

# Colorado EE Resource Review Plan

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A Project of the  
Colorado Alliance for Environmental Education  
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## ***Executive Summary***

*The Colorado EE Resource Review Plan* defines a model for a statewide review system for environmental education (EE) resources. At both the state and national level, EE Material reviews were published most recently in 1998 by the National Association for Environmental Education (NAAEE) in *The Environmental Education Collection: A Review of Resources for Educators, Volumes 1-3*. Since that initial review period, EE providers have not had materials or programs reviewed or the reviews published. To fill this void for Colorado EE practitioners, the Colorado EE Advisory Council decided to develop the following process. The overarching goals have implications for several related elements of EE design and delivery, including: quality-assurance mechanisms; marketability of EE programs; program integrity; leadership development; and credibility and value of EE in Colorado. The plan includes several evaluation mechanisms and a financially self-sustaining model, to be occasionally supplemented with grant funding.

The review criteria serve to evaluate EE resources, including programs and materials. The "Resource Guidelines for Excellence" is found in Appendix A. The following are the basic steps involved in this review process:

- 1) Submitter provides self-review analysis of the EE resource.
- 2) A team of three trained reviewers analyze the resource, verifying or disputing claims of submitter.
- 3) Submitter is notified of results; decides whether or not review is to be made public.
- 4) Results made available to the public through Program Profiles on EE Information Clearinghouse.

Submissions to the review process will be divided into two categories:

- Basic Resources: simple, limited contact, short duration, active learner involvement, involves learning cycle, has facilitator or presenter, limited or no scope and sequence.
- Complex Resources: complex, learner-centered, has curriculum framework, contains teacher instruction supplements such as lesson guides, active learner involvement but may be self-directed, nonformal or formal settings with definable scope and sequence; and multiple/longer term contact between instructor and learner.

Materials can be submitted together as a collection. Submission Guidelines and Fees (\$15 - \$165) are clearly outlined (Page 6).

Fees cover the cost of program administration including staff support (a review coordinator position). The coordinator will consolidate results, recruit and evaluate reviewers, coordinate a comprehensive training process, provide quality assurance of the review process as a whole, manage the submissions of resources, market the program throughout Colorado, evaluate the program, and solicit and manage program funding. The coordinator is to be supervised by CAEE staff.

The reviews will be published through the EE information Clearinghouse on the CAEE website (<http://www.caee.org/database.html>). Self-reviewers and reviewers will complete the Review Worksheet online. This web page will be connected to a database which will tabulate and track review results electronically. An online training resource for the general public, submitters, and reviewers is envisioned to minimize workshop time requirements.

The marketing plan includes the following objectives:

- 1) Create ownership in the EE provider community for the review process
- 2) Recruit reviewers to be part of the review process
- 3) Create a demand by EE users for the review process
- 4) Create acceptance and support from EE funders for the review process
- 5) Inform Colorado decision-makers that this review process provides EE quality control

## ***Introduction***

The following plan outlines a strategic and tactical process to provide a statewide system of review for environmental education (EE) resources. This plan is meant to be the model process that the Colorado Alliance for Environmental Education (CAEE) will offer as a support service to members and/or constituents in the EE community of Colorado.

The North American Association for Environmental Education (NAAEE) developed the National Project for Excellence in Environmental Education (NPEEE), which includes *Environmental Education Materials: Guidelines for Excellence*, NAAEE 1998 and *Guidelines for Excellence in Nonformal Environmental Education Program Development and Implementation*, NAAEE, June 2004. The NPEEE was made possible through funding from the Environmental Education and Training Partnership (EETAP) and the Office of Environmental Education within the US Environmental Protection Agency (EPA). For more information about the NPEEE, see <http://www.naaee.org/npeee>.

The *Materials Guidelines* were used by NAAEE to review, on a national scale, about 180 EE curriculum materials. Qualitative reviews were published by NAAEE in 1998 in *The Environmental Education Collection: A Review of Resources for Educators, Volumes 1-3*. Since that initial review period, EE providers have not had a mechanism to have their resources reviewed or the reviews published. To fill this void, the Colorado EE Advisory Council decided to develop a Colorado Environmental Education resource review process driven by CAEE members (and based upon the NPEEE) with the goal of enhancing the marketability, quality, and credibility of all EE resources offered in Colorado.

A committee of the Colorado EE Advisory Council was tasked with defining and outlining the basic parameters of a legitimate and consistent way to evaluate and assess EE resources in Colorado and began meeting to develop this plan in May 2002. The committee is a diverse group of dedicated individuals who represent the interests of many sections of the EE community including state agencies, non-profit organizations, nature centers, schools, higher education, and interpretation. The development of the Colorado EE Assessment model was supported, in part, by a grant from the EPA Regional EE grants program.

### **Members of the Research and Assessment Committee**

Karin Hostetter, Chairperson	Interpret This
Rob Alexander	Wilderness Education Institute
Roxanne Brickell-Reardon	Colorado State Parks - Eldorado Canyon
Brad Buckner	Colorado State Parks
Kathryn Davis Grohusky	
Cece Forget	U.S. EPA Region 8
Stephen Garretson	Aurora Academy
Francesca Giongo	South Suburban Parks and Recreation
Richard Jurin	University of Northern CO, CAEE Board Representative
Kim Langmaid	Gore Range Natural Science School
Debbie Matlock	Wild Rhythms
Mary McCormac	Colorado State Parks - Eldorado Canyon
Susan Toth	Colorado Energy Science Center

### **CAEE Staff**

Mike Way, Executive Director  
Ali Goulstone Sweeney, Assistant Director

To contact CAEE with questions or comments, call 303-273-9527 or email [info@caee.org](mailto:info@caee.org).

## ***Section A. Summary of Benefits/Purpose for Development of a Review Process for EE Resources***

To establish and provide for long-term maintenance of a replicable and consistent quality assurance mechanism for evaluation/assessment of EE resources.

To maintain the highest possible integrity in EE field.

To enhance the marketability of all EE resources offered in Colorado.

To take responsibility for quality assurance of the collective EE product.

To develop leaders in EE Community.

To elevate the sense of credibility and value of EE in Colorado.

## ***Section B. Goals/Incentives for the State EE Association***

Goal 1. Provide quality assurance information to help various audiences determine the value of the resource for their specific needs.

Goal 2. Provide professional development opportunity for EE practitioners.

Goal 3. Raise the quality of EE resources over time.

Goal 4. Improve EE content and instructional format.

Goal 5. Provide a capacity-building support tool for state's EE community.

## ***Section C. Summary of Review Process***

The review criteria (Key Characteristics, Guidelines, and Indicators) are adapted from *Environmental Education Materials: Guidelines for Excellence*, NAAEE 1998. The "Resource Guidelines for Excellence " representing this adapted version is found in Appendix A.

The model review process that follows has two distinct advantages. (1) It simplifies the subjective judgment required from reviewers and (2) it will make in-depth information available by offering to the public review detail and information to the "guideline" level.

The following are the basics steps involved in this review process:

**Step 1. Submitter provides self-review analysis of resource.**

The submitter is the person or organization requesting the resource review. Submitters are asked to provide a self-review and analysis with regard to the review criteria. This self-review is then subjected to an objective review and verification by a team of peer professionals in EE. See Self-Review Worksheet (Appendix B).

