



# **Maine Volunteer River Monitoring Program (VRMP)**

## **Appendix F**

### **Site Location Form**

#### **Program-Wide SAP Appendix**

From:

Maine DEP (Maine Department of Environmental Protection). 2009. Maine Volunteer River Monitoring Program [VRMP] - Quality Assurance Program Plan. Doc #: DEPLW-0984. Portland, ME. <http://www.maine.gov/dep/blwq/docstream/vrmp/publication.htm>



# Volunteer River Monitoring Program SITE DESCRIPTION FORM



|  |             |  |         |   |   |   |               |                                   |                         |           |
|--|-------------|--|---------|---|---|---|---------------|-----------------------------------|-------------------------|-----------|
| STATION ID #:  |             |  |         |   |   | SITE NAME:  |               |                                   |                         |           |
| STREAM/RIVER NAME:   |             |  |         |   |   | DATE:   |               |                                   |                         |           |
| TOWN:  |             |  |         |   |   | UTM NORTHING:   | _____         |                                   | MAKE/MODEL:             |           |
| <b>VRMP Use Only</b><br>STATUTORY STREAM CLASSIFICATION  |             |  |         |   |   | UTM EASTING:  | 0_____        |                                   | ESTIMATED GPS ACCURACY: |           |
|  |             |  |         |   |   | -----DATUM MUST BE IN NAD83 or WGS84-----   |               |                                   |                         |           |
| POLLUTION ISSUES:  |             |  |         |   |   |   |               |                                   |                         |           |
| RIPARIAN DISTURBANCE:  |             | YES / NO                                     |         | If YES, describe:                                 |   |   |               |                                   |                         |           |
| CANOPY COVER:  |             | 0 – 20%                                      |         | 20 – 40%  |   | 40 – 60%  |               | 60 – 80%                          |                         | 80 – 100% |
| CHANNEL WIDTH :<br><i>(estimated or measured)</i>  |             | circle:<br><i>(feet / meters)</i>            |         |   |   | <b>*AVOID IF SAFETY IS AN ISSUE *</b><br>MID-CHANNEL DEPTH:<br><i>(estimated or measured)</i> |               | circle:<br><i>(feet / meters)</i> |                         |           |
| DOMINANT/ PRIMARY STREAM BOTTOM HABITAT TYPE:  |             | FINES  | SAND    | BOULDER   | GRAVEL                                  | COBBLE  | BEDROCK/LEDGE |                                   |                         |           |
| SECONDARY STREAM BOTTOM HABITAT TYPE:  |             | FINES  | SAND    | BOULDER   | GRAVEL                                  | COBBLE  | BEDROCK/LEDGE |                                   |                         |           |
| DOMINANT RIPARIAN VEGETATION:  |             | WETLAND VEGETATION<br><i>(e.g. CATTAILS)</i> |         | GRASS   | SHRUB<br><i>(ALDERS, DOGWOOD, ETC.)</i> | MIXED SUCCESSIONAL  | MATURE TREES  | FERNs                             |                         |           |
| POSITION SAMPLE TO BE COLLECTED<br><i>(Refer to Table 1 on Page 2 for guidance)</i>                        | HORIZONTAL: | MIDDLE                                       | THALWEG | EDGE, NEAR OUTSIDE OF RIVER BEND                  | DOCK                                    | EDGE OF CONSTRICTED AREA  | FROM A BRIDGE |                                   |                         |           |
|  | VERTICAL:   | MID-DEPTH OF WATER                           |         | > HALF-ARM'S LENGTH DEPTH INTO WATER (~ 1 ½ FEET) |   | DEPTH PROFILE<br><i>(1-m increments)</i>  |               |                                   |                         |           |
| IS THE SAMPLING LOCATION IN THE "CENTER OF FLOW" AS DESCRIBED IN TABLE 1 ON THE PAGE 2? _____ YES _____ NO |             |  |         |   |   |   |               |                                   |                         |           |

**SITE SKETCH — ALSO, PLEASE ATTACH PHOTOGRAPHS TO FORM.**  
*(INCLUDE A NORTH ARROW AND, IF APPLICABLE, LOCATION AND ID CODES/ NAMES ON SKETCH)*

INCLUDE HABITAT TYPES NEAR YOUR SITE. THIS INCLUDES RIFFLES, RUNS, POOLS, CASCADES, AND DEADWATER.

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## SITE LOCATION MONITORING LOCATION AND SITE SKETCH

**TABLE 1: Required river/stream sampling and monitoring locations for inclusion in the VRMP**

### Lateral Position Across a River/Stream

→ Sampling/monitoring needs to occur in the “center half of flow” so that a flowing, well-mixed, representative sample is collected. The center half of flow is usually close to the middle of the channel, though it sometimes can move away from the middle of the channel, following the thalweg towards the outside of a river-bend.

→ Samplers need to avoid shore-related features such as:

- eddies
- deadwaters
- shallows
- jetties
- pools (even though parts of the thalweg may pass through them)
- docks (unless they are within the center half of flow).

→ To reach the “center half of flow”, volunteers can use a variety of techniques including:

- wading out by foot
- reaching out
- using an extension pole
- using a boat
- sampling from a bridge/culvert using a VRMP-approved water sampling device <sup>1</sup>

### Vertical Position in a River/Stream

(In all cases, avoid allowing water surface films or “stirred-up bottom sediments” into the sample.

Always face upstream when sampling.)

*(For Tier 1 Dissolved Oxygen & Temperature)*

→ For rivers/streams < 3 m in depth, sample at mid-depth.

→ For rivers/streams ≥ 3 m in depth, sample at 1-m increments to obtain a vertical profile.

*(For Tier 2 Dissolved Oxygen & Temperature as well as any Other Water Quality Parameters )*

→ For rivers/streams that are non-wadeable, sample at mid-depth (if depth is known) or 1-meter below the surface.

→ For rivers/streams that are wadeable, sample at mid-depth or 1 ½ feet below the surface.

(Volunteers will specify which depth on their data sheet.)

### Longitudinal Position in a River/Stream

(when near crossing such as a bridge or culvert )

→ To avoid the possible effects of roads, bridges, or scour pools on water quality, the preferred location to sample is at the upstream end of a bridge or culvert crossing (as opposed to the downstream end) *unless*:

(1) it is safer to sample at the downstream end;

(2) the purpose of sampling at the downstream end of the crossing is to include any effects of the crossing on water quality.

→ Be sure to document where the sampling takes place with respect to a crossing.

### Impoundments

→ Sample as close as possible\* to the deepest “hole” (depth) of the impoundment – generally in the vicinity of the upstream side of the dam. Bathymetry maps or sonar equipment can be used to determine river depths. \*(Do not risk your safety! Do not get too close to the dam! Do not go into “roped-off” sections of the impoundment.)

<sup>1</sup> See VRMP's QAPP's section 5.2 and Appendix 2 (Standard Operating Procedure - Methods for Collecting Water Grab Samples) for details regarding VRMP-approved water sampling devices.

**SITE LOCATION DESCRIPTION** — (Include landowner information, directions to the site, surrounding land use, and landmarks)