

Table 1: Impervious Cover Score

Wetland Feature*	IC	Cdev	C	S	Magnitude of Change	Recharge
CUM1-1 NW	54	5	7.9	34.18	High	significant groundwater recharge area
MAS3-1a*	49	15.83	19.37	40.04	High	significant groundwater recharge area
SWD6-1	49	15.83	20.02	38.74	High	significant groundwater recharge area
CUM1-1 SW	100	1.47	4.1	35.85	High	significant groundwater recharge area
MAS3-1b*	53	17.3	24.53	37.38	High	significant groundwater recharge area
SWT3-1a*	53	17.3	25.7	35.68	High	significant groundwater recharge area
CUM1-1 NE1	54	6.7	10.8	33.50	High	significant groundwater recharge area
MAS3-1c*	53	24	36.85	34.52	High	significant groundwater recharge area
SWT/SWD6-1	53	24	38.43	33.10	High	significant groundwater recharge area
SWT3-1b*	53	24	39.07	32.56	High	significant groundwater recharge area
CUM1-1 SE	79	1.25	2.5	39.50	High	significant groundwater recharge area
FOM	90	2.72	6.97	35.12	High	significant groundwater recharge area
CUM1-1 NE2	61	4.7	9.8	29.26	High	significant groundwater recharge area
MAS3-1d*	55	29.95	53.03	31.06	High	significant groundwater recharge area
MAM2	61	4.7	9.95	28.81	High	significant groundwater recharge area
SAS1-1	55	29.95	53.65	30.70	High	significant groundwater recharge area

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IC - Proportion of impervious cover (as a percentage between 0 and 100) proposed within the area of wetland catchment this is within the proponent's holdings

Cdev - Total development area of the catchment (ha)

C - size of the wetland's catchment (pre-development)

* from west to east

Table 2: Catchment Size Change

Wetland Feature*	Pre-development catchment (ha)	Post-development catchment (ha)	Change in catchment size	Magnitude of Change
CUM1-1 NW	7.9	17.42	-120.51%	Low
MAS3-1a*	19.37	28.89	-49.15%	Low
SWD6-1	20.02	29.54	-47.55%	Low
CUM1-1 SW	4.1	4.1	0.00%	Low
MAS3-1b*	24.53	34.05	-38.81%	Low
SWT3-1a*	25.7	35.22	-37.04%	Low
CUM1-1 NE1	10.8	3.4	68.52%	High
MAS3-1c*	36.85	38.97	-5.75%	Low
SWT/SWD6-1	38.43	40.55	-5.52%	Low
SWT3-1b*	39.07	41.19	-5.43%	Low
CUM1-1 SE	2.5	2.5	0.00%	Low
FOM	6.97	6.97	0.00%	Low
CUM1-1 NE2	9.8	5.5	43.88%	High
MAS3-1d*	53.03	50.85	4.11%	Low
MAM2	9.95	5.65	43.22%	High
SAS1-1	53.65	51.47	4.06%	Low