**Step 2. Team of Peers (at least 3 people) review and analyze the resource submitted, verifying or rejecting the claims of submitter.**

This system is designed as a peer review process. The reviewers are a team of knowledgeable and trained environmental educators from varied backgrounds and organizations within the EE community.

**Step 3. Submitter is notified of results; decides whether or not review is to be made public.**

The submitter will be notified of the review results and provided with feedback information. The submitter then decides if the results are to be made available to the public through the CAEE website.

**Step 4. Results available through Program Profile on EE Information Clearinghouse.**

The review information will be tied to an on-line EE information clearinghouse system on the CAEE website (<http://www.caee.org/database.html>). The public will be able to view the review results through this system. An example of the format for the review results is included in Appendix C.

An approximate timeline for the review process is included in Appendix D.

If there is a need and desire to “grow” this model into a national process, other strategic planning will need to address how to accommodate interstate and tri-national review requests.

<b>General Considerations</b>
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Not every EE resource incorporates each Key Characteristic, Guideline, and Indicator used in the review criteria. Thus, submitters and reviewers have an option to indicate that a particular Key Characteristic/Guideline is "Not an objective of the resource design." When a Characteristic or Guideline is not addressed, this does not mean that a resource should not be used. Similarly, a resource should not be valued solely on the number of Key Characteristics/Guidelines present, rather it should be valued on the Characteristics/Guidelines present that are important to the user's purpose.

Disclaimers on website will indicate:

“The listing of an EE resource on this website does not imply an endorsement or approval by CAEE nor NAAEE. Reviews are provided as an informational tool to help users make decisions on the value of the resource for their specific needs.”

"This review system is based upon a peer review process using trained reviewers analyzing written program outlines and materials only. No field reviews or performance observations are made as a part of this process. Review criteria are based upon the NAAEE National Project for Excellence in Environmental Education."

“Each peer reviewer has completed a training course in preparation to accurately analyze the information provided in the self-review according to the review criteria stated by CAEE. Reviewers are not necessarily experts on the content of the resource being reviewed. Thus, reviews do not necessarily affirm or guarantee the accuracy of the factual content. The accuracy of the content is a function of the review criteria, not the knowledge or expertise of reviewers.”

## Submission Categories

A large range of resources can be submitted for review. Submissions are divided into the following two categories (examples listed are not all-inclusive). Single or multiple (see Collections) resources may be submitted.

*Note to submitters:* Environmental **information** BY ITSELF, is not environmental **education**. If you use information supplements (e.g., posters, videos, coloring books, information packets, etc.) we suggest you provide a brief explanation of the information supplement itself AND supporting details about how the information items are used within the education or learning process.

### CATEGORIES

**1. Basic Resources** [i.e., simple, limited contact, short duration, active learner involvement, involves learning cycle, has facilitator or presenter, limited or no scope and sequence]

Examples:

Activity or Lesson Plan  
Guest Speaking Presentation  
Special Event (limited duration or contact)  
Interpretive Program or Presentation  
Stand-alone Field Trip or Guided Tour (informal education settings)  
Issue Investigation and Action Research

**2. Complex Resources** [i.e., complex, learner-centered, has curriculum framework, contains teacher instruction supplements such as lesson guides, active learner involvement but may be self-directed, nonformal or formal settings with definable scope and sequence and multiple/longer term contact between instructor and learner]

Examples:

Activity Guide	Experiential Learning Model
Compendium of Activities/Lesson Plans	Service Learning Model
Interactive, Instructional CD-ROM or DVD	Comprehensive curricula [i.e., school based model such as Environment as an Integrating Context]
Workbook	
Instructional Text	On-line Course
Case Study	Residential Instruction
Project-based Learning Model	
Self-contained Course, Seminar, and Workshop	

### COLLECTIONS

Multiple resources of similar design may be submitted as a “collection.” A collection is a group of resources submitted together that were created using the same format and educational design. The resources should be from the same category (e.g. Basic Resources or Complex Resources). There is not a limit on the number of resources that make up a collection.

In the case of Collections, reviewers will randomly select at least three of the resources, and analyze them according to the review criteria. It is not necessary that the three reviewers select the same sampling of resources, nor that they necessarily consider the identical sampling which may have been used in the self-review by the submitter.

Because all of the resources in a collection will have been created using similar format and educational designs, the published review will appear for all resources in the collection, not merely those sampled by the reviewers.

If additional resources are created after the review of a collection, the additional resources can be submitted for future review. The review coordinator will verify that the new resources were created by the same process and are presented in the same format. If appropriate, these resources will be included in the original collection and the original review will be attached to the new resource entries.

**Submission Fees**

Fees, necessary to cover the cost of the administration of this program, are charged according to submission category:

Category	Single Submission	Collection	Additional Resource in Collection*
Basic Resource	\$15	\$65	\$5 per addition
Complex Resource	\$65	\$165	\$10 per addition

\*Contact coordinator, this price is negotiable on a case-by-case basis.

Examples:

Submitting one lesson plan for review: Cost: \$15

Submitting 50 activities as a collection: Cost: \$65

Later submissions of 5 more activities as part of the collection above:

Additional Cost: \$25 (5\*\$5 = \$25)

**Submissions**

Submissions must include the following:

1. Cover page (example of format provided in Appendix E.)
2. Program profile as per CAEE’s online database/directory (see <http://www.caee.org>)
3. Resource provided in written format (e.g., plan, outline, curriculum, lesson plan)
4. Self-Review (example of format for Review Worksheet is found in Appendix B.)
5. Information to support claims made in Self-Review
6. Submission Fee

Incomplete submissions will not be accepted.

**Note:** Where applicable, K-12 resources should include correlation to the Colorado Model Content Standards (See Guideline 6.7).

Written electronic submissions are preferred, however hardcopies will be accepted. Submitter must provide four paper copies if not submitting electronically. Paper copies will not be returned.

**When/Where to submit**

There are two deadlines or cycles each year for submissions: May 1 and November 1. The submitter will be notified by CAEE that the resource has been received. It is expected that the review will be available within three months after each deadline (August 1 and February 1).

Submissions will be accepted online at <http://www.caee.org> or may be mailed to:

CAEE

Attn: Resource Review

15260 So. Golden Rd

Golden, CO 80401

Self-review workshops will be conducted near the deadlines listed above to help ensure complete and consistent submissions. This workshop is not mandatory, but is highly encouraged for submitters. The planned format is ½ day of instruction, answering questions, and providing tips; then ½ day optional work time. A basic overview of the criteria will be covered in the morning instruction; therefore workshop participants will need a working knowledge of the criteria prior to attending the workshop. There will be a discount on the fee for a review if the submitter attends a Self-Review Workshop during the first year of the resource review program.

## Post Review

A review coordinator (from CAEE) will consolidate the review results. If there are discrepancies in the

review results, the review coordinator will examine the results and, if necessary, contact reviewers to determine consensus. The review coordinator will notify the submitter of the review results and provide feedback information. The submitter decides whether those results are published through the CAEE website.

If submitter chooses to have the review results made public, a flag, indicating “Review Available” will appear next to the resource name. This flag links to the actual review results (see Figure 1).

If submitter chooses not to have results made public, a flag will not appear.

Fig 1. Example of Database/Directory Search Results

## Re-submissions

If the submitter significantly improves the original resource, and would like the resource to be reviewed again, there is no additional fee. The original fees cover the cost of one re-submission. For additional re-submissions beyond that, costs will be negotiated on a case-by-case basis.

