

Registration Cost:

Fee: Php 5,000.00

Inclusions: Registration Fee
Lunch, Morning and
Afternoon Snacks
Training Materials
Laboratory Usage
Certificate

Please send payment and accomplished registration form to UC-CLPEL c/o Dr. Ruben C. Umaly, University of the Cordilleras or Dr. Aurea Marie Sandoval, Benguet State University.

Accommodation:

For reservations, please contact:

*Gladiola Center or Home Management Guestel
Benguet State University, La Trinidad, Benguet
Tel #: (074) 309-3880*

Registration Deadline: May 11, 2012

CONTACT US:

Ruben C. Umaly, Ph.D.

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UNIVERSITY OF THE CORDILLERAS

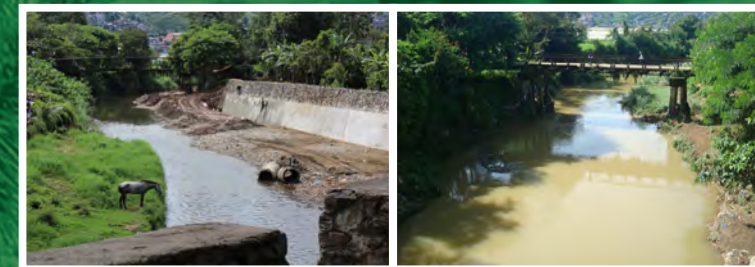
**CENTER FOR LIFELONG PROFESSIONAL
EDUCATION AND LANGUAGES (UC-CLPEL)**



in Partnership with

BENGUET STATE UNIVERSITY

Training Course on RIVERINE ECOLOGY and POLLUTION MANAGEMENT: "The Balili River Experience"



May 21-25, 2012

**Main Building, College of Arts & Sciences
Benguet State University, La Trinidad, Benguet**

Target Participants:

**Environmental Planners, Practitioners and Officers of
Government Agencies and Private Institutions, NGOs,
Environmentalists, Teachers and Students in
Biology and Environmental Science, Civic Groups**

TRAINING OBJECTIVES

The five-day training course on Basic Concepts of Riverine Ecology and Pollution Management with the Balili River as a model is aimed to:

1. provide teachers of Biology (specially Ecology) and Environmental Science, the needed training on basic concepts of Riverine Ecology with focus first on its normal ecology and then the kinds and sources of pollution, the evaluation of their impacts as well as systems of amelioration management and control;
2. enhance the awareness of the students, teachers, government officials specially those involved in Environmental Resources Management and the general public on the important roles or functions of riverine ecosystems on the welfare of a community;
3. train some faculty members, students and researchers on the basic methods of studying the geology, physics, chemistry, biology and sociology of riverine ecosystems so that management policies could be properly based on ecological research methods, principles of pollution management as well as good governance based on scientific knowledge, social values and ethics;
4. enable people and agencies working on the Rehabilitation of Balili River to understand and appreciate the scientific knowledge and technology as well as holistic social attitudes and perspectives needed for its rehabilitation as well as the proper management of its uses in the future;
5. enhance the interests of educational institutions and possibly some government agencies on the important roles of riverine ecosystems in the community and hence strive for its proper quality maintenance and developmental uses.

TOPICS

DAY 1: BASIC CONCEPTS OF LIMNOLOGY

(Rheology/Potamology)

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| Morning | 1. The River as an Ecosystem: Structure and Functions
1.1 Geography, Geology and Zonation
1.2 Physical features
1.3 Chemical features
1.4 Biological features
1.5 Ecosystem functions, goods and services |
| Afternoon | 2. Stress and Response Mechanisms
2.1 Eutrophication
2.2 Mitigation Measures |

DAY 2: RIVER BASIN MANAGEMENT

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| Morning | 1. Integrated Management Approach
1.1 The River Basin as a Basic Planning and Management Unit
1.2 Pillars of River Basin Management
1.3 Approaches on Integrated River Basin Management
1.4 Politics and Administration of Riverine Ecosystems |
| Afternoon | 2. Case Study: The Balili River
2.1 Presentation of Sectoral Initiatives on the Environmental Management of Balili River
2.2 Open Forum (or Panel Discussion) |

