An Evaluation Toolkit for The Community Mapping Program

Prepared for
The Orton Family Foundation

Prepared by
Program Evaluation and Educational Research Associates

September 8, 2004

The Community Mapping Program is part of the Place-based Education Evaluation Collaborative (PEEC), a unique partnership of organizations whose aim is to strengthen and deepen the practice and evaluation of place-based education initiatives.
PEEC programs (and organizations) include the CO-SEED Project (Antioch New England Institute); the Community Mapping Program (the Orton Family Foundation, Vermont Institute of Natural Science); the Sustainable Schools Project (Shelburne Farms, and the Vermont Education for Sustainability Project); and A Forest for Every Classroom Project (Shelburne Farms, The Northeast Natural Resource Center of the National Wildlife Federation, The Marsh Billings Rockefeller National Historical Park, The Conservation Study Institute, and Green Mountain National Forest).
In addition, the Upper Valley Community Foundation provides funding and support for several of these programs through its Wellborn Ecology Fund, as well as financial, administrative and staff support for collaborative evaluation and research efforts.

Acknowledgements

This toolkit is the result of the work of many people in addition to the staff of PEER Associates. The programs and individuals that constitute the Place-based Education Evaluation Collaborative (see above for a listing of member organizations) provided the core conceptual and practical context from which these specific evaluation tools emerged. The staff at the Vermont Institute of Natural Science (Ned Swanberg, Nicole Conte, Sherry Berrin, Tim Sinnott, among others) provided critical feedback and field testing of survey instruments, as did CM Institute trainers Amanda Gierow and others. The instruments designed by external consultant Dr. Sally Wither and piloted in the western U.S. with the help of Annie Richman greatly influenced the final form of many of the survey tools. Graduate research assistant Matt LaFond worked closely with PEER Associates staff to design and field test many elements of the case study templates. Case study template tools also drew on the groundwork laid by a previous intern for Orton. The inspiration and support of Orton Family Foundation staff members Bill Roper and Connie Knapp was crucial and constant.

Community Mapping Program Evaluation Toolkit

Sections of the Toolkit	Description of section contents
Introduction	This page provides basic information about the overall purpose of CMP evaluation efforts and the audience for this toolkit.
Permission	Use these two forms to make sure that parents, school administrators, and CM project team members are informed about evaluation efforts, and provide the appropriate level of consent.
Logic Models	The CMP Logic Models and PEEC Working Theory of Change provided in this section will orient both regional coordinators and project team participants to the overall goals and program design of CMP.
Case Study Templates	Use this set of six documents as a starting point to plan and implement a case study of a CM project that exemplifies a particular theme that you want to systematically investigate. A completed case study is provided as a sample.
Survey Administration Tools	This collection of checklists, sample letters, and step by step instructions tells regional coordinators (and others) everything they need to know about administering CMP surveys and helping ensure that the resulting data gets used well.
Survey Instruments	This section consists of full copies of the Summer 2004 versions of surveys for Educators, Students, Community Partners, and CM Institute Participants.

Introduction

This *Evaluation Toolkit for the Community Mapping Program* is a product of an exciting vision for national expansion and replication of the CM model. While planning the priorities and activities of the 2003-2004 evaluation efforts for CMP, the Director of Programs for the Orton Family Foundation challenged the external evaluation team "…to make sure we come away with tools that can be flexibly used in CMP schools around the country" (personal communication, October, 2003). Thus, this *Toolkit* is designed as a hands-on, "nuts and bolts" resource for the CMP regional coordinators who are charged with implementing key parts of the ongoing evaluation efforts. It is intended to be general enough to be adaptable to local conditions, standardized enough to make comparisons across CMP sites feasible and efficient, and detailed enough to keep regional coordinators from having to reinvent the evaluation wheel.

CMP stakeholders use evaluation findings to help make decisions.[1] Current and potential CMP funders use evaluation findings to decide whether or how much financial support to provide and often to determine whether defined goals have been met as a result of their support. Orton Foundation staff and CMP regional coordinators use the evaluation process and findings to reflect upon and make decisions about day to day program implementation and design. Community partners can use evaluation findings to decide whether or not it makes sense for them to get involved in a CM project. CMP staff and funders are as committed to continuously improving the CM model as CM team members are to meeting real needs in their communities and helping young people learn and care about those communities. Evaluation helps program participants by helping CMP staff refine, test, and ultimately deliver a better CM product to more people. For these reasons and more, CMP is committed to program evaluation.

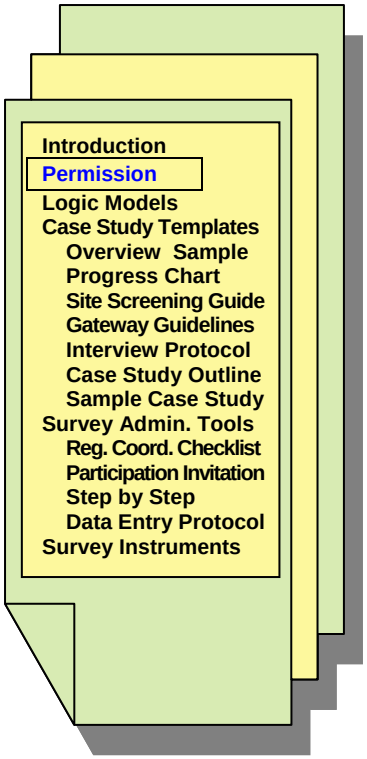
One thing these evaluation tools are NOT used for is to assess the performance or worth of individual students, educators, or other participants in a CM project. Readers and users of this *Toolkit* are encouraged to frequently remind participants that the purpose here is to learn about CMP *as a whole program*, not to judge individuals. It is critical that participants understand and feel comfortable with evaluation tools and their uses because without the gift of their participation in evaluation efforts, many important decisions simply won't be as informed as they should be.

In the templates that follow, the term "researcher" is used to refer to anyone who might undertake a case study or other evaluation activity. Depending on the program site, evaluation needs, and available budget, the "researcher" may be an external evaluator, a CMP staff member or regional coordinator, or a student intern. If the wording in this *Toolkit* is not specifically addressed to a particular role, it is assumed that the reader is a CMP regional coordinator.

[1] CMP stakeholders are defined as anyone who affects or is affected by what happens in a CM project.

Permission

It is important to obtain permission from school authorities before contacting teachers or students for evaluation related activities. This alerts the researcher to any legal or policy issues about protecting student confidentiality that may be in place, and makes sure that those who are accountable to the public have been informed and have consented to the evaluation. It also provides an opportunity to build awareness and gather support among school administrators for the CM project and the evaluation of it. Another important reason for obtaining permission is that it demonstrates a genuine attitude of respect for the needs and wishes of CM participants. Researchers are guests in the school's house.



The process does not have to be long and involved. Here are the steps to take:

- ❑ Request the educator to sign the *Waiver and Release Form*. This simple document explains the use of evaluation related products.
- ❑ Decide who is the logical person to seek school permission, the educator or the CMP regional coordinator.
- ❑ Have a quick conversation or email with the school principal to briefly explain the evaluation project (i.e. a case study or survey), and ask her/him what they would like you to do in order to obtain official permission. Oftentimes, just this amount of notification will be sufficient. Keep a record of this conversation. Find out how often permission needs to be granted (i.e. every project, every year, one time only, etc.).
- ❑ If more than verbal permission is required, sending home a "passive consent" letter to parents is almost certain to fit the bill. Fill in the blanks in the *Sample Parent Letter*. "Passive consent" simply means that everything is assumed to be OK with the parent unless they specifically request for their child to not be involved in specific ways.
- ❑ Keep a file of permission related items.

Tool (see facing page): *Waiver and Release Form*
To be used by: *Researcher*
Directions for use: *Have the educator sign this document. Keep a copy for your records.*

COMMUNITY MAPPING PROJECT WAIVER AND RELEASE FORM

The undersigned teacher or community partner understands that The Orton Family Foundation and its partners often times desires to "publish" information on its Community Mapping Projects for public relations, public information, and educational purposes on its web site, in brochures, as part of more in-depth case studies to various publications, in books, or to include information or tools developed in its projects in its "How To" manuals or other program documents. By sharing our experiences and the undersigned's (or the undersigned class's) work, we can improve and expand the effective integration of our approach and this program into other teachers' curricula and approaches to meet academic and community goals.

The undersigned agrees to the use of information, graphics, curricula, pictures or any other materials developed in his/her Community Mapping Project for PR, informational, educational or any other purposes related to the Community Mapping Program, The Orton Family Foundation or its partners deem appropriate.

If determined by school authorities to be necessary, the undersigned agrees to provide a passive consent letter to parents of participating students and provide the appropriate Community Mapping Representative with suitable documentation.

The Orton Family Foundation agrees to wherever possible: (1) credit appropriate parties for their contributions; (2) do everything we can to protect the identity of students by using no names or first names only, etc.; and (3) for partners that supply data, attach their own waiver of liability as appropriate.

_____
Signature

_____
Date

_____
Name (printed)

_____
Title/Position

_____
School/Organization

Tool: *Sample Parent Letter*
To be used by: *Educator, with support from the researcher*
Directions for use: *If school authorities require parents to be directly notified of evaluation related activities, adapt the following text into a letter to be sent to parents. It works well to set up the bottom portion of the page as a section that can be cut off and sent back. Give the original signed slips to the CMP regional coordinator, keeping copies for yourself if desired.*

Sample text for Passive Consent letter to parents

Dear Parent,

This year, your child will be taking part in an exciting project that links your school with the local community. The Community Mapping Program, a partnership between the Orton Family Foundation and [***insert local sponsor organization if appropriate***], educators and community groups as they conduct fieldwork and use mapping tools to explore the community and address local needs.

We have been hired by the program to evaluate its impact on teachers, communities and students. As part of that effort, we may be spending some time in the classroom talking with students and teachers, and documenting examples of their work.

We are requesting your permission to talk with your child about his or her experiences with the Community Mapping Program and possibly to photograph your child engaged in mapping projects. In addition, we may ask your child to respond to a brief, in-class, written survey. It asks students to think about their involvement with and connection to the place where they live. All surveys, quotes or photos we utilize (for reports, fliers, presentations or other uses) will remain anonymous. All the information gathered for this evaluation will be used by the program staff to improve their program model and keep a record of its impacts.

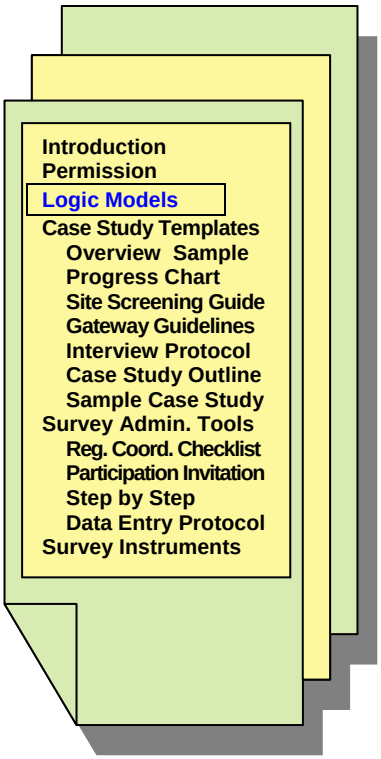
If you are NOT willing to grant your permission, please sign the attached form and ask your child to return it promptly to the teacher who gave it to her/him. If we do not hear from you, we will assume your consent for your child's involvement in our evaluation efforts. If you would like to learn more about the Community Mapping Program, please feel free to visit their web page at www.communitymap.org. If you have any questions about the evaluation, please call [***insert researcher name and phone number***]. Thank you very much for your help.

Sincerely,
[***insert researcher name(s), title(s)***]

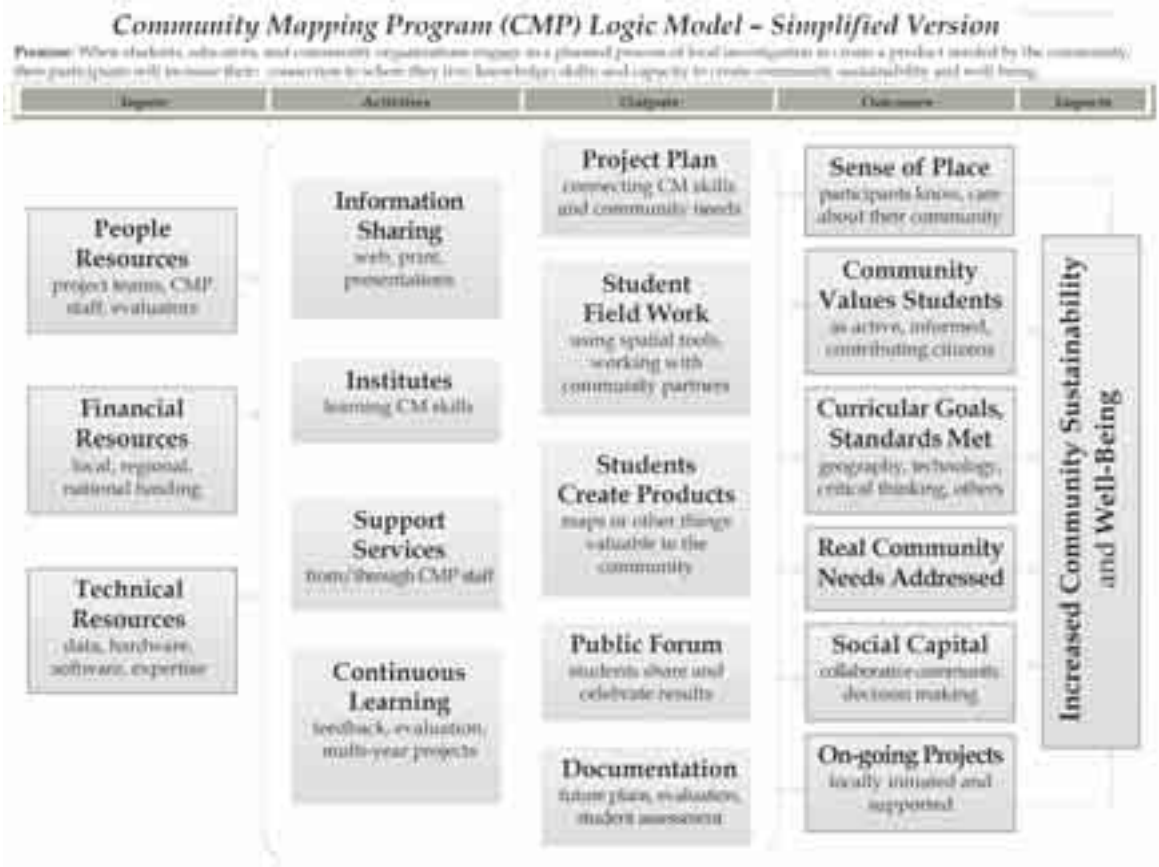
✂ - - -

Tool (see next two pages): *Logic Models and Working Theory of Change*
To be used by: *Researcher*
Directions for use: *Use these charts as conceptual anchors to make sure that the purpose, design, and results of evaluation activities are aligned with the philosophy of the CM model.*

