Norfolk Naval Shipyard, Portsmouth, VA

Appendix D

Appendix D: Wetland Classification Terms and Codes for Figure 8

What is a Wetland

"Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season. Water saturation largely determines how the soil develops and the types of plant and animal communities living in and on the soil. Wetlands may support both aquatic and terrestrial species. The prolonged presence of water creates conditions that favor the growth of specially adapted plants and promote the development of characteristic wetlands soils."

Source: http://www.epa.gov/owow/wetlands/types/

Wetlands and Deepwater Habitats Classification National Wetlands Inventory Mapping Code Description

Estuarine

[E] Estuarine - "The Estuarine System describes deepwater tidal habitats and adjacent tidal wetlands with low energy and variable salinity, influenced and often semi-enclosed by land."

Lacustrine

[L] Lacustrine - "The Lacustrine System includes wetlands and deepwater habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30% areal coverage (3) total area exceeds 8 hectares (20 acres)."

Palustrine

[P] Palustrine - "The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, emergents, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 ppt. Wetlands lacking such vegetation are also included if they exhibit all of the following characteristics: (1) are less than 8 hectares (20 acres); (2) do not have an active wave-formed or bedrock shoreline feature; (3) have at low water a depth less than 2 meters (6.6 feet) in the deepest part of the basin; (4) have a salinity due to ocean-derived salts of less than 0.5 ppt."

Upland

[U] Upland - All areas not defined as wetland or deep water habitats.

Source: http://www.nwi.fws.gov/atx/atx.html

Estuarine Codes for Figure 8

[E] Estuarine - The Estuarine System describes deepwater tidal habitats and adjacent tidal wetlands with low energy and variable salinity, influenced and often semi-enclosed by land.

- E1UBL:
 - [E] Estuarine, [1] Subtidal, [UB] Unconsolidated Bottom, [L] Subtidal
- E2EM1P:
 - [E] Estuarine, [2] Intertidal, [EM] Emergent, [1] Persistent, [P] Irregularly Flooded
- E2SS1P:
 - [E] Estuarine, [2] Intertidal, [SS] Scrub-Shrub, [1] Broad-Leaved Deciduous, [P] Irregularly Flooded
- E2SS3P:
 - [E] Estuarine, [2] Intertidal, [SS] Scrub-Shrub, [3] Broad-Leaved Evergreen, [P] Irregularly Flooded
- E2USN:
 - [E] Estuarine, [2] Intertidal, [US] Unconsolidated Shore, [N] Regularly Flooded

Lacustrine Codes for Figure 8

- L] Lacustrine The Lacustrine System includes wetlands and deepwater habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30% areal coverage (3) total area exceeds 8 hectares (20 acres).
- L1UBHx: [L] Lacustrine, [1] Limnetic, [UB] Unconsolidated Bottom, [H] Permanently Flooded, [x] Excavated

Palustrine Codes for Figure 8

[P] Palustrine - The Palustrine System includes all nontidal wetlands dominated by trees, shrubs, emergents, mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 ppt. Wetlands lacking such vegetation are also included if they exhibit all of the following characteristics: (1) are less than 8 hectares (20 acres); (2) do not have an active wave-formed or bedrock shoreline feature; (3) have at low water a depth less than 2 meters (6.6 feet) in the deepest part of the basin; (4) have a salinity due to ocean-derived salts of less than 0.5 ppt.