DAY 3: RIVER WATER QUALITY MONITORING

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| Morning | Water quality parameters : physico-chemical and biological
Water quality monitoring – identification of monitoring stations |
| Afternoon | Field trip and collection of samples |

DAY 4: WATER QUALITY MEASUREMENT

Laboratory analysis (chemical and biological)

DAY 5: WATER QUALITY ASSESSMENT

(Classification of Philippine Inland Waters and Water Quality Criteria)

- Water quality assessment of Balili River
Open forum, impressions and suggestions

TRAINERS' PROFILE

Ruben C. Umaly, Ph.D.

VP Research and Special Projects, University of the Cordilleras and Secretary General, AUAP (Association of Universities of Asia and the Pacific), Thailand

- Expert in molecular and radiation biology, parasitic immunology, medical malacology, environmental mutagens; scholar; research fellow – WHO-USA, Fondation Curie, University of Paris, France, University of Hamburg, Germany, Kyoto University, Japan; seasoned professor; author of scientific papers and biology (Zoology, Genetics and Limnology); founding member, scientific and academic organizations and honor societies - Phi Sigma Biological Honor Society (Philippines and USA) Philippine Environmental Mutagens Society, Philippine Biological Teachers Association, Philippine Society for Cell Biology, National Research Council of the Philippines, Asian Molecular Biology Society.

Adelina C. Santos-Borja, MS Biology/Environmental Science

Officer-in-Charge, Resource Management and Development and Head, Carbon Finance, Laguna Lake Development Authority

- Specialist in Limnology, Environmental Impact Assessment, Water Resource Development and Management; scholar; UNESCO Fellow - Institute of Limnology of the Austrian Academy of Sciences; author - World Lake Vision and Action Report(2003 and 1997); recipient - Ibaraki Kasumigaura Award for best paper in Lake Conservation in Management in Argentina and Chicago, respectively; member - Scientific Committee of International Lake Environment Foundation (ILEC) and Scientific Organizing Committee, World Lake Conference held every two years in different countries; resource person, paper presenter, published papers (local and international) on water quality management, sustainable partnerships on resource conservation and clean development mechanisms; researcher – with funding institutions: Research Institute of Humanity and Nature, Kyoto, Japan and Japan Climate Change assisted by World Bank.

Aurea Marie Sandoval, Ph.D.

Dean, College of Arts and Sciences, Benguet State University

- Biologist; administrator; educator; coordinator, Philippine Science Consortium; accreditor, AACUP National; Secretary, AGHAM Baguio-Benguet Chapter; University Coordinator, BSU Eco-waste Management Program; international trainings - University Staff Development Program (UNISTAFF), University of Kassel, Witzenhausen, Germany and DAAD Summer School, University of Sam Ratulangi, Manado, Indonesia.

Criselda S. Battad, MSVM, DVM

Chair, Paraclinical Department, College of Veterinary Medicine, BSU

- Doctor of Veterinary Medicine (Public Health/Microbiology); Diplomat, Philippine College of Veterinary Public Health; member, Codex Subcommittee on Food Hygiene and Veterinary Drug Residues in Food; published papers in Salmonella; participated in International Training on Microbiological Risk Assessment.

Ingr. Eldelinita D. Andres, MM

Senior Environmental Management Specialist, EMB, DENR-CAR

- Chemical Engineer; trainer, facilitator, presenter, organizer in the conduct of trainings and conferences in Water Quality Monitoring, Water Resources Management and Environmental Monitoring and Audit for the Mining Sector; active officer of the Philippine Institute of Chemical Engineers - Baguio Benguet Chapter and heads the Laboratory Services.

Cordelia C. Lacsamana, MM

Environment and Parks Management Officer, Baguio City

- Specializes in Environmental Management, Urban Development Planning and Project Development and Management; educator; exchange scholar for sociology, Catholic University of Louvain (Belgium)