Reviews are deemed valid indefinitely. If significant changes occur to the resource, it is the responsibility of the submitter to re-submit the resource for review. Each review will be dated, and consumers will judge for themselves the efficacy of the review according to date.

### Appeals

If a submitter significantly disagrees with the review results, an appeal may be made. The submitter should submit in writing why he/she disagrees with the review results. The review coordinator will review the appeal and the review results. Depending on the results of the new review, the coordinator may meet with the submitter and/or reviewers.

## ***Section D. Support Considerations***

### **D.1. Reviewer Plan**

#### **Recruiting**

Volunteer reviewers will be recruited from the following target groups:

EE program managers submitting reviews	Individual Performance Objectives (IPOs) for natural resources agencies
CAEE Advisory Council	National Association for Interpretation (NAI) EE section
People in regional EE networks	Certified Interpretive Trainers (CITs)
Teachers earning CDE credit	Certified Heritage Interpreters (CHIs)
EE teacher networks	Certified Interpretive Guides (CIGs)
Teacher Liaison Network	Facilitators in Project Learning Tree (PLT), WET, WILD, and Food Land & People (FLP)
Science information specialists	Retired volunteers
College Professors	
EE Certification candidates	
Attendees in reviewer trainings	

#### **Qualifications**

Reviewers may not necessarily be experts on the content being reviewed, however each reviewer is expected to have basic knowledge of the understandings, skills, and attitudes associated with environmental literacy. A Reviewer Commitment Form (format provided in Appendix F) will be required from each volunteer and will be kept on file. The form will include:

- Expertise
- Background
- Education
- Location
- Qualifications
- Content Strengths
- Time available to review
- Basic contact information (organization, address, phone, etc.)
- Category the reviewer is most comfortable reviewing
- Internet and email access
- Code of Ethics

A Conflict of Interest statement is included on the Review Worksheet and Commitment Form.

Reviewers will meet the following qualifications:

1. Completion of appropriate reviewer trainings (see following sections).
2. Member of CAEE (or other state affiliate and/or NAAEE member).
3. Equivalent of five years combined education or experience in environmental education or closely related field.

Reviewers may be out-of-state as long as application and training procedures are similar.

The reviewer will commit to completing at least three reviews per year.

It is intended that reviews be completed online. Thus, reviewers must have access to the internet and be capable of using computer software associated with the internet including email, downloading attachments and files, and submitting online forms.

## Incentives / Compensation

Incentives and compensation will be given to reviewers who complete more than three reviews in one year. Monetary compensation will not be given, however the following is a list of possible incentives/compensation options:

1. Continuing education credit for teachers, based on a specified number of reviews.
2. Organizational member “credits” to be used toward:
  - CAEE membership renewal;
  - CAEE scholarship/development fund;
  - Discounts on conference registration or other fee-based events;
  - Discounted NAAEE membership fees (CAEE pays difference)
3. “Credit” for National EE Certification, NAI re-certification, or other associations. (When accepted as part of requirement for competency based certification.)

Other perks and motivation for reviewers may include:

- Volunteer dinner or barbeque.
- Referral program where credits are given for referral/recruitment of new reviewers.

Grant options will be investigated to fund other incentives.

## Review Team Parameters

The review team is defined by the following criteria:

1. Each team will consist of three peer reviewers per submission.
2. Team members should have diverse backgrounds and mixed expertise.
3. Reviewers should not communicate with one another regarding a review until review is complete, and then only to resolve a discrepancy.
4. Each team member reviews the submission for all Key Characteristics.
5. The reviewer will assess if a Guideline is present based on the examples (Indicators) found in the resource. Based on the Guidelines present, the reviewer will determine if the Key Characteristic is present.
6. Reviewers will not be identified with a specific review.

## Training

Training is a very important aspect of this process and will directly affect the quality and consistency of reviews. Each reviewer must have a working knowledge of the review criteria, participate in a self-review workshop, and participate in a reviewer workshop. To meet these requirements, reviewers will have the following options.

### 1. **Basic Guidelines Workshop**

Goal: To give participants a working familiarity with *Environmental Education Materials: Guidelines for Excellence*, NAAEE 1998 and instruct how to use these guidelines to develop resources.

Workshop emphasis will be on higher quality development and design of EE resources. This training is for anyone interested in the *Guidelines*, including submitters and reviewers, and will require 2-4 hours to complete.

This workshop is one option for reviewers to meet the prerequisite about having a working knowledge of the review criteria. There are other options including, self-instruction with the *Environmental Education Materials: Guidelines for Excellence Workbook*, which is available

electronically or in a paper version. Reviewers should contact the review coordinator if they are unsure whether or not they meet this prerequisite.

## 2. Self-review Workshop

Goal: To create a pool of individuals capable of producing more complete and consistent submissions for the review process.

This training will require approximately 1/2 day of instruction and 1/2 day of optional work time (reviewers must complete the entire day). This workshop is required for reviewers so that they understand and appreciate the self-review process. This workshop is not required for submitters, but is highly recommended. The Basic Guidelines Workshop is not a prerequisite of this workshop. It will be focused on the self-review form including how and what to document for each criterion. A secondary goal of this workshop is to develop a pool of instructors for the reviewer workshop.

## 3. Reviewer Workshop

Goal: To reduce the variability and subjectivity among reviewers in creating a pool of individuals capable of producing more consistent reviews of a professional quality.

This training will be a full day workshop. Attendees must have attended a Self-review Workshop and are encouraged to bring a completed self-review to this workshop. The registration for this workshop will also include gathering some background information about the attendee (e.g., why do they want to be a reviewer, strengths and weaknesses, etc.).

A draft agenda for a full day reviewer workshop is included in Appendix G. Reviewers will be trained in all Key Characteristics and will review the whole scope of the resource submission. 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 such as action or skills. Reviewers will also be encouraged to state their rationale through comments.

These trainings will be offered individually or as a set. Incentives will be created for hosting workshops throughout Colorado. Trainings will be scheduled around the submission deadlines.

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 whole review process. If a reviewer does not complete three reviews in one year, then retraining may be necessary to re-familiarize the reviewer with the process. In addition, the coordinator may assign more than three reviewers to a submission at slow periods to ensure that newly trained reviewers have something to review within two to three months of training.

## Review Coordination

The review coordinator has a range of responsibilities including:

### Reviewers

- maintaining contact information for reviewer pool
- regular communication with reviewers via email, announcements, or reviewer meetings
- coordinating and marketing Reviewer Workshops
- conducting Reviewer Workshops
- keeping review process as simple as possible for reviewers (e.g. maintain checklists; keeping a waiting list of submissions to be reviewed, etc.)