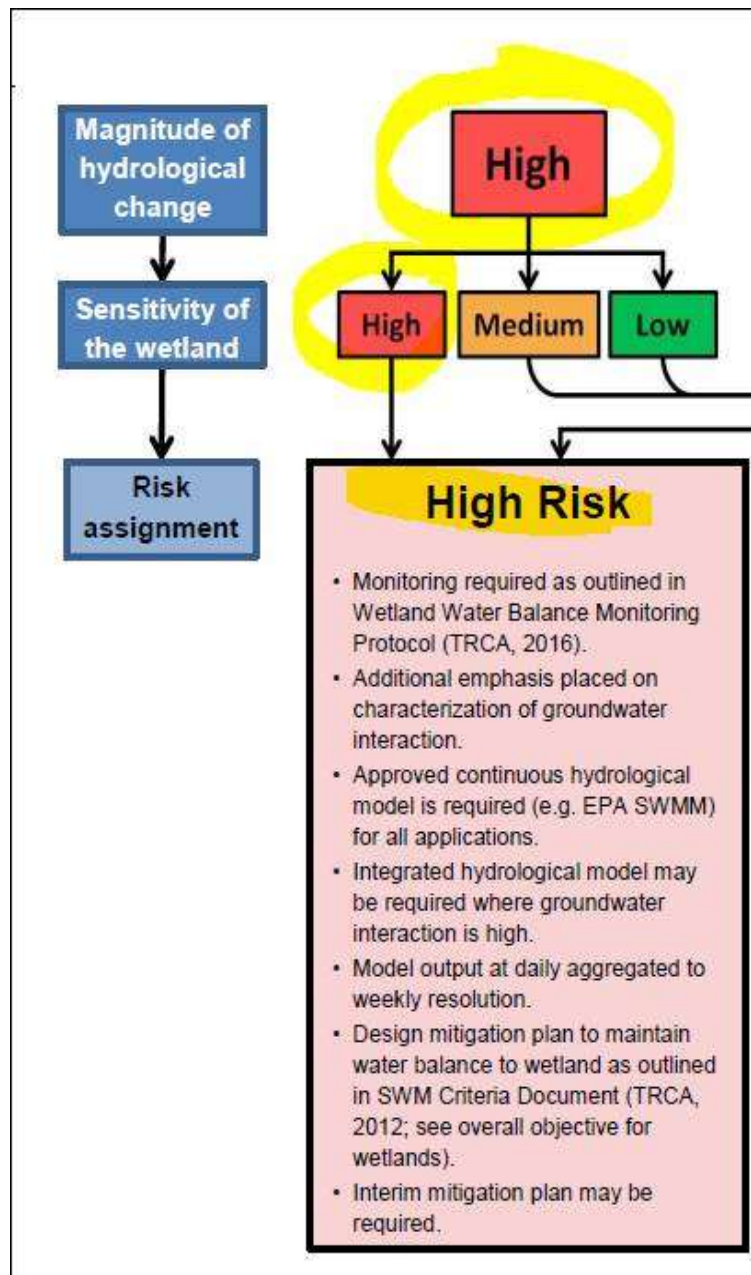
* from west to east

Table 3: Hydrological Change Ranking

Wetland Feature*	Impervious Cover Score	Increase/Decrease in Catchment Size	Water Taking or Discharge	Impacts to Recharge Areas*		Hydrologic Change Ranking
CUM1-1 NW	High	Low	LOW	High	significant groundwater recharge area	High
MAS3-1a*	High	Low	LOW	High	significant groundwater recharge area	High
SWD6-1	High	Low	LOW	High	significant groundwater recharge area	High
CUM1-1 SW	High	Low	LOW	High	significant groundwater recharge area	High
MAS3-1b*	High	Low	LOW	High	significant groundwater recharge area	High
SWT3-1a*	High	Low	LOW	High	significant groundwater recharge area	High
CUM1-1 NE1	High	High	LOW	High	significant groundwater recharge area	High
MAS3-1c*	High	Low	LOW	High	significant groundwater recharge area	High
SWT/SWD6-1	High	Low	LOW	High	significant groundwater recharge area	High
SWT3-1b*	High	Low	LOW	High	significant groundwater recharge area	High
CUM1-1 SE	High	Low	LOW	High	significant groundwater recharge area	High
FOM	High	Low	LOW	High	significant groundwater recharge area	High
CUM1-1 NE2	High	High	LOW	High	significant groundwater recharge area	High
MAS3-1d*	High	Low	LOW	High	significant groundwater recharge area	High
MAM2	High	High	LOW	High	significant groundwater recharge area	High
SAS1-1	High	Low	LOW	High	significant groundwater recharge area	High

*As per SWM requirement, pre-development infiltration target shall be met in order to mitigate the impact to recharge areas
LID strategy will be used to meet pre-development infiltration target

