Sochacki Park
Wetland Health Assessment

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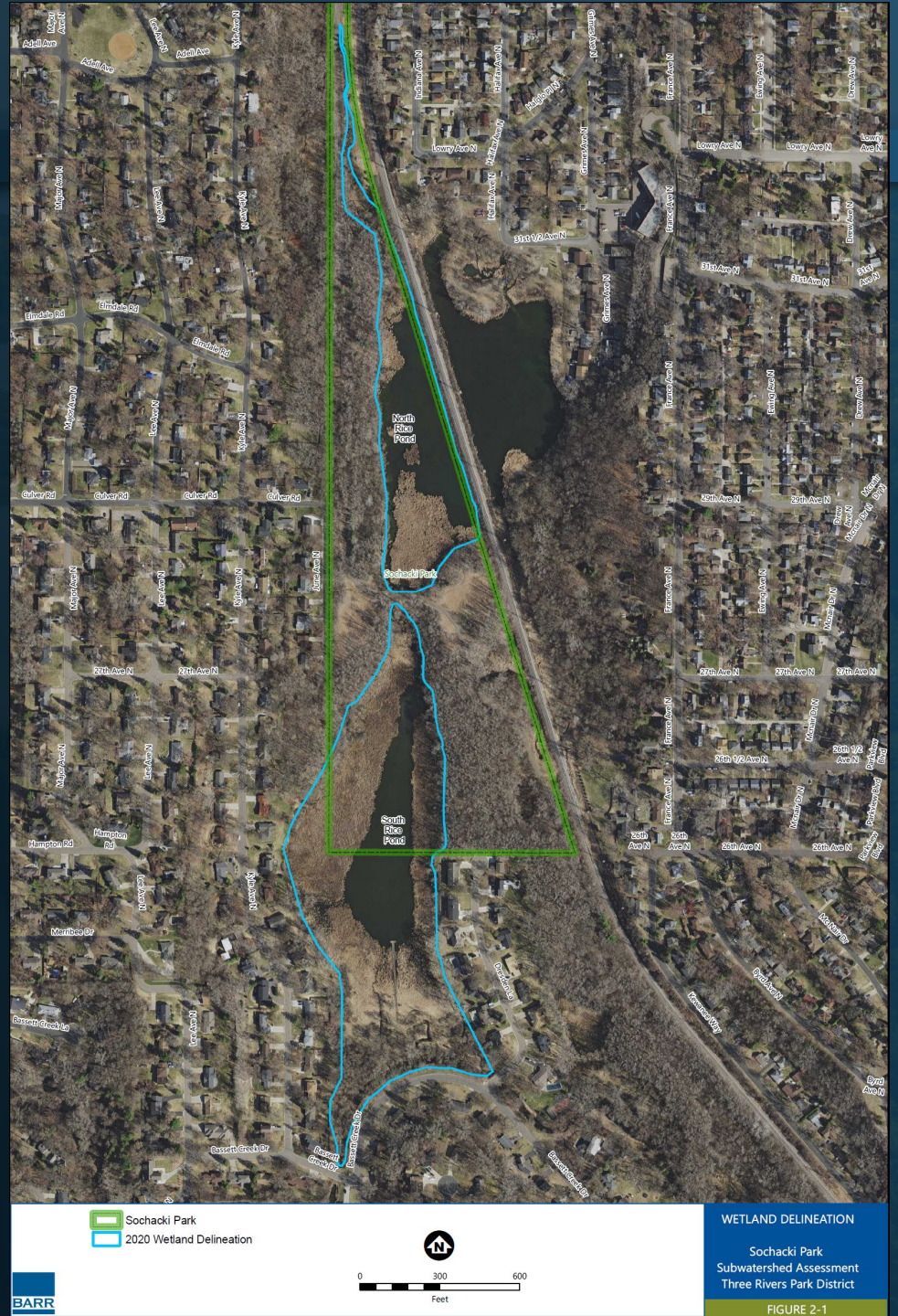
Wetland assessment tasks—N. & S. Rice Ponds

1. Wetland boundary and type summary
2. Minnesota Routine Assessment Methodology for Evaluating Wetland Functions (MNRAM) functional analysis
3. Assess (and report on) ecological health of wetlands
    i. Evaluate water quality with respect to ecological health goals
    ii. Evaluate water quality and sediment analysis implications for internal phosphorus loading
    iii. Evaluate wetland ecological health and identify, define and confirm the pond-specific issues and goals

