

ECOLOGICAL SCREENING APPROACH

Each site should be screened for potential ecological concerns as part of any site investigation to determine if further ecological evaluation is warranted. This screening process should be done as early in the investigation process as possible to ensure that the appropriate data are collected to evaluate ecological concerns.

The following screening method has been developed to provide interested parties with a quick method for evaluating whether their site warrants further ecological evaluation. If the answers to all of the questions are “NO” and sufficient documentation (e.g. maps, agency correspondence, etc.) is available to support the negative declaration, then no further ecological evaluation would likely be necessary. However, if the answer to one or more of the questions is “YES,” then further ecological evaluation of the site is warranted. The first step in further ecological evaluation is comparing the sampling data to the HSCA Screening Levels for Ecological sediment, surface water and surface soil as applicable.

Initial Ecological Evaluation Screening Questions

1. Are any of the following ecologically sensitive areas (ECSA) present on-site or immediately adjacent to the site (i.e. share a property boundary)? If the answer is “YES,” then additional ecological evaluation is necessary.

- A. Critical habitat, including breeding areas, migratory areas, and wintering areas for State or Federal designated endangered or threatened species, or habitat known to be used by designated, proposed, or under review endangered or threatened species (Reference: See address below).
- B. Federal or State Park, Preserve, Forest, Wildlife Refuge or other Federal or State administered natural or recreational area, as well as other recognized parklands, open space, or other mapped natural areas managed by local government, non-profit organizations, or others (Reference: Road Atlas or other commercially available maps).
- C. Coastal Barrier, both developed and undeveloped, including private and public beaches (Reference: USGS Topographic Maps, Road Atlas, or other commercially available maps).
- D. Spawning, migration, and feeding areas critical for the maintenance of anadromous fish/shellfish species within river, lake, or coastal tidal waters (Reference: See address below).
- E. Any waterway (stream, river, lake, tidal waters), including associated wetlands, floodplains, and riparian zones (Reference: USGS Topographic Maps, FEMA Floodplain Maps, National Wetland Inventory Maps, Delaware Wetland Maps, Site Observations).
- F. Recognized critical habitats for State listed species having the Delaware Natural Heritage Program Ranking of S1, S2, S3, S4, SU, SH, SX, and SE (Reference: See address below).
- G. Woodlands/forest in excess of 20 acres in size (Reference: Aerial photographs, site observations, USGS Topographic Maps).

To obtain information regarding question 1A (critical habitats), 1D (critical fish habitat), and 1F (Delaware Natural Heritage Program sites), send correspondence to the following address:

Environmental Review/Information Request
Delaware Natural Heritage Program
Division of Fish and Wildlife
4876 Hay Point Landing Road
Smyrna, DE 19977
(302)653-2880

Requests for information should be submitted on letterhead, and should include a full description of the proposed project or scope of work and a copy of a map, preferably a USGS topographic (7.5 minute) map, delineating the boundaries of the area of interest. In order to recover the costs of reviewing your project, you will be charged \$35 per hour (one hour minimum). In your letter, please state that you are aware of the cost recovery process.

To obtain additional detailed information about question 1D (critical fish habitat – important for sites that encompass or share a property line with a major waterway), send correspondence to the following address:

National Marine Fisheries Service
Habitat Conservation Division
904 South Morris Street
Oxford, MD 21654
(410)226-5771

2. Is the site within 2,000 feet of an ECSA listed in Question 1? If the answer is “YES,” proceed with the following questions. If the answer to any of these questions is also “YES,” then additional ecological evaluation is necessary.

- A. Is the site connected to the ECSA via open space, wooded area, agricultural land, perennial water body, or other natural corridor?
- B. Does storm runoff from the site discharge via pipe or drainage swale directly to the ECSA?
- C. Is there evidence of soil erosion from the site? Note that evidence of this would include gulleys, washout features, etc.

3. Does the site support a sufficient area (e.g. greater than ¼ acre) of vegetation (exclusive of the typically maintained lawn and flowerbed landscaping) which could offer fauna either shelter or a food source? Note that evidence of this would include bird and wildlife sightings, burrows, nests, animal droppings, etc. If the answer is “YES,” then additional ecological evaluation is necessary.

4. Is there any evidence of stressed vegetation, barren soil, dead animals, fish kills, or other ecological detriments at the site? If the answer is “YES,” then additional ecological evaluation is necessary.

If the answer to all of the preceding questions is “NO,” then no further ecological evaluation is generally required, and that negative determination should be documented in the final report for the site. However, the Department of Natural Resources and Environmental Control, Site Investigation and Restoration Section (DNREC-SIRS) reserves the right to require additional ecological evaluation for any site, regardless of the outcome of the screening, to protect the environment. If the answer to any of the preceding questions is “YES,” please proceed to the Further Ecological Evaluation Section.

Further Ecological Evaluation

If the answer to any of the **Initial Ecological Evaluation Screening Questions** is “YES,” sampling results must be compared to the HSCA Screening Levels for Ecological sediment, surface water, and surface soil, as applicable. If the sampling results exceed the HSCA Screening Levels, please contact the Department to discuss the next level of ecological risk assessment. Further evaluation could range from completing a more rigorous screening method (e.g. US EPA screening guidance) to rapid bioassessment evaluation to full-scale ecological risk assessment.