

## **Appendix A: Ecologically Significant Habitats of the Binnen Kill and Tidal Habitats<sup>124</sup>**

“The classification used in NRI and in the associated habitat mapping (Figure 15) has equivalents in the New York Natural Heritage Program (NYNHP) natural community classification (Table 7). Habitats differ from NYNHP communities in that they are sometimes more generalized, being defined in terms of dominant vegetation type (and hydrology) rather than at the species level (e.g., upland hardwood forest rather than northern red oak forest).”

**Table 7: Concordance of Habitat Names (Mapping Units) for the Binnen Kill with New York Natural Heritage Program Natural Community Names**

Habitat Maps and Descriptions		New York Natural Heritage Program Community Classification <sup>1</sup>
Code	Habitat	Community
C	Cultural	Mowed lawn; mowed lawn with trees
Cr	Common reed	Shallow emergent marsh
Dem	Deep emergent marsh	Deep emergent marsh
Ff	Fallow field	Cropland/row crops; successional old field
Fp	Floodplain pool	Vernal pool
hay	Hayfield	Cropland/field crops
hs	Hardwood swamp	Silver maple-ash swamp
ltm	Lower tidal marsh	Freshwater tidal marsh*
of	Oldfield	Successional old field
ow	Open water	Eutrophic pond
rc	Row crop	Cropland/row crops
rcg	Reed canary grass marsh	Shallow emergent marsh
sav	Submerged aquatic vegetation	Freshwater subtidal aquatic bed
sem	Shallow emergent marsh	Shallow emergent marsh
ss	Shrub swamp	Shrub swamp
tc	Tidal creek	Freshwater tidal creek
tcr	Tidal common reed	Freshwater tidal marsh
tmf	Tidal mudflat	Freshwater intertidal mudflats*
tss	Tidal sandy shore	Freshwater intertidal shore
ts	Tidal swamp	Freshwater tidal swamp
uhf	Upland hardwood forest	Floodplain forest
us	Upland shrubland	Successional shrubland
utm	Upper tidal marsh	Freshwater tidal marsh
wm	Wet meadow	None
wm/cr	Wet meadow/common reed	None

Notes: \* Indicates habitats considered “significant natural communities” by NYNHP (see Figure 21).

<sup>124</sup> Edward Samanns, Erik Kiviat, et al, *Natural Resource Inventory and Assessment of Conservation Priorities of the Binnen Kill and its Tidal Habitats* (New York State Department of Environmental Conservation, Hudson River Estuary Program, 2017), 31-32.

“Each of the observed habitats is described below, and the total acreage of each habitat is summarized in Table 8. Based on the field inspection and interpretation of aerial photographs, aquatic and wetland (both tidal and non-tidal) habitats cover approximately 410 acres (166 hectares [ha]) (51.5 percent) of the Study Area, whereas terrestrial (upland) habitats cover 370 acres (150 ha) (46.5 percent). The remaining 14 acres (2 percent) consist of developed land uses (roads and wastewater treatment facility). The study area is evenly divided among forested habitats (including upland and swamp forests; 34 percent), open uplands (oldfield, hayfield, fallow field, row crops, and upland shrubland; 30 percent), and open (non-forested) wetlands (29 percent). Unvegetated tidal channel (Binnen Kill and Hudson River) occupies another 5 percent, and the remaining 2 percent of the Study Area is developed.”<sup>125</sup>