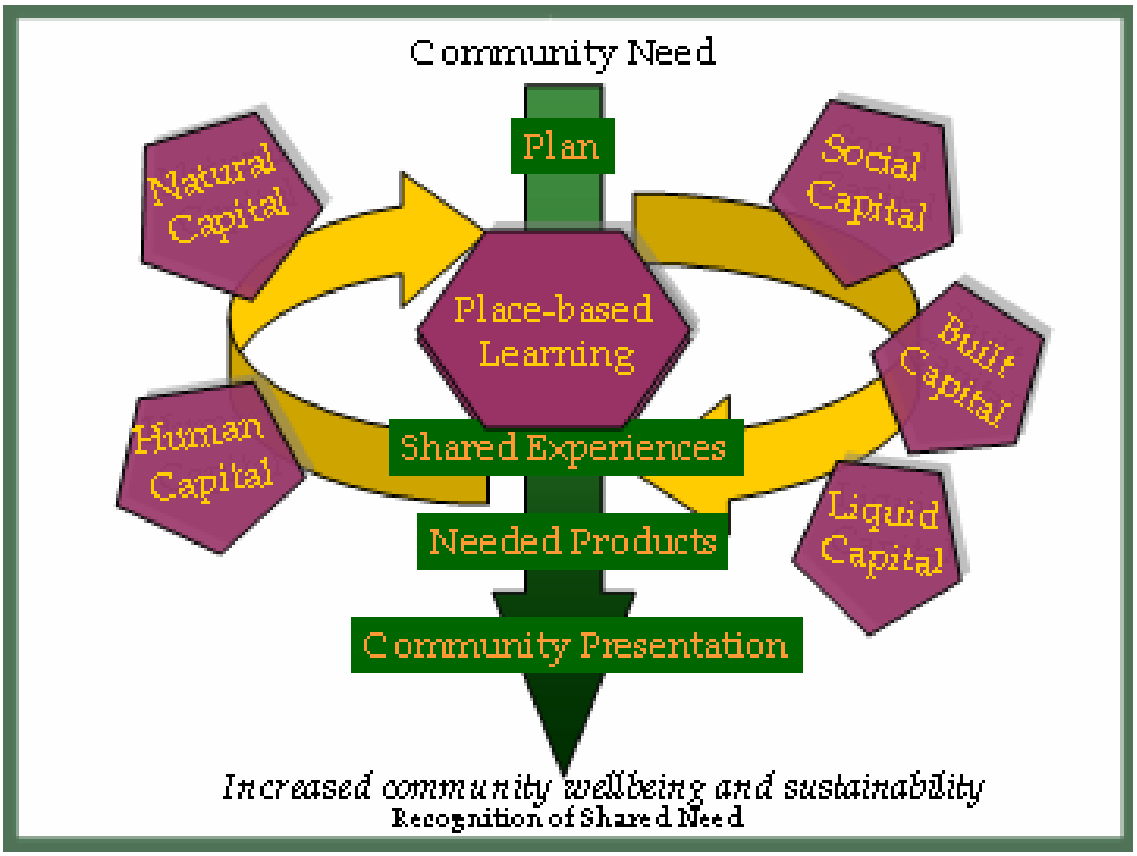
CM projects are highly varied in their implementation in large part due to the "place-based" nature of the program. Yet there are many layers of core elements that are intended to be consistent across all CM projects. The tools on the next two pages attempt to capture these key components in simplified, visual format. They may come in handy for helping a prospective or current program participant feel connected to the larger CMP effort.



On the Place-based Education Evaluation Collaborative (PEEC) web site you can find electronic versions of these, including a short PowerPoint slide show which gives more detail for the PEEC Work Theory of Change for Place-based Education. See www.PEECworks.org.

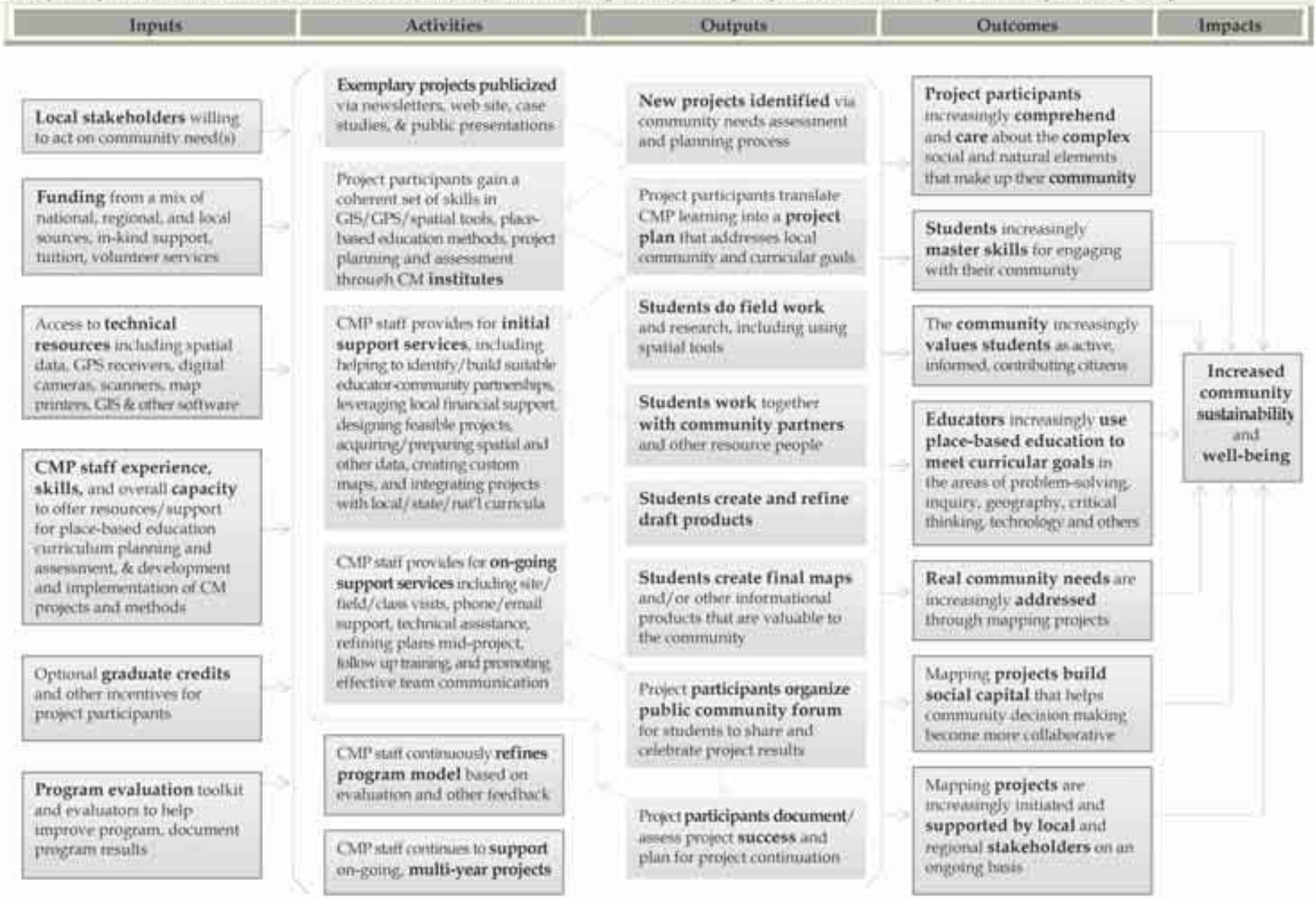


PEEC working theory of change for place-based education



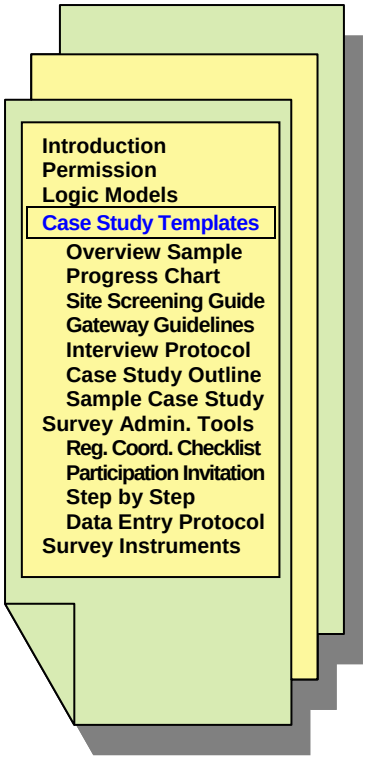
Community Mapping Program (CMP) Logic Model

Premise: When students, educators, and community organizations engage in a planned process of local investigation to create a product needed by the community, then participants will increase their: connection to where they live; knowledge; skills; and capacity to create community sustainability and well-being.



Case Study Templates

The following pages contain a collection of six tools used to plan and conduct case studies for CM projects. These tools were developed as case studies were undertaken in 2003-2004 (one of which is included here as a sample) and then refined based on the learning generated from their use.



Case Study Overview Sample

Use this document as a sample when crafting an overview to succinctly convey case study context, purposes and expectations to other stakeholders such as program staff, funders, or case study subjects.

Progress Chart

Use this form to guide the development of the case study, laying out concrete steps and a timeline, and marking progress along the way.

Site Screening Guidelines

Use these guidelines as an expedient way to determine whether a selected site is an appropriate match for case study goals.

Gateway Contact Person Guidelines

Once a teacher or community partner who is heavily involved in the case study has been identified and agrees to be the Gateway Contact Person, use this sheet to clarify expectations for their role.

Interview Protocol Sample

Use this set of sample questions as an example when developing an interview guide that will engage evaluation participants in dialogue pertinent to the case study.

Case Study Outline

Use this outline as an example when developing an outline for writing the case study report.

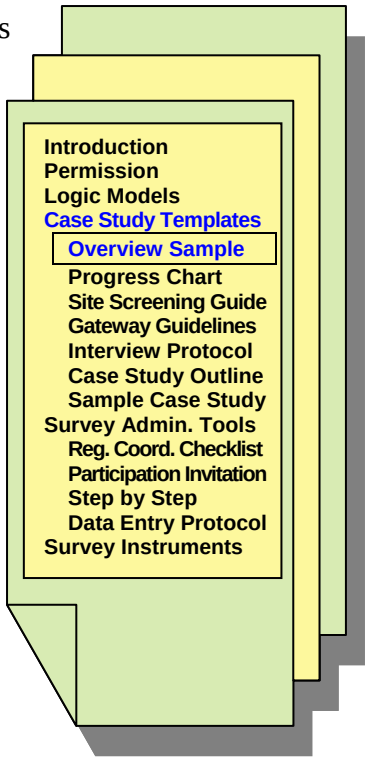
Sample Case Study

This "Critter Control" case study was completed in 2004 and provides one example of what a final case study might look like.

Tool: *Case Study Overview Sample*
To be used by: *Researcher*
Directions for use: *Use this document as a sample when crafting an overview to succinctly convey case study context, purposes and expectations to other stakeholders such as program staff, funders, or case study subjects.*

Evaluation Process

The Community Mapping Program (CMP) is often in the spotlight to develop best practices for place-based education. The insights gained from evaluation of CMP will help to strengthen future CMP program activities, as well as provide resources for other place-based education initiatives through participation in the Place-Based Education Evaluation Collaborative (PEEC).



Case Studies

To highlight some exemplary results, two case studies will be conducted this Spring to illustrate the potential benefits of a CMP partnership. These case studies will aim to show specific scenarios of how the needs of the community partner and community-school connections were impacted. Specific details of how CMP influenced the school and greater community will be gathered through interviews, observations, document review, and teacher self-evaluation.

Requested Contributions from Sites

In order to obtain necessary information to complete the case study, open participation in the case study process will be welcomed. Incentives for participation in the case study will be offered by CMP. The types of participation requested may include: interviews, journal records, photographs and observations associated with the CMP project. Initial interviews with participating teachers will take place in January or early February. Follow-up interviews will be conducted subsequent to observations and interviews with community partners.

After establishing a Gateway Contact Person within the project, evaluators will work with this contact person to set up a system of on-site document collection to include such items as: student work, student and teacher journals, photographs, newspaper and newsletter articles, supporting documents from community partners, and descriptions of public events conducted as part of the project. The data collection portion of the case study will primarily take place between March and June 2004.

Tool: *CMP Case Study Progress Chart*
To be used by: *Researcher*
Directions for use: *Use this form to guide the development of the case study, marking progress along the way.*

Case Study Task	Target completion date	Actual completion date
1. Select themes of case study with program staff		
2. Select case study site with program staff		
3. Screen site for case study criteria. (use *Site Screening Guidelines*)		
4. Discuss possibility of incentive/stipend for Gateway Contact Person, as appropriate.		
5. Confirm target completion dates with program staff.		
6. Create an Overview and provide to stakeholders. (*use Case Study Overview Sample*)		
7. Develop system for document collection by researcher and by Gateway Contact Person.		
8. Collaborate with program staff to establish an introduction to site contacts. Meet with Gateway Contact Person. (use *Gateway Contact Person Guidelines*)		
9. Identify and set up appropriate interviewees with help from Gateway Contact Person.		
10. Gather data: interviews, observations, written documents, photos. (see Interview Protocol)		
11. Compile and analyze data.		
12. Write draft of case study (see Written Case Study Outline) and provide to program staff for review.		
13. Complete case study report and, as appropriate, coordinate inclusion in overall CMP evaluation report.		

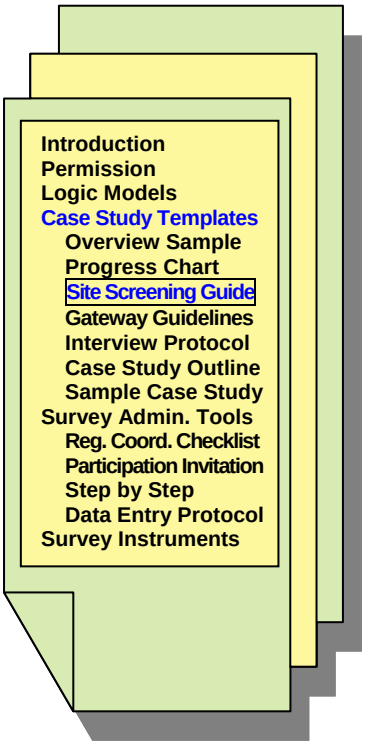
Tool: *Site Screening Guidelines*
To be used by: *Researcher*
Directions for use: *Use these guidelines as an expedient way to determine whether a selected site is an appropriate match for case study goals.*

Key Question:
Is the suggested project a good fit for this case study?

The Site Screening Guidelines tool was devised following a foray into case study work in which the mapping project and the intended theme were not well matched. For reference, the following are two hypothetical examples of mismatched projects:

Case Study Theme:	*How CMP can cause a significant shift in teacher practice*
Project Reality:	Project is successful, but teacher was already using similar practices prior to involvement in CMP
Case Study Theme:	*How students produce tangible products of value to the community*
Project Reality:	Students have a terrific learning experience but community products are either intangible or are tangible but do not leave the school.

