

Colorado Certification of Environmental Educators Program Plan

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A Project of the



Colorado Alliance for Environmental Education
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Executive Summary

The Colorado Certification of Environmental Educators Program establishes high standards for the professional qualifications of environmental educators in Colorado. A diverse team of experienced environmental educators from across the state worked to set specific standards of knowledge, skills and experience which highly qualified environmental educators in Colorado should be able to demonstrate.

A Committee of the Environmental Education (EE) Advisory Council worked from September 2006 to April 2007 to develop a first draft of this plan. A comment period was held during April and May of 2007 and nearly 100 people commented through an Advisory Council Meeting, regional group meetings, and by email. These comments have been addressed by the committee and changes are reflected in the Certification Program Plan.

This certification process is a competency-based program - one where the applicant will demonstrate what they know and can do. The certification competencies are adapted from the

Guidelines for Environmental Educators in Colorado (CAEE, 2005), North American Association for Environmental Education's *Guidelines for the Preparation and Professional Development of Environmental Educators* (NAAEE, 2004), *Requirements for NAAEE Accreditation of State/Provincial Certification Program* (NAAEE, 2006), as well as the certification competencies and requirements from the Utah Society for Environmental Education, Texas Environmental Education Partnership, and Kentucky Environmental Education Council.

This certification program covers five themes that an applicant should be proficient in to achieve certification: Environmental Literacy, Foundations of EE, Professional Responsibilities of the Environmental Educator, Planning and Implementing EE, and Evaluation and Assessment. Each theme includes competencies — statements of what individuals are expected to be able to demonstrate. The competencies are listed in Appendix A.

This program is designed with two certification levels to allow for flexibility in ranges of experiences and skills and to create an environment for career professional development and improvement. The levels are designed so that experts and novices each have a role to play in advancing the field of environmental education.

Level 1: Master Environmental Educator - will match the requirements for a nationally transferable certification. The competencies are based on the knowledge and skill levels of expert environmental educators.

Level 2: Certified Environmental Educator - will be a subset of the master environmental educator competencies. This will be a state-level certification for environmental educators who are relatively new to the field. This certification will not be transferable to other states.

Certification includes an initial application, portfolio development, final application, applicant review and notification.

- The assessment mechanism for the competencies will be a portfolio. Portfolios may include narratives, transcripts, lesson plans, papers, or other supporting documents.

The use of portfolios was selected because of the overall flexibility for applicants and professional value.

- The assessment mechanisms are flexible. This means that an applicant can use any item from past experience to demonstrate a competency (including a description of how the item meets the competency) or the applicant can complete the suggested assessment if he/she doesn't have an existing item. Suggested assessments include short answer questions, essays, lesson plans/activity outlines, scenarios, an evaluation plan, and others.
- A team of peer reviewers will serve as the certifying agent for the certification program, will review applications, and approve or reject applications.

Certification at both levels lasts for seven years, and recertification requirements are based on ongoing professional development and reflection.

Fees are necessary to cover the cost of the administration of this program. Fees will be charged according to certification level. For applicants at either level, the initial application fee is \$25 for CAEE members and \$65 for non-members. An additional fee of \$175 for master level applicants or \$35 for basic level applicants will be assessed when he/she submits a portfolio for review.

A certification complement program will be explored that allows existing certification (e.g., teacher certification, or NAI certification) to be used to meet the EE certification requirements.

An option to involve higher education institutions and other organizations providing professional development in Colorado will also be explored. Several colleges, universities and other organizations offer courses that would meet many of the competencies for certification. This type of accreditation would move the responsibility from the applicant to the course owner to demonstrate that competencies are met (i.e., a student passing one of these accredited courses would automatically meet certain competencies by participating in the course). Fees would be charged (proposed at \$1000 to \$3000 per institution) to support the program and promote the accredited courses.

The first official certified environmental educators were recognized in 2008 after participating in a pilot program held through the summer and fall. Over subsequent years the program has continued improve the process and grow.

Acknowledgements

This program is made possible through a grant from the North American Association for Environmental Education (NAAEE), funded by the United States Environmental Protection Agency (EPA), Office of Environmental Education under agreement number NT-83272501-0 between the EPA and the University of Wisconsin-Stevens Point. Additional support was provided by the Utah Society for Environmental Education (USEE), Texas Environmental Education Partnership, Kentucky Environmental Education Council, and Nevada Natural Resource and Education Council.

The contents of this document do not necessarily reflect the views and policies of the United States Environmental Protection Agency, the Board of Regents of the University of Wisconsin System, or the North American Association for Environmental Education nor does mention of trade names or commercial products constitute endorsement or

recommendation for use.

A committee of the Colorado Environmental Education Advisory Council was tasked with drafting a certification program for environmental educators that is inclusive, inviting and worthwhile. This diverse group of dedicated individuals represents the interests of many sections of the EE community including public agencies, businesses, non-profit organizations, schools, higher education and interpretation. This committee began meeting in September 2006 to develop this plan.