- tracking reviewer performance (i.e. Is one reviewer always low, high, inconsistent? Is there a need to retrain any reviewers? etc.)
- setting up and tracking incentives/compensation for reviewers
- updating website for reviewers (updating Frequently Asked Questions (FAQs) sheet, review deadlines, etc.)
- recruiting reviewers
- ensuring reviewers complete a review within two to three months of being trained

#### Submissions

- communicating with submitters to confirm submission receipt, review results, etc.
- tracking money associated with submission (may include deposits, billing, tracking membership)
- distributing and tracking submissions to review teams
- marketing program to EE providers soliciting resources for review
- updating website for submitters (FAQs, deadlines, etc.)
- coordinating and marketing Basic Guidelines and Self-review Workshops
- conducting Basic Guidelines and Self-review Workshops

#### Reviews

- creating demand for reviews in EE community
- consolidating review results
- observing review results for consistency and contacting reviewers to determine reasons for discrepancies when reviews differ dramatically
- publishing reviews that have been approved by the submitter
- managing review appeals
- tracking resource performance (i.e., are there any guidelines that are consistently not met in submissions, are there any additional indicators that should be added to the list, etc.)
- checking additional resources submitted as part of a collection already reviewed

#### Marketing

- coordinating marketing plan as described in Section D.3

#### Evaluation

- designing and carrying out evaluation of the system; including documentation and analysis of use patterns; reviewer performance; levels of demand from EE program managers and the public

#### Funding

- writing grant proposals and prospecting sponsors/donors of the system

The intent is to cover or supplement the cost of the review program (including costs associated with a review coordinator) through submittal fees. Projection is for the coordinator to be “supervised” by CAEE in some capacity (e.g., as volunteer, staff, etc.)

<b>Quality Assurance</b>
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The consistency and quality assurance of reviewers is necessary for the success of this project.

Based on evaluation criteria, the reviewer’s performance will be observed by the Review Coordinator. Performance of reviewers will be evaluated in part via reviewer comments. Upon determination of unacceptable performance by a reviewer for any cause (e.g. unresponsive to review assignments, consistently severe or lenient reviews; consistent disagreement in relation to the other reviewers; violating anonymity of the process by contacting the submitter, failure to attend scheduled trainings, etc.), the Review Coordinator will (in the following order) -- (1) contact the reviewer in person or by phone to

address the problem and suggest solution(s); (2) suspend using the reviewer until remedial actions are taken; (3) alert the CAEE Executive Director (ED) about the problem; (4) notify the reviewer in question in writing (upon consultation with the ED); (5) Dismiss the reviewer (in coordination with the ED)

To remain a reviewer, each reviewer should complete at least three reviews in one year, and attend a short refresher training every two years.

## **D.2. Website / Online Systems**

The CAEE website (<http://www.caee.org>) supports the EE Information Clearinghouse and general webpages relevant to CAEE and members. This site will need significant upgrades as follows.

### **Reviews Collection**

A webpage will be developed similar to the Review Worksheet (example included in Appendix B), so self-reviewers and reviewers can complete the Review Worksheet online. This webpage will be connected to a database to tabulate and track review results electronically. The review coordinator will use this information to track reviewer performance.

### **Review Publication**

The reviews will be published through the EE information Clearinghouse on the CAEE website (<http://www.caee.org/database.html>). Webpages with review results (format example included in Appendix C) will be linked to program profiles in the EE Information Clearinghouse. These webpages will also be connected to a database to tabulate and track review results electronically. This information will be kept to determine future training needs (i.e. if 90% of the reviews completed indicate that the resources do not have a action component, a training may be developed on this topic).

*Note: CAEE is not responsible for collecting or updating program performance evaluation information, however if the submitter takes the initiative to document program performance evaluations (e.g., performance assessments, periodic pre/post tests, site visits by an objective evaluator, evaluations for learner effectiveness, etc.), this online system will attempt to provide access to this information through an electronic link to the submitter's website.*

### **Support Pages**

CAEE will create an online area for this Resource Review Program as part of the CAEE website. Different sections will explain the details of the process for the general public, submitters, and reviewers. The general public pages will post information about the review process in general including how the process was developed, review criteria, and reviewer qualifications. The submitter area will include helpful information like instructions, worksheets, deadlines, and answers to frequently asked questions. The Reviewer section will also include worksheets and other helpful information, as well as an example of a review and the review process.

An online training resource will be researched, and if possible, created to minimize workshop time requirements. The *Environmental Education Materials: Guidelines for Excellence Workbook* may be a good resource to supplement the in-person "Guidelines Training".

### **D.3. Marketing Plan**

The objectives of the marketing plan are to:

- 1) create ownership in the EE provider community for the review process;
- 2) recruit reviewers to be part of the review process;
- 3) create a demand by EE users for the review process;
- 4) create a demand by EE funders for the review process; and
- 5) inform CO decision makers that this review process provides EE quality control.

Each objective is further discussed in the following sections and includes the Marketing Message and target audiences. This marketing message will be disseminated through CAEE's existing communication channels and any others identified through the target audiences. Examples are not intended to be all-inclusive and may change over time.

The overall marketing message is:

“The EE Resource Review efficiently proves and improves the quality of Colorado’s environmental education resources.”

#### **Existing CAEE Communication Channels**

The following CAEE programs, events, and electronic and paper communications exist.

- *EE-InfoLink* - Monthly newsletter sent to ~ 600 members (deadline is 10<sup>th</sup> of each month) electronic and paper format
- *Environmental-Ed Listserve* - emails sent anytime to ~100 environmental educators (not necessarily members)
- *Member Email* - emails sent anytime to ~500 members (we don't have emails for about 100 members)
- *Database Emails* - emails sent to anyone with a current listing in the online database ~225
- *Address Database* – addresses of about 5000 contacts throughout CO
- *Website* - about 4700 visits per month or 26,000 hits per month
- *Discussion Board* – on website
- *Teacher Liaison Network* - emails sent monthly to 150 teachers across CO
- *Regional Networks* - in a bit of disarray; several have become non-functional, but some are functioning well and can be used to help “spread the word”
- *Monthly Professional Development Meetings in Denver Area* ~ 40 people
- *Quarterly Professional Development Meetings outside Denver Area*
- *Semi-Annual Advisory Council Meetings* ~ 40 people
- *CAEE BarbEEque* ~ volunteer recognition ~ 100 people
- *Teaching OUTSIDE the Box* ~ 250 people
- *Four committees meeting regularly* ~ 80 volunteers

Other examples of marketing methods to be used to disseminate the marketing messages include:

Talk one on one	Direct mailing/e-mailing	Workshops	Meetings, pre-set
Phone calls	Press releases	Brochures	meeting agendas
Posters	Website	Listerves	

**Create ownership in the EE provider community for the review process**

**Marketing Message**

“CAEE has developed a **grassroots** peer review process that evaluates the quality of environmental education in your resources based on the NAAEE National Project for Excellence in Environmental Education.”

Benefits of the review process include:

- improving resource quality and proving the existing quality without hiring additional staff or without contracting expensive outside evaluators.
- enhancing competitiveness in grant process.
- helping EE remain in the schedule when school/classroom budgets shrink.
- raising the bar on quality of EE in Colorado.
- enabling EE to counter criticisms of EE.
- As a peer review process, this is a professional development opportunity for you and your staff to become reviewers of other resources.”

**Target Audiences**

This message will be disseminated through as many vehicles as possible as determined by the Committee, for example:

Primary

- CAEE communications
- Camp fairs/American Association
- National Association for Interpretation
- Association for Experiential Education
- Association of Nature Center Administrators
- Organization newsletters/listservs
- Residential outdoor education centers

Secondary

- Key Professors and student groups at colleges and universities
- Colorado Association of Science Teachers
- Colorado Department of Education
- National Science Teachers Association (NSTA)
- Sci-CO/MAST
- Presentations at meetings, booths

**Recruit reviewers to be part of the review process**

**Marketing Message**

“Becoming a reviewer is a great way to become familiar with Colorado EE resources, to continue your professional development, and to contribute to the EE profession.”