Criteria per Table 3 and Appendix 2 & 3			
Vegetation Community Type (ELC)	High Sensitivity	Medium Sensitivity	Low Sensitivity
MAM2-2			Low
MAS3-1		Medium	
SAS1-1		Medium	
SWT/SWD6-1	High		
SWT3-1		Medium	
High Sensitivity Fauna Species	High Sensitivity	Medium Sensitivity	Low Sensitivity
Gray Treefrog	High		
Wood Frog	High		
Spring Peeper	High		
Northern Leopard Frog	High		
Midland Painted Turtle	High		
Snapping Turtle	High		
Green Frog		Medium	
American Toad		Medium	
Alder Flycatcher			Low
Green Heron			Low
Sora		Medium	
Virginia Rail		Medium	
Wood Duck		Medium	
Canada Goose			Low
Common Yellowthroat			Low
Swamp Sparrow			Low
Mallard			Low
Muskrat	High		
High Sensitivity Flora Species	High Sensitivity	Medium Sensitivity	Low Sensitivity
Carex lacustris		Medium	
Cicuta bulbifera		Medium	
Eleocharis palustris		Medium	
Eutrochium maculatum			Low (GW Indicator/Facultative)
		Medium (GW Indicator/Facultative)	
Ilex verticillata		Medium	
		Medium (GW Indicator/Facultative; may be sensitive to hydrology)	
Impatiens capensis			
Iris versicolor		Medium	
Lycopus uniflorus		Medium (may be sensitive to hydrology)	
Lysimachia thyrsiflora		Medium	
Onoclea sensibilis		Medium (GW Indicator/Facultative)	
Ribes triste		Medium	
Rubus pubescens		Medium (GW Indicator/Facultative)	
Sagittaria latifolia		Medium	
Salix bebbiana		Medium (GW Indicator/Facultative)	
Salix discolor			Low (GW Indicator/Facultative)
Salix eriocephala		Medium (may be sensitive to hydrolog)	
Salix petiolaris			Low (may be sensitive to hydrology)
Stuckenia pectinata		Medium	
Symphyotrichum puniceum		Medium (may be sensitive to hydrology)	
		Medium (GW Indicator/Facultative; may be sensitive to hydrology)	
Thuja occidentalis			
Typha latifolia			Low
Cephalanthus occidentalis		Medium	
Elodea canadensis		Medium	
Significant Wildlife Habitat	High Sensitivity	Medium Sensitivity	Low Sensitivity
(Confirmed) Turtle Wintering Areas (Midland Painted Turtle)	High		
(Confirmed) Turtle Nesting Areas	High		
(Candidate) Colonially - Nesting Bird Breeding Habitat (Tree/Shrubs) - Green Heron	High		
(Candidate) Marsh Breeding Bird Habitat	High		
Hydrological Classification Considering Ecology	High Sensitivity	Medium Sensitivity	Low Sensitivity
Palustrine (MNRF PSW Evaluation)-confirmed presence of medium/high sensitivity veg communities and flora/fauna	High		
Overall Sensitivity of Wetland to Hydrological Change			
HIGH			
Red indicates records from MNRF Heart Lake PSW Evaluation (Wetland #1); not recorded by RJB			

