Resilience Dialogues:
Collaborative Learning Resources

Training Workbook

What is a Resilience Dialogue?

Resilience Dialogues are conversations that occur among people with diverse perspectives who have agreed to collaborate to improve a situation that contributes to building community and ecological resilience. This workbook complements a two-day training for adapting the Collaborative Learning approach to Resilience Dialogues.

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Wells National Estuarine
Research Reserve

NOAA

National Estuarine
Research Reserve System
Science Collaborative
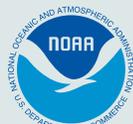
Example Ice Breaker Activity: Why Are You Here?

Annotations in parentheses below explain the intent of each question. Remove the annotations to use the example in your Resilience Dialogue.

Please write down who you are and why you are attending this "Resilience Dialogue" by answering these questions. Below is an example of the level of detail we are looking for. You will be asked to share what you write with the group.

1. **My name is**
   (Names should also be on name tents front and back)

   _____

2. **I am working with**
   (Makes the connection with the individual and their collaborating partners)

   _____

3. **...to**
   (What is this group of partners trying to do in the near term?)

   _____

4. **...in order to**
   (This is the "bottom line". Why is the group taking this action? What is their ultimate goal related to community or ecological resilience?)

   _____

1. **My name is** Chris Feurt.
2. **I am working with** The Saco Watershed Collaborative
3. **....to** Implement elements of the groups' Action Plan
4. **....in order to** sustain high quality sources of drinking water in the communities of the watershed.

Example Day One Agenda: Using Collaborative Learning to Build Resilience

8:30 am   **Registration and coffee**

9:00 am   **Welcome and course overview**

This orientation includes a participatory activity to introduce you to the Collaborative Learning approach.

Collaborative Learning—What's in it for me?

This introduction will help you understand how Collaborative Learning is used to build effective teams to build community and ecosystem resilience.

Collaborative Learning—How does it work in the real world?

Become familiar with the four phases of Collaborative Learning through the lens of a relevant case study.

Phase I: Assessment—How will Collaborative Learning apply to my work?

Begin to apply what you're learning by developing a situation description and conducting a role assessment for a situation that you and your fellow participants wish to improve.

The morning will include a 15-minute break....

12:00 pm   **Lunch**

1:00 pm   **Local Case Study for Collaboration**

Three Skills for Collaborative Learning

Learn how active listening, skillful discussion and appreciation of mental and cultural models are used to increase the impact of a Collaborative Learning process.

Phase I: Assessment (continued): Figuring Out the Who, What, and Why.

Hone your skills in active listening and skillful discussion as you create a situation description to build understanding of the system you are working within.

Phase II: Designing a Collaborative Learning Process:

Learn about the principles that must be incorporated into the design of a Collaborative Learning process and the diverse ways in which Collaborative Learning can adapt to the needs of a particular group and nature of an issue.

The afternoon will include a 15-minute break....

4:00 pm   **Adjourn**

Example Day Two Agenda: Using Collaborative Learning to Build Resilience

8:30 am   **Coffee and light snacks**

9:00 am   **Phase III: Implementing a Collaborative Learning process to address your issue.**

Practice moving from ideas to actions through focused problem-solving activities oriented to producing measurable outcomes.

The morning will include a 15-minute break….

12:00 pm   **Lunch**

1:00   pm   **Phase IV: Evaluating & managing progress to achieve shared goals.**

Learn about and apply techniques to evaluate a Collaborative Learning process, including methods to categorize and prioritize group outputs.

1:45 pm   **Putting it all Together - A Story of an Award-Winning Watershed Partnership that used Collaborative Learning**

2:45 pm   **The Challenges of Change**

How you can design your projects to take advantage of the five most powerful qualities of ideas that capture attention and spread awareness applying Diffusion of Innovations principles.

Complete Course Evaluation

The afternoon session will include a 15-minute break….

4:00 pm   **Adjourn**

Table of Contents

Training Goals, Learning Objectives, & Workbook

Resilience Dialogues are conversations that occur among people with diverse perspectives who have agreed to collaborate to improve a situation that contributes to building community and ecological resilience.

Goals

This two-day training is designed to build your capacity to work with people who have different priorities, perspectives and knowledge to achieve mutual goals for building community and ecosystem resilience. This workbook provides all of the resources needed to use the Collaborative Learning approach as a tool to plan, implement, and evaluate Resilience Dialogues.

Learning objectives

Participants in the 2-day training will:

1. Understand how the principles and practices of Collaborative Learning can contribute to your work;
2. Identify ways in which Collaborative Learning can be used to improve a situation you are working on;
3. Identify benefits and challenges to adapting Collaborative Learning to your work;
4. Identify your role(s) in a Collaborative Learning process;
5. Understand the skills and mind set required to be an effective participant in a Collaborative Learning process;
6. Practice skills for building stakeholder teams for problem solving, policy analysis, adaptive management, and the generation or integration of science into the decision-making process;
7. Practice the techniques used in each of the four phases of Collaborative Learning in small groups to evaluate an issue of interest to the group and adapt the Collaborative Learning approach to improve that situation.

Workbook

This workbook was created to support a two-day training experience and to serve as a practical reference for applying Collaborative Learning techniques. It provides a simplified overview of the Collaborative Learning process and techniques. **Copies of all of the worksheets are provided in the Tools and Resources section for you to adapt and use in your work.** This workbook provides participants in the Resilience Dialogues training with a complete set of resources to conduct a Collaborative Learning process to facilitate Resilience Dialogues.

Collaborative Learning Overview

Why use the Collaborative Learning approach?

Collaborative Learning is an adaptable process, combined with a set of techniques that enables stakeholders from diverse backgrounds to share knowledge, concerns, and ideas about a complex issue. The process enhances participant ability to shape and support a project designed to improve a particular situation. It increases accountability, provides access to information that might not have been otherwise available, fosters more trusting relationships and a sense of community, and helps to identify steps that need to be taken to address commonly identified problems.

Ultimately, Collaborative Learning clarifies and broadens the range of choices stakeholders can consider to improve a situation, refines their understanding on how information can and will be used, and enhances the potential for measurable change.

When is Collaborative Learning a good idea?

There are six fundamental motivations for the use of Collaborative Learning in a coastal resource management or resilience context. Collaborative Learning may be the right approach when....

1. Complex situations can (and need to) be understood from diverse perspectives;
2. Multiple indicators about the status of a situation are difficult to understand;
3. There is a shared sense of urgency to act;
4. There are directives from "upstairs" requiring action;
5. Multiple sources of expertise are needed to innovate and adapt to address the situation;
6. Participation in problem solving would contribute to successful implementation of solutions.

What are the principles of Collaborative Learning?

Collaborative Learning has three fundamental principles:

1. The method follows an iterative process that respects the ways adults learn.
2. Competent communication among stakeholders is honest, sincere, understandable, and appropriate.
3. Stakeholders are actively involved in the co-creation of knowledge about the problem to be addressed, the development of an action strategy to make progress, and the selection of tasks that can be accomplished within their sphere of influence.