Since a case study is an opportunity to illustrate and learn in depth about a particular instance, it is important to screen a site prior to spending time in the research process.



Before beginning the case study, talk (at least briefly) with:

- ❑ CM program staff who worked directly with case study subjects
- ❑ Lead teacher(s) implementing CM project
- ❑ Community partner(s) working directly with the CMP project

(checklist continued on next page)

Determine if the following are true:

❑ Gateway Contact Person is eager and available to help throughout study period

❑ Gateway Contact Person is well connected to many facets of the project

❑ CMP is offering the Gateway Contact Person a stipend for participating

❑ CM project exemplifies the facets of selected case study theme

❑ CM project work coincides with data collection period so that observations may be made in real time

❑ CM project location is proximal enough to researcher to allow for observations and interactions

Determine if, during the study period, students will be:

❑ Working on the CM project in the field

❑ Working on the CM project in the classroom

❑ Working directly with community partners

❑ Using particular tools or techniques of relevance to the study

Final Question: Based on the above, is the selected project a good match for a CMP case study with this particular theme, at this particular time?

❑ **YES…**Begin case study research.

❑ **NO…**Select a new site and start at the beginning of this guide.

The following table can help keep track of efforts to identify a well matched site.

	Proposed Community Mapping Project	Proposed Case Study
Contacts		
Themes	*CM project name, area of focus:*	*Case study theme:*
Time period	*For CM project implementation:*	*For data collection:*
Location	*Of project:*	*Of case study researcher:*

Tool: *Gateway Contact Person Guidelines*
To be used by: *Researcher*
Directions for use: *Identify a teacher or community partner who is heavily involved in the CM project being studied and who agrees to provide access to case study data throughout the process. Use this sheet during initial meetings, emails and/or phone calls with Gateway Contact Person to clarify expectations for their role in the case study.*

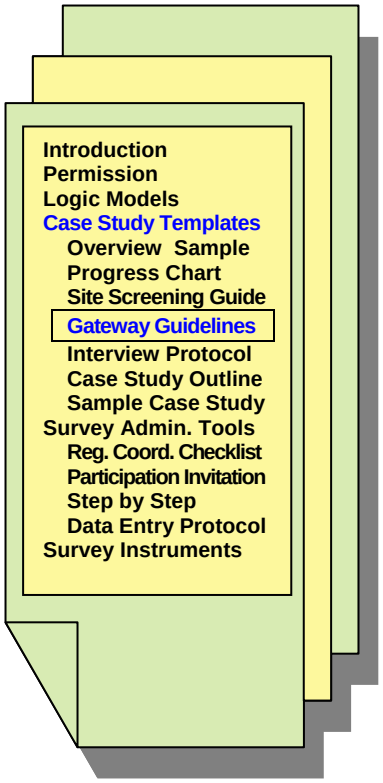
❑ Provide Gateway Contact Person (GCP) with an overview of the project (use *Case Study Overview)*

❑ Introduce GCP to the purposes and process of the case study, including the theme, methods and larger evaluation context, if applicable. (Use *Progress Chart*)

❑ Review roles/expectations of the GCP (see *Sample Email* below) and discuss incentive or stipend for participation (provided by program, as appropriate).

❑ Show GCP the data gathering system (such as an accordion file) and/or create a workable system *with* the GCP. The accordion file can contain labels noting the types of materials that would be useful for the GCP to gather. Potential items for collection include:

- ✓ Photographs (print or digital)
- ✓ Newspaper articles (or reference to other media coverage)
- ✓ Student work
- ✓ Teacher work/curricula
- ✓ Correspondence (with partners, parents, students, local officials)
- ✓ Journal entries, reflective writing (students, teachers partners)
- ✓ Fliers, brochures
- ✓ Maps, other products
- ✓ Other supporting documents



(checklist continued on next page)

❑ Ask GCP for recommendations, introductions and/or contact information for the following:

- ✓ Other teachers in the school who participated in the CMP project
- ✓ Other teachers in school who were impacted by the CMP project (not necessarily participants)
- ✓ Relevant school administrators
- ✓ Other teachers in neighboring schools who were impacted by the CMP project (if applicable)
- ✓ Other community partners
- ✓ Parents or other community members
- ✓ Students (inquire about what permissions are needed for interviewing and/or photographing students)
- ✓ Note: Also arrange to interview CMP program staff—find out which staff have been most actively involved (may not be necessary to discuss with GCP)

❑ Set up interview date(s) with GCP

❑ Set up dates for gathering data from accordion file, including its final retrieval

❑ Set up dates for observing the following CMP related activities:

- ✓ students in the field
- ✓ students in the classroom
- ✓ students working with community partners
- ✓ teacher team meetings in which CM project is discussed
- ✓ community partner meetings in which the CM project is discussed
- ✓ student, teacher or partner presentations
- ✓ other culminating events

(see next page for a sample email to the Gateway Contact Person)

Sample Email to Gateway Contact Person

Dear Janet,

It was good to talk to you the other day. I was encouraged by your enthusiasm for being part of the case study process we're doing in conjunction with an evaluation of CMP.

I will provide you with more specific details about the case study when we meet, but I want to remind you what we're hoping you can help us with. As the "gateway" to the project, we hope you will link us with appropriate community partners, students, teachers, parents and administrators whom we might interview about the project. We would like you to provide us with dates when we might observe the students working in class, the field, presentations, etc., and we will also ask you to show us your project documentation (curricula, student work, maps, etc.) that we can include in the case study. CMP has offered to provide you with a $100 stipend as a small token of appreciation for your help.

Also as a reminder, our focusing theme for the study is *how the students' work contributes to a usable product for the community/community partner*. Our investigation will center around that theme.

Please let me know if this role is still agreeable to you, and we will proceed from there.

Thanks again for your participation.

Tool: *Interview Protocol Sample*
To be used by: *Researcher*
Directions for use: *Use this set of sample questions as an example when preparing to engage evaluation participants in dialogue pertinent to the case study. Specific questions will need to be tailored to individual case studies based on the case study theme, information needed, rapport with the participant, etc.*

Educators

Background:

1. How long has your class been involved with Community Mapping Program?
2. How did the project come about?
3. What were the students' initial interest levels? Compared to other projects?
4. What have been some of the specific projects/events/field trips associated with the CM project?

Working with a partner:

5. How did your community partners communicate the needs of their organizations? The importance of the project?

Utility of products:

6. Has the students' work been effective or useful to the community partner? If so, in what ways?
7. Has the students' work been effective or useful to the community in general? If so, in what ways?

Students:

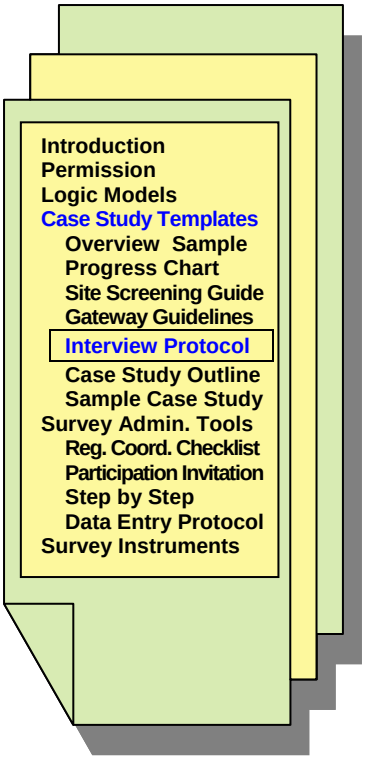
8. Did the students show increased engagement in learning? In the community? If so, how?

Teacher practice:

9. Have you used similar community-based education programs in the past?
10. In what ways has the CM project impacted your teaching style?

Barriers:

11. What was the most challenging aspect of implementing CMP?
12. Were you able to overcome the challenges? If so, how?



School Administrators

1. How were you introduced to the CM project?
2. Have you noticed an impact on students' level of engagement in the community? If so, in what ways?
3. Has the CM program made the school more of an asset to the community? If so, in what ways?
4. Describe a change you have noticed in the involved teachers' teaching styles as a result of the CMP project.
5. What is the greatest challenge your school faces in terms of participating in this kind of program?

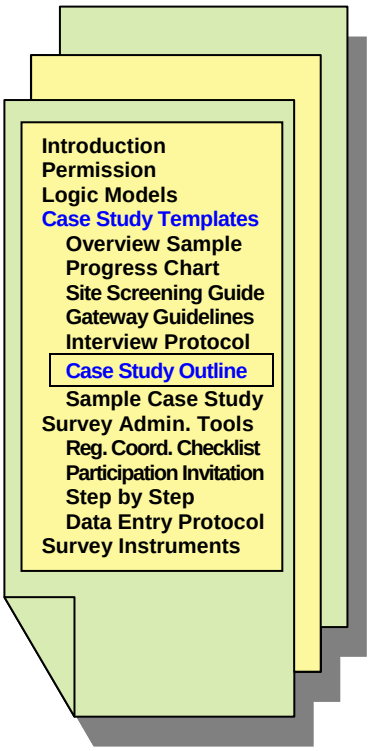
Community Partners

1. How did you/your organization become involved with CMP?
2. What was your initial reaction to the program?
3. In what ways has the CMP project impacted your organization?
4. Has the students' work been useful for your organization? If so, in what ways? (If not, why not?)
5. In your view, has the students' work been effective or useful to the community in general? If so, in what ways?
6. How has the CMP project helped define the value of the school in the community?

Other potential interviewees

1. CMP Staff
2. Students
3. Parents

Tool: *Case Study Outline Sample*
To be used by: *Researcher*
Directions for use: *Use this outline as an example when developing an outline for writing your case study report.*



I. Title of case study

II. Executive Summary
   a. Condense key points of each section into a total of two pages or so. Write this last.

III. Brief CMP background
   a. Sponsoring organizations, their mission and goals
   b. Summary of CM program format
   c. Primary program goals

IV. Case study methodology
   a. Purpose of the case study
   b. Evaluation questions and/or explanation of case study theme
   c. Data sources

V. Brief overview of the case (project and site)
   a. Describe the teachers, students and school
   b. Describe the community and community partners
   c. Describe mapping site and products created

VI. Findings *(these are just examples of themes or sub-themes that may be presented based on selected case study theme and emergent findings)*
   a. Theme 1: (primary theme) students' work meeting partner's needs
   b. Theme 2: community school relationships changing
   c. Theme 3: teachers adapting the way they teach civics

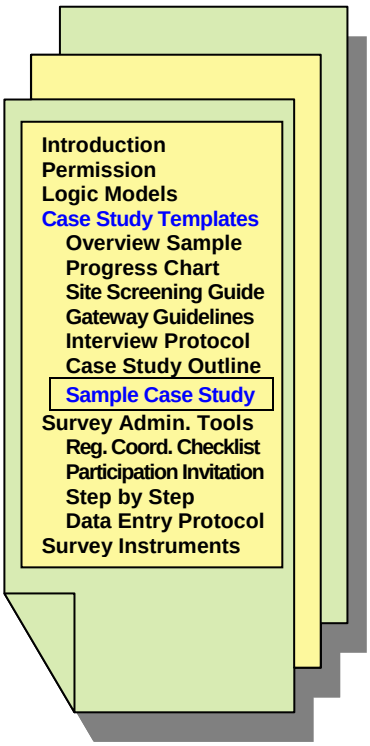
VII. Conclusions
   a. Synopsis of key findings as they relate to the case study theme(s)
   b. Use CMP's vision and goals and compare with findings

VIII. Recommendations/Implications for Practice
   a. What can we learn from this case?
      i. Successes that could be transferable to other CMP projects
      ii. Successes that could be transferable to other programs

Format Guidelines:
- Each case study might be 6-10 pages, single spaced, including photos, charts, etc.
- Intersperse photographs, examples of student work or other charts/graphics interspersed throughout the text.
- Provide a portfolio of other pertinent documents (such as lesson plans, relevant newspaper articles, student work, maps, brochures, etc.) as an appendix to the case study.

Tool: *Sample Case Study*
To be used by: *Researcher*
Directions for use: *Use this sample to give you ideas about what a final case study product might look like. Remember that it is important to modify the case study report to meet the specific purpose and audience for which it is intended.*

CASE STUDY OF CMP IN ACTION: YOUNG STUDENTS MONITOR WILDLIFE PATTERNS ALONG ROADS



Students, teachers, and community partners in Hayden, Colorado, and nearby Steamboat Springs, recently completed year two of a community mapping project called Critter Control. Elementary students involved in the project collect and provide roadkill data to the Colorado Division of Wildlife (DOW) to help the agency determine how best to reduce the number of animals killed by motorists. Using the framework set forth by the Community Mapping Program (CMP), forty-four second- and fourth-grade students from Hayden Elementary School, along with their two teachers, began the project in the fall of 2002. In the fall of 2003, 40 fifth graders and their two teachers at Strawberry Park Elementary School in Steamboat Springs joined the project.

"The Community Mapping Program is an open-ended, dynamic, and broadly inclusive way to bring students, teachers, and other members of a community together to better understand the places in which they live, the social and political issues affecting those places, and the means by which those issues might be addressed."
-Making Community Connections, 2003

With the help of DOW, students and their families have been systematically collecting data on deer, elk, raccoons, skunks, and other mammals killed by motorists along the 25 miles of Highway 40 between Hayden and Steamboat Springs. Students have presented their information to DOW in the form of maps, data sheets, PowerPoint presentations, and detailed written information, all of which is being added to a multiple-year DOW study intended to help the agency make informed decisions about appropriate mitigation methods such as where to place signage or install fencing.

CRITTER CONTROL CASE STUDY CONTEXT

CMP is a program of The Orton Family Foundation, which is committed to evaluating its community activities. Joining with like-minded groups, the Foundation helped to establish the Place-based Education Evaluation Collaborative (PEEC), to facilitate evaluation and dissemination of results to the larger educational community. This case study is one of several methods used by PEEC to illustrate the processes and outcomes of its member programs.

The Community Mapping Program

CMP is a grassroots, community development initiative that strives to connect students, educators, and community partners to their home place through local inquiry. With resources provided by The Orton Family Foundation, CMP supports school projects in Vermont, New Hampshire, Colorado, Montana, Utah, Wyoming, Texas, and Maine through teacher training, on-site project support, and expert guest-lecturing. CMP supports local mapping projects by offering educators and community partners training using hands-on technologies, such as GPS and geographic information systems (GIS). Initiated in 1999, the CMP model provides a reliable road map for carrying out school projects that incorporate spatial analysis and facilitate school-community connections.

Once educators and community partners have participated in a CMP institute, students, educators, and community partners take on semester-long or multi-year projects that have value for the greater community, especially the community partner. As detailed on the Community Mapping web site, project teams actively investigate social, economic and ecological systems, identify and solve local problems, and develop enduring connections.

The Schools: Hayden and Strawberry Park Elementary

Critter Control currently involves 54 students -- 14 fourth-graders and one teacher from Hayden Elementary, along with 40 fifth-graders and two teachers from Strawberry Park Elementary. Hayden Elementary is a public school of approximately 200 students located in Hayden, Colorado, a small rural community with a rich ranching heritage. Teachers value the school's small size in that it allows them to effectively address individual students' needs, as well as get to know students' families.

