Site Record Variables

1. **Collector Name** cf. Common Variable “Collector Name”
2. **Collector ID** cf. Common Variable “Collector ID”
3. **Site Name** cf. Common Variable “Site Name”
4.

a. **Site Type**

Generally for mussel surveys, Site Type consists of an Area or length of stream. In this type provide the Origin Latitude and Origin Longitude as decimal degrees (cf. variables 12 and 13 below). Origin is defined as the upstream end of your survey area. Also record the Terminus Latitude and Terminus Longitude defined as the downstream most point of the survey location.

For Transect surveys the Origin is defined as one end of the transect and the Terminus as the other. If doing multiple transects at one site, record the upstream and downstream most coordinates.

b. **System Type**

Ecological Systems broadly characterize habitats into several categories. Multiple classifications exist. The one on this form is a hybrid designed to provide some insight into the area examined and what might be expected to live there. It also provides a check on what additional information (i. e. forms) should be forthcoming.

Collectors are provided a choice of three basic systems to choose from. The aquatic system is further separated into Lacustrine, Riverine and Palustrine. Descriptions of each system follow below.

AQUATIC-PALUSTRINE - Non-tidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean derived salts is below 0.5 parts per thousand. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2m at low water; and salinity due to ocean- derived salts less than 0.5 parts per thousand.

AQUATIC -LACUSTRINE - 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; and (3) total area exceeds 8 ha (20 acres). Similar wetland and deepwater habitats totaling less than 8 ha are also included in the Lacustrine System if an active wave-formed or bedrock shoreline feature makes up all or part of the boundary, or if the water depth in the deepest part of the basin exceeds 2 m (6.6 feet) at low water. Lacustrine waters may be tidal or nontidal, but ocean-derived salinity is always less than 0.5 parts per thousand.

AQUATIC-RIVERINE - Includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetland dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean derived salts in excess of 0.5 parts per thousand. A channel is "an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.”

5. **LLID** for DNR usage
6. **Permitee ID** cf. Common Variable “Permitee ID”
7. **Date** cf. Common Variable “Date”
8. **Project** cf. Common Variable “Project”
9. **Work Plan** cf. Common Variable “Work Plan”
10. **Job** cf. Common Variable “Job”
11. **Travel Directions** Provide concise driving/walking directions to the origin of the site. Start from a well known or easily identifiable location (ex. the intersection of US Routes 219 and 33 in Elkins, WV). Provide distance and

direction to the site. Do not place the starting point any further from the site than is necessary. Use the size of the space provided to gauge the length of the description, but if more space is needed continue on item 24. (Notes) or the back of the sheet.

12. Origin Latitude dd, upstream end of survey area or one end of transect. Record the latitude of the Site in decimal degrees and to no less than 4 decimal places. If your GPS unit does not record in decimal degrees or if you extracted the coordinates from a map as degrees, minutes and seconds you may convert to decimal degrees using the following example.

Given a latitude of 38° 22' 05" convert the coordinate to decimal degrees.
Solution: 05" is 5/60 of a minute or 0.08333 of a minute.
Add 0.08333 to 22 to arrive at a coordinate of 38° 22.08333'.
22.08333' is 22.0833/60 of a degree or 0.368055 of a degree.
Add 0.368055' to 38° to get 38.368055°

13. **Origin Longitude DD** cf. 12. Origin Latitude dd above, upstream end of survey area or one end of transect

14. **Terminus Latitude dd** cf. 12. Origin Latitude dd above, downstream end of survey area or one end of transect

15. **Terminus Longitude dd** cf. 12. Origin Latitude dd above

16. **NA Datum** NA Datum stands for North American Datum. It is often abbreviated as NAD. A datum is the mathematical equation that describes the earth as a sphere but incorporates some of the earth's differences from a perfect globe. This was done in 1927 and again in 1983 with the 1983 attempt producing better results. The WV Division of Natural Resources collects all current coordinate data using NAD83 and is correcting legacy data to that standard. Most popular GPS units allow the user to choose the format of the data collected. Many maps also report the NAD data in the legend or on the margin.

17. Accuracy Code The accuracy code records the confidence level of the recorded coordinates. Accuracy can vary considerably depending on the accuracy acceptable for the study, the instrumentation available, expertise able to be applied, etc. Select a numerical code from the following table to describe the accuracy level of the coordinates you record on this form. Note that the accuracy code should change after the rover file is corrected.

Accuracy
Code Accuracy Description
0 Unknown or Unreported accuracy
1 Survey Quality (+/- 0.5 cm accuracy)
2 Corrected GPS (+/- 3 m accuracy)
3 Correct to approx. 1 second of arc (+/- 15 m)
4 Coordinates extracted from a known point on a 7 1/2 quad (+/- 100 m)
5 Coordinates extracted from an approx. point placed on a 7 1/2 quad. (+/- 500 m)
6 Coordinates extracted from an approx. point on 7 1/2 quad using general directions (+/- 1 km)
7 Accurate only to the quarter quadrangle (7 1/2 min. quad)
8 Accurate only to the quadrangle (7 1/2 min)
9 Accurate only to the county level
10 Uncorrected GPS