What is the science behind Collaborative Learning?

The Collaborative Learning approach draws from theories developed through research in the disciplines of adult learning, alternative dispute resolution, and soft systems methodology.

It brings effective, practical, social science methods to people working to build resilience in social ecological systems, and to sustain natural resources and ecosystems services.

How does Collaborative Learning work?

Collaborative Learning is an iterative process that includes four, overlapping phases: assessment, design, implementation, and evaluation.

Typically, a planning team or steering committee conducts the assessment and design phases to prepare for the implementation of a Collaborative Learning event that includes a larger group of stakeholders. The planning team reconnects after the event to complete the evaluation and begins to plan the assessment phases for the next event.

Each of the four phases has multiple steps. An overview of the steps is presented in the next two pages.

Phases of Collaborative Learning

Phase I: Assessment

This phase uses a "progress triangle" framework to bring the multiple systems engaged in a situation into sharp focus. A progress triangle uses three elements—processes, substance, and relationships—to analyze conflicts and evaluate the collaborative potential of a situation. During the assessment phase, you will...

1. Understand and clarify the nature of the situation you want to improve;

2. Identify potential stakeholders and listen to different perspectives;

3. Use the Progress Triangle concept and worksheets to organize knowledge about the system in which the project will occur. (See page 9 and 31-32 for details about the Progress Triangle)

Phase II: Design Phase

In the design phase, you use the results of the assessment to plan events to bring the appropriate stakeholders together to make progress on shared objectives, using activities that respect the knowledge, expertise, and time of everyone involved. Careful design transforms stakeholder interaction from passive receiving of information from outside experts to real sharing of expertise among all members of the group. During the design phase, you will....

1. Complete a role assessment worksheet to better understand the collaborative role of different stakeholders in the process (see page 13-14);

2. Confirm the problem statement and purpose for the collaborative process that you will include in your invitation to participate;

3. Develop activities that will engage stakeholders in a way that brings diverse knowledge and skills to bear on shared objectives;

4. Develop facilitation and knowledge management skills within your team, or secure competent, outside facilitators to assist in the implementation of your process.
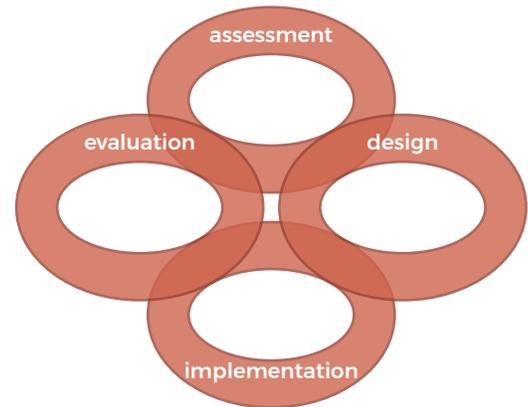
Phase III: Implementation

A Collaborative Learning event engages participants in a stepwise process of outcome-focused problem solving. There are 10 elements needed to implement such a process successfully. These are based on what social science teaches us about how adults learn, and how to apply learning to problem solving and action. These elements are covered in the Implementation section beginning on page 22.

Phase IV: Evaluation & Adaptive Management of the Collaborative Learning Process

Evaluation is the iterative process of attending to, documenting, and reflecting on how your progress to improve a situation compares to the goals and objectives that have been set for each phase of a collaborative project. Effective evaluation accounts for....

1. Changing stakeholder perceptions on the situation being addressed;
2. Factors contributing to the usefulness of the Collaborative Learning process;
3. The effect of a Collaborative Learning process on participants' views of stakeholders;
4. The generation of a collaboratively developed vision (plan, practices).

Pages 28-29 provides example questions for evaluation.

Collaborative Learning Phase I: Assessing Your Situation for Collaborative Potential

How do you determine if Collaborative Learning is appropriate for a situation that you want to improve?

Every collaborative process starts with an assessment of the system(s) that encompasses the situation you would like to improve. Interviews, meetings, and review of policy documents are common methods you can use to conduct a thorough assessment.

Assessment is guided by questions that are derived from the **"progress triangle"** concept. The progress triangle is a three-element framework for analyzing conflicts and evaluating the collaborative potential of a situation. Using the progress triangle framework, you collect information that tells you about the **relationships** among people who care about a particular situation, the **processes** that have been identified as being effective and ineffective for working within that situation, and the **substance** (information) required to understand and improve the situation. When sufficient information about each of these elements has been collected, a final analysis will help you determine whether a Collaborative Learning approach is appropriate for the situation at hand.

An example of an Assessment Interview begins on page 10. This assessment can be used to explore the relationships, processes, and substance of a situation.

Phases of Collaborative Learning

Progress Triangle
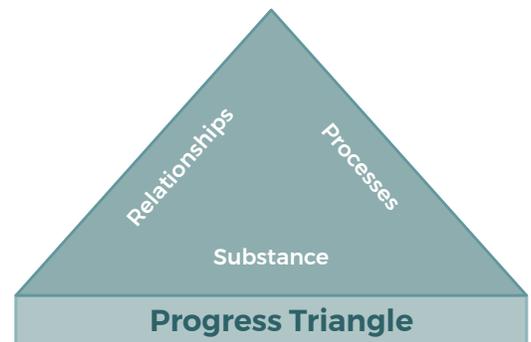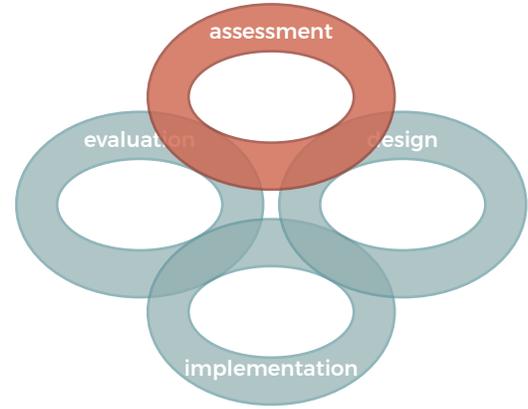
Example Assessment Used to Prepare for a Collaborative Learning Event

The assessment for a collaborative learning event begins months in advance. For this example, the planning team shared their knowledge of the substance, relationships, and processes that drive the situation they hoped participants would want to address. Together, they began to explore the collaborative potential of the situation and then broadened this exploration with interviews with issue stakeholders who might attend the event. The interviews data provided knowledge to modify the agenda and prepare the facilitators so they could support a productive experience for all involved. The process used for designing and conducting these critical interviews is outlined below. This is a needs assessment interview. See page 31-32 for an expanded interview protocol.

Number of interviewees

Determine the number of interviews based on your knowledge of potential participants. If the group's perspectives are homogeneous and there is little conflict, five interviews should provide the information needed to prepare for the event. If you anticipate multiple, issues-based groups, try to interview one person from each issue group.

