



## IDENTIFICATION & PRIORITIZATION OF POTENTIAL WETLAND MITIGATION SITES

Through the use of the Agricultural Conservation Planning Framework planning toolbox, we identified two types of potential wetland areas: depressions and “nutrient removal” wetlands. The depressions were based on topographic depression areas; whereas, the wetlands were pooled areas with vegetated buffers that were created by simulating an impoundment (height = 3’) along the flow path. The impoundment, which can be a simple riffle structure, allows for floodplain reconnection and provides for potential flood storage.

### Round #1 Assessment

We looked at the following relevant attributes in the initial assessment of all the identified candidate wetland areas.

Attribute	Description	Scored Attribute
<i>Proximity to SHLT</i>	Distance (miles) to nearest SHLT parcel	✓
<i>Proximity to Managed Land</i>	Distance (miles) to nearest ‘managed land’ parcel	✓
<i>Area calculation</i>	The acreage of each wetland	✓
<i>Pool Storage</i>	The storage volume of each wetland (acre-feet)	-
<i>Flood zone</i>	Is the wetland within the 100 year flood zone (YES/NO)	✓
<i>Parcel count</i>	Sum the number of parcels that intersect the wetland	✓
<i>Contributing area</i>	Acreage draining into wetland	-
<i>Area drained calculation (%)</i>	Wetland area/contributing area * 100	-
<i>National Wetlands Inventory</i>	Does the wetland intersect an NWI wetland (YES/NO)	-
<i>Watershed critical/protection area*</i>	Does the wetland fall within a critical or protection area (YES/NO)	✓

\*Little Calumet River East Branch Watershed Management Plan – October 2015

We calculated a score for each candidate wetland and depression based on the summed total of the scored attributes from the list above. The attributes were all weighted equally. The score was designed to help rank the candidates in a way that reflects the prioritization of the project. Wetlands and depressions with the highest scores are those that are near SHLT parcels, near other managed land, within the 100-year flood zone, relatively large in area, have fewer land owners, and are located within watershed priority and/or critical habitat areas.

#### Wetland Score Factors

			[selected records/total records]	
A	<i>Proximity to SHLT</i>	Below mean = 1	Mean = 2.03	[41/84]
B	<i>Proximity to Managed Land</i>	Below mean = 1	Mean = 0.74	[46/84]
C	<i>Flood zone</i>	Yes = 1		[ 9/84]
D	<i>Parcel count</i>	Less than 5 = 1	Median = 5	[40/84]
E	<i>Area calculation</i>	Greater than median = 1	Median = 5	[42/84]
F	<i>Watershed critical area</i>	Yes = 1		[ 9/84]
G	<i>Watershed protection area</i>	Yes = 1		[ 26/84]
Total Score = A + B + C + D + E + F + G				

#### Depression Score Factors

				[selected records/total records]
A	<i>Proximity to SHLT</i>	Below mean = 1	Mean = 1.9	[45/77]
B	<i>Proximity to Managed Land</i>	Below mean = 1	Mean = 0.45	[48/77]
C	<i>Flood zone</i>	Yes = 1		[28/77]
D	<i>Parcel count</i>	Less than 2 = 1	Mean = 1.6	[46/77]
E	<i>Area calculation</i>	Greater than median = 1	Median = 0.74	[38/77]
F	<i>Watershed critical area</i>	Yes = 1		[33/77]
G	<i>Watershed protection area</i>	Yes = 1		[ 7/77]
Total Score = A + B + C + D + E + F + G				

In addition to the scoring, an off-site visual review of all the scored sites was performed via Google Earth to determine if the candidates would have an impact to existing structures (e.g., houses, buildings, barns, etc.), roads, golf courses, etc. This eliminated 8 wetland and 3 depression candidate sites.

**Round #1 Prioritization**

The shared data layers illustrate the location of the wetland and depression candidate sites and their ranking. The maximum wetland score was 5 out of 7; the maximum depression score was 6 out of 7. The color ranking scheme follows ROYGBIV with red being the lowest score and blue being the highest score for each wetland type.

Type	Rank	Number of Candidates
<i>Wetland</i>	4 to 5	9
<i>Depressions</i>	4 to 6	30
<i>Depressions</i>	5 to 6	11

**Round #2 Evaluation**

A second round of criteria can be used in the next round, the candidate evaluation phase. Our suggestions include:

Criteria	Description
<i>Drainage area</i>	Indicates potential wetland hydrology stability
<i>Adjacent to water (flow path)</i>	Indicates potential wetland hydrology (isolated or connected)
<i>NWI Intersect – Active cropland</i>	Indicates potential for restoration mitigation credits
<i>NWI Intersect – Existing wetland or pond</i>	Indicates potential for enhancement mitigation credits
<i>Flood storage</i>	Indicates potential for flood storage benefit
<i>Cluster of candidate sites</i>	Multiple site within a close proximity; sites within a mitigation bank