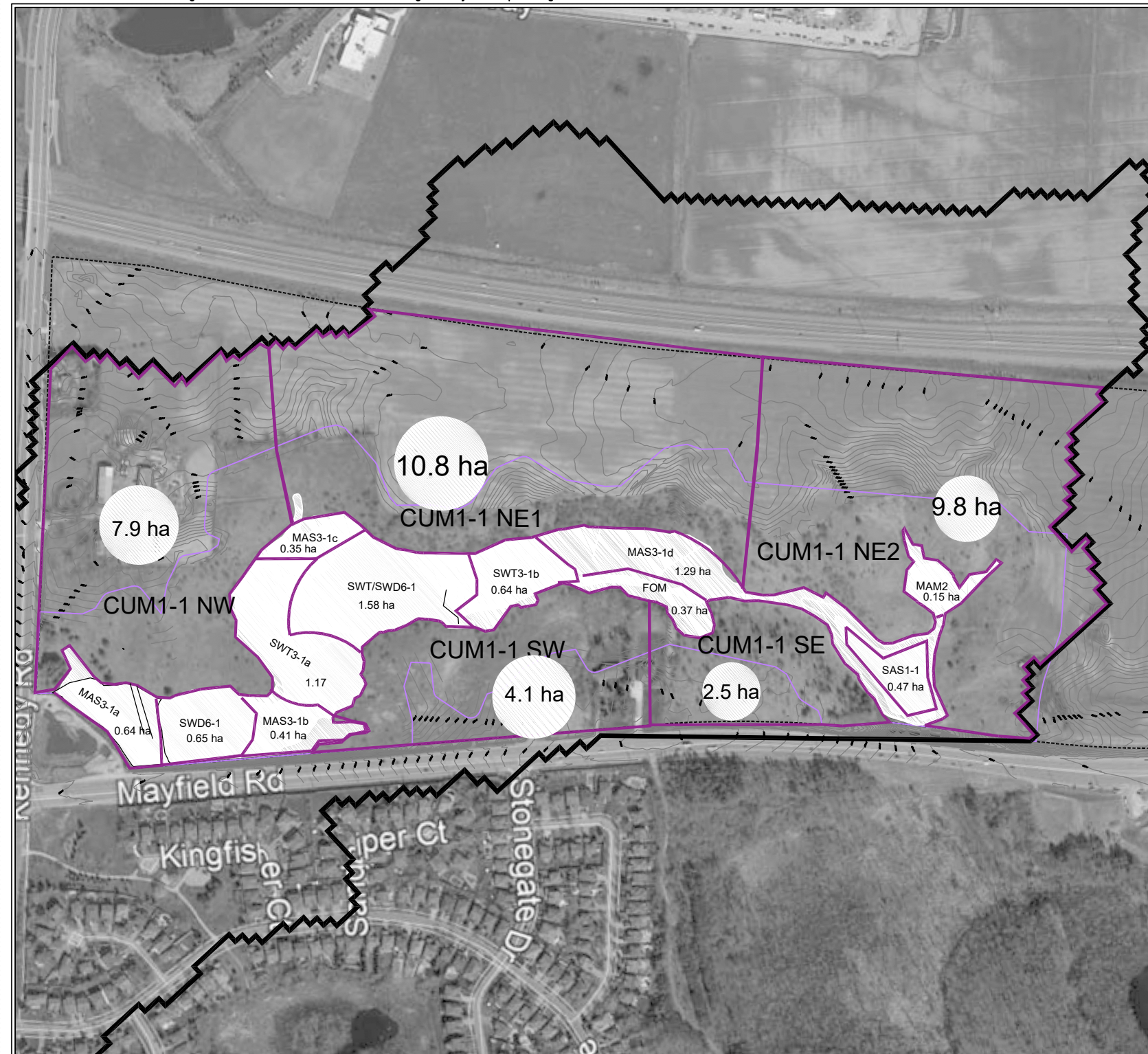


As per Figure 3 of TRCA Wetland Water Balance Risk Evaluation Guidelines, the work proposed is clearly High Risk and therefore will require a continuous hydrological model as outlined on page 17-18 of the guidelines