Interview process

1. In the space provided on the interview form on the next page, [option 1] record the situation you think can be improved through a collaborative process or [option 2] provide an example of such a situation to prompt the interviewee to supply their own.

2. Assure interviewees that their responses are confidential. Explain that their information will contribute to a needs assessment for a Collaborative Learning event. It will not be attributed to them in the event, and their role as one of the people providing input will not be revealed.

3. Read the introductory paragraph on the interview form; allow time for questions from the interviewee.

4. Read each question slowly, exactly as written. Allow interviewees ample time to answer. Use the "prompt" for each question only if needed

5. If you feel an interviewee did not fully answer a question, you can prompt them using specified prompts, or general phrases like, "Anything else?" "Tell me a little bit more about that" or "What exactly do you mean by _____?"

6. Do not share stories or express opinions related to the interviewee's subject matter.

7. Record responses as accurately as possible for each question; you may use separate forms for each interview. Combined answers from all interviews may be organized into a table to look for patterns across the interviews.

8. The planning team uses this data to design the Collaborative Learning event.

Needs Assessment Interview Form

Interviewee name: _____

Date of Interview: _____

Location of Interview: *(this may be by phone)* _____

Issue of concern: _____

Organization or affiliation: _____

Professional role/title: _____

Contact Information: _____

Brief description of interest, skills, reputation, involvement, knowledge, strengths etc.:

Introduction script: To prepare for the training/workshop I'd like to take advantage of your familiarity with the *[insert your general description of situation that you believe this person is in a position to help improve.]* Your responses are confidential. The purpose of collecting this information is to help the planning team enhance materials and activities. It will not be attributed to you in the training and your role as one of the people providing input will not be revealed. This should take about 20 minutes. Do you have any questions before we begin?

1. **Describe the situation that needs to be improved, as you see it. Prompt if needed: What are the issues that contribute to this situation?** *Answers will provide insights into all aspects of the progress triangle: relationships, process, and substance.*

   _____

   _____

2. **Who do you consider to be the essential decision makers in this situation?** Prompt if needed: What do you know about each decision maker's values (what they care about), concerns, and fears (aspects that might be barriers to improving the situation)? *Answers provide insights on relationship aspect of progress triangle.*

   _____

   _____

3. **Do you think decision-making about this situation can be shared?** Prompt if needed: Can you think of any jurisdictional, legal or organizational aspects of the situation that affect the degree to which collaborative decisions can be developed and implemented? *Answers provide insights on relationship and process aspects of progress triangle.*

   _____

   _____

4. **What past policies or actions have been used to deal with this situation?**
    Prompt if needed: Are there effective actions or policies that could be used to facilitate action? Are there past failures that are important to understanding the situation? *Answers will provide insights into all aspects of the progress triangle: relationships, process, and substance.*

    _____

    _____

5. **What information or data is needed to improve this situation?** Prompt: Are there key information needs or gaps that should be addressed as part of the process? Are there guidelines or standard operating procedures that determine acceptable solutions? *Answers provide insights on substance aspects of progress triangle.*

    _____

    _____

6. **Is there something other than, or in addition to, information or data required to improve this situation?** *Answers will provide insights into all aspects of the progress triangle: relationships, process, and substance.*

    _____

    _____

7. **Is there anything else you would like to add that you think will be important as we prepare for this event?** *Answers will provide insights into all aspects of the progress triangle: relationships, process, and substance.*

    _____

    _____

Stakeholder Role Assessment Activity: Finding the Right People for Your Process

This stakeholder role assessment activity will help you (and your group) define the situation you will focus on for a meeting/workshop and identify the right stakeholders to participate in the Collaborative Learning process. This activity is normally conducted by the planning team designing the Collaborative Learning event. It begins with individual reflection, followed by a facilitated small group discussion, and group completion of a role assessment table.

Stakeholder Role Assessment Step 1: Individual Reflection

The activity begins with your individual reflection on the three questions below. Your group will use the answers you provide to these questions to complete the role assessment table on the next two pages, so be prepared to share your thoughts!

The situation that I would like to improve is....

_____

_____

_____

Who do you consider to be the essential decision makers in this situation?

_____

_____

_____

What do you know about each decision maker's values (what they care about), concerns, and fears (aspects that might be barriers to improving the situation)? *Use the stakeholder assessment interview responses (page 11-12) to answer this question.*

_____

_____

_____

_____

Stakeholder Role Assessment Step 2: Defining the Roles in a Collaborative Process

After the individual reflection in Step 1, a facilitator can guide your group in comparing and discussing individual descriptions of the situation and reflections on potential participants. During the discussion, use the role descriptions below to think about each potential participant's role(s) in a collaborative process. After completing the table on the next page, return to this checklist to see if your group has included representatives for each category in the list of potential participants.

- ☐ **Participant:** Has an interest but no strong position. A participant wants to be involved but is not a primary voice for a particular point of view or outcome.

- ☐ **Advocate:** Holds a strong position on one or more of the major issues, generally a primary stakeholder who is prepared to support a specific policy decision.

- ☐ **Representative:** Participates for or advocates on behalf of a group or organization, may or may not have decision authority.

- ☐ **Decision maker:** Has authority to make and implement a decision. Establishes decision parameters and decision space (how much of the decision authority can be shared).

- ☐ **Information provider:** Provides data or information pertaining to issues in the situation, may be a technical expert or source of local knowledge.

- ☐ **Initiator:** Identifies the need for a Collaborative Learning process, may then become the convener or sponsor.

- ☐ **Convener:** Brings parties together and provides a venue, may also participate in process design. Internal organizational support for the Collaborative Learning process is critical.

- ☐ **Sponsor:** Provides public support for the Collaborative Learning process or may provide resources. Internal organizational support for the Collaborative Learning process is critical.

- ☐ **Designer:** Develops the Collaborative Learning event or series of events to accomplish group goals, may be a planning team or steering committee.

- ☐ **Facilitator:** Guides the process in an impartial manner, may be internal member of a convening organization or an external consultant.

- ☐ **Evaluator:** Analyzes input collected during the Collaborative Learning event, may be a planning team or steering committee member or an external consultant.

Role Assessment Step 3: Group Completion of a Role Assessment Table

With support from your facilitator, your group will combine individual reflections to complete this table on a flip chart.

Situation to be improved: _____

Team members: _____

Potential participant in collaborative process	What is important to them (related to your team's situation)?	Role they would play in a collaborative process?

I can see myself in the role(s) of _____

Key Skills Used in Assessment and Throughout a Collaborative Learning Process

The social science disciplines that are the basis for Collaborative Learning provide methods and tools that can contribute to shared learning and conflict resolution. This workbook focuses on three powerful skills for effective collaboration and generation of high impact outcomes:

- Mental and cultural model awareness

- Active listening

- Skillful discussion

Using Cultural and Mental Models to Understand the Situation You Want to Improve

It ain't what you don't know that gets you into trouble.