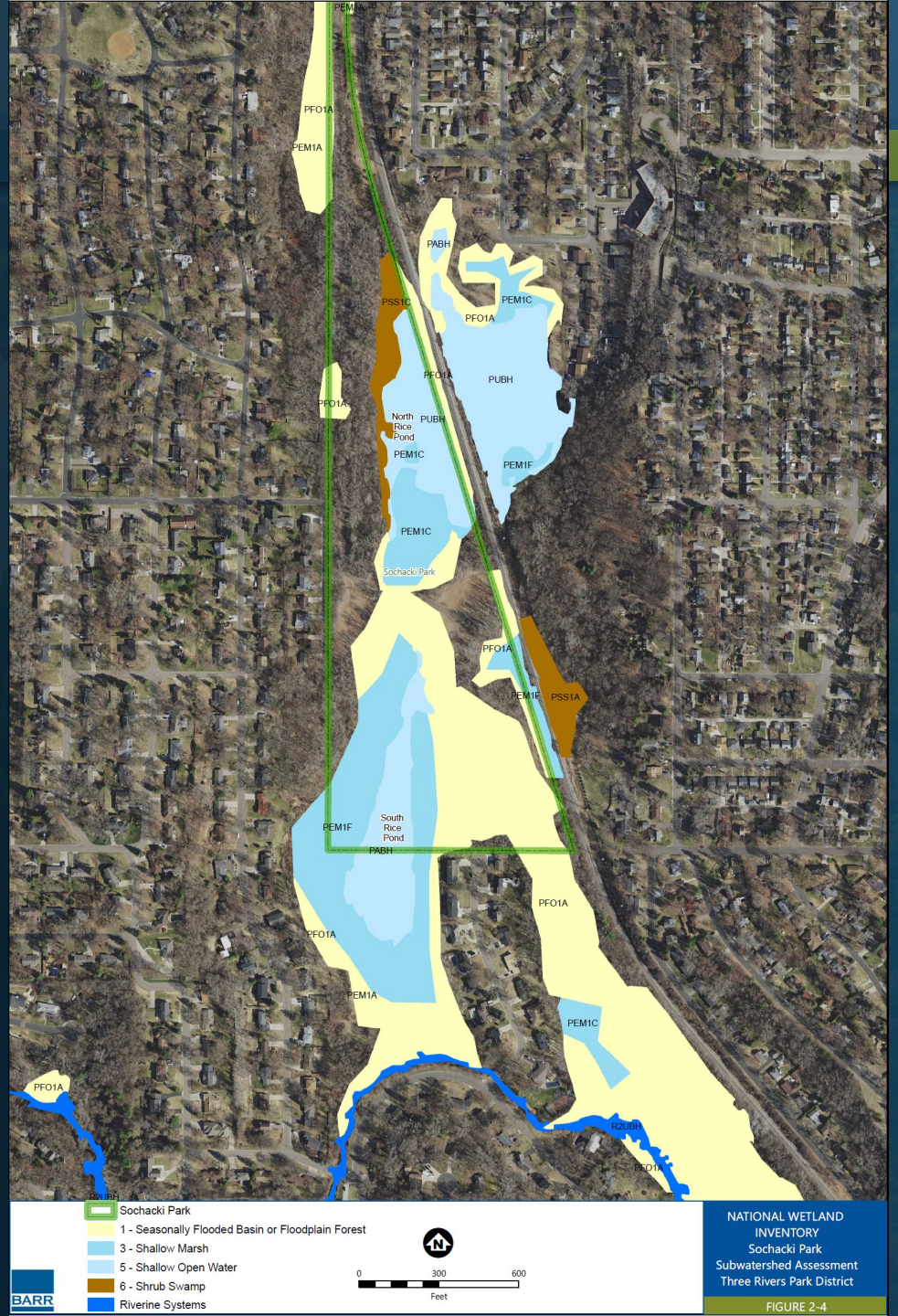
Wetland delineations



National Wetland Inventory

Table 2-1 Wetland Summary

Wetland ID	Approximate Area (acres)	Circular 39 Wetland Type [1]	Cowardin Wetland Type [2]	Eggers & Reed Wetland Community Type [3]
North Rice Pond	7.30	Type 5/3/6	PABH/EMC/SSC	Shallow open water/shallow marsh/shrub-carr
South Rice Pond	17.33	Type 5/3/1	PABH/EMC/FOA	Shallow open water/shallow marsh/floodplain forest



MNRAM background

Wetland Functions

Wetland functions are defined as a process or series of processes that take place within a wetland. These include the storage of water, transformation of nutrients, growth of living matter, and diversity of wetland plants, and they have **value** for the wetland itself, for surrounding ecosystems, and for people.

USGS, National Water Summary of Wetland Resources, Water Supply Paper 2425

MNRAM assesses

- Wetland water quality
- Vegetative diversity/integrity
- Hydrologic regime
- Wildlife habitat and structure
- Fish habitat
- Amphibian habitat
- Downstream water quality
- Aesthetic/recreation/education/ cultural values
- Wetland sensitivity to stormwater and urban development

MNRAM results

North and South Rice Ponds have low ratings for

- Vegetative diversity/integrity in shallow marsh and floodplain (due to dominance of non-native invasive vegetation)
- Maintenance of wetland water quality
- Maintenance of amphibian habitat
- Additional stormwater treatment needs

Maintenance of hydrologic regime rating was low in North Rice and moderate in South Rice

North and South Rice Ponds have moderate ratings for

- Vegetative diversity/integrity in open water
- Downstream water quality
- Fish and wildlife habitat and structure
- Flood and stormwater attenuation
- Aesthetic/recreation/education/cultural values
- Wetland sensitivity to stormwater and urban development

Next steps

- Assess (and report on) ecological health of wetlands
  - Evaluate water quality with respect to ecological health goals
  - Evaluate water quality and sediment analysis implications for internal phosphorus loading
  - Evaluate wetland ecological health and identify, define and confirm the pond-specific issues and goals

Questions??