Members of the Research and Assessment Committee, Certification Sub-committee:

Name	Organization	Location	Participation
Paul Aldretti	iCAST	Denver	Member
Nicole Bickford	Butterfly Pavilion & Insect Center	Westminster	Member
Fran Blanchard	Plains Conservation Center	Aurora	Member
Bette Blinde	Colorado Foundation For Agriculture	Red Feather Lakes	Member
Mary Ann Bonnell	City of Aurora Parks and Open Space Dept.	Aurora	Member
Susan Buhr	University of Colorado	Golden	Member
Tiffany Fourment	Boulder County Parks & Open Space	Boulder	Member
Francesca Giongo	Colorado State Parks	Denver	Member
Julie Gustafson	National Wildlife Federation	Boulder	Member
Wendy Hanophy	Colorado Division of Wildlife	Denver	Member
Karin Hostetter	Interpret This	Aurora	Member
Richard Jurin	University of Northern Colorado	Greeley	Member
Kelly Keena	Thorne Ecological Institute - Kassler Center	Littleton	Member
Tabbi Kinion	Colorado Division of Wildlife	Denver	Member
Paul Krabacher	Division of Minerals and Geology	Grand Junction	Member
Rainey Kreis	University of Wisconsin-Stevens Point	Stevens Point	Member
Betsy Leonard		Parachute	Member
Debbie Matlock	City of Boulder/Wild Rhythms	Louisville	Member
Curry Rosato	City of Boulder	Boulder	Member
Mike Zawaski	Science and Outdoor Educator	Greeley	Member
Rob Alexander	Maxwell School, Syracuse University	Syracuse	Member-At-Large
Stacy Armitage	U.S. Fish and Wildlife Service	Commerce City	Member-At-Large
Lisa Bardwell	FrontRange Earth Force	Denver	Member-At-Large
Kristine Borchers	San Juan Mountains Association	Mancos	Member-At-Large
Roxanne Brickell-Reardon	Colorado State Parks - Barr Lake	Brighton	Member-At-Large

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Name	Organization	Location	Participation
Natalie Brower-Kirton	City of Aurora - Public Info Water Cons.	Aurora	Member-At-Large
Brett Bruyere	CSU Environmental Learning Center	Fort Collins	Member-At-Large
Eric Chandler	Montezuma-Cortez High School	Cortez	Member-At-Large
Karen Cravens	Windy Peak Outdoor Ed Lab School	Bailey	Member-At-Large
Mark DeGregorio	National Park Service - Rocky Mtn Nat'l Park	Estes Park	Member-At-Large
Alyson Duffey	Thorne Ecological Institute	Boulder	Member-At-Large
Julie Ethington	Colorado State Parks	Denver	Member-At-Large
Lisa Evans	Colorado Division of Wildlife	Fort Collins	Member-At-Large
Mary Joyce Fink	Bennett Elementary	Fort Collins	Member-At-Large
Jill Katzenberger	Denver Museum of Nature and Science	Denver	Member-At-Large
Nicole Knapp		Co Springs	Member-At-Large
Linda Hamilton	Colorado State Parks - Lory	Fort Collins	Member-At-Large
Kim Langmaid	Gore Range Natural Science School	Avon	Member-At-Large
Elissa LaVoie	American Birding Association	Co Springs	Member-At-Large

Christy Moroye	Overland High School	Denver	Member-At-Large
Amanda Morrison	Rocky Mountain Bird Observatory	Brighton	Member-At-Large
Erin O'Neill	Thorne Ecological Institute	Boulder	Member-At-Large
Allison Plute	Fountain Creek Nature Center	Fountain	Member-At-Large
Kary Schumpert	Eco-Cycle	Longmont	Member-At-Large
Judy Serby	Colorado State Forest Service - State Office	Fort Collins	Member-At-Large
Carol Silvas	Dept of Environmental Health	Denver	Member-At-Large
Kevin Snyder	The Catamount Institute	Co Springs	Member-At-Large
Susan Smith	Audubon Society of Greater Denver	Littleton	Member-At-Large
Susie Strife	University of Colorado	Boulder	Member-At-Large
Joy Thompson	City of Aurora Parks and Open Space Dept.	Aurora	Member-At-Large
Dave Van Manen	Mountain Park Environmental Center	Beulah	Member-At-Large
Jennifer Visitacion	Utah Society for Environmental Education	Salt Lake City	Member-At-Large

Description of Participation

Committee Member: Participated in committee meetings and in discussions in person, by phone, or through email.

Committee Member- At-Large: Could not participate in meetings, but participated on the committee by reading meeting minutes and providing input outside of meetings.

CAEE Staff

Ali Goulstone Sweeney, Executive Director
Amanda Peterson, Program Coordinator
Saba Siddiki, Program Assistant
Kate Gardner, Program Assistant

To contact the Colorado Alliance for Environmental Education (CAEE) with questions or comments, call 303-273-9527 or email info@caee.org. Educators are encouraged to photocopy these materials for the non-commercial purpose of educational advancement.