It's what you know for sure that just ain't so. — Mark Twain

A mental model is a simplified representation of an individual's thought process about how something works in the "real world." Mental models function like maps, templates, and field guides as we move through the world, allowing us to unconsciously recognize the familiar, categorize without thinking, and link novel experiences to what we already know.

Our mental models allow us to recognize a borzoi as a dog the first time we see one. When we order lunch, eat, and pay the check in a restaurant, we draw from script-like mental models that guide and constrain our behavior. We all use mental models to interpret and explain our experiences, make inferences and conclusions, and solve problems.

When mental models are shared within a culture or social group, they become cultural models. Cultural models also motivate us to act and guide our behavior. Members of a social group use these shared perceptions and attitudes about how the world works unconsciously, taking for granted that certain kinds of language and metaphors are shorthand for complex ideas that everyone understands. Our cultural models help us communicate with members of groups who share our way of thinking, but they can hinder communication with people outside of those groups.

Mental and cultural models are cognitive concepts that organizers of a Collaborative Learning process can draw on to facilitate communication and to identify potential barriers to learning and cooperation in a group. Unexamined mental and cultural models can include false assumptions about what people in a group know and care about. The activities and tools in this workbook will help you become more aware of the mental and cultural models used by diverse stakeholders in the situation you are trying to improve. The **Collaborative Learning Guide** is a case study of how an understanding of the cultural models of water was used was to design the Protecting Our Children's Water project in Southern Maine. The Guide and a primer on cultural models are included in the References for this workbook.

Active Listening to Understand, Interpret, and Evaluate What You Hear

The ability to listen actively can improve relationships by reducing conflict, strengthening cooperation, and fostering understanding. Practicing the key elements of active listening listed below will enhance your participation in discussions during collaborative meetings. Active listening also has the potential to amaze colleagues and friends if you practice in settings beyond this training:

- ☐ Listen openly and actively with a focus on learning what people think.

- ☐ Withhold judgment until the other person's view is understood.

- ☐ Ask questions for understanding before responding.

- ☐ Give everyone equal opportunity to speak.

- ☐ Focus on concerns and interests rather than positions.

- ☐ Examine future improvements rather than dwelling on the past.

- ☐ Emphasize the situation rather than the people.

- ☐ Value disagreement and constructive argument.

- ☐ Look for ways to achieve mutual gain or win-win outcomes.

- ☐ Regard others' views as legitimate and deserving respect.

Using Skillful Discussion to Make Real Progress in Your Collaborative Process

Skillful discussion is a technique you can use to enhance your understanding of the systems that surround your situation. The intent is to foster decision-making on actions that move the group forward. The ability to conduct a skillful discussion supports the generation of action strategies and the implementation of tasks to improve your situation. People leave a "skillful discussion" with priorities for action and a timetable for progress. Skillful discussion requires:

- An "even playing field" where all participants treat each other as colleagues;

- An atmosphere of openness and trust so group members feel secure enough to speak freely without fear of ridicule or ramifications;

- Group agreement to keep discussion content within the confines of the group process;

- A situation in which exchange of points of view and new perspectives takes precedence over "selling" new ideas;

- An agenda, time (2 hours minimum), and context to allow for skillful discussion to happen;

- That every participant expects to talk about the same subject.

How to Engage a Skillful Discussion

1. Be aware of your own intentions: What do you want from this conversation? Are you willing to be influenced, to change your mind?

2. Balance advocacy with genuine inquiry: Ask others - what led them to their views? What do they mean by their statements?

3. Build shared meaning in your group: When we (your group) use the term _____, what are we really saying?

4. Use self-awareness as a resource: What am I thinking? What am I feeling? What do I want at this moment?

5. Explore impasses by taking time to assess: What does our group agree on, and what do we disagree on?

Additional resources on active listening and skillful discussion are included in the Resources section of the workbook, starting on page 34.

Managing conflict

Conflict is a part of any Collaborative Learning process. During assessment, you may discover sources of conflict that have the potential to derail your work. The conflict assessment questionnaire on page 33 can be used to focus a planning team's thinking about this conflict and to design a Collaborative Learning event to address the conflict. This can also be used to determine that the collaborative potential of the situation is too low for success. Collaborative Learning does not fit every situation.

Situation Map Activity: Revealing Mental and Cultural Models to Find & Describe Common Ground for Resilience Dialogues

The situation map activity is the foundation of the Collaborative Learning approach. One objective of the situation mapping activity is to build shared understanding of the system within which the situation is embedded. A second objective is to reveal the diversity of mental models used by stakeholders to think about the situation and to begin to understand, without judgement, the diverse ways individuals view the situation.

Creating a situation map facilitates discussion and enables a group to find common ground among diverse perspectives and to "get on the same page" in preparation for improving a situation. You can use this tool in all phases of Collaborative Learning. For example, a planning team could create a situation map in initial discussions to brainstorm the scope of a project or to develop a stakeholder list or to identify areas of conflict. Situation mapping is frequently used to launch a Collaborative Learning process, as it provides a record of early thinking that can be used to measure and chart progress.

Guidelines for Generating a Situation Map

This small group activity is designed to engage each participant in deeper thinking and discussion about the systems within which Resilience Dialogues take place. Using active listening and skillful discussion, participants reveal and understand the mental models people are using to think about the situation. Skillful discussion during this activity brings individual ideas to light for group reflection. The goal is to improve collective understanding of the system and generate ideas that can contribute to improving the situation.

To practice using this tool, participants will break into groups. Guided by a facilitator, each group will create a situation map by following the steps outlined below. The facilitator will provide an overview of the subject and purpose for the map, and give each person a bold marker and large sticky notes in three colors (this will inspire big thinking!).

Step 1: What are the values of the situation you are working to protect? What is important to you? Values can be social or ecological.

Examples: Protecting my ability to make a living on the water; protecting sources of clean drinking water; protecting my home from erosion; protecting coastal wetlands from sea level rise.

Each person uses individual green stickies to record 1-3 values. Place each sticky in the center of the poster paper. The facilitator leads a discussion of whether these values can be combined into categories and asks, "What are we missing?"

Step 2: What are the threats or barriers to protecting what we value in this situation?

Each person uses red stickies to record 1-3 threats or barriers. Place each sticky around the outer edge of the paper, surrounding the values. The facilitator leads a discussion of whether these threats/barriers can be combined into categories and asks, "What are we missing?

Step 3: Individual consideration of the question: What is one way to protect what you value from the threats identified?

Each person uses a blue sticky to describe one way that threats can be reduced and what they value can be protected. Place each sticky in the space between the threats and values. Each person describes how their idea protects what is valued. If time allows, the facilitator can ask the group to identify additional ways that the values can be protected.

Step 4: The facilitator will lead a skillful discussion about how members of the small group see their work as part of a system affecting the situation they are working to improve.

Step 5: Small groups reconvene to share important outcomes of the activity. Through skillful discussion and active listening, ideas from each group are combined to build a situation map where all ideas are represented.