SNELL'S HOLLOW SECONDARY PLAN
TOWN OF CALEDON

LEGEND

-  WETLAND COMPLEX
-  PRE DRAINAGE
BOUNDARIES



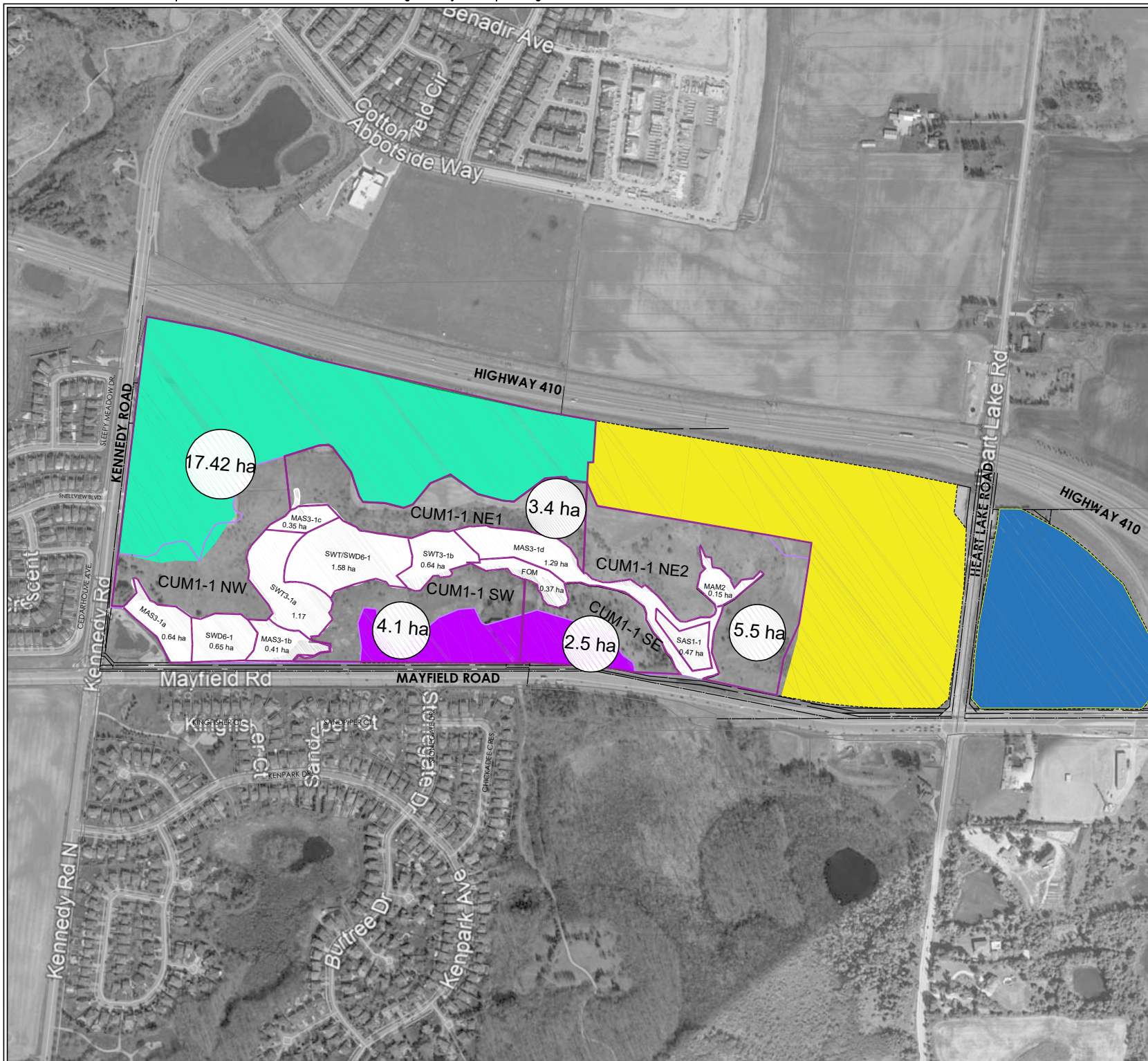
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FIGURE 1
WETLAND PRE-DEVELOPMENT
DRAINAGE AREA

SNELL'S HOLLOW SECONDARY PLAN TOWN OF CALEDON

LEGEND

-  WETLAND COMPLEX
-  POST DRAINAGE BOUNDARIES



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FIGURE 2
WETLAND POST-DEVELOPMENT
DRAINAGE AREA