

**[Question]** How will the sample load vary during the year? When might existing samples be ready to send to contractors?

**[Answer]** NMED's sample window is from mid-September to mid-November. The sample load can be determined at the end of that window. Macroinvertebrate samples would either be submitted immediately or several months later depending on whether or not NMED would sort samples before sending them to the contractor(s). Periphyton samples could be submitted immediately or on a date to be determined by NMED and the contractor(s)

**[Question]** Are there requirements for QA/QC analysis? For example, a certain percentage of samples?

**[Answer]** Ten percent of the sorted samples in each lot should be examined by laboratory QC personnel or a qualified co-worker. (A lot is defined as a special study, basin study, entire index period, or individual sorter.) The QC worker will examine the sorted debris and will look for organisms missed by the sorter. Organisms found will be added to the sample vials. If the QC worker finds less than 10 percent of organisms remaining in the sorted debris, the sample passes; if more than 10 percent are found, the sample fails. If the first 10 percent of the sample lot fails, a second sample of the sample lot will be checked by the QC worker.

**[Question]** If diatoms and soft-algae (non-diatoms) are analyzed separately, is there a particular procedure required for soft-algae analysis?

**[Answer]** NMED currently has no procedure for soft bodied algae analysis. NMED would like contractor(s) to use a procedure that closely follows those of EPA and/or USGS NAWQA. The contractor(s) should specify in detail in the proposal the procedure to be used.

**[Question]** Summary reports are required to accompany results of sample analyses (Section B, Scope of Work, Periphyton). What should these include, at a minimum (e.g., metric calculations)?

**[Answer]** At a minimum these should include a list of taxa and the number of individuals of each taxa. If there were a list of metrics that the contractor(s) usually submits as part of a report then that would be fine for inclusion. If any additional analysis is wanted then NMED will contact the Contractor(s) and arrangements can be made.

**[Question]** Is there an incumbent firm/individual for benthic invertebrates and periphyton? If so, who are they and what were the last prices you paid for these services?

**[Answer]** Currently NMED has no firm/individual on contract for benthic invertebrates or periphyton.

**[Question]** Regarding full sample picks, do you have any idea how many invertebrates are in these samples? What happens if there are excessively large numbers of organisms in the samples? Can subsampling be allowed in these cases?

**[Answer]** A full sample pick of a quantitative sample requires that the entire sample be picked. If the contractor(s) should encounter a sample that they think should be sub-sampled then the contractor(s) should contact NMED for instructions. Bare in mind that NMED may require that the contractor(s) complete the picking of the entire sample. Therefore, the contractor(s) quote should take into consideration that some samples will be large while others will be small. Generally, completely picked samples range from 1 - 7444. Here are some summary statistics based on 1292 individual Hess samples: Mean = 225.3901, Median = 142, StDev. = 463.595, min = 1, max = 7444

**[Question]** Regarding sample types in the Scope of Work, when you use the phrase "with no processing of sample" do you mean that the samples are already sorted by your staff? Or does this mean something else?

**[Answer]** Yes, the phrase "with no processing of sample" means that the samples are already sorted by NMED staff

**[Question]** Are you looking for 4 different prices for riffle samples and 4 different prices for microhabitat samples?

**[Answer]** If the contractor has different prices for riffle samples collected by different methods then, yes, NMED would like the quote to reflect that. If the contractor has one price for a riffle sample, regardless of how it was collected, then the quote should reflect that. The quote should also reflect any price difference between sorted and unsorted samples.

In addition to riffle samples NMED will also be collecting microhabitat samples using a kicknet. These microhabitat samples are being collected as part of a biocriteria project for New Mexico's large rivers initially the Rio Grande and Pecos River. These microhabitats will generally consist of main channel erosional, main channel depositional, backwaters, unconnected waters, and woody debris. If the contractor has different prices for microhabitat samples then the quote will need to reflect that.

**[Question]** You are asking for a voucher collection by site and by drainage. Could the aggregate of reference collections for each site within a drainage count as the overall reference collection, or would we need to create a second, stand-alone collection for the watershed?