Step 6: Analyzing the qualitative data in the situation map to reveal mental models requires you to look for patterns in the way people are thinking about the situation. This analysis is normally done by the planning team or you as an individual facilitator after the meeting. Begin by making a simple list of the responses for each question. Below are sample questions used to analyze the mental models revealed in a situation map from a workshop focusing on **protecting coastal wetlands from erosion**.

1. How do people **value** coastal wetlands?

2. What do people think are **threats** to coastal wetlands?

3. How did people attach **blame or responsibility for threats**?

4. How do people think about **cause of threats** and **effects on what they value**?

5. How did people talk about a **path** from the **source of a threat to its impact on a value**?

6. What do people think are the **ways to protect** the values of coastal wetlands?

7. What did you learn about the ways people assign **responsibility for solutions**?

Planning team members should complete the analysis questions individually. During a facilitated discussion with the entire team, individual results are discussed to recognize and understand the **scope and diversity of mental models** being used to think about **what is valued, how threats are perceived** and **how people think progress can be made.** This knowledge can be used to design the next Collaborative Learning event. By making mental models visible, these results can guide discussion by tapping into the collaborative potential of the group.

Collaborative Learning Phase II: Designing the Collaborative Learning Process

The objectives of the design phase of Collaborative Learning are to plan for an event that brings the right stakeholders together to identify and make progress on shared objectives through group generated ideas and actions. Careful design, based on knowledge gained during the assessment, will transform interactions within a problem-solving team from the passive receiving of information from outside experts to sharing of all participants' expertise.

Phases of Collaborative Learning

It's important to design activities that will respect and leverage the knowledge, expertise, and time constraints of all involved. Thoughtful design will help you manage conflict and uncertainty by orienting and focusing group energy, knowledge, and expertise on improving aspects of the situation that everyone cares about. You will find that enjoyable activities that provide opportunities for participants to go outside and visit the "natural resource" in question have surprising power to drive innovation and resolve conflict. For example, a boat trip on a river may be a great setting to discuss the value of buffer lands under consideration for zoning. Effective collaborative processes are guided by a **social contract** between the conveners and all participants that includes the following promises:

- The event will be based on solid assessment of a situation relevant to all participants.

- The event will be "safe"—participants should feel safe to interact as they choose, safe to speak, and to challenge dominant ideas.

- There will be respect for knowledge in the room—conveners will engage the **kaleidoscope of expertise** (see Collaborative Learning Guide for Ecosystem Management in references) and facilitate relationships based on authenticity and respect.

- Participants will be able to learn by doing, with self reflection.

- This will be an iterative process: While Collaborative Learning can be one time event, it's better for long term engagement of problem-solving teams.

- The process will be mindful of how adults learn and process information: This includes the cognitive, affective, and psychomotor process that people use to interpret a situation, make decisions, and evaluate alternatives.
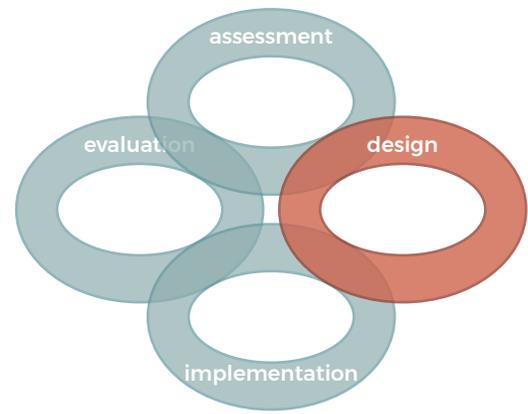
Collaborative Learning Phase III: Implementing the Collaborative Learning Process

Implementing a Collaborative Learning event requires 10 essential elements based upon what social science teaches us about how adults learn and apply learning to problem solving and action. Think of each of the ten elements as steps in a recipe or instructions for assembling a gadget. In these examples, steps are followed to achieve a clear outcome. Likewise, a Collaborative Learning event engages participants in a stepwise process of outcome-focused problem solving.

We've grouped the ten essential steps of Implementation into four categories that reflect the stages of a Collaborative Learning event. Copies of all worksheets are provided, beginning on page 36.

Phases of Collaborative Learning

Setting the Stage for Action Directly Connected to Participants' Expertise

1. Begin the event by providing orientation to its purpose, process, outcomes

2. Establish relevance to the work of participating stakeholders

3. Connect the event to participating stakeholder values

Build Shared Understanding

4. Build shared understanding by creating and synthesizing situation maps that capture the diversity of perspectives and reveal shared goals (see page 19)

Moving from Individual Reflection to Group Brainstorm Ideas for Improvement

5. Generate your ideas for improving the situation ("The way I see it" worksheet on page 36)

6. Include a listening session for most promising ideas

7. Discuss and evaluate individual ideas in small group brainstorm. Identify Most Promising Ideas (see page 25) using criteria agreed upon by the group

Develop Action Strategies with a Path to Outcomes

8. Move from Ideas to Action – complete group Worksheet

9. Visualize the Path from Action to Outcomes

10. Develop Measures of Success and accountability to evaluate progress and guide adaptive management for long term projects – complete group Worksheet

(Day one of the two-day training covers steps one through four; day two of the training focuses on activities described in steps five through ten.)
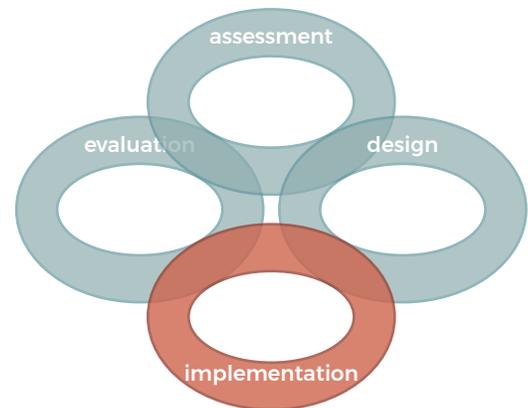
Rolling Up Your Sleeves to Practice Implementation

This series of activities will lead you through the final six steps of implementing a Collaborative Learning event. By continuing to work with your small group, you will have the opportunity to use a series of focusing worksheets to generate ideas, facilitate discussion, and co-create knowledge about your situation and ways to improve it to reach desired outcomes.

Remember, the goal of this workbook is to build your capacity and empower you to use Collaborative Learning in your work with partners and stakeholders to achieve resilience outcomes. These implementation activities demonstrate the basic architecture of a Collaborative Learning event. After this training, we hope that you will work with a planning team to conduct your own assessment and design a Collaborative Learning event that adapts this basic architecture to your situation. *Copies of all worksheets that can be adapted to fit your situation are available starting on page 36.*

Implementation Step 1: "The way I see it…"

Each participant fills out the "The way I see it" worksheet that is provided separate from this workbook. The questions are designed to stimulate your thinking about the relationship, process and substance aspects of your situation as they relate to your work.

