

Analysis Name: PA Natural Stormwater Preservation

Map areas where the land condition (green) is providing great value to aquatic resources (blue). The benefit could be minimizing flooding, enhancing groundwater recharge, moderating stream flow, providing for sediment and nutrient capture, and other goals. In Pennsylvania these are primarily wooded areas but might also include meadows.

Absolute

- 1 cannot already be protected
- 2 cannot be open water

Relative

- 1 cannot already be in mitigation project area (e.g., RIBITS, banks, DOT mitigation projects)
- 2 in a 303(d) impaired watershed
- 3 is a potential wetland surrounded by high impervious areas
- 4 is a potential wetland surrounded by 'not natural' areas
- 5 is a wetland
- 6 is farmed or pasture (indicates ease of restoring)
- 7 is forested
- 8 is in a 100-year flood plain
- 9 is in a first order stream catchment
- 10 is in a larger (200 acres or larger) forested area
- 11 is in a least disturbed streams watershed as defined by PA ACC
- 12 is in a Pennsylvania Natural Heritage core habitat
- 13 is in a Pennsylvania Natural Heritage supporting habitat
- 14 is in a watershed for which a 319 plan has been adopted
- 15 is in an ACC preservation watershed
- 16 is in an Audubon Important Bird Area
- 17 is in forested or woody riparian zone
- 18 is not within five miles of federally funded airport (to discourage restoration within airport distance)
- 19 is potential wetland

- 20** is within Active River Area with a 30m buffer
- 21** is within an Exceptional Value (EV) or High Quality (HQ) watershed
- 22** scored greater than 90 in the FS Forests To Faucets mapping

Analysis Name: PA Riparian Zone Preservation

Map and score areas near but not in the stream that are contributing positively to stream health. Examples include areas that are heavily wooded, or have other woody vegetation near the stream, which prevent erosion, absorb nutrients and sediment and provide habitat for terrestrial and aquatic species.

Absolute

- 1 must be forested or woody
- 2 must be within the riparian area, defined as Active River Area plus one meter pixel plus flood plains plus 300 feet

Relative

- 1 is in a first order stream catchment
- 2 is in a least disturbed streams watershed as defined by PA ACC
- 3 is in a Pennsylvania Natural Heritage core habitat
- 4 is in a Pennsylvania Natural Heritage supporting habitat
- 5 is in an ACC preservation watershed
- 6 is in an ACC restoration watershed
- 7 is in an Audubon Important Bird Area
- 8 is within 300 feet of state gamelands, state forests (or within?)
- 9 is within a USFWS priority area for endangered species areas (scored 1 to 4) (PA)
- 10 is within an Exceptional Value (EV) or High Quality (HQ) watershed
- 11 scored greater than 90 in the FS Forests To Faucets mapping

Analysis Name: PA Riparian Zone Restoration

Find and score stream buffer restoration opportunities. Consider both whether restoration can be completed and the value of completing. Scores will range from 1 to 5 in each of the watersheds from the CPF

Absolute

- 1 cannot be forested (is already functioning as a healthy riparian zone)
- 2 must be within the riparian area, defined as Active River Area plus one meter pixel plus flood plains plus 300 feet

Relative

- 1 in a 303(d) impaired watershed
- 2 is farmed or pasture (indicates ease of restoring)
- 3 is in a first order stream catchment
- 4 is in a Pennsylvania Natural Heritage core habitat
- 5 is in a watershed for which a 319 plan has been adopted
- 6 is in an ACC preservation watershed
- 7 is in an ACC restoration watershed
- 8 is in an area that has a local TMDL established
- 9 is in an Audubon Important Bird Area
- 10 is in an MS4 area
- 11 is not within five miles of federally funded airport (to discourage restoration within airport distance)
- 12 is within 300 feet of state gamelands, state forests (or within?)
- 13 is within a USFWS priority area for endangered species areas (scored 1 to 4) (PA)

Analysis Name: PA Stormwater Restoration

Map areas where green infrastructure projects can be incorporated and where there is great value in doing so. These will be primarily areas where impervious surfaces are more predominant or where flooding may be extreme.

Absolute

- 1 cannot be a wetland
- 2 cannot be in a 100-year flood plain
- 3 cannot be open water

Relative

- 1 cannot be in karst geology formation
- 2 in a 303(d) impaired watershed
- 3 is a potential wetland surrounded by high impervious areas
- 4 is a potential wetland that would reconnect hydro
- 5 is farmed or pasture (indicates ease of restoring)
- 6 is in a first order stream catchment
- 7 is in a watershed for which a 319 plan has been adopted
- 8 is in an ACC restoration watershed
- 9 is in an MS4 area
- 10 is not within five miles of federally funded airport (to discourage restoration within airport distance)
- 11 is potential wetland
- 12 is within Active River Area with a 30m buffer
- 13 is within an Exceptional Value (EV) or High Quality (HQ) watershed
- 14 scored greater than 90 in the FS Forests To Faucets mapping

Analysis Name: PA Wetland Conservation

Absolute

- 1 cannot already be protected
- 2 must be a wetland

Relative

- 1 is in a least disturbed streams watershed as defined by PA ACC
- 2 is in a watershed for which a 319 plan has been adopted
- 3 is in an ACC preservation watershed
- 4 is in an area that has a local TMDL established
- 5 is in an Audubon Important Bird Area
- 6 is in an MS4 area
- 7 is within 200 feet of but not in a stream or water body
- 8 is within 200 feet of but not within already protected lands
- 9 is within an Exceptional Value (EV) or High Quality (HQ) watershed
- 10 is within flood plain and the Active River Area
- 11 scored greater than 90 in the FS Forests To Faucets mapping

Analysis Name: PA Wetland Restoration

Find and score wetland restoration opportunities. Consider the value and benefit of restoring the area to a functioning wetland. Scores will range from one to five in each 104 subwatersheds from the CPF. This analysis will allow the user to find optimal eco-opportunities within a subwatershed. Consider both whether restoration can be completed and the value of completing.

Absolute

- 1 cannot be a wetland
- 2 cannot be open water
- 3 must show some evidence of having been a wetland in the past, generally as determined by poorly drained and very poorly drained soils (GSSURGO) (PA)

Relative

- 1 in a 303(d) impaired watershed
- 2 is a potential wetland surrounded by 'not natural' areas
- 3 is a potential wetland that would reconnect hydro
- 4 is farmed or pasture (indicates ease of restoring)
- 5 is in a 100-year flood plain
- 6 is in a first order stream catchment
- 7 is in a Pennsylvania Natural Heritage core habitat
- 8 is in a watershed for which a 319 plan has been adopted
- 9 is in an ACC restoration watershed
- 10 is not within five miles of federally funded airport (to discourage restoration within airport distance)
- 11 is within a USFWS priority area for endangered species areas (scored 1 to 4) (PA)
- 12 is within Active River Area with a 30m buffer
- 13 is within an Exceptional Value (EV) or High Quality (HQ) watershed
- 14 scored greater than 90 in the FS Forests To Faucets mapping