Strawberry Park Elementary is a public school of approximately 450 students located on the outskirts of Steamboat Springs, Colorado, a mountain town known for world-class skiing, biking, and hiking. Strawberry Park values high student achievement and, as noted on its web site, "seeks to build community partnerships that will involve students in community issues and activities."

The Community Partners: DOW and CDOT

DOW is an active, very visible agency in both Hayden and Steamboat Springs due to the prevalence of wildlife in the area and the need to manage it. The agency has a particularly strong presence in Hayden (where Critter Control began and is concentrated) due to the large number of residents there who value hunting and fishing.

DOW lends great support to the Critter Control project in the following ways:

- Classroom teaching: Working with students on Life Science and Geography concepts such as habitat, migration, native species, natural history, and topography, as well as wildlife management basics
- Field work supervision: Leading students, teachers, and parents on regular field trips to map the project site (Highway 40), plot roadkill, study habitats, and observe wildlife
- Technical support: Teaching and reinforcing spatial technology skills by providing hands-on activities (such as playground scavenger hunts--see Appendix) to train students, teachers, and parents in GPS and GIS.

Recently, another community partner, the Colorado Department of Transportation (CDOT), expressed interest in this same sort of data. With it, they hope to determine where best to add eco-passages such as culverts and bridges that would allow animals to cross roads safely, an initiative that both maintains existing wildlife corridors and makes highways safer for motorists. In order to meet CDOT's needs for more detailed and comprehensive roadkill data, students have recently begun using Global Positioning System (GPS) units to collect data and have added reptiles and amphibians to their study.

The Site: Highway 40

The project takes place along the 25-mile stretch of Highway 40 between Hayden and Steamboat Springs, a two-lane road that follows the Yampa River and is surrounded by premium wildlife habitat. This stretch of road is frequently traveled by teachers, students, and DOW personnel, providing ample opportunities for data collection.

The Project's Origins

Critter Control has its origins in a genuine community need that was communicated to The Orton Family Foundation in the spring of 2002 by the DOW Wildlife Manager. "We didn't have the time, personnel, or funding available to collect data on the roadkill along Highway 40," explained the Wildlife Manager, "but we knew this information would be useful in determining what might be done to address the problem." This public servant was further motivated to pose the roadkill project idea to the Community Mapping Program because his son had done similar project-based work involving GPS at a nearby working ranch and nature center. "My son wasn't a straight A student," he said, "but this sort of hands-on learning that included technology really clicked with him."

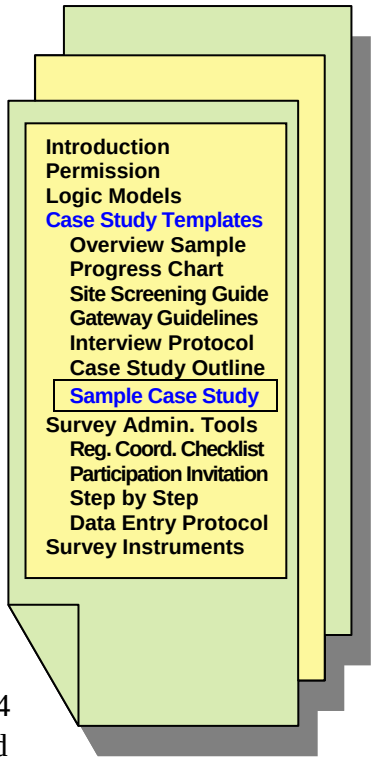
Soon after the DOW Wildlife Manager presented the DOW's need to the Community Mapping Program, two Hayden Elementary teachers participated in a week-long Community Mapping Institute in Steamboat Springs and while there, learned of DOW's need for roadkill data. The teachers were intrigued by the seeming fit between this sort of study and the life experiences of the children in their rural school district. As one teacher explained, "We wanted a high interest, genuine project -- something the kids could really 'own.'" With the support of Community Mapping Program staff, as well as DOW, the teachers launched their project at Hayden Elementary in the fall of 2002. Since then, one of those teachers has switched to teaching fifth-grade at Strawberry Park Elementary, and so the project has "followed her" and expanded to involve a second school.

The Project's Evolution

In year one of the project, second- and fourth-grade students collected data almost entirely by hand, though they did use technology on a limited basis. High school students and DOW personnel helped the younger students use GPS units to accurately plot mile markers onto a highway map. Copies of this map and an accompanying student-designed data collection sheet (see Appendix) traveled in each student's family's car, allowing students to manually record roadkill locations as they encountered animals that had been killed. Back in the classroom, Community

Mapping staff helped students use ArcView GIS software to input their data onto a computer-generated map (see Appendix). Students also transferred their data onto a 12-foot, hand-drawn map that hung in the hallway and included roadkill locations and photos, roadside physical features, and students' theories explaining the abundance of animals at certain points along the highway.

Year two of the project brought an increase in the use of technology, both as a means to meet CDOT's need for more accurate data and as a way to expand the project to excite the fourth- and fifth-grade students participating in it. DOW personnel trained students to use GPS units (rotating them among family's cars) to actually record waypoints of roadkill locations to the nearest .10 of a mile (see Appendix). DOW staff also helped students use GIS to create a more accurate, computer-generated version of the hand-drawn hallway map they had used in year one. Commenting on the ever-evolving nature of the project, one Hayden teacher noted, "We've certainly made ongoing changes to the way the project is designed. Our project certainly wasn't 'done' at the end of the first year. In fact, it had really just started."



CRITTER CONTROL CASE STUDY METHODOLOGY

This case study was conducted over the course of the 2003-2004 school year in an effort to document the process, successes, and challenges of an exemplary Community Mapping project. Critter Control can be considered exemplary in the way it has paired students and a community partner. This partnership has given students the chance to provide meaningful data to the community in a "real world" context and has forged a strong school-community connection. This connection serves as a primary theme and focus of this case study.

Data for the case study was collected over nine months through a combination of interviews, observations, meetings, and document review. Specific data sources are as follows:

- 4 interviews with teachers at Hayden and Strawberry Park Elementary Schools
- 2 interviews with community partners (DOW)
- focused group conversation with three students
- 2 classroom observations, including whole-class conversations / discussions
- one partnership meeting that included teachers, other school personnel, community partners, and staff from the Community Mapping Program
- review of related documents (student work, newspaper articles, etc.)

CRITTER CONTROL CASE STUDY FINDINGS

The primary themes that emerged from this case study are:

- Collaborative involvement among community partners, teachers, students, and parents involved in the project is critical to its success.
- Community partners achieve goals through participation in the project.
- Students demonstrate increased academic engagement and achievement through work on the project.

True Collaboration is Critical

Community partner offers invaluable support

Teachers repeatedly stressed the importance of working with a community partner who truly has the time and enthusiasm to commit to the project. "I can see how a community partner can make or break a project," one teacher remarked. "DOW has been wonderfully involved and there is support from top management. [The DOW Wildlife Manager] lives nearby and is just great about coming into the classroom to work with students."

Another teacher commented, "My young students are definitely impressed and motivated by the fact that a 'real' wildlife manager -- uniform and all -- takes the time to come into the classroom. It has a powerful effect on them, and makes the project all the more 'real' and exciting."

This same teacher noted the advantage of having a partner who is passionate about place-based learning, and has prior experience with it. "[The DOW Wildlife Manager] has seen this sort of project's success with his own son," she said. "He knows it works, he knows it's powerful, and so he's willing to 'hang in there' through the tough times."

DOW commented on the value of having established a prior relationship with a school and community before digging into a project that requires so much parental involvement. "I've been in Hayden over 20 years," said the project's DOW community partner. "I've established some trust over the years, and that makes it a lot easier to work with the school and parents."

A number of DOW staff have proven exemplary in their recognition of the importance of parent "buy-in" and in working hard to earn it. For example, in year two of the project, the primary DOW community partner organized a well-attended Parent Night to introduce parents to the project and to train them in using GPS units--and even cooked chili for the event!

Teachers and students operate as a team.

Teachers involved in the project repeatedly commented on the power of teaming with another teacher. "It was so helpful having gone through Community Mapping training with another colleague in the building," one teacher remarked. "She's a veteran teacher and I was in my first year. I couldn't have pulled off the project without her help and experience." This same teacher continued, "The two of us got together after school every Friday for a month to talk through the project. That dialogue was critical."

Teachers also stressed the value of viewing students as fellow team members, and the importance of honoring their input and ideas. "I guess I was on something of a mission to prove that my second graders could do much of this with appropriate guidance--and they did!" explained one teacher. "It was important that students participate in all aspects of the project, including drawing up the data sheets on the computer and coming up with the important information to include on those sheets."

Clearly, the teachers delighted in their students' enthusiasm for Critter Control and embarked on the project in the spirit of adventuring alongside their students. "The kids were so concerned about all the animals being hit and very much wanted to help fix the problem," explained one teacher. "We could hardly wait to get going with them."

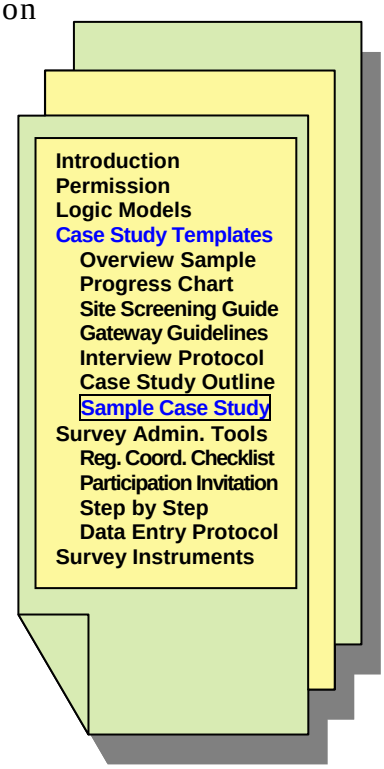
Another teacher added,

> We ran with their enthusiasm, and got them out into the field right away, which motivated and excited them. All of us, teachers and students, were sort of making things up as we went! We knew we had to just dig in, go where the kids and the project took us, and see what happened. That was hard at times, since the tendency is to want to plan everything out in advance, but it was really the only way to approach this sort of project.

Parental involvement is critical.

Teachers stressed the critical role played by parent volunteers, especially when working with young children. "I couldn't do this project with such young students without my parents' help. They've been there on field trips to help with safety, in the classroom to supervise learning stations, and of course in their cars helping kids plot roadkill," said one teacher. She added,

> Sometimes, I've had five parents in my classroom at once, working with students, and sometimes it's difficult. It can be hard to rely on others and trust them to 'do their thing.' Teachers aren't used to this. We're using to being in control of the show.



Community Partner Achieves Goals

Students provide valuable data

DOW stressed that their goals for the project are certainly being met, and referred to the long-term nature of the study. "The students' data has certainly helped us identify areas of high roadkill concentration," explained the community partner. "We've stressed with the students and teachers that we need much more data before we can make decisions about mitigation methods such as signage. The students' data will help greatly with those decisions, but that is several years down the road." The DOW Wildlife Manager also noted, "We're honing a model of data collection and reporting that works. Getting that model in place takes a bit more time because it's being created by such young students."

The DOW Wildlife Manager also offered an anecdote to help explain the "soft data" he has collected while working with students on the project: "One day I was out with students looking for and plotting animals that had been hit, and we discovered a smooth green snake in the road -- a type I'd never seen before around here. It was thrilling to see a species that I hadn't previously known to occur in the area."

DOW meets educational and public relations goals.

DOW also noted that their goals for the project extend far beyond that of data collection. "A primary goal of ours is in educating students," explained another DOW wildlife manager. "We work hard to get the wildlife message out there to the next generation. With this project, students get to see DOW 'in person.' We're able to get them thinking about wildlife, habitat, and natural resources in ways that they might not do otherwise."

The DOW Wildlife Manager added that DOW also reaps important public relations benefits from its involvement in Critter Control. In a rural town such as Hayden, DOW is often known primarily for its role in enforcing hunting and fishing regulations. "Our involvement with this type of project generates some good public relations benefits locally," said the community partner. "The children and their parents get a perspective on our job duties that is quite different from the enforcement role we're usually involved in."

CDOT enters project as new community partner.
As noted previously, CDOT has recently joined the project as a community partner, and modifications to the data collection process are being implemented to serve its needs. As Critter Control enters its third year, the hope is that the data collection process that has been honed so far will soon begin providing accurate, highly-useful data to CDOT for their statewide environmental database.

Students Motivated, Engaged, and Achieving

"Real world" nature of project motivates students.

Teachers repeatedly remarked on the value of the project's connection to the "real world," and noted its interdisciplinary nature. "The project involves so much--collecting data, observing, science, map-reading, and a lot of reading and writing *for a purpose*," noted one teacher. "I'd tell the kids, 'If DOW can't read your handwriting and things don't make sense, then that data isn't useful.'" Another teacher added, "Kids can read about scientists and experiments, but this project allows kids to *be* the scientists and actually *do* the experimenting. That's what makes it so powerful."

Teachers also noted the effect the project had on students' motivation and engagement. "Watching students' excitement about the project and seeing what they've achieved makes me believe in hands-on and place-based education all the more," remarked one teacher. "I *know* it works. This sort of learning is so real and meaningful to students, especially for the ones who struggle with more 'typical' classroom activities."

Students also commented repeatedly on the value of this sort of hands-on learning. "I love doing Critter Control because we get to learn real science about animals, and we

get to learn how to use GPS for real purposes," explained one fourth-grade student. Another fourth-grader added, "When you read about science in a book, you have to just imagine it. With this project, you get to go outside and actually do science. That's a lot different and a lot better."

Students demonstrate growth in writing and critical thinking.

Teachers commented specifically on the way in which the project produced great writing in some of their students. "Kids recounted their experiences with the project and they wrote constantly," explained one teacher. "The project really sparked some great writing in kids who were otherwise hesitant, struggling writers." A fourth-grade student spoke of the project's connection to writing in this way: "It's so much easier to write about something and explain it once you've done it. It also makes your writing much more personal and real."

This same student spoke to the gains in critical thinking that teachers noticed in their students, saying, "Now I know that if there's a lot of roadkill in one place, there must be a reason for it, such as lots of food and water nearby." Another student commented,

> I didn't realize until I started this project that about 90% of the animals being killed are very small, much smaller than deer. That makes sense if you think about how many different types of small animals there are, but before, I'd really just noticed and thought about the deer.

Project allows for authentic assessment of student achievement.

The project afforded teachers many opportunities to authentically assess students' progress. For instance, one teacher explained,

> We didn't do much formal assessment, but the project had so many components that it was easy to constantly assess the students. We definitely saw student growth in the way they organized information for their end-of-year Power Point presentation to DOW, and in the way they confidently answered questions from the audience about the project. We also noticed a huge jump in students' abilities to work cooperatively with one another.