Use your personal expertise and understanding of the issue, as influenced by day one of the training, to respond. We've included an example of the detail that would be appropriate in the sample worksheet below. *A copy of the worksheet is available on page 36 of the Resources section.*

Example: "The way I see it…" Worksheet

Name: Dr. Who | **Phone:** 415: 827-3471 | **Email:** overworked@witsend.org

Think about the current challenges of the situation concerning *Sustaining ecosystem services in the Saco Estuary*. Reflect on the group discussion as you created the situation map, listened to presentations or reviewed a proposed plan of action.

What part of the situation is important to you? *Making connections between scientific findings about biodiversity values of fringing marshes and land use policies that affect riparian buffers.*

What are your specific concerns and interests about these issues and why are these issues important to you? *Land use decision-making of property owners, planning boards, and code enforcement recognizes property rights without assessing tradeoffs related to the role of fringing marshes in pollution attenuation and habitat for birds and commercially and recreationally important species of fish. Granting variances allows increased impervious cover, nutrient runoff from lawns and precludes future marsh migration in the face of sea level change.*

What can be done to improve this situation? (For this activity, choose one improvement as your focus.)

An improvement may be an action, project, or management approach you think is desirable and feasible. Describe the improvement, being as specific as possible. *Use scientific understanding about the correlation between adjacent land use and fringing marsh ecological integrity to create scenarios that make tradeoffs more explicit. For example, three scenarios could be graphically displayed to show*

1. *Undisturbed forested buffer results in fringing marsh that is habitat to 12 species of migratory songbirds and foraging by 8 species of fish.*

2. *Moderately disturbed buffer results in fringing marsh with evidence of nutrient runoff and partial invasion of Phragmites resulting in habitat for 4 species of birds and 5 species of fish.*

3. *Development of hardened shoreline extends to fringing marsh experiencing erosion from wave reflection. This scenario has 80% coverage by Phragmites resulting in habitat for 2 species of birds and foraging use by 2 species of fish.*

Use this information in a Collaborative Learning workshop engaging scientists and the land use decision-makers in an evaluation of the impacts of current land use policies and practices.

Why is this improvement desirable? *Science relevant to decision-making is used to develop tradeoff scenarios that can be used to examine current policies and desired outcomes through collaborative dialogue.*

Is this a short-term or a long-term improvement? *Collecting the relevant science and developing scenarios can take time. If stakeholders are engaged in the process there will be increased probability of long-term improvement.*

How is this improvement feasible? For example, who might be responsible for implementation? How might your improvement be funded? Be as specific as possible. *With grant funding UNE researchers can involve students in data collection and analysis. The Center for Sustainable Communities can work with researchers to engage community land-use decision makers in dialogues to connect the science to local policies and assess consequences of tradeoffs.*

What obstacles currently stand in the way of making this improvement? How might those obstacles be overcome? *Maintaining adequate funding to complete the ecological analysis correlating land use and fringing marsh ecological integrity and to engage stakeholders in dialogue to evaluate current policies in light of the science is an obstacle.*

How does this improvement relate to other aspects of the situation? *Climate change impacts on fringing marshes are connected to adjacent land use which is connected to the land use decision-making system.*

What people or views must be considered when designing the improvement? *The concerns of shoreland property owners must be acknowledged and respected. Engaging property owners from the outset in discussion is critical.*

Implementation Step 2: Listening for Most Promising Ideas

Building upon The Way I See it... reflection, each person shares their most promising idea in a listening session with a partner. A listening session requires leaving the room and taking a 20 minute walk during which each partner has 10 minutes of uninterrupted time to share their idea and explain the thinking behind that idea.

Implementation Step 3: Most Promising Ideas Group Brainstorm

During a facilitated brainstorming session, the group reviews the criteria for "most promising ideas" below, focusing on your situation. Your group will then discuss the individual ideas generated during the Most Promising Ideas listening activity and identify the ideas that rise to the top or can be combined as the group moves forward to develop action strategies. The resulting group generated list of ideas becomes the basis for the "Ideas to Actions Worksheet" in step 4.

You'll know an idea is **promising** when it...

- Makes the work that someone is already doing easier and more efficient
- Is achievable in the timeframe identified by a project
- Is connected by a clear path to desired outcomes
- May be achievable as the first step of a complex long-term strategy
- Respects the realities of the culture within which stakeholders work
- Provides missing information vital to the project
- Identifies key stakeholders not present in the room
- Reveals important policy connections that can be linked to outcomes
- Identifies concrete management practices that can be linked to outcomes

Implementation Step 4: Ideas to Actions Worksheet

In this facilitated session you will use your group's Most Promising Ideas and complete an Ideas to Actions worksheet. An example is provided on the next page. When resources are available, for a group to work with a skilled facilitator and a note taker, the results can be produced and available at by the end of the meeting. Depending upon your training resources, this worksheet can be completed on a flip chart or typed on a computer and displayed with a projector in real time. Flip chart results can be prepared after the meeting and shared with the group. A record of a Collaborative Learning event should be prepared in draft for review by participants before being made final. Formal White Papers and Proceedings can be produced as outputs from a Collaborative Learning event.

Example Ideas to Actions Worksheet

Most promising idea	How will this idea improve the situation?	What actions would make this idea a reality	Who needs to be involved to implement the idea?	What do we need to be aware of?
Identify sources of nutrients through monitoring land-based runoff	Policies and management actions can be targeted to known sources and improvements in water quality can be compared against a baseline	1. Examine existing water quality data for nutrient hot spots 2. Conduct field surveys for evidence of nutrient runoff such as algal blooms 3. Contact local watershed group to request monitoring of hotspots this summer 4. Apply for grant money to expand capacity of volunteer water quality network and account for increased lab costs 5. Contact landowners for information on nutrient applications	1. Americorps summer intern 2. Watershed volunteers 3. Project team 4. Co-op extension and Soil and Water Conservation District	Take action to find evidence for and quantify land-based runoff. Important to examine our assumptions and identify the source of inputs. What about septic and atmospheric inputs?

Implementation Step 5: Visualize a Path from Action to Outcomes

Actions guided by a clear mental model of desired outcomes and the path connecting the two have a greater possibility of success than actions taken without a systematic assessment of the relationship, process and substance aspects of the situation. What is the likelihood, for example, that scientific findings will be used if the first time a scientist thinks about connecting them to management is at the end of a research project?

In this step, participants will take some time to think about their mental models of the path that connects actions identified by their group to improvements in the situation they have collectively described. Visualize action items successfully completed. Who will be affected? How will the situation be changed? For example, if you envision a decision support tool or a model to improve decision making, who is using what you have created and how are their actions improving the situation that you care about? Use these ideas to develop the Measures of Success Worksheet.

Implementation Step 6: Measures of Success Worksheet

In this facilitated session, your small group will select one or two action items from the Ideas to Action worksheet and complete the Measures of Success worksheet.