**Target Audiences**

This message will be disseminated through as many vehicles as possible as determined by the Committee, for example:

Primary

- CAEE communications
- Camp fairs/American Camping Association
- National Association for Interpretation
- Association for Experiential Education
- Association of Nature Center Administrators
- Organization newsletters/listservs
- Residential outdoor education centers

Secondary

- Key Professors and student groups at colleges and universities
- Colorado Association of Science Teachers
- Colorado Department of Education
- National Science Teachers Association (NSTA)
- Sci-CO/MAST
- Presentations at meetings, booths

Emphasis should be placed upon direct contact with potential reviewers.

## Create a demand by EE users\* for the review process

### Marketing Message

“CAEE is developing a review process for Colorado environmental education resources. Areas to be reviewed include Fairness and Accuracy, Depth, Emphasis on Skills Building, Action Orientation, Instructional Soundness, Usability, and Relevance to Colorado Model Content Standards. Review results will provide a “quick glance” to assess the quality of resources, saving you time and ensuring quality.”

### \*Users are defined as

Point person at schools for classroom programs:

- Teachers
- Principals
- Home school parents/Associations

Individual sign-up programs

- Parents for summer programs
- Parents for after school programs
- Scout Groups
- Camps

Adult participants in programs

- Families
- Businesses
- EE Providers/CAEE Members

### Target Audiences

This message will be disseminated through as many vehicles as possible as determined by the Committee, for example:

#### Primary

- Facilitators for teacher training workshops
- CAEE communications
- Colorado Association of Science Teachers (CAST)
- CO Social Studies Teacher Association
- Teacher certification programs in higher ed
- Curriculum coordinators for CO school districts
- Key Professors and student groups at colleges and universities
- Colorado Department of Education
- National Science Teachers Association (NSTA)
- Sci-CO/MAST

#### Secondary

- Camp fairs/American Camping Association
- National Association for Interpretation
- Association for Experiential Education
- Association of Nature Center Administrators
- Organization newsletters/listserves
- Residential outdoor education centers
- Presentations at meetings, booths

**Supplemental Actions:** A campaign targeting users to increase awareness about the benefits of quality EE programs may be considered. Also, there may be some advertising about how the general public can see reviews of programs they may be interested in attending.

## Create a demand by EE funders\* for the review process

### Marketing Message

“Including this review process in your suggested criteria for grant applicants will provide a measure of quality of EE resources in the proposals.”

### \*Funders are defined as

Foundations  
Government grants at local and state levels  
Corporations

## Target Audiences

This message will be disseminated through as many vehicles as possible as determined by the Committee, for example:

- Individual Foundations, Agencies, Corporations
- Community Resource Center
- The Foundation Center
- Colorado Association for Foundations
- Chronicle of Philanthropy

*Emphasis should be placed upon direct meetings and presentations*

<b>Inform CO decision makers* that this review process provides EE quality control</b>
--

## Marketing Message

“Environmental education is our best bet to ensure the long-term quality of life in Colorado. Colorado's future is dependent upon our capability to conserve its rich environmental heritage and natural resources, and our capacity to offer meaningful, lifelong educational opportunities. Environmental education offers highly effective interdisciplinary education methods, and a rich real-world context for learning - which leads to broad-based environmental literacy of its citizens. The review process provides quality assessment regarding such areas as Fairness and Accuracy, Depth, Emphasis on Skills Building, Action Orientation, Instructional Soundness, Usability, and Relevance to Colorado Model Content Standards. This peer-review process incorporates guidelines from the NAAEE National Project for Excellence in Environmental Education.”

**(NOTE: the above message is only intended as a general outline. It will need to be adapted and customized to fit the needs/expectations of each individual audience noted below.)**

The resource review process provides quality assessment regarding such areas as Fairness and Accuracy, Depth, Emphasis on Skills Building, Action Orientation, Instructional Soundness, Usability, and Relevance to Colorado Model Content Standards.

### **\*Decision Makers include**

Superintendents of Schools  
School Boards  
State Legislators  
Governor  
Colorado Environmental Coalition  
Colorado Communities Incorporated  
State Business Groups

## Target Audiences

This message will be disseminated through specific groups and individuals that are determined by the Committee. May include PTO and PTA groups, teacher's unions and support groups.

## **D.4. Evaluation**

Several different forms of evaluation will be used to determine the success of the EE Resource Review system. Quantitative and qualitative data will be collected and used to evaluate the on-going performance of specific aspects of the model process: (1) Monthly, technical data regarding the number of hits to online reviews and the 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 also be developed asking submitters, reviewers, and users to evaluate the ease of use of the online submission, review, and user process. The data from these surveys will be tracked and evaluated to help determine the value of the online portion of the system. (3) Surveys will also be developed to evaluate the effectiveness of all trainings. These surveys will be administered at the end of the training day and six months later. (4) As well, focus groups of submitters will be created to obtain information about the effect of the review results on the program reviewed (i.e., did review help? as a result did you change anything? etc.). (5) The review coordinator will also develop a system to track and evaluate reviewer performance. A review database will be maintained to track the key characteristics and guidelines that are missing from programs to develop of data set that could be used to determine the needs of the EE community. Other evaluation mechanisms may be necessary as the program builds and expands.

In addition, the CAEE leadership (staff, board, advisory council) will periodically step back and assess the “big picture” of the review system, using the following outline listing key questions that will be answered as thoroughly as possible prior to the implementation of this project, and then answered annually as an ongoing project evaluation.

### Sustainability:

Is the process fiscally sustainable?

Is the fee structure correct?

Is the process creating results that are 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 resources reviewed?

What kinds of resources are being submitted?

Is the Self-Review process creating better EE resources?

Is there a demonstrated increase in demand for training on Guidelines?

What is the demand from users of the EE Information Clearinghouse?

Do they value that Reviews have taken place or not?

Do they seek details about which Characteristics/Guidelines are present?

### Reviewers:

Is the pool of reviewers adequate? (In terms of number? Of 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, wise reviews?

## **D.5. Funding and Sustainability**

The intent is for this process to be financially self-sustaining, occasionally supplemented with grant funding. The CAEE Board will determine the value to the organization and the priority of providing this service with regard to the other support services (e.g. annual conference, annual awards program, etc.). In addition to considerations of funding, user demand/interest, and management, the board will also need to

consider the implications of timing and proactive leadership in determining the start-up and long-term viability of this project.

A basic cost analysis was created to approximate the cost of a review coordinator. This analysis does not include costs for coordinator tasks such as marketing, evaluation, funding, or website development. It also does not include hard project costs such as postage, phone, etc.