Another teacher added, "Whenever the students were in the field, they'd collect data, write up observation notes, and come up with hypotheses. Reviewing their work was a way to both gauge what they were learning about science and to assess their writing."

In preparing for end-of-year presentations to DOW and the Community Mapping Program, teachers videotaped students' speeches and presentations, allowing students to self-assess and then hone their presentation skills. Teachers also provided opportunities for peer evaluation, with students providing feedback on and suggestions for each other's presentations.

CRITTER CONTROL CASE STUDY CONCLUSIONS

CMP projects that directly involve community partners and community members encourage meaningful connections between students, teachers and their communities. As evidenced by this case study, teachers, students and community partners all benefited from participation in the Critter Control project. In light of the intended outcomes of the CMP program, as indicated in the CMP Logic Model, this case study shows that:

- Active and direct involvement by the community partner was critical to the success of the project.
- The participating community partner was able to achieve its goals by being involved in the Critter Control project.
- Students and parents increased their understanding of and gained a different perspective on the community partner as a result of their work on the project.

- Teamwork among teachers, along with extensive parental involvement, allowed teachers to work effectively with a multi-age group of young students on an ambitious project.

- The project energized teachers and validated their belief in the efficacy of project-based learning.

- Due to the interdisciplinary nature of the project, its field work component, and its connection to the "real world," teachers were able to authentically and informally assess their students and to document increased student achievement. Specifically, students demonstrated growth in areas such as writing, critical thinking, public speaking, and cooperative learning.

- By participating in the project outside of the classroom, students gained a better understanding of and deeper connection to their local place and its natural resources.

- Students were able to feel ownership of the project and hone critical-thinking skills by being given a voice in project design and implementation.

- Students were motivated and engaged by the project due to its "real world" nature, its hands-on components, and the opportunity to learn outside of the classroom.

CRITTER CONTROL CASE STUDY IMPLICATIONS FOR PRACTICE

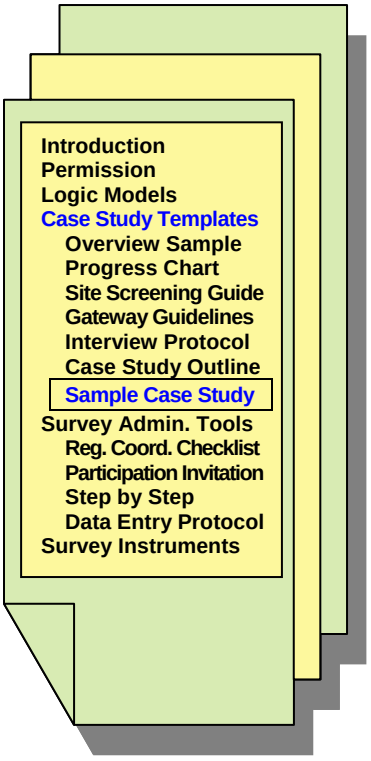
The data collected in this case study reveal several themes, which are detailed in the "Findings" section of this report. The implications of these themes for the future of CMP programs include:

- Community Mapping projects in which community partners are directly involved encourage more meaningful connections between students and their community. Both students and community partners gain valuable new perspectives, information, and skills as a result of this direct involvement. **CMP staff could encourage community partners to be actively engaged in the project work and to provide timely feedback and direction to students throughout the project.**

- Community Mapping projects in which teachers, students, community partners, and CMP staff share in project design and decision-making provide participants a sense of ownership and responsibility, and foster deep engagement in the project. **CMP staff could encourage teachers and community partners to adopt a collaborative approach to the project wherein all participants -- including students -- have a voice in project design and implementation.**

- In order to increase the likelihood that student work is both academically relevant *and* useful to the community, **CMP staff could facilitate the clear articulation of academic and community needs being addressed, including the goals of the project and expectations of the students.**

- Community Mapping projects that are interdisciplinary in nature, include a field component, and are built upon a genuine community need of interest to students motivate students and can result in increased student achievement. **CMP staff could support teachers and community partners in designing projects that allow students to draw on a number of disciplines and learning styles and that engage students outside the classroom in addressing a real-world problem.**



CRITTER CONTROL CASE STUDY APPENDIX

Critter Control Appendix 1: Critter Control Treasure Hunt

CRITTER CONTROL TREASURE HUNT

In today's field exercise, you will learn how to set "waypoints" using satellite data transmitted on a **GPS** unit, which stands for Global Positioning System. You will work in groups to find items related to the **Critter Control Community Mapping Project** that we are extending from west of Hayden to the Ferndale Picnic Area on Rabbit Ears Pass, along US Highway 40. We are excited to have you all join in the fun and importance of this study, which continues to receive lots of attention from people concerned about wildlife, safety, and issues of local, regional, and national significance.

Items related to your Critter Control Mapping Project have been scattered in the area near your school. How many of you have come across an old deerhide or skeleton while hiking in a similar grassy area? We have chosen things associated with your study, so keep your eyes peeled for 12 items, marked by numbered pink flags close to the ground. In order to map the precise location of each object, you will work in teams using the Garmin GPS 12XL units to record the waypoint (satellite data) for each object.

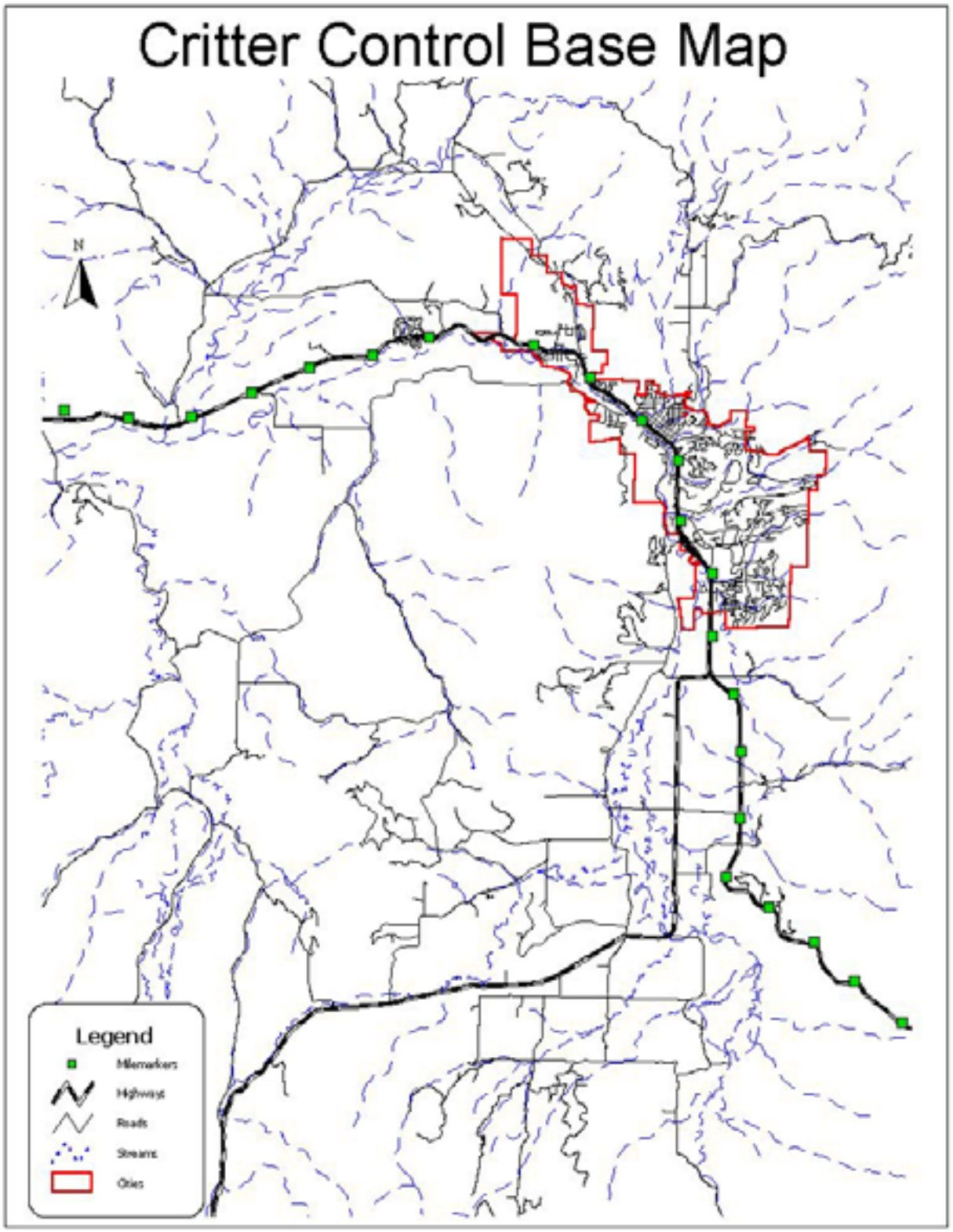
Follow these steps to become a *Deerly Adept Observer* (10-12 items found); a member of the *Elk Spotting Squad* (7-9 items); an honorary member of the *Critter Finder Team* (4-6 items); or a badge-bearing *Map Maker* (1-3 items). Your teachers and Sylvia will help you, so don't be afraid to ask questions…

- **MAKE A MARK ON THE MAP CLOSE TO WHERE YOU THINK THE OBJECT IS**
- **DO NOT REMOVE THE FLAG OR THE OBJECT**
- **FILL IN THE CHART, NAMING EACH POINT ON THE GPS WITH THREE DIGITS AND THE FLAG NUMBER, for example, 003 for a skull found near a pink flag that has the number 3 on it.**
- **AT THE WAYPOINT SCREEN OF YOUR GPS UNIT, WHICH SHOULD BE COVERED WITH BLANKS, GO AS CLOSE TO THE OBJECT AS POSSIBLE, THEN:**
  1. Press "mark"
  2. Move to the number using the scroll button, press "enter" and put in the right flag number
  3. Press "enter" to save your number

4. Move to "average" to get an accurate reading from all the satellites overhead & press "enter" again,
5. Then, press "enter" to Save your waypoint. TA DA! You now know how to use a GPS unit! Now look for another object…

Flag Number Put on the map!	*Name your waypoint on the GPS unit!*	*Describe what you found*	*Field observations?*	*Describe what kind of environment are you in?*
23	**023**	Pile of elk duds	They were oldy and moldy, by the ditch	We found them in a grassy area near some willows
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Critter Control Appendix 2: Critter Control Points on Highway Map



Critter Control Appendix 3: Student-designed Data Collection Sheet

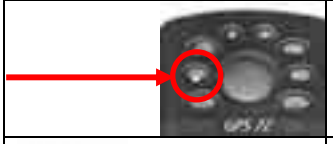
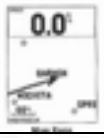
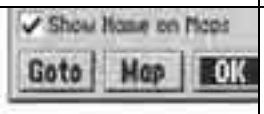
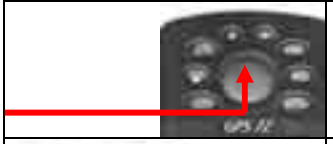
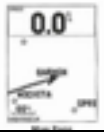
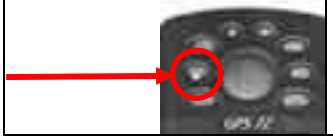
WE NEED YOUR HELP WITH OUR CRITTER CONTROL PROJECT!

Critter Control Data Sheet

Directions: Please keep this sheet in your car to record dead animals you see on Highway 40. Fill out the table below and then plot a point on the map on the reverse side. Label each point with the number corresponding to the row from the table

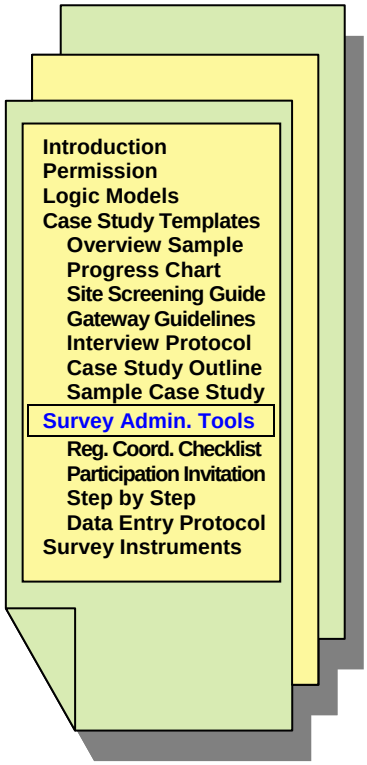
Way-point #	Date and Time	Between mile markers — Nearest 1/10 mile UTM #	Type of animal (deer, raccoon, fox, elk	Sex of animal (if known)	Weather conditions	Other comments

Critter Control Appendix 4: Critter Control GPS Training

GARMIN GPS 72	
	Press and hold the **POWER** button to turn on your GPS unit.
 Your map page will look slightly different.	The screen on your GPS unit will go through a series of pages as the unit acquires all of the necessary satellites. Wait for the **MAP PAGE** to appear.
	Press and hold the **ENTER/MARK** button to capture a waypoint.
	The **MARK WAYPOINT PAGE** will then appear.
	Record the **WAYPOINT** number on your data sheet.
Location **13 T # # # # # #** UTM **# # # # # #**	Record the **LOCATION** (UTM coordinates) on your data sheet.
	Make sure the **OK** field is highlighted at the bottom of the screen,
	If the **OK** field is not highlighted, use the **ROCKER** button to move the unit's cursor to select and highlight the **OK** field.
	Once you are sure the **OK** field is highlighted, press and quickly release the **ENTER** button to store your waypoint.
 Your map page will look slightly different.	The **MAP PAGE** will reappear. You are now ready to mark your next waypoint.
	Press and hold the **POWER** button to turn off your GPS unit.

Survey Administration Tools

The following pages contain a collection of four tools used to plan and conduct surveys for CM projects, followed by copies of all the 2004 versions of survey instruments.



IMPORTANT NOTE: As part of the philosophy of continuous learning that is central to the CMP model, many of these survey instruments and guidelines will continue to be refined and improved. As a general rule, always check the Place-based Education Evaluation Collaborative's website before administering a survey to make sure that you have the most current version. All the tools you will need can be downloaded from http://www.peecworks.org/PEEC/PEEC_Inst/S001004B5.

Regional Coordinator Survey Task Checklist

Use this document to make sure that CM project participants have all the information and tools they need in order to take the surveys themselves and / or guide their students through the survey taking process.

Participation Invitation Tools

Three rounds of requests for participation in a survey are usually enough to get the 60% or higher response rate from the target sample of potential survey respondents. This is essential for being able to establish that the survey sample is representative of the larger population of interest. Use these tools to plan out the logistics of making multiple requests for participation in the survey.

Step by Step Instructions for Educators

Classroom teachers and other educators can use this simple guide to make sure that surveys are administered in as standard of a way as possible.

Data Entry Protocol

When paper surveys are used instead of the on-line versions, regional coordinators or others may be asked to provide the first step of the data entry process of getting the survey responses into electronic format. This tool provides all the necessary information for how to do this.

Survey Instruments

The final pages of this *Toolkit* are copies of the 2004 versions of various survey instruments.

