

### White Group

• **Scenario:**

– “You are a District Conservationist and Bill Gates has just purchased the Oswego County land tract and wants to restore the wetlands. Mrs. Gates wants a nice view from her new 2 story home and especially likes waterbirds, which she watches with her Ziess spotting scope. Understanding that you have unlimited funds, develop a wetland restoration plan to meet their objectives.”

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### White Group

• **Objective:**

– **Landowner objective:** “...wants to restore the wetlands. Mrs. Gates wants a nice view from her new 2 story home and especially likes waterbirds, which she watches with her Ziess spotting scope...”

– **Our objective:** restore the ecosystem, with the intent of maximizing wildlife potential.

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### Resource Inventory

- **Site is groundwater-driven**, but is currently drained to an extent where hydrology does not exist.
- **Site is Carlisle muck soil (hydric)** with a >20 inch A horizon, but currently unsaturated due to drainage.
- **Hydrophytic vegetation** is present, but does not currently dominate the site, due to drainage and previous ag practices.

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### Resource Inventory

- **Wildlife observed:** Northern black water snakes, red-winged blackbirds (*various sandpipers, herons, frogs, songbirds, etc., on adjacent restoration site*).
- **Engineering:** existing subsurface drainage outlets into 3 drainage ditches, which in turn outlet into road culvert.
- **Functional assessment:** assessment scores range from 0.07 (habitat function 2) to 0.37 (hydrologic function 2).

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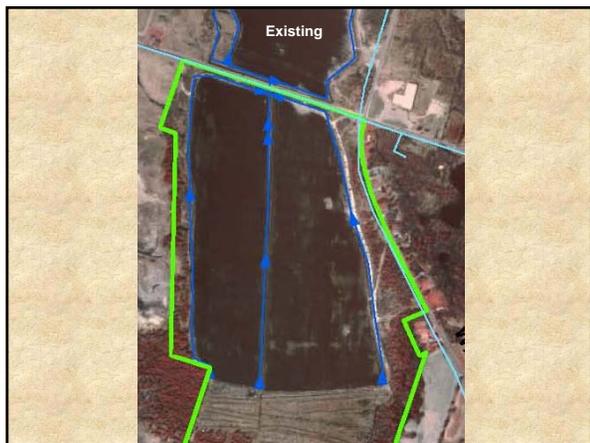
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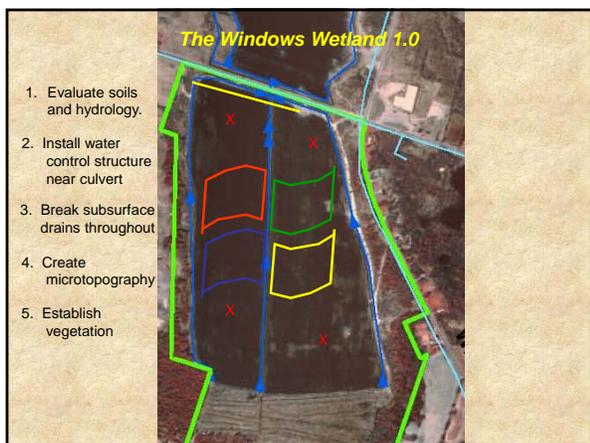
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### Proposed Plant List

- **Overstory:** swamp white oak (300), pin oak (300), red maple (nat.), cottonwood (nat.), willow (nat.), aspen (nat.)
- **Shrubby islands/sandbars:** silky dogwood (300), red-osier dogwood (300), cranberrybush vib.(300), buttonbush (300)
- **Upland nesting areas:** Switchgrass, Indiangrass, Big & Little Bluestem, Eastern gamagrass, plus 1 lb per acre of wetland forbs

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### Proposed Plant List

- **Water Plants:** lilies, elodea, arum, etc.
- **Emergent fringe:** sod mats for grasses, sedges, rushes; blue flag, etc.
- **Snags** (variable heights and diameters)
- **Food plots:** millet, etc., planted in fluctuating water-level areas

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### Engineering Features

- **Water control structure:** Agri-drain at/near the culvert pipe to control the hydrology of the site
- **Microtopography:** shallow embankments, pools, drainage swales, high areas created throughout—as part of the Windows-icon layout. Water depth will vary from 0 – 18”, with ‘deep’ water near the home for aesthetics.

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### Wildlife considerations

- Waterbirds desired, which means maximizing shallow water habitats and food sources suited to those species.
- Specifically, we want to increase and maintain invertebrate and herp numbers, and maximize annual seed/plant diversity. This will be done through forested fringes, upland area creation, and water level management.

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### Funding Source

Come on, we're working with Bill Gates here...

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### Timetable

- **Phase 1:** Evaluation of soils and hydrology
- **Phase 2:** Construction and installation, plus initial seedings (trees, shrubs, snags, etc.). Invasive plant mgmt.
- **Phase 3:** Secondary plantings on upland sites, water plants, emergent fringe; installation of nesting structures. Ongoing invasive plant mgmt.
- **Phase 4:** ongoing, adaptive mgmt of wetland complex.

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### Operation & Maintenance

- Mr. Gates will hire a full-time, permanent “preserve manager” to maintain and monitor the wetland complex. Duties to include water level mgmt, invasives control, habitat plantings and maintenance.

(Several applicants already, a.k.a. White Team)

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### Feasibility

- General objectives of landowner, unlimited funding, and suitable site make virtually anything possible over time... There is high potential for this to become a continually-refined “work in progress”.
- “The sky’s the limit.”

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### Site Suitability for Class

- Based on existing soil and hydrologic potentials, site is very suitable for open-canopied wetland projects. As a forested wetland, a lot of work, funding, and time would be needed to achieve the desired result.

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