	Scenario 1	Scenario 2	Scenario 3
Number of Reviewers	20	40	70
Number of items to review/period	15	30	45
Number of periods/year	2	2	2
Reviews/reviewer	4.50	4.50	3.86
Hours/Year (specifics below*)	129	197	276
Coordinator Hours/Item	4.3	3.3	3.1
Hourly Wage for Coordinator	\$ 15.00	\$ 15.00	\$ 15.00
Cost/year	\$ 1,927.50	\$ 2,955.00	\$ 4,132.50
Cost/item	\$ 64.25	\$ 49.25	\$ 45.92
Average Member Price/Item	\$ 88.00	\$ 88.00	\$ 88.00
Income	\$ 2,650.00	\$ 5,300.00	\$ 7,950.00
Gain/Loss / year	\$ 722.50	\$ 2,345.00	\$ 3,817.50
<b>*To determine the hours/year, it is assumed the Review Coordinator will complete these basic tasks:</b>			
All time is assumed	Scenario 1	Scenario 2	Scenario 3
<b>Communicating regularly with reviewers via email, announcements, meetings</b>			
assume 1 communication/month			
time/month	1 hour	12	12
<b>Maintaining contact information for reviewers</b>			
time/reviewer	0.5 hour	10	20
All time is assumed	Scenario 1	Scenario 2	Scenario 3
<b>Maintaining review info for reviewers (who has what, who should get what review)</b>			
time/reviewer	0.5 hour	10	20
<b>Distributing submissions to review team</b>			
assume coordinator sends 3 reviews to each reviewer each deadline			
time/item	0.5 hour	15	30
<b>Maintaining checklists/waiting list of reviews/submissions to be reviewed</b>			
time/item	0.17 hour (10 min)	5	10
<b>Reviewing and track reviewer performance</b>			
assume tracking is automatic through online system			
time/item	0.17 hour (10 min)	5	10
<b>Determining reasons for reviewer discrepancies</b>			
assume there are discrepancies for 1 of 5 reviews			
time/item	1 hour	6	12
<b>Communication with Submitter (confirmation, results)</b>			
time/item	0.33 hour (20 min)	10	20
<b>Maintaining review results database</b>			
assume tallied automatically from online forms			
time/item	0.25 hour	7.5	15
<b>Training Reviewers and Submitters</b>			
assume training modules are already created			
time/period	24 Hours	48	48

## *Appendices*

Appendix A. Resource Guidelines for Excellence

Appendix B. Self-Review Worksheet

Appendix C. Published Review Format

Appendix D. Review Process Timeline

Appendix E. Cover Page for Submitters

Appendix F. Reviewer Commitment Form

Appendix G. Reviewer Workshop

## **Appendix A. Resource Guidelines for Excellence**

Key Characteristic #1 Fairness and Accuracy: Environmental education resources should be fair and accurate in describing environmental problems, issues, and conditions, and in reflecting the diversity of perspectives on them.

- 1.1) Factual accuracy.
- 1.2) Balanced presentation of differing viewpoints and theories.
- 1.3) Openness to inquiry.
- 1.4) Reflection of diversity.

Key Characteristic #2 Depth: Environmental education resources should foster awareness of the natural and built environment, an understanding of environmental concepts, conditions, and issues, and an awareness of the feelings, values, attitudes, and perceptions at the heart of environmental issues, as appropriate for different developmental levels.

- 2.1) Awareness.
- 2.2) Focus on concepts.
- 2.3) Concepts in context.
- 2.4) Attention to different scales.

Key Characteristic #3 Emphasis on Skills Building: Environmental education resources should build lifelong skills that enable learners to address environmental issues.

- 3.1) Critical and creative thinking.
- 3.2) Applying skills to issues.
- 3.3) Action skills.

Key Characteristic #4 Action Orientation: Environmental education resources should promote civic responsibility, encouraging learners to use their knowledge, personal skills, and assessments of environmental issues as a basis for environmental problem solving and action.

- 4.1) Sense of personal stake and responsibility.
- 4.2) Self-efficacy.

Key Characteristic #5 Instructional Soundness: Environmental education resources should rely on instructional techniques that create an effective learning environment.

- 5.1) Learner-centered instruction.
- 5.2) Different ways of learning.
- 5.3) Connection to learners' everyday lives.
- 5.4) Expanded learning environment.
- 5.5) Interdisciplinary.
- 5.6) Goals and Objectives for the Resource
- 5.7) Appropriateness for specific learning settings.
- 5.8) Assessment.

Key Characteristic #6 Usability: Environmental education resources should be well designed and easy to use.

- 6.1) Clarity and logic.
- 6.2) Easy to use.
- 6.3) Long-lived.
- 6.4) Adaptable.
- 6.5) Accompanied by instruction and support.
- 6.6) Make substantiated claims.
- 6.7) Fit with national, state, or local requirements.

## **Appendix B. Self-Review Worksheet**

**(Note: Only partial example shown to illustrate format.)**

### **Environmental Education Resource Review Self-Review Worksheet**



Submitter Name: \_\_\_\_\_

Resource Name(s): \_\_\_\_\_

Name of Organization: \_\_\_\_\_

Did you develop this resource? \_\_\_\_\_ Who is the intended audience? \_\_\_\_\_

**Background Information** (It may be useful to complete the rest of the self-review and then return to this section.):

**General Comments** (This space should be used to include general information about your resource that may be useful to reviewers, but is not specifically addressed by the review criteria):

**Planning and Development Considerations** (Describe your efforts to provide for the following key planning considerations):

Needs Assessment (e.g. identifying/assessing/analyzing particular audience or community need or environmental issue; internal/external inventory of existing or similar EE resources, etc.):

Planning and Development (e.g. analyzing the scope and structure of the EE resource as an organizational priority; promotion and marketing considerations; developing partnerships and collaboration; addressing staff training needs, etc.):

Quality Assurance and Appropriateness (e.g., pilot testing; built-in and/or objective evaluations for effectiveness; cost/benefit analysis; applying evaluative information to improve the EE resource; evidence that environmental literacy has been enhanced; etc.):

**General Instructions:**

Indicate whether or not there is evidence of each Guideline, then based upon those results decide whether or not the Key Characteristic is an attribute of the EE resource. Provide supporting evidence (e.g. page numbers, references to specific activities or sections, etc.) of the guideline, or simply indicate "not present" if no evidence can be presented. If the guideline was consciously avoided or irrelevant to the EE resource, indicate "Not an objective of the resource design" and provide the justification for that decision.

**Note:** It is NOT expected that your resource will incorporate every key characteristic, guideline, and indicator listed on the following pages. The section "What to look for" includes indicators that are examples to consider as possible ideas for your supporting evidence. You are not expected to provide evidence for each indicator listed.

**KEY CHARACTERISTIC #1 FAIRNESS AND ACCURACY**

Environmental education resources should be fair and accurate in describing environmental problems, issues, and conditions, and in reflecting the diversity of perspectives on them.

**Guideline 1.1 Factual Accuracy** Environmental education resources should reflect sound theories and well-documented facts about subjects and issues.

What to look for:

- Sources of factual information are clearly referenced.
- Data are drawn from current and identified sources of information. (Knowing the source of information can aid in judging its trustworthiness or identifying possible bias.)
- Factual information is presented in language appropriate for education rather than for propagandizing.
- Information comes from primary sources-which provide context, documentation, and explanation - rather than from reviews or newspaper articles that simply provide bits and pieces of arguments or evidence.
- A range of experts in the appropriate fields reviewed the resources or participated in their development in another way. The resources provide a list of the people involved in development and review, and their areas of expertise.

Present     Not Present     Not an objective of the resource design (provide justification below)

**Supporting Evidence/Justification:**

[Empty box for supporting evidence/justification]

**Guideline 1.2 Balanced presentation of differing viewpoints and theories** Where there are differences of opinion or competing scientific explanations, the range of perspectives should be presented in a balanced way.

What to look for:

- Proponents of differing viewpoints reviewed the resources or helped develop them in another way. The resources list the people involved in development and review, and their organizational affiliation.
- Opinions or policies of an agency or organization are clearly identified.
- Scientifically and socially credible positions and explanations are covered thoroughly, while other positions are also mentioned. (Balanced presentation does not mean giving equal time and space to every opinion or perspective, but treating major positions fairly.)
- Resources communicate areas of consensus among scientists or other experts.