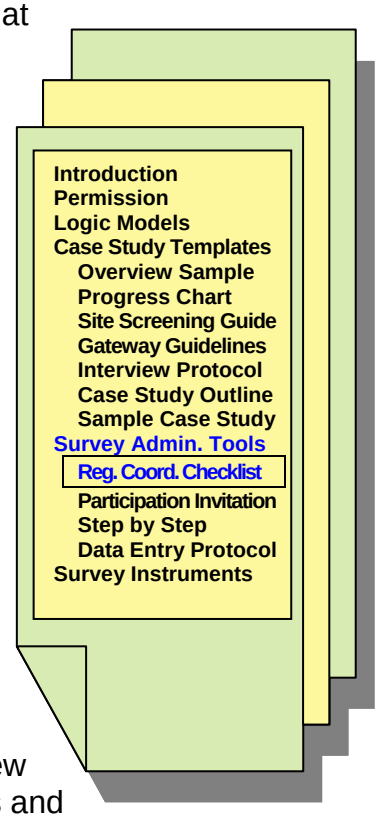
Tool: *Regional Coordinator Survey Task Checklist*
To be used by: *Researcher*
Directions for use: *As the key person bridging the worlds of the CMP participants and external evaluators, there are several logistical details to keep track of. Use this checklist to make sure that all the bases are covered.*

- ❑ Work with the National CMP Lead person to determine <u>who</u> should be invited to fill out surveys.
  - ✓ It may be only a small sample of all possible CM participants, randomly selected or purposefully chosen to meet a specific data analysis goal.
  - ✓ It is usually more useful to have a high response rate from a carefully designed small sample, than a low response rate from a broad sample, even if the latter provides higher numbers of respondents.
  - ✓ For CM Institute surveys, make sure that list of possible institute times, dates, and locations has been updated on the on-line survey.
- ❑ Obtain permission from school authorities as necessary. (Use *Permission* tools).
- ❑ Work with the National CMP Lead person to determine <u>when</u> surveys should be administered.
  - ✓ Avoid May and June if possible. These are very busy times for schools.
  - ✓ Because these surveys use a "dose-response" measurement strategy instead of a "pre-post" measurement strategy, surveys can be successfully administered at any point before, during, or after a project cycle, so long as there is sufficient variability in the "dose" of participants throughout the sample. See the 2003-2004 CMP Evaluation report for a more detailed discussion of the "dose-response" measurement strategy.
  - ✓ Make sure all key parties are on board with the timeline that gets set up (Use the *Participation Invitation Tools* to implement the timeline).
- ❑ Work with the National CMP Lead person to determine if incentives for participation in surveys can be provided, particularly for educators.
  - ✓ Entry in a raffle for a large, exciting prize seems to work well.
  - ✓ If offering a gift for participation (e.g. a free book) make sure that the survey instrument has a place for respondents to enter the address they would like the gift sent to.
- ❑ Make sure that educators fill out the educator version of the survey on or near the same day that their students fill out the student version of the survey.
  - ✓ *NOTE: if this does **<u>not</u>** happen, then very little of the student survey data will be able to be used in the analysis*.

(checklist continued on next page)

❑ Determine whether the on-line or paper version of the survey is most appropriate for the particular situation.

- ✓ Filling out surveys on-line is the preferred method when logistics allow it. For student surveys, however, this usually requires access to a computer lab since it is essential that all students fill out the survey on the same day.
- ✓ Paper versions of surveys are perfectly acceptable. If educators choose this route for having their students fill out surveys, make sure they are able to successfully download and print the surveys at least two days ahead of time. It is best if CMP regional coordinators can provide the hard copies of the blank surveys, already printed out and accompanied by a pre-addressed envelope for returning the completed surveys.



❑ Plan on it taking more time than you would expect to support educators in administering surveys to their students. Go out of your way to make sure that educators understand that:

- ✓ Students need support in completing surveys. The most thorough, thoughtful student surveys result from teachers and/or evaluators who take a sizeable chunk of classroom time to…
- ✓ …discuss the rationale for and value of the surveys in the context of the students' community mapping projects
- ✓ …read through, work through, or at least preview the surveys with students, answering questions and clarifying things when needed
- ✓ …insist on quality work

❑ If paper versions of the survey are used, consult with the National CMP Lead person to determine who will enter the data into electronic form to send to external evaluators for analysis.

- ✓ Use the *Data Entry Protocol* tool.
- ✓ Coordinate with the National CMP Lead person if the scoring rubric for open-ended student responses is used.

Tool: *Survey Participation Invitation Tools*
To be used by: *Researcher*
Directions for use: *Use some combination of at least of three or four of the following activities over the course of three to five weeks in order to ensure a suitably high response rate from the chosen sample of potential respondents.*

1. **INITIAL EMAIL INVITATION:** Set a date to open the "survey season." Be prepared with a plan to deal with the undeliverable email addresses that will inevitably come back to you.

Sample text for Initial Email Invitation

Dear [***insert participant first name***],

You are one of a handful of people that has been selected to participate in the on-line survey component of the Community Mapping Program evaluation. Every person who completes the survey by June 15 will receive a prize, and a lucky few will receive a grand prize (follow the links below for details). It is very easy and should take you approximately 30 minutes or less. We really appreciate your effort, especially at this busy time of the school year. THANK YOU!!!

If you are an educator, please go to [SurveyLink]

If you are a community partner, please go to [SurveyLink]

In order for the survey results to be most useful, nearly everyone selected in the small sample needs to complete a survey. To that end, we will be following up with email and phone reminders for the next couple of weeks for those who have not yet had the chance to respond. Please don't hesitate to contact me if you have any questions or concerns.

Sincerely,
[***insert researcher name, title, and, IMPORTANTLY, researcher email address***]

2. **EMAIL REMINDER:** About a week later, send another friendly reminder.

Sample text for email reminder

Simply modify the text from the initial invitation by adding some respectful phrase such as…

"…We know this is a busy time of year, and so hope you don't mind if we send you this reminder about our survey. ;-)…"

3. **MAIL SURVEY:** Within 3-5 days of the email reminder, consider mailing out hard copies to all or a selected group of non-respondents. Include clear directions for where to return the survey, and remind them again that they can fill out the survey on-line if they prefer.

Sample text for snail mail enclosure

*Dear [**insert participant first name**],*

Enclosed you will find a printed copy of the CMP Survey that you were recently invited to fill out on on-line (which is still an option!). We have not yet received all completed surveys and are very interested in receiving yours at your earliest convenience. You will also find enclosed an addressed, stamped envelope. Please complete the survey and return it to:
*[**insert researcher name, title, mailing address, and still include the researcher email address**]*

THANK YOU!

4. POSTCARD: About a week to ten days before closing the survey response period, consider sending a postcard to the remaining non-respondents.

Sample text for postcard

*Dear [**insert participant first name**],*

You recently received a paper copy of the CMP Educator Survey in the mail. Our evaluation team has not yet received all CMP surveys and would like to encourage you to please complete the survey you received and return it to:
*[**insert researcher name, title, mailing address, and still include the researcher email address**]*

THANKS!

5. **FINAL EMAIL REMINDER:** A couple of days before the close of the survey response period, send out a final request by email.

Sample text for final email reminder

*Dear [**insert participant first name**],*

Next Tuesday, June 15 is the drawing for prizes among those who have completed this survey. The CMP staff will be thrilled if your name is in the hat. In any case, you'll get to choose one of three books to receive as a free thank you gift for taking a moment to fill out the Community Mapping Educator survey at [SurveyLink].

Thanks in advance for your participation, and please don't hesitate to contact me with any questions or concerns.

Sincerely,
*[**insert researcher name, title, and still include the researcher email address**]*

6. **PHONE CALLS:** Concurrent with the final email reminder, consider making personal phone calls to some or all remaining non-respondents to ask for their participation.

7. THANK YOU: Within a couple of days of the close of the survey response period, send a brief thank you to everyone who participated, updating them on what to expect next.

Sample text for thank you notice

*Dear [**insert participant first name**],*

I just wanted to thank you on behalf of the staff at the Community Mapping Program for taking the time to fill out the Educator survey. Thanks to you, we did reach our minimum thresholds for our sample size and so will be able to use the results to help support the growth and development of the program.

CMP staff will be contacting participants in the near future to announce the prize winners (including the participation prizes of free books).

Again, THANK YOU.

Sincerely,
*[**insert researcher name, title, email address**]*

Tool: *Step by Step Instructions for Administering Student Surveys*
To be used by: *Educators*

Thank you for helping us to better understand the workings and impacts of the Community Mapping Program. The students' input is very important. Consistent administration of these surveys will assure that the information they provide is usable in our research. If different classes approach the survey in different ways, we will have results that are not comparable.

Please follow these steps when administering surveys to your students.

1. Please administer the survey in the classroom (rather than sending it home).
   (NOTE: If you want to have your students fill out the survey on line, that is OK, too, - actually preferable- but you'll probably need access to a computer lab so that all your students can fill it out on the same day.)
2. Please assure that students are not talking to one another or sharing answers.
3. For younger students, it may be necessary to read each question aloud as they choose an answer. If so, please use the questions as they are on the sheet without providing examples. Simple clarifications of terms may be necessary.
4. Please allow a maximum of 30 minutes for completion of the survey. (It is unlikely to take that long, however.)
5. Please place all the completed surveys in an envelope (without looking at their answers) and return the envelope to your CMP staff contact or mail it directly to: CMP Evaluator, 272 Eaton Rd., Swanzey, NH 03446.

Please read the following statements out loud to your students:

1. Your participation will help people understand how you feel about your school and community and what kinds of things you are learning.
2. This is not a test. There are no right or wrong answers. You do not need to write your name on the survey if you do not want to, but it is important to write down your teacher's name.
3. Please notice that there are different types of questions. First you are asked to write an answer in your own words. Then you are asked how strongly you disagree or agree. Then you are asked about how often you see or do certain things. Toward the end you are asked to choose among several options and tell a little about yourself.
4. Please do not leave any answers blank. Choose the answer that best matches how you feel.
5. You will probably be asked to complete a follow up to this survey at a later date.
6. Your ideas are valuable. Thank you for participating.

If you have any questions, concerns or feedback about this please feel free to call or email CMP's program evaluator, Michael Duffin, 603-357-3547 michael@PEERassociates.net.

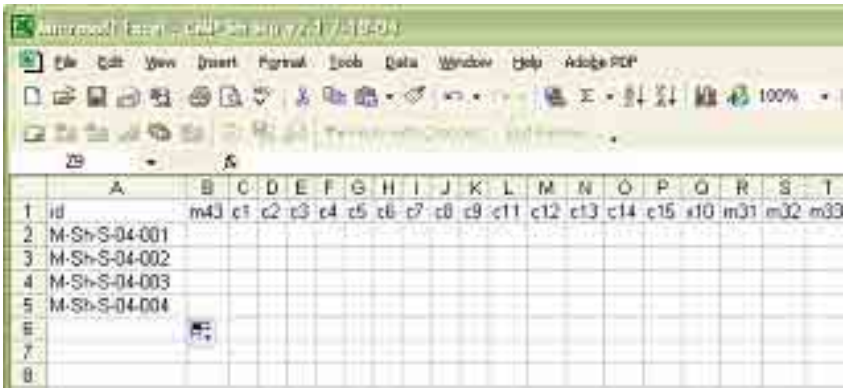
Thanks again for taking the time to assist with this research.

Reminder: Please fill out an educator survey yourself within one day of when your students fill out their surveys so that we can use the student data.

Tool: *Data Entry Protocol*
To be used by: *Researcher*
Directions for use: *If paper surveys were used, regional coordinators will often get involved in directly entering data into Excel spreadsheets that can be emailed to the external evaluators for analysis. Use these steps to ensure systematic data entry.*

1) Open the Microsoft Excel spreadsheet file named “CMP data entry template.xls”. This is included in all electronic versions of the *Toolkit*.

2) Make sure that the file is designed for easy data entry for the particular survey you have, i.e. columns labeled with all the right survey item numbers in the correct order and as narrow as possible while the screen still looks neat and tidy.



3) Name this file using the following naming protocol: "program initials" space “two characters for site or region (e.g. NE for New England, CO for Colorado, TX for Texas, etc.)” space "respondent group (either Stu, Edu, or Com)" space "survey version number(s)" space "date data entry starts" dot "xls" [no quotes obviously], e.g. CMP TX Stu v3.0 7-1-04.xls

4) Use the following protocol for the id variable: "single letter program code" dash "two character program site/cohort code" dash "single letter respondent group code" dash "two character year survey was administered" dash "three character serial number starting at 001 and going to 999" [also no quotes], e.g. M-Sh-S-04-001, M-Sh-S-04-002, M-Sh-S-04-003, etc. where M stands for Community Mapping Program, Sh stands for Sheldon School, S stands for Student, 04 is the year, and the final three digits are unique for each survey.

5) Hand write the id variable in the upper right hand corner of the hard copy survey. *This is very important for ensuring accuracy and usability of the data.*

6) Type up all responses to open-ended questions in a separate MS Word file using the same file naming protocol (except use “.doc” at the end instead of “.xls”) and labeling each response with the id variable.

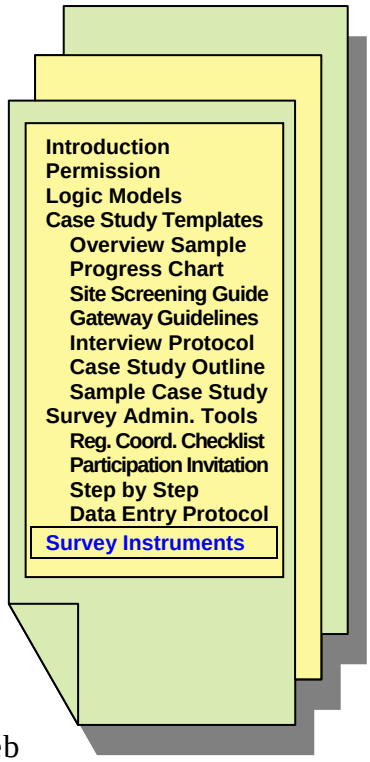
7) If a response to an item is blank or ambiguous on the original, leave that cell blank in the Excel file. If there is a zero or “not sure” on the original, enter a 0 value in the Excel file as opposed to leaving it blank.

8) After all the data is entered, please email the file to the external evaluator.

Tools: *Survey Instruments*
To be used by: *Researcher*
Directions for use: *Download the most recent versions of each of these surveys from* http://www.peecworks.org/PEEC/PEEC_Inst/S001004B5.

The remaining pages in this *Toolkit* are copies of the surveys for:

- Educators
- Students
- Community Partners
- CM Institute participants



On-line versions of all these surveys are available on the web at http://www.peecworks.org/PEEC/PEEC_Inst/S001004B5

Community Mapping Program
Making Community Connections
www.communitymap.org

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CMP Educator Survey

We sincerely thank you for taking the time (approx. 30 minutes) to complete this survey. Your frank feedback is very valuable for helping us to improve the Community Mapping Program. Your individual responses will be seen only by the evaluation team and program staff, and your name will NOT be used in any report, publication or discussion without your prior permission. We appreciate your best guess on any items that may seem a little broad or not directly connected to the CMP. We also recognize that CMP is not the only factor affecting your students. You will notice that the question numbers and letters are not always in sequence. That is because this survey is a key part of a larger effort to measure the impact of place-based education programs.

