

MBSS Benthic Macroinvertebrate Sampling and Laboratory Processing /Subsampling Certifications Frequently Asked Questions

I want to collect, process and identify stream benthic macroinvertebrates in Maryland and have been asked to comply with the MBSS certification process. What is required?

The requirements are:

1. The *person* sampling benthos is certified in MBSS benthic macroinvertebrate sampling.
2. The *person* processing and subsampling the benthic macroinvertebrate sample is certified in MBSS laboratory processing and subsampling.
3. The taxonomist identifying the macroinvertebrates is Society for Freshwater Science (SFS) certified in Group 2 (Ephemeroptera, Plecoptera, and Trichoptera) genera and Group 3 (Chironomidae) genera.

What is involved in MBSS Benthic Macroinvertebrate Sampling certification?

1. You must register for and attend a one-day MBSS Benthic Macroinvertebrate Sampling Training. Attendance will be documented by signing in and signing out.
2. You must be present during the Power Point presentations given during the morning of the MBSS Spring Training.
3. You must be present at the benthic macroinvertebrate sampling field demonstration during the afternoon of the MBSS Spring Training.
4. Using YOUR OWN equipment and supplies, you must collect a MBSS benthic macroinvertebrate sample using standard MBSS protocols with oversight from a MBSS Quality Control Officer and prior to sampling other sites.
5. You must complete a written test administered at the end of the MBSS Spring Training.

What specifically is involved in laboratory processing and subsampling certification?

1. You must attend a brief training on MBSS benthic macroinvertebrate processing administered at DNR Benthic Lab in Annapolis.
2. You must demonstrate proficiency in benthic sample processing and subsampling. This will include a hands-on subsampling test. You will also complete a benthic subsample that will be compared to a subsample completed by MBSS benthic laboratory staff.
3. You must complete a written laboratory processing and subsampling test.
4. NOTE: Requirements 1-3 will be completed on the same day at the DNR field office in Annapolis. The applicant and DNR staff will schedule the certification at a mutually-agreed upon time.

There are several types of benthic macroinvertebrate subsampling trays. Must I use the MBSS-style tray to conduct MBSS-certified benthic lab work?

Yes. Plans for constructing the MBSS subsampling tray are available from DNR (Email Dan Boward: dan.boward@maryland.gov).

How much will the certification cost?

The MBSS Benthic Macroinvertebrate Sampling certification will cost \$700 for individuals from for-profit companies and \$300 for government agency, NGO personnel, and academic personnel. The laboratory processing and subsampling certification will cost \$425 for individuals from for-profit companies and \$125 for government agency, NGO, and academic personnel.

Is certification intended for an entire sampling crew or an individual?

Only individuals can be certified in MBSS benthic macroinvertebrate-associated protocols.

Must I pursue certification in both field and lab protocols?

No. MBSS benthic macroinvertebrate certification is *a la carte*. You can choose one or both.

How do I get certified in MBSS benthic macroinvertebrate taxonomy?

DNR will consider you certified in taxonomy if you've passed and are currently certified in Group 2 (Ephemeroptera, Plecoptera, and Trichoptera) and Group 3 (Chironomidae) genera by the Society for Freshwater Science certifications. Click [HERE](#) for more information.

How can I pay for certification?

We can accept checks made payable to "Maryland DNR" or payment may be made via credit card on DNR's online store. Payment for training must be made in advance of MBSS spring training (see website for deadlines). No certification checks will be accepted at the door at training and we cannot admit walk-in registrants at training. Do not submit certification payments via credit card prior to your audit. DNR will not accept checks or credit card payments for certification fees from individuals who register for benthic macroinvertebrate sampling, fish crew leader, or fish taxonomy certification until **after** the written tests (administered at training) have been passed. If the written test is passed, DNR will accept the payment within 48 hours of the field or lab audit. If the written test is not passed, no certification payment is required.

Can I pay certification fees with one check or credit card transaction for all my staff?

No. Since payment is not required for those who do not pass written tests at training, separate checks or card transactions will be required for training and certifications.

Can I attend MBSS training without certification? If so, what are the costs?

Yes. MBSS training will continue as in previous years. Spring Training (without certification) will cost \$85.

Will MBSS trainings continue to be open to non-professionals?

Yes. However, MBSS training registrations will continue to be accepted on a first come-first served basis.

If I submit payment for registration or certification but then cannot attend the training (field or lab), can I get a refund?

Training fee refunds will be given for payment by credit card. To eliminate the need for certification fee refunds, DNR will only accept payment after written certification tests are passed and a field or lab audit is complete.

How long is the certification valid?

Benthic Macroinvertebrate Sampling certification is valid through December 31 of the third year following certification. Attendance at annual MBSS spring trainings is required to maintain this certification. The Lab certification is valid for three years from the date of laboratory certification.

What will I receive if I pass all requirements for certification?

Within three weeks of completing the MBSS Benthic Macroinvertebrate Certification, your name and affiliation will be posted on the [MBSS Certification Registry](#). MBSS certification may qualify you to work on certain stream-related projects in Maryland. Some state and county agencies are considering making MBSS certification a requirement for working on certain projects.

Does DNR offer certification for other MBSS protocols besides benthos (e.g., fish, physical habitat, herpetofauna)?

Yes. Fish Crew Leader, Fish Taxonomy and Physical Habitat Assessment certifications are also being offered. Other MBSS protocol certifications may be phased in during future years.

Revised December 19, 2019
Dan Boward