Present     Not Present     Not an objective of the resource design (provide justification below)

**Supporting Evidence/Justification:**

[Empty box for supporting evidence/justification]

**Guideline 1.3 Openness to inquiry** Resources should encourage learners to explore different perspectives and form their own opinions.

What to look for:

- Educators are given tools to use in helping learners to form and express opinions about competing theories.
- Exercises are suggested for helping learners explore personal and societal values and conflicting points of view within the context of the issue.
- Resources encourage an atmosphere of respect for different opinions and an openness to new ideas.
- There are exercises that encourage learners to understand the opinions of their peers.
- Resources suggest projects that encourage learners to collect and analyze their own data and to compare those data to similar data from other places.
- Activities encourage learners to become discerning readers and observers of media coverage of environmental matters.

*Present*     *Not Present*     *Not an objective of the resource design (provide justification below)*

**Supporting Evidence/Justification:**

**Guideline 1.4 Reflection of diversity** Different cultures, races, genders, social groups, ages, etc., are included with respect and equity.

What to look for:

- Resources contain descriptions and illustrations that depict people of various races, ethnic groups, genders, and social groups in a respectful and equitable manner.
- Where such variety is appropriate, the content and illustrations depict rural, suburban, and urban settings.
- If the resource is designed for nationwide use, the content and illustrations reflect geographic differences appropriately.
- Experts in multicultural education and members of historically under-represented groups, such as women and people of color, have been involved in the development and review process.
- Readings and additional resources that present concepts and perspectives from different cultures are offered.

*Present*     *Not Present*     *Not an objective of the resource design (provide justification below)*

**Supporting Evidence/Justification:**

***Indicate whether or not Key Characteristic #1 is an attribute of the EE resource, based upon the Guidelines above.***

**KEY CHARACTERISTIC #1 FAIRNESS AND ACCURACY**

Environmental education resources should be fair and accurate in describing environmental problems, issues, and conditions, and in reflecting the diversity of perspectives on them.

***Present***     ***Not Present***     ***Not an objective of the resource design (provide justification below)***

**General Comment for Key Characteristic #1:**

I certify that the information provided in this Review Worksheet, together with all attached documents, is complete and true to the best of my knowledge.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Appendix C. Published Review Format**  
(Note: Only partial example shown to illustrate format.)



**Environmental Education Resource Review**

Review results are below in green text. Learn more about the [Resource Review System](#)

Resource Name(s): \_\_\_\_\_

Organization: \_\_\_\_\_

Date Reviewed: \_\_\_\_\_

**Present** *Key Characteristic #1 Fairness and Accuracy*

Environmental education resources should be fair and accurate in describing environmental problems, issues, and conditions, and in reflecting the diversity of perspectives on them.

**Present**                      **Guideline 1.1 Factual Accuracy** (*Description*)

**Present**                      **Guideline 1.2 Balanced presentation of differing viewpoints and theories** (*Description*)

**Not an Objective**        **Guideline 1.3 Openness to inquiry** (*Description*)

**Not Present**                **Guideline 1.4 Reflection of diversity** (*Description*)

## Appendix D. Review Process Timeline

Start	End	Milestones	Apr 04	May 04	Jun 04	Jul 04	Aug 04	Sept 04	Oct 04	Nov 04	Dec 04	Jan 05	Feb 05	Mar 05	Apr 05	May 05
4/1/04		Plan Approved, Decision to Launch														
4/1/04	5/31/04	QA Process Website Creation														
4/1/04	5/31/04	Reviewer Website Creation														
4/1/04	5/31/04	Published Review Prototype														
4/1/04	5/31/04	Review Worksheet Prototype														
4/1/04	Ongoing	Create ownership in the EE provider community for the review process														
4/1/04	Ongoing	Recruit reviewers to be part of the review process														
4/1/04	5/31/04	Develop content of Guidelines, Self-Review, and Reviewer Workshops														
4/1/04	Ongoing	Coordinate logistics for Workshop(s)														
4/1/04	Ongoing	Conduct Guidelines Workshop														
6/1/04	Ongoing	Conduct Self-Review Workshop														
8/1/04	Ongoing	Conduct Reviewer Workshop														
4/1/04	Ongoing	Workshop Evaluation and Revision														
7/1/04	7/31/04	Develop reviewer management plan														
7/1/04	7/31/04	Develop process/offline database tracking reviewer performance														
4/1/04	Ongoing	Marketing to providers														
7/1/04	7/31/04	Develop incentives/Compensation for Reviewers														
8/1/04	Ongoing	Receive self-reviews														
9/1/04	Ongoing	Assign reviews to reviewers														
10/1/04	Ongoing	Receive first reviews														
10/1/04	Ongoing	Consolidate review results														
10/1/04	Ongoing	Contact submitters about publishing review														
10/1/04	Ongoing	Publish review														
10/1/04	Ongoing	Track reviewer results														
10/1/04	Ongoing	Track review results														
10/1/04	Ongoing	Market to users, disseminate results: Create a demand by EE users														
10/1/04	Ongoing	Marketing to funders: Create a demand by funders														
10/1/04	Ongoing	Market to decision makers														
10/1/04	10/31/04	Advertise/hire review coordinator														
	4/31/05	End of pilot														
5/1/05	5/31/05	Evaluation of pilot														

## Appendix E. Cover Page for Submitters



### Environmental Education Resource Review Submission Cover Page

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Resource Title: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: \_\_\_\_\_

**Deadlines for submissions are May 1 and November 1.**

Incomplete submissions will not be accepted. If you are submitting paper copies, you must send FOUR copies. Only one copy is needed for electronic submissions.

Include the following and indicate submission type:

Cover Page	<input type="checkbox"/>	electronic	<input type="checkbox"/>	paper
Resource to be reviewed	<input type="checkbox"/>	electronic	<input type="checkbox"/>	paper
Program profile in CAEE online database/directory	<input type="checkbox"/>	online		
Self-Review Worksheet	<input type="checkbox"/>	online		
Supporting information to substantiate claims made in Self-Review*	<input type="checkbox"/>	electronic	<input type="checkbox"/>	paper
Submission Fee	<input type="checkbox"/>	enclosed	<input type="checkbox"/>	credit

\*Please include a list of all of the items (props, books, etc.) used in your program if you consider these items to be fundamental in meeting any of the review criteria.

Other Considerations:

- if the resource(s) you are submitting are lengthy or elaborate, consider flagging or marking specific items that are being used to support specific criteria and/or creating an outline or table of contents.
- include support documents that are pertinent to your program (i.e. evaluation and feedback forms, journals, worksheets, etc.)