Please do not leave blanks. THANK YOU!

How much do you disagree or agree? **For each of the following items, please circle only *one* number that best matches your opinion.**	*Strongly Disagree*	*Tend to Disagree*	*Tend to Agree*	*Strongly Agree*	*Not sure or N/A*
M1 The CMP staff has been responsive to my needs for support.	1	2	3	4	0
M2 I was able to use the skills I gained from CM institutes and workshops to create a solid plan for this year's mapping project.	1	2	3	4	0
M3 Communication and coordination between project participants was effective.	1	2	3	4	0
M4 The public forum organized to share the product of our mapping project with the community was successful.	1	2	3	4	0
M5 I plan on doing a CM project next year.	1	2	3	4	0
M6 I will require additional funding and/or CMP staff support in the coming year.	1	2	3	4	0
M7 CM projects are increasingly initiated and supported by local and regional stakeholders (other than CMP staff).	1	2	3	4	0
M8 GIS was an important part of our CM project this year.	1	2	3	4	0
M9 Other spatial tools such as manual mapping or map and compass were more important than GIS in our CM project this year.	1	2	3	4	0
M10 I want more GIS and technical skills development.	1	2	3	4	0
Items M15-18 begin with the following phrase: "Within the last six months I have seen my students demonstrate grade-level appropriate mastery of the skills described in the following standards..."					
M15 National Geography Standard #1: How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective.	1	2	3	4	0
M16 National Geography Standard #18: How to apply geography to interpret the present and plan for the future.	1	2	3	4	0
M17 National Science Education Standards: Students are able to design and conduct a scientific investigation, and think critically and logically to make the relationship between evidence and explanations.	1	2	3	4	0
M18 International Society for Technology in Education #6: Students are able to select and use appropriate tools and technology resources to solve problems, and to design, develop, publish, and present products to audiences inside and outside the classroom.	1	2	3	4	0
P1 CMP helps me meet local, district and/or state learning standards.	1	2	3	4	0

X19 Please describe in as much detail as possible which standard(s) you are referring to in item P1.

How much do you disagree or agree? For each of the following items, please circle only *one* number that best matches your opinion.	*Strongly Disagree*	*Tend to Disagree*	*Tend to Agree*	*Strongly Agree*	*Not sure or N/A*
Items X1-X12 refer to the group of students that you know best or work most closely with in your school or project					
X1 Our students are enthusiastic about learning.	1	2	3	4	0
X2 CM projects may be nice, but they don't really improve student academic achievement.	1	2	3	4	0
X3 Through CM projects, students gain a sense of responsibility for improving the local community and environment.	1	2	3	4	0
X4 Through CM projects, students regularly take action to protect and improve the environment.	1	2	3	4	0
X5 Students prefer CM activities to more traditional-style school activities.	1	2	3	4	0
X6 I am satisfied with the quality of education in our school.	1	2	3	4	0
X7 Students have a strong connection to the community where our school is located.	1	2	3	4	0
X8 At home or outside of school, students regularly take action to protect and improve the environment.	1	2	3	4	0
X9 Standardized test scores are an accurate indicator of student academic achievement.	1	2	3	4	0
X10 The CMP helps students increase their scores on standardized tests.	1	2	3	4	0
X11 CM projects are particularly beneficial for students with learning challenges.	1	2	3	4	0
X12 Students are self-directed in their work on CM projects.	1	2	3	4	0
P2 I collaborate with other teachers for curriculum planning.	1	2	3	4	0
P3 I feel energized and confident while teaching about the local environment and/or community.	1	2	3	4	0
P4 It is difficult to cover traditional subjects through CM projects.	1	2	3	4	0
P5 The curriculum in our school is well-coordinated throughout the grade levels.	1	2	3	4	0
P6 CM projects have helped me become a better teacher.	1	2	3	4	0

D1 For the following item, please write a NUMBER in the box to the right of each activity description to indicate how many times you have participated in that CMP related activity over the years. Write 0 in the box if you have not taken part in that activity or if it does not apply to you. If the number of times is large or hard to quantify, just put your best guess. The idea here is to try and get an overall estimate of your level of involvement with CMP and which types of support are most used. The support may come directly from CMP staff or from other vendors arranged through the CMP. It might help to read through the whole list of activities first to jog your memory.

	Number
a. attended an introductory presentation or workshop on the CMP	
b. attended [X number of] days of CM institutes or workshops X =	
c. prepared a CM project plan, application and/or timeline	
d. met as a project team with CMP staff/ vendors during project planning	
e. received additional funding by working with or through CMP staff/vendors	
f. used CMP staff/vendors to secure or format data	
g. used CMP staff/vendors to generate field or wall maps	
h. meetings with both educator and community partners present	
i. events with community partners working with students	
j. events with CMP staff/vendors working directly with students	
k. borrowed equipment from CMP staff/ vendors	
l. meetings with CMP staff/vendors for logistical and/or technical problem solving	
m. additional contacts with CMP staff/ vendors for long-distance support	
n. meetings with CMP staff/vendors for help developing the draft or final product	
o. helped plan public community forum to celebrate/share final product	
p. participated in public community forum to celebrate/share final product	
q. other CMP activity (please specify)	
r. other CMP activity (please specify)	

For questions D2-D12, please circle the one answer that most closely applies.

D2 I would guess that, over the years, the total number of hours I've spent in direct contact with CMP staff/vendors and formal program elements is about:
- a. less than 5 hours
- b. between 5 and 40 hours
- c. between 40 and 100 hours
- d. between 100 and 500 hours
- e. more than 500 hours
- f. I'm not sure/couldn't guess

D3 I would guess that, over the years, the total number of hours I've spent in other (non-CMP) place-based or environmental education training programs is about:
- a. less than 5 hours
- b. between 5 and 40 hours
- c. between 40 and 100 hours
- d. between 100 and 500 hours
- e. more than 500 hours
- f. I'm not sure/couldn't guess

D3 For the current school year, I have had (or will have) my students working on CMP-related activities:
- a. twice per year or less
- b. three to six times per year
- c. about once a month
- d. once a week or more
- e. I'm not sure/ doesn't apply to me

D4 In terms of my overall curriculum plan for the current school year, CM projects are:
- a. a very small part of it, if at all
- b. a significant but contained unit
- c. a major part of it
- d. the core organizing structure
- e. I'm not sure/ doesn't apply to me

D5 The amount of effort I put into planning and implementing CMP-related activities for the current school year is:
- a. minimal or non-existent
- b. comparable to other topics/units I teach
- c. more than other aspects of my teaching
- d. far above and beyond the call of duty
- e. I'm not sure/ doesn't apply to me

D.6 What subject do you teach:

- not a teacher/ doesn't apply to me
- elementary classroom, integrated
- math
- science
- social studies/ history
- English
- foreign language
- physical education or health
- art or music technology
- other: _____
- After school or other non-formal education project leader

D.7 For how many school years have you been working in this school? (count the current school year as one)

- first year here
- 2-3 years
- 4-5 years
- 6 or more years

D.11 How many students would you confidently say were involved in your CM project this year?

# of students = _____

How much do you disagree or agree? **For each of the following items, please circle only *one* number that best matches your opinion.**	*Strongly Disagree*	*Tend to Disagree*	*Tend to Agree*	*Strongly Agree*	*Not sure or N/A*
V.1 In general, people in our community are actively involved in trying to make the community a better place to live.	1	2	3	4	0
V.2 Our community is environmentally healthy.	1	2	3	4	0
V.3 The key decision makers in our community have a good plan for addressing the important needs in our community.	1	2	3	4	0
V.4 CM projects get people (young and old) more involved in solving real life problems in our community.	1	2	3	4	0
V.5 The quality of the environment in our community is improving as a result of CM projects.	1	2	3	4	0
V.6 Through CM projects, students are collaborating with important decision makers in our community.	1	2	3	4	0
V.7 CM projects may be nice, but they don't address real needs in our community.	1	2	3	4	0

How often do these things happen? **Items L1-L6 refer to the classrooms that you know best or work most closely with.**	*Twice per year or less*	*Three to six times per year*	*About once a month*	*Once a week or more*	*Not sure or N/A*
L.1 The school building and grounds (places outside of the classrooms) are used as places for learning.	1	2	3	4	0
L.2 Parents and/or other community members work directly with students on school-related projects.	1	2	3	4	0
L.3 As part of school, students work on real-world problems in their community, school buildings and/or school yard.	1	2	3	4	0
L.4 The content of classroom assignments and homework is directly connected to the local natural and/or urban environment.	1	2	3	4	0
L.5 Students learn about and/or interact with local cultural heritage, history and people through their schoolwork.	1	2	3	4	0
L.6 Students do community volunteering and/or service-learning work to satisfy their educational requirements.	1	2	3	4	0

For the remaining questions, please write your answers in the spaces provided. Please continue your answers on the back of this survey if you need more space.

M.20 What were the two or three most significant barriers you overcame in your project this year?
1.

2.

3.

M.21 What were the two or three most important supports for your project this year?
1.

2.

3.

M.22 What two or three things would best support future community mapping projects?
1.

2.

3.

M.23 What were the two or three most important things that your community partner contributed to this year's project?
1.

2.

3.

M.24 What else would you like to say about your experience with the CMP?

Your School _____ Your Name _____ Today's Date _____

Please return this survey in the envelope provided, by email to a CMP staff person or to:
CMP Evaluation, 836 Snipe Ireland Rd., Richmond, VT 05477 or email to mduffin@phd.antioch.edu.

The End. Thank you again for taking the time to fill out this survey!

Community Mapping Program
Making Community Connections
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CMP Student Survey

*We are interested in <u>your</u> ideas about the **environment** and your **community**. By community, we mean everything in the town or neighborhood where you live, including people, nature and the built environment. There are no right or wrong answers! Please answer <u>every</u> question and give your completed survey to your teacher. Thanks, we appreciate your help.*

 # 43 Please choose only <u>ONE</u> of the following situations to write about (either A, B, or C.). Circle the one you choose. In the box below, please explain in as much detail as possible how you would answer the question at the end of the situation you chose. (Use the back of the survey if you need more space).

A. A student group is planning to build a new path through a natural area near the school. They have asked you to determine where the path should go and what impact the path might have on the natural area. *What would you do to answer their questions?*

B. The city planning department has asked for student input on where to build a new teen center. They are asking students to determine the impact this new teen center might have on the surrounding area. *What steps would you take in order to give the city planners the best input you can?*

C. Residents of your neighborhood are concerned about the amount of traffic and auto accidents in your area. They are preparing a report for the mayor (hoping that s/he will improve the situation), and they want your help. *How would you go about collecting traffic and accident information for the report?*

Remember to circle the situation you choose to write about, and to use as much detail as possible.

(please complete all three pages) CMP Stu v2.1 *Page 1 of 3*

How much do you disagree or agree? **For each of the following items, please circle only *one* number that best matches your opinion.**	*Strongly Disagree*	*Tend to Disagree*	*Tend to Agree*	*Strongly Agree*	*Not sure or N/A*
C1 I feel like I am part of a community.	1	2	3	4	0
C2 I pay attention to news events that affect the community.	1	2	3	4	0
C3 Doing something that helps others is important to me.	1	2	3	4	0
C4 I like to help other people, even if it is hard work.	1	2	3	4	0
C5 I know what I can do to help make the community a better place.	1	2	3	4	0
C6 Helping other people is something everyone should do, including myself.	1	2	3	4	0
C7 I know a lot of people in the community, and they know me.	1	2	3	4	0
C8 I feel like I can make a difference in the community.	1	2	3	4	0
C9 I try to think of ways to help other people.	1	2	3	4	0
C11 I like it when I get to be absent on a regular school day.	1	2	3	4	0
C12 On my own time, I often study or read extra about the topics we're working on at school.	1	2	3	4	0
C13 In the last two months I have done something *with my classmates* to take care of my neighborhood or community.	1	2	3	4	0
C14 In the last two months I have done something *on my own time* to take care of my neighborhood or community.	1	2	3	4	0
C15 I enjoy learning about the environment and my community.	1	2	3	4	0
XX0 Community mapping projects help me do better on tests and get better grades.	1	2	3	4	0
M31 Making and using maps is a fun way to learn about the place where I live.	1	2	3	4	0
M32 Working with maps helps me understand math better.	1	2	3	4	0
M33 I can look at almost any map and understand the information it is trying to communicate.	1	2	3	4	0
M34 Looking at maps of my community gets me excited about trying to make it a better place.	1	2	3	4	0
M35 When news stories and reports of current events use maps, I pay closer attention and understand things better.	1	2	3	4	0
M36 I can describe at least three ways that maps are used by people in our community to make decisions about the future.	1	2	3	4	0
M37 I like trying to figure things out using critical thinking, logic, and scientific questions.	1	2	3	4	0
M38 I use a scientific way of thinking to help me with other subjects in school, like social studies and English.	1	2	3	4	0
M39 I know the steps involved in doing a scientific investigation.	1	2	3	4	0
M40 I want to learn more about the different kinds of computer mapping technology.	1	2	3	4	0
M41 If I have to report some information about my community, I know when it is best to use computer mapping technology instead of just using writing, math, science or art.	1	2	3	4	0
M42 I know how to use computer mapping technology to help my community.	1	2	3	4	0

(please complete all three pages) CMP Stu v2.1 *Page 2 of 3*

How often do these things happen? **For items L1-N8, please circle only *one* number that best matches how often you do or see the things described. Please do not leave any blanks.**	*Twice per year or less*	*Three to six times per year*	*About once a month*	*Once a week or more*	*Not sure or N/A*
L1 The school building and grounds (places outside of the classrooms) are used as places for learning.	1	2	3	4	0
L2 Parents and/or other community members work directly with students on school-related projects.	1	2	3	4	0
L4 Our classroom assignments and homework are about nearby nature and/or the city where we live.	1	2	3	4	0
L5 In my school we learn about local people, culture and history.	1	2	3	4	0
N1 I visit parks, playgrounds, forests, creeks, ponds or other natural areas *by myself.*	1	2	3	4	0
N2 I visit parks, playgrounds, forests, creeks, ponds or other natural areas *with friends, family or as part of a group.*	1	2	3	4	0
N3 As I go about my day, I notice plants and animals that I know a lot about.	1	2	3	4	0
N4 I think to myself that I am glad to live in this community.	1	2	3	4	0
N5 I stop and think about how things that I do are going to affect nature and the people around me.	1	2	3	4	0
N6 I spend almost the whole day inside buildings, cars or buses.	1	2	3	4	0
N7 I share my opinions about what should be done to take care of the community where I live.	1	2	3	4	0
N8 I feel good about what this community will be like in the future when I am grown up.	1	2	3	4	0

For question C10, circle the <u>one</u> answer that best matches the way you feel.