Palustrine Codes for Figure 8 Continued

- PEM1A: [P] Palustrine, [EM] Emergent, [1] Persistent, [A] Temporarily Flooded
- PEM1Ad: [P] Palustrine, [EM] Emergent, [1] Persistent, [A] Temporarily Flooded, [d] Partially Drained/Ditched
- PEM1C: [P] Palustrine, [EM] Emergent, [1] Persistent, [C] Seasonally Flooded
- PM1Cd: [P] Palustrine, [EM] Emergent, [1] Persistent, [C] Seasonally Flooded, [d] Partially Drained/Ditched
- PEM1Ch: [P] Palustrine, [EM] Emergent, [1] Persistent, [C] Seasonally Flooded, [h] Diked/Impounded
- PEM1Cx: [P] Palustrine, [EM] Emergent, [1] Persistent, [C] Seasonally Flooded, [x] Excavated
- PEM1E: [P] Palustrine, [EM] Emergent, [1] Persistent, [E] Seasonally Flooded/Saturated
- PEM1Eh: [P] Palustrine, [EM] Emergent, [1] Persistent, [E] Seasonally Flooded/Saturated, [h] Diked/Impounded
- PEM1Hx: [P] Palustrine, [EM] Emergent, [1] Persistent, [H] Permanently Flooded, [x] Excavated
- PEM1R: [P] Palustrine, [EM] Emergent, [1] Persistent, [R] Seasonal-Tidal
- PEM1S: [P] Palustrine, [EM] Emergent, [1] Persistent, [S] Temporary-Tidal
- PFO1A: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [A] Temporarily Flooded
- PFO1Ad: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [A] Temporarily Flooded, [d] Partially Drained/Ditched
- PFO1C: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [C] Seasonally Flooded
- PFO1E: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [E] Seasonally Flooded/Saturated
- PFO1R: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [R] Seasonal-Tidal
- PFO1S: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [S] Temporary-Tidal
- PSS1A: [P] Palustrine, [SS] Scrub-Shrub, [1] Broad-Leaved Deciduous, [A] Temporarily Flooded
- PSS1C:[P] Palustrine, [SS] Scrub-Shrub, [1] Broad-Leaved Deciduous, [C] Seasonally Flooded
- PSS1R: [P] Palustrine, [SS] Scrub-Shrub, [1] Broad-Leaved Deciduous, [R] Seasonal-Tidal
- PSS3R: Evergreen, [R] Seasonal-Tidal
- PUBFh: [P] Palustrine, [UB] Unconsolidated Bottom, [F] Semipermanently Flooded, [h] Diked/Impounded
- PUBFx: [P] Palustrine, [UB] Unconsolidated Bottom, [F] Semipermanently Flooded, [x] Excavated
- PUBHh: [P] Palustrine, [UB] Unconsolidated Bottom, [H] Permanently Flooded, [h] Diked/Impounded
- PUBHx: [P] Palustrine, [UB] Unconsolidated Bottom, [H] Permanently Flooded, [x] Excavated
- PUBKrx: [P] Palustrine, [UB] Unconsolidated Bottom, [K] Artificially Flooded, [r] Artificial Substrate, [x] Excavated
- PUBKx: [P] Palustrine, [UB] Unconsolidated Bottom, [K] Artificially Flooded, [x] Excavate
- PEM1A: [P] Palustrine, [EM] Emergent, [1] Persistent, [A] Temporarily Flooded

Palustrine Codes for Figure 8 Continued

- PEM1Ad: [P] Palustrine, [EM] Emergent, [1] Persistent, [A] Temporarily Flooded, [d] Partially Drained/Ditched
- PM1C: [P] Palustrine, [EM] Emergent, [1] Persistent, [C] Seasonally Flooded
- PM1Cd: [P] Palustrine, [EM] Emergent, [1] Persistent, [C] Seasonally Flooded, [d] Partially Drained/Ditched
- PEM1Ch: [P] Palustrine, [EM] Emergent, [1] Persistent, [C] Seasonally Flooded, [h] Diked/Impounded
- PEM1Cx: [P] Palustrine, [EM] Emergent, [1] Persistent, [C] Seasonally Flooded, [x] Excavated
- PEM1E: [P] Palustrine, [EM] Emergent, [1] Persistent, [E] Seasonally Flooded/Saturated
- PEM1Eh: [P] Palustrine, [EM] Emergent, [1] Persistent, [E] Seasonally Flooded/Saturated, [h] Diked/Impounded
- PEM1Hx: [P] Palustrine, [EM] Emergent, [1] Persistent, [H] Permanently Flooded, [x] Excavated
- PEM1R: [P] Palustrine, [EM] Emergent, [1] Persistent, [R] Seasonal-Tidal
- PEM1S: [P] Palustrine, [EM] Emergent, [1] Persistent, [S] Temporary-Tidal
- PFO1A: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [A] Temporarily Flooded
- PFO1Ad: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [A] Temporarily Flooded, [d] Partially Drained/Ditched
- PFO1C: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [C] Seasonally Flooded
- PFO1E: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [E] Seasonally Flooded/Saturated
- PFO1R: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [R] Seasonal-Tidal
- PFO1S: [P] Palustrine, [FO] Forested, [1] Broad-Leaved Deciduous, [S] Temporary-Tidal
- PSS1A: [P] Palustrine, [SS] Scrub-Shrub, [1] Broad-Leaved Deciduous, [A] Temporarily Flooded
- PSS1C:[P] Palustrine, [SS] Scrub-Shrub, [1] Broad-Leaved Deciduous, [C] Seasonally Flooded
- PSS1R: [P] Palustrine, [SS] Scrub-Shrub, [1] Broad-Leaved Deciduous, [R] Seasonal-Tidal
- PSS3R: Evergreen, [R] Seasonal-Tidal
- PUBFh: [P] Palustrine, [UB] Unconsolidated Bottom, [F] Semipermanently Flooded, [h] Diked/Impounded
- PUBFx: [P] Palustrine, [UB] Unconsolidated Bottom, [F] Semipermanently Flooded, [x] Excavated
- PUBHh: [P] Palustrine, [UB] Unconsolidated Bottom, [H] Permanently Flooded, [h] Diked/Impounded
- PUBHx: [P] Palustrine, [UB] Unconsolidated Bottom, [H] Permanently Flooded, [x] Excavated
- PUBKrx: [P] Palustrine, [UB] Unconsolidated Bottom, [K] Artificially Flooded, [r] Artificial