Introduction

An on-going need exists to maintain a high level of integrity and credibility when it comes to environmental education programmatic content and delivery. The quality of materials or other educational resources is inherently affected by the skill level of the educator who is using them. Some Colorado environmental education providers possess an abundance of training and expertise while other practitioners require additional professional development. In addition, environmental educators come from a variety of backgrounds and may not have formal training in both the content areas (science/social studies/math/reading) and process areas (education/communication).

The Colorado Certification of Environmental Educators Program establishes high standards for the professional qualifications of environmental educators in Colorado. A diverse team of experienced environmental educators from across the state endeavored to set specific standards of knowledge, skills, and experience, which highly qualified environmental educators in Colorado should be able to demonstrate.

The focus of the program will be on encouraging quality and professional growth. These standards better define the environmental education (EE) profession within Colorado, and meeting these requirements fosters the professional development of EE providers as individuals and as a professional community. Defining our profession will help build support and appreciation for the field.

The certification program is designed for both educators who are new to the field and those who have years of experience. To be successful candidates need to have had some experience providing environmental education. After the initial application, each candidate works on a portfolio to demonstrate that he or she has the experience, knowledge and skills necessary for certification. Candidates for certification must also understand and agree to uphold high ethical standards in the practice of EE.

The following plan outlines both strategic and tactical processes to support a statewide system of certification for environmental educators in Colorado. This plan is intended to be the model program the Colorado Alliance for Environmental Education (CAEE) offers as a support service to members and/or constituents in the environmental education community in Colorado.

Background and Needs Assessment

In the late 1990's, the North American Association for Environmental Education (NAAEE) developed the National Project for Excellence in Environmental Education (NPEEE), which includes a five-volume set of guidelines for the best practices in EE. One of these volumes is the *Guidelines for the Preparation and Professional Development of Environmental Educators* (NAAEE 2004), a set of recommendations about the knowledge and abilities needed by educators in order to provide high quality EE. By 2001, discussions had begun among key EE leaders concerning the development of these Guidelines into a certification program for environmental educators.

The Colorado EE community continued the journey to excellence in May 2002, when a committee of the Advisory Council began developing the Resource Review System (see <http://www.caee.org/quality>). This system focuses on the quality of EE programs and materials.

Although resource quality was seen as a necessary first step, the EE community felt it was imperative to also address the quality of how EE programs are *delivered and performed*.

In 2003, state association leaders including CAEE's then Executive Director, Mike Way, formed the EE Quality Assurance (EEQA) team to focus on certification and a materials review process. This group led the way to creating NAAEE's Certification Advisory Council (CAC) in 2004.

Meanwhile, based on the NAAEE *Guidelines*, the Utah Society for Environmental Education (USEE) and Montana Environmental Education Association (MEEA) developed state level guidelines for environmental educators. In addition, four state EE associations — Utah, Texas, Kentucky, and Georgia — began developing certification programs for environmental educators based on NAAEE's *Guidelines*. The CAC then recognized three programs — Utah, Texas and Kentucky - as model certification states and developed draft guidelines for a national accreditation process. **A comparison of these three state models is included in Appendix B.**

In 2005, at the request of EE leaders in Colorado, CAEE began the first steps toward certification by developing state-level provider guidelines based on similar ones in Utah and Montana, on NAAEE's draft NCATE standards and on NAAEE's *Guidelines for the Preparation and Professional Development of Environmental Education*. This project introduced the idea of professional guidelines and certification, assessed the level of interest and need in the Colorado EE community and created momentum for further action. The result of this work was the *Colorado Guidelines for Environmental Educators* (CAEE 2005). The document is intended to help environmental educators define and understand the skill sets necessary for providing high quality EE in Colorado.

This solid foundation helped the Colorado EE community take the next step and develop *the Guidelines* into an active certification program to set specific standards of knowledge, skills and experience highly qualified environmental educators should be able to demonstrate. In September 2006, a call for committee members met with responses from more than 50 people who wanted to be actively involved in developing a certification program for environmental educators. The many diverse perspectives represented are critical to the value and strength of the program.

The committee examined documents from the certification programs in Utah, Kentucky, Texas and North Carolina. The draft accreditation document from NAAEE was used as well to ensure that Colorado's program would be a part of the national system.

A successful program was developed by the leaders in Colorado's EE community through a consensus approach. Feedback continues to be invited and encouraged so that every environmental educator in Colorado is proud to be a part of this program. Please contact CAEE at 303-273-9527 or info@caee.org.

Pilot Design

A pilot program tested the practical application of the Certification Program in 2009. The pilot was open to any educator who wanted to develop a portfolio; and there were 9 participants in the initial review. Applicants represented diverse backgrounds in environmental

education (teacher, nonprofit educator, etc.).

To encourage participation in the pilot program all fees associated with certification were waived and all relevant portions of the applications were accepted when the certification program was finalized after the pilot. Pilot applicants were asked to commit to the evaluation of the process and to be a part of a focus group to assisting the committee in continually improving the program. The pilot helped to evaluate if the certification program effectively identifies quality environmental educators in Colorado and if the certification program is valuable to participants.

