

# **River Watch Certification Versus River Watch CDIP Certification**

## **A Certified River Watch Volunteer or Data**

CPW in partnership with River Science creates, implements and approves all processes to train and qualify River Watch volunteers and their data. As a River Watch Volunteer, a designated individual from each organization agrees to be the primary contact responsible for the equipment, sampling and training. For schools, often that is a teacher, for groups it ranges from a staff person, executive director or board member and we also have individual sponsors.

Every sponsor is required to attend the four day training, pass associated tests and is officially trained in River Watch. Each individual who passes the training receives a certificate stating they have been trained by River Watch. They in turn can bring others to a River Watch training who also become officially trained or train others themselves. Each year River Watch staff visits every active group and conducts a site visit where equipment is tested, updated or replaced, volunteers are tested, new methods or equipment is introduced and any other needs related to performance or issues are addressed. The annual site visit along with other quality assurance protocols and processes, including a valid Memorandum of Understanding certify a groups "data" for that year. Each individual who participates in a site visit receives a certificate stating they passed the annual site visit tests.

All of this collectively comprises what can be termed being certified as a River Watch volunteer. While training is a one time event, testing of supplies, equipment and volunteers is an annual series of events. These elements are built into the volunteer agreement and required to keep the equipment and remain in the program. This is core to the River Watch program and has been for 30 years. River Watch as a program is creating an on-line training platform to have the flexibility to train semi-virtually and help sponsors who need a brush up or to train additional volunteers. This platform will also help teachers train students and integrate River Watch into curriculum easier. Much of this new virtual content will be used for both River Watch training as a program and the River Watch CDIP Certification, even though they are two separate programs.

## **River Watch CDIP Certification (new)**

This new certification is different in several ways. First, it is created and implemented by River Science independent of CPW and River Watch as a program itself. It does overlap and leverage everything about River Watch as a program to benefit students, teachers, schools and River Science's ability to support River Watch in their role. Second, CDIP is for 9th to 12th graders (in charter or public schools) only and River Watch will serve lower grade levels. Third, it is not required by River Watch the program in any way shape or form but is available as an opportunity for River Watch school groups, or for non school groups that might be working with

schools in their work. Fourth, it will be available to non River Watch schools after the second year of implementation. Fifth, it provides monetary resources back to each school (minus the administrative costs for implementation provided by River Science) and assists the ability to expand and integrate River Watch into curriculum and other school programs in a way core River Watch does not.

## **River Watch Career Development Incentive Program (CDIP) Certification FAQ.**

1. **Who is CDIP?** CDIP is a legislative funded agency created to help schools provide applied education for students to better succeed after graduation. Oversees numerous certification programs that operate in a similar fashion. A qualified entity creates and oversees the content and testing of said topic and skill set and the CDIP accepts their application and process. River Science applied for a specific River Watch Certification after some research and interviews with industry on its value. School districts apply to be in the program and can select which CDIP certifications they want to engage. As with all programs there are qualifications,
2. **Does my School Qualify?** All Colorado schools within State recognized school districts or charter schools do qualify for CDIP. Private schools do not qualify.
3. **How do Schools get involved?** Schools apply or sign up with CDIP and specific certification programs like this new River Watch certificate, determine how to implement said certificate content in their curriculum and for the students. Once students complete the curriculum they take a proctored test and if pass, receive certification in that skill area. [MORE INFO HERE ON SIGNING UP](#)
4. **What is in it for our School?** The school receives a financial reimbursement for every student that completes a certification up to \$1,000 per student. However, it costs River Science to implement and support the program, provide content, platform, proctor tests, provide equipment, etc. and they request a percentage of that reimbursement (all CDIP certifications have a qualified external entity like this to make it happen). Some schools are engaged in multiple CDIP certification programs that can provide several 10's of thousands of dollars per year to their school. This past year as a pilot, one River Watch school certified 87 students.
5. **What is in it for our Students?** A skill set and knowledge that prepares them for professions in the work world. For example, the basic skills and knowledge to enter a trade school to be an electrician, but hit the ground running and maybe test out of some lower level courses. The River Watch certificate is geared toward basic study design, chemistry, stream ecology, data synthesis and visualization, critical thinking, policy and skills in the field and laboratory, all complemented by traditional chemistry, biology, etc.
6. **What is required by Students?** There will be a minimum number of modules a student has to complete within a year (or smaller time frame depending upon school). These will

be Tier one and include the core River Watch activities such as sample preparation, collection, all things temperature, pH, alkalinity, hardness, dissolved oxygen, metals and nutrients. All things meaning how to prepare, collect and analyze as well as what it is, why you care about it, what influences it, how it changes, etc. A student would have to complete five of ten at a minimum for example. Complete means take a written open book exam that follows the River Watch Sample Plan content and pass by 80% (retake possible) and two practicums which would collect and titrate an alkalinity and hardness sample (2) for example.

There will be a Tier two set of modules that are also core to River Watch such as the River Continuum Concept, Clean Water Act or Data Interpretation. These are a series of tasks and an open book written exam. For example, for River Continuum, student will go through stream order and analyze physical, chemical and biological stream components along the continuum through worksheets and Sample Plan. One of these will be required to become certified. River Science will be adding modules to this tier as funds allow.

A student could complete more than the minimum for their own interest and benefit and this will be documented on their certificate. The funds a school receives is not a function of how many modules a student completes in this sense, only if they complete the minimum number at the passing criteria. **THIS IS THE CURRENT CONCEPT IN BETA TESTING and may be modified.** This does illustrate how this certification uses and overlaps with River Watch requirements as much as possible for the benefit of all.

- 7. What is required by Teachers?** To integrate content into the curriculum and make it available to students, often teaching some concepts. The virtual River Watch content will be available for self-paced and individual learning. Teachers also have a large role in the practicum testing and helping administer the written exams. As a River Watch volunteer, River Watch equipment can and is expected to be used for this purpose. For future non River Watch schools, information will be provided on how to create the chemical tests with school equipment. For this purpose, the data being generated is not what is important to transfer, but the skill to generate real data once in the real world.