**[Answer]** NMED would like a voucher collection by site OR by drainage. The quote should specify the approach.

**[Question]** Regarding periphyton, can you provide more details regarding what you are asking for? For example, are you looking at diatoms exclusively or soft bodied algae and diatoms together? Different fractions require different sample handling procedures. Are you open to suggested methods from bidders?

**[Answer]** NMED is interested in receiving separate quotes for diatoms and for soft bodied algae. If the contractor has a quote for a combined diatom and soft bodied algae analysis please also provide that. If resources are limited then only diatom analysis will be pursued by NMED

at this time. NMED is definitely interested in taking suggestions on methods from the selected contractor(s).

**[Question]** In the evaluation criteria there is a category for staff references. We have never seen this before. Are you asking for letters of recommendation for each staff member? What kind of information do we need to provide for you to adequately evaluate each staff member?

**[Answer]** A resume of each staff member that will be involved in the sorting, QA/QC, and taxonomic determinations of the samples.

**[Question]** Given the page limit you are specifying (10) pages, it might be necessary to split our proposal into 2 parts and submit 2 responses in order to meet the page limit. Would this be acceptable, or would you be willing to increase the page limit?

**[Answer]** Yes, two separate proposals, one for macroinvertebrates and one for periphyton, would be acceptable.

**[Question]** Would you please elaborate on what 'lowest practical taxon' means? For example, if a sample has a 1000 chironomids, is it 'practical' to slide mount all 1000 chironomids to identify them to genus?

**[Answer]** Lowest practical taxon will generally mean Genus level for aquatic insects, Family level for oligochaets, Genus level for amphipods, etc. If there are more than 300 chironomids from a completely picked sample then a random sub-sampling routine can be employed. A minimum of 300 chironomids must be sub-sampled and identified.

**[Question]** Can the BMI sample processing fees be on a sliding scale depending on the number of individuals per sample? If not, is there an average number of BMI's to be expected in a HESS, Surber and kicknet sample?

**[Answer]** If the contractor has a sliding scale for benthic macroinvertebrate (BMI) sample processing then please provide in quote, with details. It would also be advisable for the contractor to include a fixed price for BMI sample processing for comparison to other contractor(s) submitting a proposal(s) that does not include a sliding scale.

**[Question]** Will the samples be composites from several spots in the riffles or microhabitats or will they be from only one spot?

**[Answer]** HESS samples consist of 3 replicates taken from within a riffle and are not composited. All other riffle samples would be taken from several spots within a riffle and composited. Macrohabitat samples will be taken from several spots within one microhabitat and composited. Different microhabitats will not be composited. There will be 5 different microhabitat samples.

**[Question]** What has been the typical range of the number of animals in samples for which the entire sample must be processed?

**[Answer]** Here are some summary statistics based on 1292 individual Hess samples: Mean = 225.3901, Median = 142, StDev. = 463.595, min = 1, max = 7444

**[Question]** What is the area of benthic habitat sampled for the kicknet samples?

**[Answer]** Approximately one square meter.

**[Question]** What is considered "lowest practical taxon" for the following groups: Chironomidae, Oligochaeta, Hirudinea, Ostracoda

**[Answer]** Genus for chironomids, Family level for oligochaets, Family level for Hirudinea and, Ostracoda for ostracods.

**[Question]** What mesh size is used on the macroinvertebrate sampling gear?

**[Answer]** 500 um. mesh nets are used in all macroinvertebrate sampling by NMED.

**[Question]** What is the elevation range of the sampling sites?

**[Answer]** Elevations for these samples range from just over 915 meters to around 3,350 meters.

**[Question]** Are there reports from previous NMED freshwater macroinvertebrate projects posted on the internet; can I see representative species lists?

**[Answer]** Yes, some examples of taxa lists included in reports can be seen at: <http://www.nmenv.state.nm.us/swqb/index.html>

**[Question]** Are all the samples from wadeable streams/lotic habitats?

**[Answer]** The majority of samples will be from wadeable streams and rivers. Some samples may be from unwadeable areas within these rivers. A relatively small portion of these samples will be from lentic (unconnected pools within the river channel) and backwater habitats

**[Question]** Are Cladocerans and Copepods enumerated?

**[Answer]** Those that can be seen while picking, yes. However, they do not need to be identified beyond Cladocera or Copepoda.