The pilot program was introduced at CAEE's Annual Conference (April 25-27, 2008). A display and session at the conference helped increase awareness of the program and pilot project. Interested pilot participants were asked to inform CAEE of their intent to apply by May 15, 2008. A workshop was developed to explain the process and held for the first time in June 2008. Portfolios were due September 1, 2008 and the committee met to review in October. As a result of the initial pilot review the initial certification rubric was refined and a rubric for each level of certification was developed.

Following the initial pilot both reviewers and participants were asked to complete a survey with their feedback on the program and a focus group was held during the Teaching OUTSIDE the Box annual conference to collect more in-depth qualitative feedback. Results of the feedback was used to refine assessment rubrics, develop recommendations for marketing, and plan future growth areas for the program including partnerships with higher education, alignment with other certifications, and professional development. Feedback has been incorporated into the current Certification Plan.

Purpose and Benefits of a Certification Program

Certification has a variety of benefits for individuals, organizations and the field of EE. The overall goal of this program is for CAEE to recognize high quality environmental educators through a certification program that aligns with NAAEE's accreditation program.

Summary of Benefits for Environmental Educators and Employers

A certification program will:

- Professionalize the field of environmental education
- Set a baseline understanding for skills and knowledge expected of environmental educators
- Support use of best practices in environmental education
- Raise the credibility of the environmental education profession
- Broaden the community of environmental educators
- Foster professional development among environmental educators
- Help employers identify well qualified staff
- Develop common ground in a diverse and varied field
- Build a strong foundation and consistency in skills and knowledge for EE providers
- Measure certified and master level proficiency in environmental education

Summary of Benefits for Accreditation

NAAEE has developed a process whereby state EE associations can participate in a national process. The proposed certification program for Colorado will meet the accreditation requirements. As a part of the national program, Colorado's certification

process will:

- Increase recognition of Colorado's program nationally
- Strengthen the credibility of the Colorado's certification program
- Enable applicants to receive national certification and to transfer certification among states with accredited certification programs
- Allow Colorado to continue to be a model state and to assist other states in build their models

Goals for CAEE

This certification program is supported by the Colorado Environmental Education Master Plan Goal II: Professional Development and CAEE's Strategic Plan, Goal 4.1 Improve the Skill Level of Environmental Educators.

The goals for CAEE are to:

- Provide opportunities to develop and enhance the knowledge, skills and abilities of all EE providers through professional development and mentoring
- Improve EE instruction
- Provide a capacity-building support tool for the state's EE community
- Foster the statewide network of professional environmental educators
- Encourage mentoring relationships between experienced and novice educators

Participation

The Certification Program is designed to benefit employers, employees, and volunteers involved in:

- Formal education
- Non-formal education
- Professional development seekers
- Facilitators (Project WET, WILD, Learning Tree, and Food, Land & People)
- Outdoor educators
- Interpreters

It is expected that experienced environmental educators who are interested in formal credentials, as well as, more novice environmental educators will find value in this certification program.

Summary of Certification Program

This is a competency-based program — one in which the applicant will demonstrate what they know and can do.

The certification competencies are adapted from the *Guidelines for Environmental Educators in Colorado* (CAEE 2005), North American Association for Environmental Education's *Guidelines for the Preparation and Professional Development of Environmental Educators* (2004), *Requirements for NAAEE Accreditation of State/Provincial Certification Program* (NAAEE 2006), as well as the certification competencies and requirements from the Utah Society for Environmental Education, Texas Environmental Education Partnership and the Kentucky Environmental Education Council. The "Colorado Competencies" representing this adapted version are listed in Appendix A.

The certification process includes two levels to ensure that master as well as novice EE providers are a part of the professional development required through the certification program.

There are several steps involved in receiving certification, including:

1. Initial Application
2. Portfolio Development
3. Submission of Final Portfolio
4. Application Review
5. Notification
6. Submitting the Final Application

A rubric was developed to make it as easy as possible for the applicant to understand the process and what is expected for a successful application. If applicants need more than the allotted 12 months to complete a portfolio, the application can be extended for an additional six months upon written request.

Step 1: Initial Application

The applicant must complete an initial application and inform CAEE of their intent to participate in the program by submitting an application form and resume.

At this stage, applicants will select their level of certification. The certification coordinator will ensure the application is complete and ensure the applicant receives any relevant professional development, training, or resources that can support them through the certification process.

Certification Levels

This certification program is designed to be inclusive and inviting to all educators in the broad field of environmental education. Certification levels allow flexibility for ranges of experiences and skills and will create an environment for career professional development and improvement. The levels are designed so that experts and novices each have a role to play in professionalizing the field of EE.

Level 1: Master Environmental Educator

The competencies for this certification level match the requirements for a nationally transferable certification. The competencies are based on the knowledge and skill levels of expert environmental educators and are described in Appendix A. Target audiences for the Master Environmental Educator certification are career environmental educators.

