

## **MEMORANDUM OF UNDERSTANDING**

### **For the Implementation of Trout Unlimited's "TROUT IN THE CLASSROOM" Program within the State of Colorado**

**PURPOSE:** The purpose of this Memorandum of Understanding (MOU) is to define the objectives, roles and responsibilities for the parties required to implement Trout Unlimited's (TUs) "Trout in the Classroom" (TIC) program within the State of Colorado. The parties identified in this MOU are: Colorado Trout Unlimited (CTU) acting as the Colorado executive agent for Trout Unlimited, a national non-profit conservation organization; the Colorado Division of Wildlife acting as the biological control agency for the State of Colorado; and the xyz high school, Ft Collins school district, implementing the initial program at the xyz high school.

**PROGRAM OBJECTIVE:** The objective of the Trout in the Classroom Program is to introduce a conservation education program into selected middle and high school based on the life cycle of a member of the trout species. The program curricula will include aquatic biology and ecology, watershed management and stewardship issues, disease awareness, aquarium maintenance, water quality, fish growth and behavior, health and regulatory concerns and other topics relative to the project.

#### **Participant Roles and Responsibilities:**

##### **I. Colorado Trout Unlimited (CTU) will:**

- a. Act as the executive agent for Trout Unlimited (TU) with oversight responsibility for maintaining the continuity of the program in that it conforms to TU program guidelines and all required State of Colorado Health and Biological Regulations as prescribed by the Colorado Division of Wildlife (CDOW).
- b. Ensure that all eggs/fish in the Trout in the Classroom program comply with Colorado regulations with regard to the obtaining, holding, disease testing and releasing of fish within the State of Colorado.
- c. Provide funding as required for the purchase of necessary equipment including fish eggs, fish-food stocks, aquaria and associated equipment, water supplies, etc.
- d. Appoint a Project Coordinator who will be responsible for maintaining routine oversight activities including coordination with school and Colorado Division of Wildlife (CDOW) personnel.
- e. Obtain the necessary permits, licenses, etc. including an annual Aquaculture Permit from the Colorado Department of Agriculture
- f. Ensure all required CDOW prescribed testing is conducted.
- g. Coordinate the fish release site with CDOW and the school
- h. Obtain a stocking permit prior to release of fish.
- i. Conduct overall project administration to include the development of a master program schedule and the planning/scheduling of appropriate coordinating meetings among the parties.

- II. Colorado Division of Wildlife (CDOW) as the agency for protecting the health of the state's fish and watersheds, including the identification of potential threats, will:
- a. Act as the program primary agency for the State of Colorado with regard to the biological oversight required by Colorado law and CDOW Rules and Regulations:
  - b. Issue program rules and guidelines for the proper cultivation of trout stocks.
  - c. Appoint a Project Coordinator who will be responsible for the routine exchange of information among the parties (CTU and the xyz high school instructor).
  - d. Expediently conduct required testing and provide rapid turnaround of relevant test results.
  - e. Provide appropriate fish eggs from CDOW stocks or recommend an approved sources of fish eggs.
  - f. Identify a Fish Biologist and Fish Pathologist from the CDOW Aquatic Animal Health Lab to monitor the program and provide feedback for issues identified by the program instructor or CTU.
  - g. issue a blanket Aquaculture permit to the school and to waive the \$100 Aquaculture Permit fee.