Example: Measures of Success Worksheet

Improving the situation: *to Sustain Ecosystem Services in the Saco Estuary*

Idea to Action to Outcome: *Identify sources of nutrients through monitoring of land-based runoff so that policies and management actions can be targeted to known sources and improvements in water quality can be compared against a baseline.*

Action Items	Measures of Success	Accountability	Comments
1. Examine existing water quality data for nutrient hot spots	Existing data is examined for geographic scope, sampling timeframe, database is created; hot spots are mapped	Americorps Intern under supervision of Stewardship Coordinator by October 2021	Identify gaps in coverage of existing sampling regime. Share results within the sampling network.
2. Conduct field surveys for evidence of nutrient runoff such as algal blooms	Thatcher Brook watershed survey completed Summer and Fall 2021	Saco River Corridor Commission and Saco River Salmon Club Volunteers, Coordination and support by Americorps Intern by October 2021	Training will be needed and volunteers supervised
3. Contact local watershed group to request monitoring of hotspots this summer	Volunteers agree to monitor top 10 priority hot spots	Same as above July 2021	Same as above Host cookout and boat trip at end of summer to celebrate volunteer accomplishments
4. Apply for grant money to expand capacity of volunteer water quality network and increased lab costs	319 Grant for NPS Pollution Reductions	Stewardship Coordinator NERR and Soil and Water Conservation District Next cycle March 2022	Look for community grants supporting local action and local business support. Consider partnering with schools for monitoring in the future
5. Contact landowners for information on nutrient applications in regions of hot spots	Presentations to each of the local farm co-ops in the region and to municipal officials with cable access broadcasting. Contact 80% of landowners by February 2022	Co-op extension and Soil and Water Conservation District working with local champions and land owners	Design questionnaire for landowners using landowner input. Link message about nutrient reduction to existing incentive programs that support landowners' actions to improve the situation

Collaborative Learning Phase IV: Evaluation of the Collaborative Learning Process

In Collaborative Learning, evaluation is not an end of pipe activity. It is an iterative process of attending to, documenting, and reflecting on how progress to improve a situation compares to the goals and objectives set for each phase of a collaborative project. During evaluation, there are a variety of opportunities for you and your group to make the course corrections necessary to reach shared goals in an efficient and productive way.

Evaluation engages everyone involved in a Collaborative Learning process. Individuals evaluate their own participation and their achievement of personal action items that contribute to the larger strategy generated by the group. Planning team members evaluate the design and implementation of a Collaborative Learning event and group progress toward shared goals.

Phases of Collaborative Learning

With your planning team, you can develop an evaluation strategy that matches the needs and scope of your Collaborative Learning process. The list below contains examples of the aspects of a Collaborative Learning event that can be evaluated by the group and contribute to building community and ecosystem resilience.

- **Changing perceptions of the situation being addressed:** A natural consequence of Collaborative Learning is the evolution of understanding of a situation as multiple perspectives are discussed. Documenting these changes is an important role for evaluation. Records of meetings, grant reports, and action plans are examples of what you can use to document change. Posing open-ended questions in an interview or survey also can explicitly capture this; for example,

  How has your understanding of the situation changed as a result of your participation in this partnership?

- **Factors contributing to the usefulness of the Collaborative Learning process:** The objectives of a Collaborative Learning process can be accomplished in a variety of ways. Evaluating the effectiveness of a specific design element to achieve objectives can be a part of a post event survey. An example of a Likert Scale survey question:

  The use of keypad poling to rank action items was a good way to evaluate our priorities. **Response choices:** strongly agree-agree-disagree-strongly disagree-cannot rate.

- **Judgments concerning the Collaborative Learning process:** Collaborative processes are designed to provide equal opportunities for all voices to be heard and to generate ideas for improving a situation of shared importance to a group. Evaluating the process for perceived fairness can be important, especially when the results of a group's work together are incorporated into a plan of action that must be approved by a governing body. An example of this is the development of a town Conservation Plan.

  Through a series of public meetings where Collaborative Learning was used to develop a plan, participants were asked at each meeting to evaluate the fairness of the process. Examples of questions posed using keypad poling and a corresponding Likert Scale for response included:
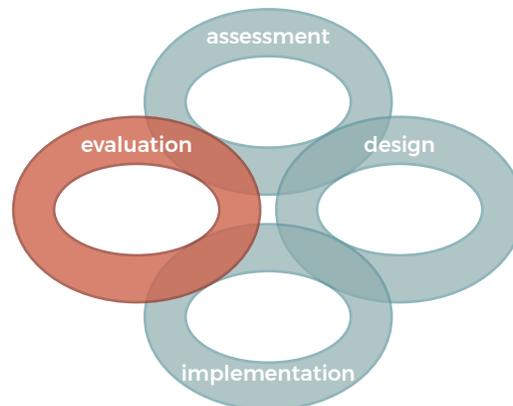
I had a chance to voice my opinions about conservation priorities. My priorities for conservation in our town are included in the five conservation values. I feel that my opinions were respected and captured in the list of important agricultural lands.

- **Effect of a Collaborative Learning process on participants' views of stakeholders:** The progress triangle emphasizes the role of relationships in making progress on a situation. Evaluation can ask if the right stakeholders have been included as well as documenting how stakeholders' views of each other and their contributions to improving the situation change.

  Who else should the researchers contact as we develop our decision support tools?

  Interacting with town planners at the workshop contributed to the design of my research to document the effects of stormwater in tidal creeks. (Likert scale question)

- **Generation of collaboratively developed vision (plan, practices):** Collaborative Learning can facilitate holistic management approaches like ecosystem-based management and watershed management that depends upon a collaboratively develop vision of desired future outcomes. Such visions, and the road map for achieving them, are frequently expressed in the form of action plans or best management practices. These final documents or protocols can be used as benchmarks to evaluate and track progress in the future. A sample action item for watershed management is included in the Resources section on page 40. The elements of this action item were generated by the Collaborative Learning process described in **The Collaborative Learning Guide** and are designed to be used to evaluate progress as the Watershed Council continued to work together to protect water quality.

Collaborative Learning Tools & Resources

Tools & Resources for Collaborative Learning

This section is a collection of resources and tools that you can use to assess, design, conduct and evaluate Collaborative Learning events. Copies of templates in an editable format are available from https://www. wellsreserve.org/project/the-resilience-dialogues

Assessing the Collaborative Potential of a Situation

The questions in steps 2 through 4 below were derived from the progress triangle framework, referenced on page 9 of this workbook. As a reminder, the progress triangle is a three-element framework that describes the **relationships** among people who care about a particular situation, the **processes** that have been identified as being effective and ineffective for working in that situation, and the **substance**(information) required to understand and improve the situation.

Members of a planning team may answer the full set of questions. When designing your stakeholder assessment protocol for a larger set of stakeholders, you do not have to ask every question listed below; choose those that best fit your circumstances and time you have available to conduct the assessment and analyze the data. Make sure to ask about the situation (step 1) and choose at least one question from each category of the triangle—relationship, process, and substance.