Level 2: Certified Environmental Educator

Competencies for Basic Environmental Educator certification will be a subset of the master environmental educator competencies. This is a state-level certification for environmental educators who are relatively new to the field and will not be transferable to other states. Target audiences for this level are workers relatively new to the field including seasonal workers, volunteers or pre-service teachers. Specific competencies for this level are described in Appendix A.

Step 2: Portfolio Development

The assessment mechanism for the competencies and self-assessment will be a portfolio; the use of portfolios was selected because of the professional value and overall flexibility for applicants. Each portfolio will be unique and competency-based evidence may contain a variety of inserts including:

- Articles
- Brochures
- Case studies
- Demonstration or observed performance (i.e. a mentor's observation report)
- Documentation and records
- Evaluation tools and results
- Essays
- Examples from home, social activities or volunteer work
- Finished or end products
- Interviews
- Lesson plans/activity outlines
- Letters of recommendation
- Narratives
- Papers or other supporting documents
- Proof of coursework
- Publications
- Reading reflections
- Records of recent projects, assignments or excerpts from work diary
- Report from colleagues, mentor, or managers
- Research
- Resume
- Response to questions to a guided discussion led by the mentor
- Review of lesson plans/activity outlines
- Special assignments devised by mentor and candidate
- Tests
- Transcripts
- Visuals (video, photos)
- Work documents or records
- Workshop certificates
- Written or tape-recorded personal accounts

The portfolio will provide sufficient evidence for certification. Each submitted document should list the competencies that it is intended to address and terms and language used must be self-explanatory or properly explained. For example, if a workshop is used as a piece of evidence, a description of how it meets the competency should also be included.

Some applicants may take only a few weeks to complete the process while others may need several months. CAEE staff and volunteers will be available to help applicants with questions. The certification program is open to all who meet the minimum eligibility requirements regardless of race, ethnicity, religion, gender, socio-economic background, political affiliation or sexual orientation.

Step 3: Submission of Final application

When the applicant feels that his/her portfolio adequately addresses the competencies, the applicant will submit an application form, portfolio, fee, current resume, and a signed copy of the *Colorado Environmental Education Code of Ethics and Standards for Professional Conduct* (Appendix C).

Step 4: Application Review

A Certification Peer Review Panel, composed of trained certified educators, will review each application based on the rubrics in Appendix A. Individuals appointed to the panel must exemplify high standards of professional judgment, competence and integrity and are required to have Level 1: Master Environmental Educator Certification or be an Honorary Certified Master Environmental Educator. In addition, the panel's members will represent various disciplines within EE (non-profit, secondary education, higher education, etc.). Members of the panel will review applications to determine whether the applications will be approved or denied. The Certification Peer Review Panel has the sole authority to confer certification.

The Certification Peer Review Panel will use the rubrics for evaluating proficiency in the competencies listed under each section.

Step 5: Notification and Recognition

Certification will be confirmed or denied in writing from the Certification Peer Review Panel within one month of the decision. Applicants will receive a summary of their reviews including identified areas of strength and improvement. Newly certified educators will be formally recognized via:

- Ribbons on nametags at conference/special events
- Announcements in the CAEE newsletter
- Postings on the CAEE website
- Certificates presented to applicants
- Recognition at the CAEE Awards Banquet

If an applicant does not meet the requirements for certification, he/she will be granted provisional status. Applicants have one year from the date of submission to resubmit materials that meet the standards of the certification program.

Demonstrating Competency

This certification program covers five themes an applicant should be proficient in to achieve basic or master level certification: Environmental Literacy, Foundations of EE, Professional

Responsibilities of the Environmental Educator, Planning and Implementing EE and Evaluation and Assessment. Each theme includes competencies, or statements of what individuals are expected to be able to demonstrate. These competencies correlate to the *Guidelines for Environmental Educators in Colorado* (CAEE, 2005), which can be used for additional examples of ways to provide evidence. The committee has tried to maintain a focus on the most important indicators of successful master environmental educators rather than sampling every skill to know that the educator is qualified.

Appendix A describes the themes, competencies, rubrics, and suggested responses. This table represents the requirements for accreditation from NAAEE, suggested skill and knowledge based competencies, rubrics that will be used by reviewers to evaluate the portfolio elements and the suggested response to further describe the competencies.

The response mechanisms are flexible meaning that applicants can use any item from past experience to demonstrate a competency (including a description of how the item meets the competency) or applicants can complete the suggested response if he/she doesn't have an existing item. Some examples of items from past experience are listed on page 12. Successful applicants will demonstrate that:

- All evidence is *valid*. Valid evidence relates directly to, and is appropriate for, the standard that is being assessed and its associated performance criteria.
- There must be sufficient evidence on which to make a judgment. (For example, knowing one teaching method is not enough to show competency under theme 4's "understands various teaching methods and strategies.")
- Evidence is authentic, that is belonging to the candidate. If the evidence was part of a group effort, the candidate's individual contributions need to be considered instead of the end product.
- Achievement dates are considered. Are the skills, knowledge and understanding that are evidenced by prior achievement still current?