			Enter Amount Due
<b>Basic Resources</b>	\$15/submission	\$65/collection	\$
<b>Complex Resources</b>	\$65/submission	\$165/collection	\$
<b>Organizational Membership</b>	\$65/year		\$
<b>Total Amount Due:</b>			\$

**Payment Method:**

- \_\_\_ Check enclosed, made payable to CAEE
- \_\_\_ Please charge my credit card:
- \_\_\_ Visa
- \_\_\_ Mastercard

Card # \_\_\_\_\_

Name on Card: \_\_\_\_\_

Signature: \_\_\_\_\_

Send submission and payment to:

CAEE  
15260 S. Golden Rd  
Golden, CO 80401  
Email: [info@caee.org](mailto:info@caee.org)  
Fax: 303-273-9527

# Appendix F. Reviewer Commitment Form



## Environmental Education Resources Review Reviewer Commitment Form

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Email (required): \_\_\_\_\_ Phone: \_\_\_\_\_

You may either send a current resume with the following information or add information below:

### *Educational Information (use another sheet if necessary)*

Degrees:

Institutions	Dates	Degree	Major
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Trainings: \_\_\_\_\_

Certifications: \_\_\_\_\_

### *Professional Experience (use another sheet if necessary)*

In Environmental Education or related field:

Organization	Years	Title	Responsibilities
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

### *Which category of resources do you feel most comfortable reviewing?*

*(You are welcome to select both categories if you wish)*

**Basic Resources** [i.e., simple, limited contact, short duration, active learner involvement, involves learning cycle, has facilitator or presenter, limited or no scope and sequence]

**Complex Resources** [i.e., complex, learner-centered, has curriculum framework, contains teacher instruction supplements such as lesson guides, active learner involvement but may be self-directed, nonformal or formal settings with definable scope and sequence and multiple/longer term contact between instructor and learner]

*How many reviews are you willing to complete in the next year?* \_\_\_\_\_

*(each review takes approximately 3 hrs to complete)*

**Content Strengths:** (check all that apply)

- Agriculture:** Irrigation, Grazing, Food Production, Ranching, Range Management, Organic Farming, or Crop Management (e.g. GE, IPM, pesticides, etc)
- Earth Sciences:** Astronomy, Climate, Geology, Minerals, Mining, Soils, Volcanology, or Weather/Atmosphere
- Ecology/ Biodiversity:** Ecosystems: (mountain, desert, wetland, marine, riparian/aquatic, forest, grasslands, or rainforest) or Endangered Species
- Energy:** Conservation, Efficiency (e.g. utility planning), General, Hydropower, Nuclear/Radiation, Renewable/Alternative, or Traditional (e.g. coal, oil, gas, etc)
- Wildlife:** Endangered/ Threatened Species, Ecology, Habitat, Hunting/Fishing/ Trapping, Ethics or Management
- Water:** Aquifers, Conservation, Groundwater, Quality, Rights and Allocation, or Watersheds
- Trees, Plants and Lands:** Forestry, Forest Fires, Gardening, Landscaping, Urban Forestry, Xeriscaping, Permaculture, Herbalism, or Botany
- Human Dimensions:** Archeology, Animal Welfare, Cultural Awareness, Consumerism, Environmental Justice, Environmental Policy, Folklore, Human History, Health, Industry & Economics, Nutrition/Hunger, Open Space, Population, Sustainable Development, Transportation, Urban Design, Ecopsychology, Ecological Identity, Democratic Process, Artistic Expression of the Human/Earth Relationship, or Media
- Nature Awareness:** Parks/Trails, Nature Center, Tourism, Wilderness, Recreation & Outdoor Skills, Sensory Awareness Skills, Sense of Place, or General Naturalist Skills
- Waste/Pollution:** Toxic, Hazardous, Recycling, Air Pollution, Noise Pollution, or Water Pollution

**As a reviewer for the Colorado EE Quality Assurance Project, I will**

- not communicate with other members of the review team until all members have completed the resource review.
- examine all of my relationships or actions which could be legitimately interpreted as a conflict of interest by clients, officials, the public or peers. In any instance where I have a financial or personal interest in the activities with which they are directly or indirectly involved, I will make a full disclosure of that interest to CAEE, and other affected parties.
- conduct my analysis primarily in subject areas for which I am qualified, and shall encourage and recognize the participation of other professionals in subject areas where I am less experienced.
- accurately and adequately conduct reviews and not base decisions on theological or religious beliefs, political pressure, or client or supervisor pressure.
- practice professional behavior that is free from sexual harassment or discrimination with respect to religion, gender, sexual orientation, race, national origin, age, or physical restrictions.
- refrain from attempting to injure the reputation of another environmental educator through the use of false, biased or otherwise unsubstantiated claims.
- uphold the dignity and credibility of the environmental education profession by subscribing to the highest standards of integrity, responsibility, and ethics, and endeavoring to avoid even the suspicion of dishonesty, fraud, deceit, misrepresentation, or unprofessional demeanor.

As a reviewer for the Colorado EE Quality Assurance Project, I commit to completing at least three resource reviews within 12 months.

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

## **Appendix G. Reviewer Workshop**

### **Draft Agenda and Content Suggestions**

#### Full Day Format

30 min. Welcome – ice breaker activity

(A quick review of the Key Characteristics)

30 min. Overall ideas

Definition of EE and environmental issues, what they are or can be

Clarify differences between Environmental Science and Environmental Issues

What is the big picture of what is being asked of the review program and reviewer

Who's who in review process (CAEE, reviewer, coordinator...) and responsibilities of each

15 min. Briefly explain layout of self review form

15 min. Break

60 min. Exploration of Self Review using 3-6 key questions (2 hours)

Each participant will be asked to bring his/her self-review document. Divide into groups of three. As a group, they should answer some key questions based on their personal experiences of doing the self-review. Questions might include: What was easy for you? What was hard for you? What did you not understand? What are you afraid the reviewers will not understand/find? What part of the review process of your resource most concerns you? Provide each group with a different color of post-it notes. As the group comes up with questions of its own, write each on a separate post-it sheet and put it on the appropriate flip chart sheet already posted around the room (headings might include comments, different materials, wording scale, subjectivity, trust, each Key Characteristic, trust, other...)

90 min. "Instruction" time (using specific items we know we want covered plus any new issues arising from the post-it notes in above activity):

\* What the "grading scale/words" mean – reducing subjectivity

\* Trust

\* Comments

Make valuable comments

Eliminate pronouns (or be sure it is completely clear to what the pronoun refers). Be specific and use consistent language.

When NA and Not Present are used, make comments on how they could/should be incorporated

Use variety of examples in comments and decisions – don't use same single example as evidence of missing or present

Tips on removing judgment – rewording, use positive action words

\* How does one determine if a final key characteristic is present? How many characteristics should a program have?

\* What to do if you disagree with self-review as to present/not an objective

\* How to approach the different types of submissions i.e. compendium vs sequential

\* Where to look for certain types of information

10 min. Self analysis

Quick little check list of topics in Key Characteristics (writing goals and objectives, determining objectivity, etc.) and a 1-5 scale of how comfortable individual feels with the material at this point in the day.

45 min. Lunch

During lunch, the instructors take the self-analysis forms and make groups of three mixing strengths in an area with weaknesses as much as possible. Also decide which resource each group will review. Be sure to have the resource and the already completed self-review. Should be resources and reviews new to everyone in the group.

30 min. Preface review

Explain reviewer portion of form

Tips on completing review

Read through the entire submission before using the review sheet

Use pencil

Remind reviewers to take a step back and look at context (adapt indicators as appropriate)

Allow/Take enough time to do a quality review

120 min. Conduct a review

Hand out the groups and materials determined at lunch. Review same resources individually without interaction. Then get together as a group of three to go over their differences. Use post-it sheet process again.

15 min. Break

30 min. Follow-up of any new/still unanswered questions from participants based on reviews just completed.

15 min. Review of review process structure.

15-30 min. "Paper-work" such as a reviewer commitment form, workshop evaluation....