III. The xyz High School will:

- a. Select an appropriately qualified instructor(s) for the Trout In the Classroom program.
- b. If more than one instructor, designate one as the primary Point of Contact for the program.
- c. Develop and implement a comprehensive program curricula to include relevant TU and CDOW objectives.
- d. Maintain on-site a copy of all required State and local health regulations, permits, licenses, including the Aquaculture Permit and a copy of the Fish Health Inspection Certificate from the source facility.
- e. Ensure requests for inspections and required testing are coordinated with the appropriate agency with sufficient lead time. Specifically a fish health inspection must be made to the CDOW Aquatic Animal Health Lab in a timely fashion in order to schedule the inspection. The inspection must be scheduled at least six weeks prior to the anticipated release date to allow for testing and paperwork to be completed.
- f. Coordinate with the CDOW Aquatic Animal Health Lab so that disease testing can be scheduled (see Addendum) unless specifically exempted by the CDOW Director.
- g. Ensure timely coordination of issues with the designated CDOW Biologist or Fish Pathologist from the Aquatic Animal Health Lab.
- h. Ensure that the appropriate Aquaculture Permit and Fish Health Inspection Certificate from the source facility are carried during any transport of fish eggs
- i. Ensure the appropriate water source testing and disposal is accomplished (See addendum).
- j. Coordinate with CDOW and CTU to obtain approval for fish release at the end of the program.

**RELEVANT PROJECT DETAILS:**

1. Location and Description of Program Facility: \_\_\_\_\_  
\_\_\_\_\_
2. Description of water source AND description of disposal of used water: \_\_\_\_\_  
\_\_\_\_\_
3. List species/strain of fish to be held at the facility or classroom: \_\_\_\_\_  
\_\_\_\_\_
4. Numbers of fish to be possessed: \_\_\_\_\_
5. Program Start Date: \_\_\_\_\_ Program Completion Date: \_\_\_\_\_
6. Planned Disposition of Fish: \_\_\_\_\_

**SIGNATURE BLOCK**

**COLORADO TROUT UNLIMITED**

Dave Nickum \_\_\_\_\_ Date: \_\_\_\_\_  
Executive Director

CROW  
(name) \_\_\_\_\_ Date: \_\_\_\_\_  
(position)

XYZ School  
(name) \_\_\_\_\_ Date: \_\_\_\_\_  
(title)

**ADDENDUM**

**Definitions:**

1. A "lot" of fish is defined as a group of fish of the same species and age that share a common water supply and originate from a distinct spawning population. If there are more than one aquaria in a classroom, but all are on the same water supply and eggs are from the same source, they will all be considered one lot.

**Miscellaneous Restrictions:**

1. Feed and Feeding Conditions. Only commercially available manufactured feed can be fed to fish; no fish or invertebrates can be collected to feed or cohabitate with the fish.

2. Substrates. Only commercial substrates, furniture, and plastic plants may be purchased for the aquaria. No native substrates, decorations, plants, or invertebrates can be used in the aquaria. Substrates must be disposed of or disinfected at end of year.

**Testing Requirements:**

1. An appropriate number of fish from each aquarium/lot will be required during the health inspection to result in confidence and prevalence levels required from other facilities within the state. The sample numbers are based upon a 5% prevalence level for a pathogen (the number of fish selected at random will give at least one positive 95 times out of 100).

Examples for sample size are: If the aquarium holds 500 fish, 55 would be tested  
If the aquarium holds 250 fish, 50 will be tested  
If the aquarium holds 100 fish, 45 will be tested  
If the aquarium holds 50 fish, 35 will be tested, etc.

TU and/or the schools will be responsible for the cost of the testing.

2. Whirling Disease (*Myxobolus cerebralis*) testing - at the time of the annual inspection, fish to be released in salmonid habitat will be tested for whirling disease and the sample size will be 60 according to regulations. Because classroom trout will not have been held on the water supply for at least 10 months, the polymerase chain reaction (PCR) technique will be the method of testing. Fish must be on the water supply at least 4 months prior to testing. A positive finding in such instance shall be considered presumptive for the presence of *M. cerebralis*. Confirmation shall be determined by a second PCR conducted by a different laboratory. Cost for this testing is the responsibility of TU and/or the school.

3. Water Source Testing and Disposal. The water source and disposal must be inspected and approved by CDOW personnel *prior* to institution of program. Only water from the municipal water system can be used and conditioned/de-chlorinated before eggs/fish are introduced, and the same supply of water must be used to maintain the level of the aquaria. All water disposed from the aquaria should enter the public sewer system via the school drains.