The portfolios are reviewed at least one time per year, additional reviews may be scheduled if there is a need. There will be a two year deadline from the time of the initial application to the final application and portfolio submission.

Application Review

Competencies will be evaluated by any three members of the Certification Peer Review Panel. Rubrics have been developed for each competency and will be used to determine the quality of the application. Multiple rubrics will measure independent aspects of the competencies. There will be no score; rather, applicants will be assessed qualitatively based on the rubrics. There must be consensus among reviewers for each candidate. The reviewer qualifications are described in the next section.

Certification Management and Coordination

Several advisory and review boards consisting of volunteers and CAEE staff will be necessary

for the operation of the certification program. All boards, committees or councils will be selected entirely on a nondiscriminatory basis with respect to age, race, color, ethnic background, creed, disability, national origin, sexual orientation, gender, marital status, military status, political affiliation, religion or socio-economic status. A broad coalition representing different aspects of environmental education will to be maintained.

Certification Advisory Board

The Colorado Certification Advisory Board will:

- Serve in an advisory capacity to guide the certification program
- Receive and review quarterly communications from the certification coordinator about the certification program
- Meet at least annually in-person or by phone to discuss certification program successes and suggestions to promote continuous improvement
- Review grievances from participants
- Examine the reviewers performance annually and suggest improvements

The Certification Advisory Board will include representation from:

- CAEE
- the formal education community
- a graduate from a recognized EE certification program
- a federal or state/provincial natural resource agency
- an environmental education non-profit organization,
- a higher education institution
- a business or industry
- an environmental NGO

This Advisory board will make recommendations to the CAEE Board of Directors for the program but will not be a voting body of CAEE. Commitments for the Certification Advisory Board will be two-year terms; self-nominations will be encouraged. Members of the Advisory Board will be approved by the CAEE Board of Directors.

Certification Peer Review Panel

The Certification Peer Review Panel will:

- Serve as the certifying agent for the certification program
- Review applications and approve or reject applications
- Be made up of master certified environmental educators

Members of the Certification Review Board will be approved by the Certification Advisory Board.

Reviewer Qualifications

Reviewers are required to meet the following qualifications:

1. Completion of appropriate reviewer training.
2. Membership in CAEE (or other state affiliate and/or NAAEE).
3. Equivalence of five years combined education or experience in environmental education or closely related field.
4. Be a Certified Master Environmental Educator*

*To address the need for reviewers to certify the first environmental educator (i.e., a reviewer

qualification is certification, but they cannot be certified unless there are reviewers), a nomination process will be developed to find exemplary master environmental educators from throughout the state. A colleague will nominate these honorary exemplary master environmental educators, and the committee will review the nominations. The accepted nominees will be named “Honorary Exemplary Master Environmental Educators” and will be asked to become peer reviewers in the process. These Honorary members of the review panel will not be asked to submit a portfolio, but will be required to attend the reviewer training prior to reviewing applications.

A Conflict of Interest statement and commitment form will be kept on file for each reviewer.

Reviews will be completed in person during at least one review meeting annually.

Incentives / Compensation

Incentives and compensation will be given to reviewers who complete more than five reviews in one year. While monetary compensation will not be given, the following are possible incentives/compensation options:

1. Continuing education credit for teachers based on a specified number of reviews.
Organizational member “credits” to be used toward:
 - CAEE membership renewal
 - CAEE scholarship/development fund
 - Discounts on conference registration or other fee-based events
2. “Credit” for NAI re-certification or other associations (when accepted as part of requirement for competency based certification).
3. Recognition at a CAEE event

Grant options will be investigated to fund further incentives.

Review Team Parameters

The review team is defined by the following criteria:

1. Each team consists of three trained peer reviewers per application.
2. Team members have diverse backgrounds and mixed expertise.
3. Reviewers will not communicate with one another regarding a review until his/her review is complete and then only to resolve a discrepancy.
4. Each team member reviews the submission for all competencies.
5. Reviewers will assess if a competency is addressed based on the rubrics.
6. Reviewers will not be identified with a specific application.

Certification Coordinator

The certification coordinator will be a CAEE staff member who handles daily administration of program including marketing, communications, funding, etc. Clear and accurate records of applications and certified educators are essential.

Support Considerations

Training

Applicants

CAEE will develop and host trainings to assist educators in understanding the certification process and identify the gaps in their experience where they do not meet the competencies. Workshop emphasis will be on certification process details and skills and knowledge of master level environmental educators. The goal of this basic certification workshop will be to give participants a working familiarity with the competencies and instruct them in using these guidelines to develop a portfolio. This training is for anyone interested in certification, including applicants and reviewers, and will require two to four hours to complete.

Due to the profusion of professional development opportunities currently available for environmental educators, CAEE will create a list of potential professional development opportunities to help applicants obtain the skills and knowledge needed to be certified but will not create new professional development programs at this time.

