NHDES-W-07-060

Volunteer Monitor Field Sampling Procedures Checklist

New Hampshire Volunteer Lake Assessment Program

RSA 487:31

(Form is to be Completed by the Volunteer and Filed with Original Field Data Sheet)

Lake Name: **Town:**

Date: **Time:**

Volunteer Monitors:

SAMPLING TASK	DONE	COMMENTS
I. PREPARATION FOR SAMPLING		
1. Anchor with enough line to anchor at deep spot.		
2. Life vests for everyone on the boat.		
II. DEEP SPOT SAMPLING		
Locating the Deep Spot(s):		
1. Indicate method used to locate deep spot: *circle: triangulation, GPS, depth finder, depth measurement with Kemmerer bottle, other (specify):_____*		
2. Depth of deep spot recorded on data sheet.		
Sample Collection:		
Deep spot samples (in general):		
1. White bottle rinsed with sample before filling.		
2. White bottle filled to the neck .		
3. Total phosphorus bottle was ***not rinsed.***		
4. Total phosphorus bottle was filled to ***shoulder*** from white bottle.		
5. White bottle was refilled or topped-off to the bottle's neck.		
6. Samples collected at the appropriate depths: *Depths pre-determined by the DES biologist and recorded on data sheet* ***OR*** *Depths determined based upon temperature profile and thermal layering.*		
Bottom (Hypolimnion) samples:		
1. After anchoring, bottom sediments allowed to settle out before collecting deepest sample.		
2. Hypolimnion) sample checked for sediment before filling bottles.		
Chlorophyll-a sample:		
1. Indicate method used to collect sample (*composite or integrated sampler*):		
2. Bucket rinsed with lake water and discarded.		
Composite method:		
1. Kemmerer bottle lowered to appropriate depth.		
2. Water collected at each meter from surface to appropriate depth and composited in a bucket. Ex.: 1, 2, 3, and 4 m samples for a 4 m composite.		
3. Brown bottle rinsed with sample before filling.		
4. Brown bottle filled to the neck with sample.		
Integrated sampler method:		
1. Weighted end of tube & chain lowered to appropriate depth (depth markers on the water's surface with no slack in tube or chain).		
2. End of tube crimped or closed tightly.		
3. Weighted end hauled **up by chain only** (not tube).		

SAMPLING TASK	DONE	COMMENTS
4. Weighted end placed in bucket. Crimped end lifted above head and un-crimped *(open end of tube should always be higher than water level in tube).*		
5. Brown bottle rinsed with sample before filled.		
6. Brown bottle filled to the neck with sample.		
Transparency		
1. Non-viewscope readings taken on the **shady** side of boat.		
2. Viewscope readings taken on the **sunny** side of the boat.		
3. Disk lowered until it just disappears.		
4. Disk pulled up until white portion just appears.		
5. Chain marked at water level and depth recorded to tenth of meter.		
6. One reading taken by at least two monitors.		
III. TRIBUTARY SAMPLING		
1. Sample not collected if tributary is not flowing or is too shallow to avoid bottom disturbance and noted on data sheet.		
2. Sample collected slightly upstream if sediment disturbed.		
3. Tributary flow noted and recorded on field data sheet.		
3. White bottle was rinsed with sample by scooping into stream flow, discarded downstream, and then bottle refilled.		
4. Total phosphorus bottle was ***not rinsed*** with sample.		
5. Total phosphorus bottle was filled to ***shoulder*** from white bottle.		
6. White bottle was refilled and topped-off to the bottle's neck.		
IV. BACTERIA SAMPLING		
1. Sterile bottle used for collection.		
2. Cap was removed just prior to sample collection.		
3. Care was taken to avoid touching the neck, inside the bottle, or cap.		
4. Lake water: sample taken at approx. knee depth.		
5. Flowing stream: sample taken midway b/w top & bottom of water, in upstream direction.		
6. Mouth of bottle pointed towards water surface, submerged completely, and then used to scoop water in an upward "U-shaped" motion away from the person taking the sample.		
7. Bottle was ***not rinsed*** with sample to avoid contamination.		
8. Bottle was filled completely allowing some air space at top of bottle.		
9. Efforts made to avoid getting sediment and debris in sample.		
V. SAMPLE LABELING		
1. Bottles properly labeled with waterproof pen: *lake name, station, date, time, depth (for deep spot).*		
VI. FIELD DATA SHEET		
All sections of the data sheet were properly filled out.		
One field data sheet per deep spot submitted.		

Signature (monitors): _____