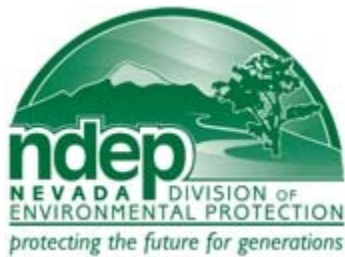


REQUEST FOR QUOTES

**TAXONOMIC IDENTIFICATION AND ENUMERATION OF AQUATIC
MACROINVERTEBRATES**

Release Date: October 12, 2009
Proposal Submission Deadline: November 20, 2009



Nevada Division of Environmental Protection
Bureau of Water Quality Planning
901 S. Stewart Street, Suite 4001
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This Request for Quotes consists of 6 pages (including cover sheet and Table 1). In addition and provided as an attachment is the Southwest Association of Freshwater Invertebrate Taxonomists (SAFIT Level II) Standard Taxonomic Effort Levels (Nov 28, 2006)

REQUEST FOR QUOTE

TAXONOMIC IDENTIFICATION AND ENUMERATION OF AQUATIC MACROINVERTEBRATES

Date of Announcement: October 12, 2009

Deadline for Submittal of Quote: November 20, 2009

Background

The Nevada Division of Environmental Protection, Bureau of Water Quality Planning collects aquatic macroinvertebrates on a statewide basis to assess the aquatic health of the state's streams and rivers. The field work is performed using the "reach wide/composite" field protocols developed under U.S. EPA Western EMAP and U.S. EPA National Rivers and Streams Assessment-Wadeable Streams (NRSA).

We are currently seeking one laboratory to perform a 600 count taxonomic identification and enumeration for approximately 35-50 samples per year for a 3-year period. Preference will be given to those laboratories that historically have favorably performed this service for the Nevada Division of Environmental Protection.

A. Macroinvertebrates Scope of Work and Deliverables

- The selected laboratory will receive from the NDEP approximately 35-50 preserved and site-composited macroinvertebrate samples per year over a 3 year period (105-150 samples total). Enumeration and identification shall be at a 600-organism count per sample. If 600 organisms are not contained within the sample, then the complete sample will be identified and enumerated.
- Identification levels will be, at the minimum, the taxonomic effort provided in the Southwest Association of Freshwater Invertebrate Taxonomists (SAFIT) Level II (attached as separate file). In addition, Table 1 below provides an overview of the SAFFIT Level II taxonomic level of effort, however, laboratories should refer directly to the SAFFIT document attached to this proposal for bidding and macroinvertebrate identification clarification.
- The laboratory shall provide the NDEP with an updated electronically submitted Laboratory Quality Assurance and Quality Control document.
- The NDEP shall be advised immediately by email or written notification if samples possess any known "invasive" such as New Zealand mud snails and/or quagga mussels and/or zebra mussels.

- Completed identified samples are to be placed into vials (vouchers) containing 90% ethanol, separated by taxon and sample site, labeled with NDEP's site identification number, organism identification and number of organisms in the vial and the year collected. The vouchers are to be returned to NDEP before payment of services will occur.
- In addition, a reference collection for each individual year shall be supplied to NDEP upon completion of that year's identification. The reference collection shall consist of preserved specimens identified and labeled to the appropriate SAFFIT Level II.
- Sample remnants (un-analyzed) may be disposed of by the laboratory upon completion of the laboratory QAQC procedures.
- Empty macroinvertebrate sample containers originally delivered to the laboratory are to be returned to NDEP along with the vouchers, reference collections and final identification and enumeration results.
- The state is currently in the process of having laboratory macroinvertebrate identification and enumerations uploaded directly into the state's Ecological Data Application System (EDAS). Please be advised that the laboratory will be required to supply the state with an electronic format applicable (with minimal format changes) for upload into that system once it is developed. This is expected to occur within the next 1 year. Until such time, results of the enumeration and identification of all samples will be provided to the state in electronic Microsoft Excel spreadsheet format including standard index calculations, unless other arrangements are made. A hard copy to the state shall also be provided.

B. Macroinvertebrate Project Time Period for Deliverables

At a minimum, ½ of a given year samples will be identified enumerated and the results submitted to the state within the first six months of the delivery date of the samples to the laboratory. The remaining samples will be identified, enumerated and the results submitted to the state the following 3 months of the contract period for an overall laboratory process period not to exceed 9 months. Each year will follow the same progression with a total contract period of 3 years.

C. Macroinvertebrate Field Sample Collection Methodology

Samples are collected primarily in the late spring through late summer months using a D frame 500 micron net. The samples are stored in 95% ethanol. Each sample consists of a composite of 11 transects and are only slightly cleaned with the removal of large debris and rocks in the field. General sample size is approximately 1 liter including ethanol; however, this can vary depending on the sample site.