CAEE has posted a recorded webinar on the certification process on the website for potential applicants to build knowledge around requirements and expectations. CAEE also hosts an Principles and Foundations of Environmental Education online course during the summer. All assignments throughout the course are designed to help support portfolio development and acquiring of the necessary knowledge and skills.

Reviewers

Training is a very important aspect of this process and will directly affect the quality and consistency of reviews. Each peer reviewer must have a working knowledge of the competencies and participate in a reviewer workshop.

Training is conducted at the beginning of each review. The goal of the reviewer training will be to reduce the variability and subjectivity among reviewers. This creates a pool of individuals capable of producing more consistent reviews of a professional quality. The Reviewers will be trained in the competencies and rubrics, as well as the scope of the certification process. As part of the reviewer workshop, participants will conduct a test review (to assure some degree of standardization) and will be trained on how to recognize components. Reviewers will also be encouraged to state their rationale through comments.

CAEE's review coordinator will be responsible for observing reviewer results with regard to consistency. Retraining needs will be monitored and determined through evaluation of the entire review process. In addition, the coordinator may assign more than three reviewers to a submission at slow periods to ensure that reviewers maintain their knowledge and skill.

When/Where to Apply

Submissions will be accepted by email at director@caee.org or may be mailed to: CAEE
Attn: Certification
15260 S. Golden Rd
Golden, CO 80401

Program Records

A centralized, confidential system of record keeping that includes a process for eliminating

inactive files will be maintained by CAEE. Applicant records will be kept for a period of ten years and will consist of each applicant's application, portfolio, and completed scoring tools.

Appeal Process

Applicants will have the opportunity to appeal any decision made by the Certification Peer Review Panel. Decisions may be appealed in writing to the Certification Advisory Board. Appeals must be made within one year from the date of decision.

Recertification

Certification will be valid for seven years. To be recertified, an educator must have at a total of 56 (average eight hours/year) contact hours— not credit hours — of professional development. Certified environmental educators will record professional development activities including Attending reviewer training, reviewing portfolios, and attending and presenting at conferences, trainings, courses or workshops. To be recertified, the applicant will submit a list of professional development activities with the name of the event, date, number of hours and signature. In addition, the applicant will submit answers (less than one page) for these questions:

1. Why did you choose to participate in one of the professional development opportunities on your list?
2. How did you apply what you learned professionally?
3. How did the session, workshop, training, etc., benefit you professionally?
4. What significant changes in the field and/or your own practice have occurred in the last seven years? (including addressing any feedback and suggestions from reviewers during initial portfolio review.)

Applicants need not resubmit portfolios to be recertified. Cost of recertification will be \$35.

Website / Online Systems

The CAEE website (<http://www.cae.org>) supports the EE Directory and general web pages relevant to CAEE and its members.

Support Pages

CAEE will host an online area for the certification program as part of its website. Various sections for the general public applicants and reviewers will explain program details. General public pages will post basic information about the certification program including process development, competencies, and panel and advisory board requirements. The applicant page will include instructions, worksheets, deadlines and answers to frequently asked questions.

Application Collection

A general interest form and online application resource review system are housed on the website. An email is automatically sent to the certification coordinator when an application or interest form is submitted. The system is connected to a database that will tabulate and track results electronically. The certification coordinator then will use this information to track overall information.

Additional Considerations

Finances and Fiscal Management

The intent is that this program be financially self-sustaining, periodically supplemented with grant funding. The CAEE Board will assess the value to the organization and the priority of providing this service with regard to other support services (e.g., annual conference, awards program, etc.). In addition to funding considerations, user demand/interest and management, the board will also consider implications of timing and proactive leadership in determining the start-up and long-term viability of this project.

The goals for the certification program include ten applicants in first year, with 10 percent growth each year (Yr2=11, Yr3=12, Yr 4= 13, Yr 5=14) to total 60 master educators by the end of year five. As the program grows, CAEE may need to hire staff to handle the time commitment. Estimated time and expense for the program in the first year:

Administration Requirements – five hours/ applicant

1 hour – analyze complete application and organize review
 panel 1 hour – answer applicant questions and pair with mentor
 3 hours – finalize review from panel for applicant

General Administrative Support (year 1) – 25 hours

Marketing Materials and Dissemination – 20 hours
 Volunteer Coordination – 2 hours/year
 Advisory Board Coordination – 3 hours/year

Total Hours/year: 75 @ \$20/hour = \$1500 for 10 applicants

General Overhead Costs

Phone, web and email hosting, rent, supplies, postage, recognition items, and display items Estimated: \$400/year

NAAEE Accreditation Costs

Current estimates are at least \$1000/year to maintain national accreditation.

Total Cost for 10 applicants = \$2900

This program depends significantly on volunteers to contribute their time and energy. Reviewers will likely spend at least four hours per application as follows:

- 3 hours to review application and comment
- 1 hour – communication with CAEE/other reviewers
- Other – mentor time

Certification Fees

Fees are necessary to cover the cost of the administration of this program. Fees will be charged according to certification level.

For applicants at both levels, the initial application fee is \$25 for CAEE members, and \$65 for non-members.