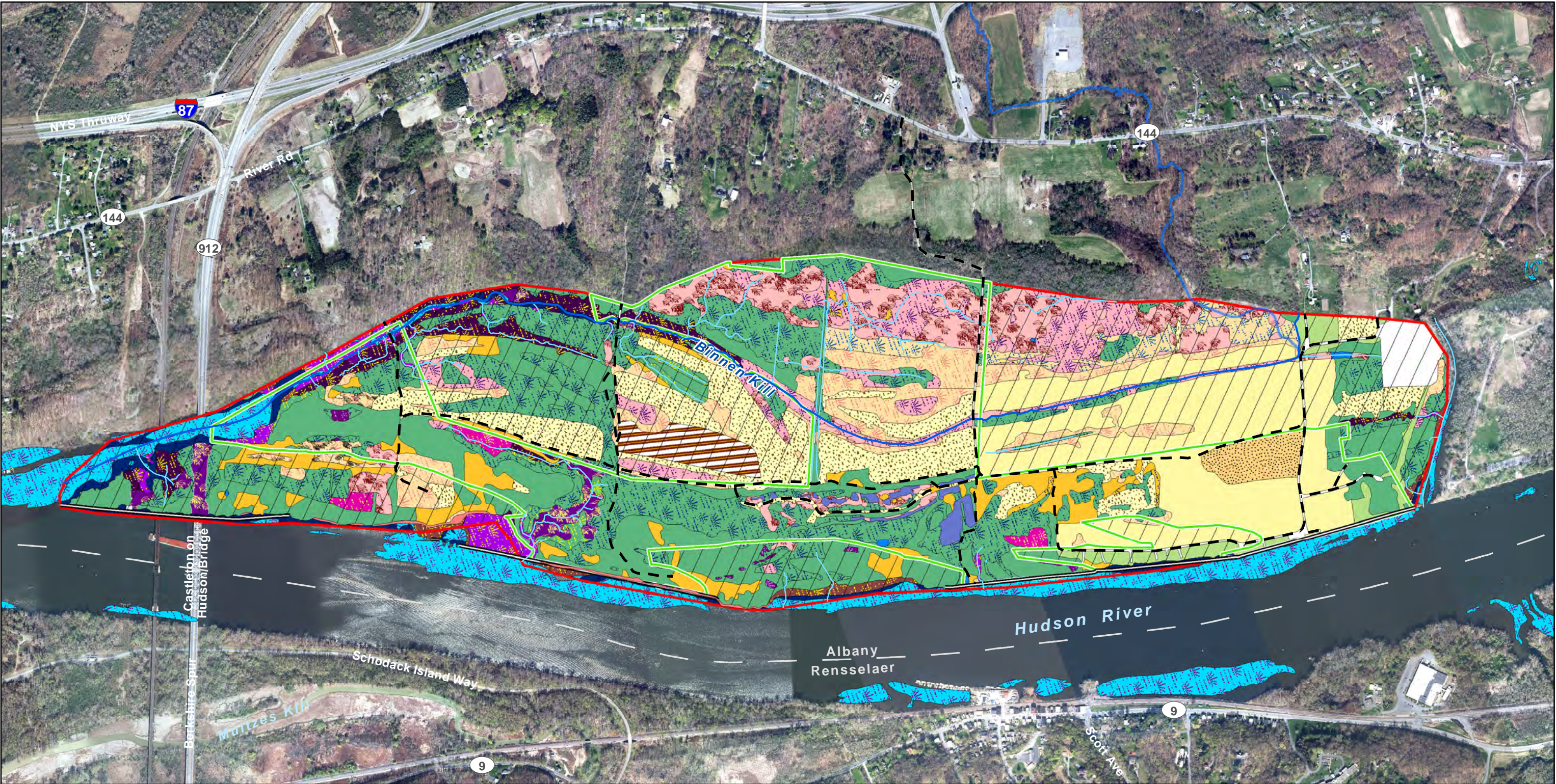
**Table 8. Summary of Plant Community Acreages in the Study Area**

Habitat	Code	Acreage
Cultural	c	12.8
Open Water	ow	0.9
Tidal Creek	tc	36.7
Submerged Aquatic Vegetation	sav	0.5
Tidal Sandy Shore	tss	2.0
Tidal Mud Flat	tmf	5.2
Lower Tidal Marsh	ltm	10.2
Upper Tidal Marsh	utm	23.2
Tidal Common Reed	tcr	9.7
Shallow Emergent Marsh	sem	44.7
Deep Emergent Marsh	dem	5.0
Common Reed	cr	53.9
Wet Meadow	wm	50.8
Wet Meadow/Common Reed	wm/cr	3.8
Reed Canary Grass	rcg	14.5
Floodplain Pool	fp	5.2
Shrub Swamp	ss	2.1
Tidal Hardwood Swamp	ts	6.7

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<sup>125</sup> Ibid.





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|--|---|--|---|
| <ul style="list-style-type: none"><li>Path</li><li>Study area</li><li>Focus area</li><li>Non-focus area</li><li>Developed area or non-significant habitat</li><li>Bulkhead</li></ul> | <ul style="list-style-type: none"><li>Other stream</li><li>Cultural</li><li>Common reed</li><li>Deep emergent marsh</li><li>Fallow field</li><li>Floodplain pool</li><li>Hayfield</li><li>Hardwood swamp</li><li>Intermittent woodland pool</li></ul> | <ul style="list-style-type: none"><li>Lower tidal marsh</li><li>Oldfield</li><li>Open water</li><li>Row crop</li><li>Reed canary grass marsh</li><li>Submerged aquatic vegetation</li><li>Shallow emergent marsh</li><li>Shrub swamp</li><li>Tidal channel</li></ul> | <ul style="list-style-type: none"><li>Tidal common reed</li><li>Tidal mudflat</li><li>Tidal sandy shore</li><li>Tidal swamp</li><li>Upland hardwood forest</li><li>Upland shrubland</li><li>Upper tidal marsh</li><li>Wet meadow</li><li>Wet meadow/common reed</li></ul> |
|--|---|--|---|
- Habitats**
- Binnen Kill

Sources:  
Tidal wetlands modified from  
NYSDEC 2007.  
SAV modified from NYSDEC 2017.  
2014 aerial orthophotos, NYSGIS.

Coordinate System:  
New York State Plane Ft, East Zone  
Datum: NAD 1983

October 2017



**Figure 15**  
**Ecologically Significant Habitats**  
Binnen Kill Natural Resource Inventory and Assessment  
Towns of Bethlehem and Coeymans  
Albany County, New York



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Feet