D. Macroinvertebrate Quote/Proposal Content

1. Project Title
2. Name of Organization, Address and Contact Information
3. Provide General Organization Background Information
4. Scope of Work and Deliverables:
 - a. Describe each major task and each deliverable and your understanding of this proposal request.
 - b. Describe and give an example of the electronic and hardcopy format of the taxonomic results that will be delivered to the state. Please state the ability of your lab to provide EDAS acceptable formatted spreadsheets to the NDEP. Metrics do not need to be included in the EDAS compatible format.
 - c. Include the minimum level of taxonomic effort the applicant is willing to provide.
5. Standard Operating Procedures (SOP): Describe in detail the applicants SOP and QA/QC procedures.
6. Schedule: Provide a time schedule for deliverables to the state.
7. Budget: Include an overall budget for the entire macroinvertebrate project based on 50 macroinvertebrate samples per year. Breakdown to the cost per sample per year. The budget may include a % increase for subsequent year analysis (e.g. Year 2010-2011 samples etc.). However, show the year and the cost per sample increase per year.
8. Project Management and Key Personnel: Describe your management structure and organization.
9. Qualifications: State applicant's qualifications for both management and laboratory personnel. Identify any subcontractors and provide their qualifications, references and contact information.
10. References: Provide a list of several previous clients that the laboratory has preformed macroinvertebrate identification. Include the clients contact information including name, address, phone number and e-mail address.
11. Private (non-government) Laboratories must submit verification of the following with the proposal:
 - a. Commercial General Liability Insurance with a standard minimum limit of \$1,000,000 per occurrence and \$2,000,000 general aggregate.
 - b. Verification of Workers' Compensation Insurance or a statement of the organizations intent to supply an affidavit of Rejection of Workers' Compensation Insurance Coverage.

E. Selection and Notification Process

The process for selecting the applicants will be determined based on:

- The applicants' level of knowledge, experience, references and qualifications for conducting taxonomic identification of macroinvertebrates and/or periphyton.
- Laboratory Standard Operating Procedures and QA/QC protocols
- Budget based on a per sample basis and the ability to meet contract deadlines
- Taxonomic Effort
- Availability of resources and staff to successfully complete taxonomic identification to laboratory standard operating procedures
- A sample copy of the format that will be used for submittal of sample results to the state
- Previous laboratory identification contracts with the State of Nevada, Division of Environmental Protection and/or recommendations.

The selection and notification process will be completed within 20 working days following the close of the proposal deadline. Notification of the laboratories selected will be through e-mail unless a different method is requested by the laboratory. Upon notification, the applicant will submit a final copy of the proposal for the contract process. The state reserves the right to clarify items in the proposal providing both parties agrees. In the event, the applicant and the State of Nevada are unable to agree to the terms of the contract, the state reserves the right to disqualify the consultant and select another consultant or reissue the request for quote.

Once selection has occurred, the state contract process generally takes approximately 2-3 months to complete.

Quotes/proposals will be accepted by hard copy and/or electronic email to the contact person and address provided below.

**Nevada Division of Environmental Protection
Bureau of Water Quality Planning
Attn.: Karen Vargas, Environmental Scientist
901 S. Stewart St., Suite 4001
Carson City, NV 89701**

**Or e-mail proposal to:
kvargas@ndep.nv.gov
Phone: (775) 687-9457**

Table 1: Taxonomic Standard Level of Effort SAFFIT Level II

Classification		Standard Effort SAFFIT Level II	Reference
Phylum Porifera		Phylum	Frost et al. (2001)
Phylum Cnidaria		Genus	Slobodkin & Bossert (2001)
Phylum Platyhelminthes		Class	Kolasa (2001)
Phylum Nemertea		Genus	Kolasa (2001)
Phylum Nemata		Excluded	
Phylum Nematomorpha		Excluded	
Phylum Entoprocta		Genus	Wood (2001)
Phylum Ectoprocta		Class	Wood (2001)
Phylum Mollusca		Genus/Species	Dillon (2006), Burch (1972) Nedeau et al (2006)
Phylum Annelida	1. Class Oligochaeta & Branchiobdella 2. Class Hirudinea 3. Class Polychaeta	1. Class 2. Genus 3. Species	See SAFFIT Pg. 29
Phylum Arthropoda: Subphylum Chelicerata,	Subclass Acari- Mites	Genus (where possible)	Smith et al. (2001)
Phylum Arthropoda: Subphylum Crustacea		Genus/Species	Rogers (2005)
Phylum Arthropoda: Subphylum Hexapoda	Class Collembola-Springtails	Excluded	
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Ephemeroptera-Mayflies	Species (where possible)	Edmunds and Waltz (1996)
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Odonata-Damselflies/Dragonflies	Species (where possible)	Westfall & May (1996), Needham, Westfall & May (2000)
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Plecoptera: Stoneflies	Species (where possible)	Stewart and Stark (2002)
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Hemiptera (suborder Heteroptera)- True Bugs	Species	Polhemus (1996)
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Megaloptera: Dobsonflies/Alderflies	Genus	Evans & Neunzig (1996)
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Neuroptera: Spongillaflies	Genus	Evans & Neunzig (1996)
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Trichoptera: Caddisflies	Species (where possible)	Wiggins (1996a)
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Lepidoptera: Moths/Butterflies	Genus for Parapoynx & Petrophila, otherwise Order	Lange (1996)
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Coleoptera: Beetles	Species (where possible)	See SAFFIT Pg 136
Phylum Arthropoda: Subphylum Hexapoda: Class Insecta	Order Diptera	Genus (where possible)- Chironomidae to Genus	Merritt & Cummins (1996)