Fee Summary	Initial Application Fee	Certification Application Fee	Recertification Fee
Master Level	\$25 members \$65 nonmembers	\$175	\$35
Certified Level	\$25 members	\$35	NA

	\$65 nonmembers		
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An additional fee of \$175 for master level applicants or \$35 for basic level applicants will be assessed when he/she is accepted into the program. Grants and other funding sources will be sought to provide scholarships (up to ten per year) to ensure that fees do not exclude eligible participants from this process.

If an applicant does not meet the requirements to become certified, the applicant will be granted a provisional status. Applicants have one year from the date of submission to resubmit materials to meet the standards of the certification program. One resubmission will be accepted at no additional cost.

Role for Higher Education or Other Professional Development Courses

An option to involve higher education institutions and other organizations providing professional development in Colorado will be explored. Several colleges, universities and other organizations offer courses that would meet many of the competencies for certification. It is suggested that the certification coordinator and Advisory Board design a program to accredit these courses. This type of accreditation would move the responsibility from the applicant to the course owner to demonstrate that competencies are met (i.e., a student passing one of these accredited courses would automatically meet certain competencies). One benefit to the course owner is that these courses would be promoted to existing or future applicants through the certification program.

Fees would be charged (proposed at \$1000 to \$3000 per institution) to support the program and promote accredited courses. Courses would be reviewed against the competencies and *Guidelines for Environmental Educators in Colorado* (CAEE, 2005).

State-National Relationship

This program is intended to meet the *Requirements for NAAEE Accreditation of State/Provincial Certification Program* (NAAEE, March 2006). CAEE will apply for accreditation when it is available from NAAEE. This accreditation program for state certification programs will create a system of reciprocity among the states (i.e., master level certified educators will receive national certification which will be transferable among states with accredited certification programs). Certified level educators will not be recognized by the national program.

Program Marketing

A marketing plan will be used to:

- create ownership in the EE provider community for the certification program;
- recruit applicants and reviewers to be part of the program;
- create a demand by employers and other decision makers for the program;
- inform Colorado decision makers that the certification program professionalizes the EE field.

The program will be marketed as a professional development opportunity for

EE professionals and is defined as an optional program where the decision to participate is the choice of the applicant. At all times, the focus will be maintained on the efficiency and effectiveness of the program and that it be realistic. Initially, large organizations employing several environmental educators will be targeted to create momentum and participation.

A certification program does not immediately result in quality programs and/or buy in from every park, organization or agency in the state. Professional EE certification takes time to develop and implement. It also requires that organizations such as CAEE educate communities about the value of certified professionals. A quality certification program which measurably increases knowledge and decreases risk will, over time, influence organizations to adopt the standards and require certified staff members.

A brochure describing the program for college programs can be developed to encourage colleges to address the competencies. Students can gain basic certification by completing these courses.

Evaluation

Evaluation of certification processes will be assessed on a regular basis and findings used to improve the program.

Several different forms of evaluation will be used to determine the success of the certification program. Quantitative and qualitative data will be collected and used to evaluate on-going performance of specific aspects of the model process:

- (1) Technical data regarding the number of hits to the certification website will be collected. This information will be tracked and evaluated for trends and evidence about the success of marketing or recruitment efforts.
- (2) Surveys will be developed to request that applicants, reviewers and employers evaluate the ease of use of the application and review process. Data from these surveys will be tracked and evaluated to help determine the program value.
- (3) Surveys will be developed to evaluate training effectiveness. Surveys will be administered at the end of the training day and again six months later.
- (4) Focus groups of applicants will be convened to elicit information concerning the effects for them, personally and professionally, of review results.
- (5) The certification coordinator will develop a system to track and evaluate reviewer performance.
- (6) An applicant database will be maintained to track themes and competencies that are missing from applications so that a data set may be developed to determine the needs of the EE community.

Automatic electronic surveys will be used to ease the administration of assessment surveys.

Additional evaluation mechanisms may become necessary as the program builds and expands.

CAEE leadership (staff, board, advisory council) will also periodically assess the

“big picture” of the certification program. They will use the following key questions to be answered thoroughly prior to project implementation, and again annually as an ongoing project evaluation.

Sustainability:

- Is the program fiscally sustainable? Is the fee structure correct?
- Is the program creating results that have a positive impact on Colorado’s EE community? Does the cost/benefit analysis support the continuation of the program?
- Is the marketing plan being followed? Is it effective?
- Is there a greater degree of confidence in EE demonstrated by the public (targeted audiences)?

Use:

- What is the demand from Program Managers to have their employees certified? What kinds of applications are being submitted?
- Is there a demonstrated increase in demand for training?
- Do applicants value certification?

Reviewers:

- Is the pool of reviewers adequate? (Number? Expertise?)
- Is the act of reviewing a valuable professional development experience? Are incentives for reviewers adequate?
- Training — What is the level of confidence demonstrated by the reviewers?
Performance — Are the reviewers providing consistent, judicious reviews?