C10 This is how I feel about school:

a. I do not enjoy school and what I'm learning is not important to me.
b. Sometimes I learn useful things in school, but usually what I learn is not that important.
c. I learn something important on most days. I can usually see how most of what I learn at school will be useful in my life.
d. Almost everything I learn is important and useful. I enjoy learning at school every day.
e. I'm not sure

Your Name _____

Your Teacher's Name _____ (who gave you the survey?)

Your School _____

Your Grade: *(check one)* ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12

Are you ☐ Male or ☐ Female? Today's Date _____

The End. Thank you for completing this survey.

Items C1-C9 of this survey are taken with permission from The Civic Responsibility Surveys (1999), developed by A. Furco, P. Muller, and M. S. Ammon at the Service-Learning Research & Development Center, University of California, Berkeley.

Community Mapping Program
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CMP Community Partner Survey

We sincerely thank you for taking the time (approx. 30 minutes) to complete this survey. Your frank feedback is very valuable for helping us to improve the Community Mapping Program. Your individual responses will be seen only by the evaluation team and program staff, and your name will NOT be used in any report, publication or discussion without your prior permission. We appreciate your best guess on any items that may seem a little broad or not directly connected to the CMP. We also recognize that CMP is not the only factor affecting the ideas described in this survey. You will notice that the question numbers and letters are not always in sequence. That is because this survey is a key part of a larger effort to measure the impact of place-based education programs. Please do not leave blanks. THANK YOU!

How much do you disagree or agree? **For each item, please circle only *one* number that best matches your opinion.**	*Strongly Disagree*	*Tend to Disagree*	*Tend to Agree*	*Strongly Agree*	*Not sure or N/A*
M1 The CMP staff has been responsive to my needs for support.	1	2	3	4	0
M2 I was able to use the skills I gained from CM institutes and workshops to create a solid plan for this year's mapping project.	1	2	3	4	0
M3 Communication and coordination between project participants was effective.	1	2	3	4	0
M4 The public forum organized to share the product of our mapping project with the community was successful.	1	2	3	4	0
M5 I plan on doing a CM project next year.	1	2	3	4	0
M6 I will require additional funding and/or CMP staff support in the coming year.	1	2	3	4	0
M7 CM projects are increasingly initiated and supported by local and regional stakeholders (other than CMP staff).	1	2	3	4	0
M8 GIS was an important part of our CM project this year.	1	2	3	4	0
M9 Other spatial tools such as manual mapping or map and compass were more important than GIS in our CM project this year.	1	2	3	4	0
M10 I want more GIS and technical skills development.	1	2	3	4	0
M11 Students who participate in CM projects are active, informed, contributing citizens of our community.	1	2	3	4	0
M12 Our CM project this year addressed a real need in our community.	1	2	3	4	0
M13 The final product of this year's CM project is being (or will be) actively used by the community or my organization.	1	2	3	4	0
M14 Participating in the CMP has furthered the goals/mission of my organization.	1	2	3	4	0

(Please complete all 4 pages of this survey)

How much do you disagree or agree? **For each item, please circle only *one* number that best matches your opinion.**	*Strongly Disagree*	*Tend to Disagree*	*Tend to Agree*	*Strongly Agree*	*Not sure or N/A*
v3 In general, people in our community are actively involved in trying to make the community a better place to live.	1	2	3	4	0
v4 Our community is environmentally healthy.	1	2	3	4	0
v5 The key decision makers in our community have a good plan for addressing the important needs in our community.	1	2	3	4	0
v6 CM projects get people (young and old) more involved in solving real life problems in our community.	1	2	3	4	0
v7 The quality of the environment in our community is improving as a result of CM projects.	1	2	3	4	0
v8 Through CM projects, students are collaborating with important decision makers in our community.	1	2	3	4	0
v9 CM projects may be nice, but they don't address real needs in our community.	1	2	3	4	0
Items X1-X12 refer to the group of students that you know best or work most closely with in your school or project					
x1 Our students are enthusiastic about learning.	1	2	3	4	0
x2 CM projects may be nice, but they don't really improve student academic achievement.	1	2	3	4	0
x3 Through CM projects, students gain a sense of responsibility for improving the local community and environment.	1	2	3	4	0
x4 Through CM projects, students regularly take action to protect and improve the environment.	1	2	3	4	0
x5 Students prefer CMP activities to more traditional-style school activities.	1	2	3	4	0
x6 I am satisfied with the quality of education in our school.	1	2	3	4	0
x7 Students have a strong connection to the community where our school is located.	1	2	3	4	0
x8 At home or outside of school, students regularly take action to protect and improve the environment.	1	2	3	4	0
x11 CM projects are particularly beneficial for students with learning challenges.	1	2	3	4	0
x12 Students are self-directed in their work on CM projects.	1	2	3	4	0

Next page →

(Please complete all 4 pages of this survey)

8.1 For the following item, please write a NUMBER in the box to the right of each activity description to indicate how many times you have participated in that CMP related activity over the years. Write 0 in the box if you have not taken part in that activity or if it does not apply to you. If the number of times is large or hard to quantify, just put your best guess. The idea here is to try and get an overall estimate of your level of involvement with CMP and which types of support are most used. The support may come directly from CMP staff or from other vendors arranged through the CMP. It might help to read through the whole list of activities first to jog your memory.

	Number
a. attended an introductory presentation or workshop on the CMP	
b. attended *[X number of]* days of CM institutes or workshops. X =	
c. prepared a CM project plan, application and/or timeline	
d. met as a project team with CMP staff/ vendors during project planning	
e. received additional funding by working with or through CMP staff/vendors	
f. used CMP staff/vendors to secure or format data	
g. used CMP staff/vendors to generate field or wall maps	
h. meetings with both educator and community partners present	
i. events with community partners working with students	
j. events with CMP staff/vendors working directly with students	
k. borrowed equipment from CMP staff/ vendors	
l. meetings with CMP staff/vendors for logistical and/or technical problem solving	
m. additional contacts with CMP staff/ vendors for long-distance support	
n. meetings with CMP staff/vendors for help developing the draft or final product	
o. helped plan public community forum to celebrate/share final product	
p. participated in public community forum to celebrate/share final product	
q. other CMP activity (please specify)	
r. other CMP activity (please specify)	

8.2 I would guess that, over the years, the total number of hours I've spent in direct contact with CMP staff/vendors and formal program elements is about:

- a. less than 5 hours
- b. between 5 and 40 hours
- c. between 40 and 100 hours
- d. between 100 and 500 hours
- e. more than 500 hours
- f. I'm not sure/couldn't guess

8.3 I would guess that, over the years, the total number of hours I've spent in other (non-CMP) place-based or environmental education training programs is about:

- a. less than 5 hours
- b. between 5 and 40 hours
- c. between 40 and 100 hours
- d. between 100 and 500 hours
- e. more than 500 hours
- f. I'm not sure/couldn't guess

For the remaining questions, please write your answers in the spaces provided. Please continue your answers on an additional sheet of paper if you need more space.

8.20 What were the two or three most significant barriers you overcame in your project this year?

1.

2.

3.

Only one more page! →

(Please complete all 4 pages of this survey)

M.23 What were the two or three most important supports for your project this year?

1.

2.

3.

M.24 What two or three things would best support future community mapping projects?

1.

2.

3.

M.25 What were the two or three most important contributions your organization made to this year's mapping project (e.g. leadership, time, resource people, referrals, logistics, tools, etc.)?

1.

2.

3.

M.26 What else would you like to say about your experience with the CMP?

Your Organization _____ Your Name _____ Today's Date _____

Please return this survey in the envelope provided or by email to a CMP staff person or to:
CMP Evaluation, 836 Snipe Ireland Road, Richmond, VT 05477 or email to mduffin@phd.antioch.edu

The End. Thank you again for taking the time to fill out this survey!

(Please complete all 4 pages of this survey) CMP Com v3.1 *Page 4 of 4*

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CM Institute Evaluation

Thank you for taking time to complete this survey. The content of this survey should serve as a design template for the ideal CM institute, especially when used in conjunction with the CMP Logic Model and existing CM publications such as books, websites and other program materials. ***(Items in bold type are the highest priority elements).*** *This survey also provides feedback to CMP staff about how well they did or did not implement the core elements of a CM institute. Your frank feedback is greatly appreciated and will help us to improve the Community Mapping Program. Please do not leave blanks. THANK YOU!*

How much do you disagree or agree? For each item, please circle only *one* number that best matches your opinion.	*Strongly Disagree*	*Tend to Disagree*	*Tend to Agree*	*Strongly Agree*	*Not sure or N/A*
Big picture goals of the Institute					
K.1 **Overall, I feel well-prepared to organize and implement a successful CM project.**	**1**	**2**	**3**	**4**	**0**
K.2 I understand the overall premise of the CMP: that engaging a CM project team in a process of local investigation to create a product needed by the community can lead to increased community sustainability and well-being.	1	2	3	4	0
K.3 **I understand how spatial tools like GIS can enhance both the process and products involved in carrying out a CM project.**	**1**	**2**	**3**	**4**	**0**
K.4 **I understand why geographic/spatial inquiry is an important aspect of any CM project.**	**1**	**2**	**3**	**4**	**0**
K.5 I understand how place-based and project-based education are integral parts of a CM project.	1	2	3	4	0
K.6 The institute was fun and enlightening.	1	2	3	4	0
Building Community Relationships and Support					
K.7 CM projects must meet a need that is clearly identified by the community partner.	1	2	3	4	0
K.8 I know how to go about building and maintaining a viable school-community partnership for a CM project.	1	2	3	4	0
K.9 I understand how support from school administration, technical staff and community partner can increase the success of my CM project.	1	2	3	4	0
K.10 I know what kinds of post-institute project support I will need and how to get it, with help from CMP staff and/or others as necessary.	1	2	3	4	0
Planning and Managing a Community Mapping Project					
K.11 **On a smaller scale, the institute modeled what I think I will be going through as I design and implement my own CM project.**	**1**	**2**	**3**	**4**	**0**
K.12 I understand the fundamental goals and characteristics of a successful CM project from a design perspective.	1	2	3	4	0
K.13 I know how to develop a feasible CM project timeline with interim goals and final products.	1	2	3	4	0
K.14 The example project conducted in this institute did a good job of addressing the academic standards it was designed to meet.	1	2	3	4	0

(Please complete all three pages of this survey)

How much do you disagree or agree? For each item, please circle only *one* number that best matches your opinion.	*Strongly Disagree*	*Tend to Disagree*	*Tend to Agree*	*Strongly Agree*	*Not sure or N/A*
K.15 **I know how to connect CM project activities with specific academic standards that I am responsible for meeting.**	1	2	3	4	0
K.16 **CM tools and methods taught in this institute were presented in a logical sequence, not as isolated activities – more like a coherent instructional road map than an unorganized toolbox.**	1	2	3	4	0
K.17 **The institute moved quickly to hands-on/direct practice/reflection without getting bogged down in instructor demos and lectures.**	1	2	3	4	0
Skills and Project Implementation					
K.18 **I am familiar with a variety of field techniques and am able to choose the appropriate ones to use for my project.**	1	2	3	4	0
K.19 I understand that gathering and assimilating data may require teaching additional skills, such as scientific inquiry, research, creating spreadsheets, survey writing, interviewing, map reading and interpretation, compass skills, and/or other specific skills related to the issue being investigated.	1	2	3	4	0
K.20 I understand that gathering and disseminating information may require facilitating proficiency in other areas, including critical thinking and problem-solving, public process, public speaking, graphics editing, time management, leadership skills, and/or other life skills.	1	2	3	4	0
NOTE: Questions K.22-K.37 ask specifically about GPS/GIS skills. Regardless of whether or not your institute covered these skills in depth, it is still very useful for the program staff to have a sense for your comfort level with these skills. Please remember that there are no "wrong" answers. Thanks!					
K.21 **This institute gave me the right amount of GPS/GIS skills to complete my CM project – not too much, not too little.**	1	2	3	4	0
K.22 I know how to open and save a project (.aep, .mxd or .apr).	1	2	3	4	0
K.23 I know how to navigate, manipulate and display GIS data in a data frame or view.	1	2	3	4	0
K.24 I know how to add GIS data and edit or create layers.	1	2	3	4	0
K.25 I know how to use a GPS unit to collect point, line and polygon data.	1	2	3	4	0
K.26 I know how to import GPS data into the GIS.	1	2	3	4	0
K.27 I know how to create a GIS map layout with title, scale, orientation, grid, legend, labels, and source information.	1	2	3	4	0
K.28 I know how to open a GIS table and perform simple queries.	1	2	3	4	0
K.29 I know how to print or export a GIS map.	1	2	3	4	0
K.30 I am aware of other GIS skills that would benefit my CM project, e.g. creating hot links and buffers, downloading data from the Internet and importing it into a GIS, manipulating attribute tables, or using aerial photos and remote imagery.	1	2	3	4	0
K.31 I will need more training in GIS before I feel comfortable introducing it to others.	1	2	3	4	0
K.32 I intend to pursue additional GIS training.	1	2	3	4	0
K.33 I intend to use GIS in my CM project (either at my school, or alternate location).	1	2	3	4	0
K.34 I intend to use GPS in my CM project (either at my school, or alternate location).	1	2	3	4	0

(Please complete all three pages of this survey)

How much do you disagree or agree? For each item, please circle only *one* number that best matches your opinion.	*Strongly Disagree*	*Tend to Disagree*	*Tend to Agree*	*Strongly Agree*	*Not sure or N/A*
E.35 I have good access to the hardware and software I need to incorporate GIS into my CM project.	1	2	3	4	0
E.36 Overall, I understand and feel comfortable enough with GPS/GIS data/ applications/skills to direct their use, with support, on my CM project.	1	2	3	4	0
Transferability					
E.37 The institute schedule provided enough time for networking and sharing ideas among participants.	1	2	3	4	0
E.38 I am leaving this institute with materials in hand (e.g. project plans and sample GIS products) that are ready to use at my school or organization.	1	2	3	4	0
E.39 This institute taught me teaching strategies for how to share my CM project skills with others on my CM project team.	**1**	**2**	**3**	**4**	**0**
E.40 I was overwhelmed by the amount of resources presented to me during this institute, many of which I'll probably not use.	1	2	3	4	0
Evaluation and Assessment					
E.41 I know how to develop and use formative assessments of student needs and learning in the process of my CM project.	1	2	3	4	0
E.42 Evaluation and feedback are critical to the ongoing success of the CMP and future CM projects.	1	2	3	4	0
E.43 I am willing to complete evaluation surveys and participate in other activities that help to document my CM project work.	1	2	3	4	0
E.44 I will recommend this institute to friends and colleagues.	**1**	**2**	**3**	**4**	**0**

E.45 What else would you like to share with us about your learning or any other part of this CM institute?

The End. Thank you again for taking the time to fill out this survey!

Your Name _____ Your Role _____

Your School or Organization _____

Title & Dates of this Institute _____

Location of this Institute _____ Today's Date _____

(Please complete all three pages of this survey) CM Inst Eval v5.0 *Page 3 of 3*