exotic species in any stratum (herbaceous, shrub, and canopy). (Point Value of 5)*
ii) *The wetland contains more than 5% but less the 15% of nuisance and/or exotic species in any stratum (herbaceous, shrub, and canopy). (Point Value of 3)*
iii) *The wetland contained more than 15% nuisance and/or exotic species in any stratum (herbaceous, shrub, and canopy). (Point Value of 1)*

4) Is the wetland community appropriate?

i) *The wetland's vegetative community has not been impacted by development, earthmoving, or agricultural activities and the vegetative community is intact. (Point Value of 5)*
ii) *The wetland's vegetative community has evidence of disturbance from development, earthmoving, or agricultural activities, but the community structure is generally intact. (Point Value of 3)*
iii) *The wetland's community has been altered by disturbance from development, earthmoving, or agricultural activities causing a shift in community structure. (Point Value of 1)*

5) Is the wetland vegetative community healthy?

i) *The wetland's vegetative community has not been impacted by development, earthmoving, or agricultural activities and the vegetative community is intact. (Point Value of 5)*
ii) *The vegetative community appears generally healthy with signs of regeneration and recruitment, appropriate size and distribution, with less than 10% of the native species appearing stressed. (Point Value of 3)*
iii) *The vegetative community appears stressed with limited signs of regeneration and recruitment, and/or inappropriate size and distribution, and/or more than 10% native species observed appeared stressed. (Point Value of 1)*

D) Other Wetland Functions and Values

1) Is the wetland unique or rare for the region?

i) *The wetland contains unique vegetation, such as submerged aquatic vegetation (eel grass, southern naiad, etc.), or is part of the karst features, seepage slopes, or other unique geographic formations. (Point Value of 5)*
ii) *The wetland contains unique vegetation, such as submerged aquatic vegetation (eel grass, southern naiad, etc.), but also contains some (less than 10%) exotic species (hydrilla, elodea) or is not located in karst features, seepage slopes or other unique geographic formations, but also contains some (less than 10%) exotic species (hydrilla, elodea). (Point Value of 3)*

iii) *The wetland does not contain unique vegetation, nor is it located in karst features, seepage slopes or other unique geographic formations but also contains some (more than 10%) exotic species. (Point Value of 1)*

2) Is the wetland historically or culturally significant or connected to these systems (i.e. Orlando Wetlands Park or other parks)?

   i) *The wetland abuts or directly connects to historically or culturally significant wetlands. (Point Value of 5)*
   ii) *The wetland is indirectly connected to historically or culturally significant lands but is more than one mile from the lands. (Point Value of 3)*
   iii) *The wetland is not directly or indirectly connected, nor within one mile of historically or culturally significant lands. (Point Value of 1)*

3) Does the wetland have recreational value?

   i) *The wetland abuts or directly connects to publicly accessible recreational waterways (i.e. public boats and kayak launches). (Point Value of 5)*
   ii) *The wetland is indirectly connected to publicly accessible recreational waterways. (Point Value of 3)*
   iii) *The wetland is not directly or indirectly connected to publicly accessible recreational waterways. (Point Value of 1)*

4) Is the wetland utilized by protected species? **

   i) *Protected species have been documented and/or observed within the wetland and it contains suitable habitat. (Point Value of 5)*
   ii) *Suitable habitats for protected species is located within the wetland but no documented occurrence or observations within 500 feet from the wetland. (Point Value of 3)*
   iii) *No protected species habitat is within or adjacent to the wetland. No documented occurrences or observations of protected species within 1,000 feet of the wetland. (Point Value of 1)*

5) Does the wetland contain natural topographic features (hummocks, channels, refugia, etc.)?

   i) *The wetland contains hummocks, channels, refugia and/or other natural topographic features found in wetlands. (Point Value of 5)*
   ii) *The wetland contains hummocks, channels, refugia and/or other natural topographic features found in wetlands and may include some features that are man-made (such as berms and ditching) if the features do not cause adverse impacts. (Point Value of 3)*

iii) The wetland lacks natural occurring hummocks, channels, refugia and/or other natural topographic feature, and/or is highly disturbed by man-made features (such as ditching and berms). (Point Value of 1)

Notes:

*Impervious estimates are based on EPA's 8 Tools of Watershed Protection in Developing Areas.

**Protected Species are defined as those species (including plants) listed by USFWS FWC, and FDACS as Threatened or Endangered. Protected species also includes species listed by Florida Administrative Code (FAC) including Bald Eagle, Florida Black Bear, Bats.