Step 1: Describe the situation that needs to be improved as you see it.

Step 2: Select from the following questions designed to evaluate the relationship dimension of the situation that has been described.

a. Who are the primary parties directly involved? What are their skills and level of knowledge of the situation?

b. Are these parties willing to collaborate? To what extent? Can those opposed to collaboration be persuaded to try?

c. What is the history among the major parties?

d. What is the degree of trust among the parties and how might it be improved?

e. Who are the essential decision makers? What do you know about their values, concerns and fears?

f. What are the power relationships, sources of conflict and incentives to collaborate?

Step 3: Select from the following questions designed to evaluate the process dimension of the situation.

a. What methods other than collaboration might the parties use to pursue their goals? Are there traditional approaches to problem solving that support or conflict with a collaborative approach?

b. Can decision-making about this situation be shared? Are there jurisdictional, legal or organizational aspects of the situation that affect the degree to which collaborative decisions can be developed and implemented?

c. Are there sufficient resources of time, staff, expertise and money to conduct a Collaborative Learning process? Are there needs for design and facilitation by an impartial party?

d. What are alternative methods that might be used that include key parties and require less resource use?

Step 4: Select from the following questions designed to evaluate the substance dimension of the situation.

a. What are the issues important to this situation?

b. Do the issues vary among the parties?

c. Which of the issues are tangible?

d. Which of these issues are primarily symbolic?

e. Are there differences in how the major parties understand the situation, define the issues, and prioritize the issues?

f. What are the parties' interests and concerns about the issue?

g. What policies or actions have been tried in the past to deal with this situation?

h. What are the key information needs (data) or information gaps that should be addressed as part of the process? Is the information accessible and understandable?

Step 5: Evaluation—Will Collaborative Learning get the job done? When the interviews are complete, use the data you have collected to consider the following questions about the stakeholders you will engage...

- Is there recognition of interdependency and acceptance and respect for diverse perspectives?

- Is there commitment to learn and understand from sources considered credible and reliable?

- Is there desire for situation improvement and recognition of the potential for mutual gains?

- Can decision-making be shared?

- Is there a shared sense of responsibility for outcomes?

- Is there evidence of flexibility about ways to share and analyze information and reach agreement?

- Are there sufficient resources to implement a collaborative process over the time required?

If the answers to these questions are "yes," the collaborative potential of the situation will support a Collaborative Learning process.

Interview process for Assessment

An interview is an excellent tool for collecting in depth data about people's perspectives and knowledge. Observing tested interview protocols will help you collect data that will be the most informative for your assessment. Page 11 provides an additional example assessment.

Conflict Assessment Worksheet

Gregg Walker and Steven Daniels developed the principles and practices of Collaborative Learning to help natural resource managers understand and resolve sources of conflict in order to create group generated improvement for complex natural resource challenges.

Your assessment may reveal sources of conflict that require special attention during the design phase that leads up to a Collaborative Learning event. The following information can be used to guide a planning team discussion or be adapted for an interview with key stakeholders to deepen understanding of the root causes of conflict.

Conflict can arise from a variety of differences of opinion over key concepts, including...

- **Facts** — what is true, accurate, reality?

- **Values** — what should be the determinants of a decision? (Criteria, basis, priority)

- **Interests** — Who will get what in the distribution of scarce resources, both tangible and intangible?

- **Jurisdiction** — Who has authority, standing and legitimacy in the situation?

- **Personalities** — Disagreement over personal styles

- **Places/venues** — Problems with the choice of setting, place, room layout

- **History** — Disagreement over the history of the issue, the conflict, the conflict relationship as perceived by the parties in conflict

- **Culture** — Disagreements that stem from cultural orientations, worldviews and identities. This can include the underappreciated differences in the culture of scientists and managers.

When sources of conflict are identified in the assessment phase and the decision is made that there is still enough collaborative potential to proceed with a Collaborative Learning approach, the time spent assessing the nature of the conflict and incorporating that knowledge into the design of the process increases the chance that the Implementation phase of the process will produce the desired results.

Results of a conflict assessment can be used with the role assessment (page 13-15) to ensure that representatives from all sides of a conflict are included. Sources of conflict can be made explicit and acknowledged at the start of a Collaborative Learning process, followed by a situation mapping activity designed to elicit the shared values and goals that can support collaboration and orient a group toward actions to improve a situation.

Tips for Active Listening During Interviews

To know how to listen to someone else, think about how you would want to be listened to. While the ideas are largely intuitive, it might take some practice to develop (or re-develop) the skills. Here's what good listeners know:

1. Face the speaker. Sit up straight or lean forward slightly to show your attentiveness through body language.

2. Maintain eye contact, to the degree that you all remain comfortable.

3. Minimize external distractions. Turn off the TV. Put down your cell phone. Ask the speaker and other listeners to do the same.

4. Respond appropriately to show that you understand. Murmur ("uh-huh") and nod. Raise your eyebrows. Say words such as "Really," "Interesting," as well as more direct prompts: "What did you do then?" and "What did she say?"

5. Focus on what the speaker is saying. Try not to think about what you are going to say next.

6. Minimize internal distractions. If your own thoughts keep horning in, simply let them go and continuously re-focus your attention on the speaker, much as you would during meditation.

7. Keep an open mind. Wait until the speaker is finished before deciding that you disagree. Try not to make assumptions about what the speaker is thinking.

8. Avoid letting the speaker know how you handled a similar situation. Unless they specifically ask for advice, assume they just need to talk it out.

9. Even if the speaker is launching a complaint against you, wait until they finish to defend yourself. The speaker will feel as though their point had been made. They won't feel the need to repeat it, and you'll know the whole argument before you respond. Research shows that, on average, we can hear four times faster than we can talk, so we have the ability to sort ideas as they come in...and be ready for more.

10. Engage yourself. Ask questions for clarification, but, once again, wait until the speaker has finished. That way, you won't interrupt their train of thought. After you ask questions, paraphrase their point to make sure you didn't misunderstand. Start with: "So you're saying..."

Source: https://www.mindtools.com/CommSkll/ActiveListening.htm

Skillful Discussion: Balance Advocacy with Inquiry

You've chosen a situation important to you—how do you know you are effectively balancing feelings of advocacy with open-minded inquiry? Use self-reflection and this chart to assess.

HIGH	TELLING	GENERATING
A D V O C A C Y	**Asserting:** Here's what I say and here's why I say it. **Explaining:** Here's how the world works and why I can see it that way **Dictating:** Here's what I say and never mind why. (dysfunctional)	**Skillful Discussion:** Balancing advocacy and inquiry, genuinely curious makes reasoning explicit, asks others about assumptions without being critical or accusing. **Dialogue:** Suspending all assumptions, creating a container in which collective thinking can emerge. **Politicking:** Giving the impression of balancing advocacy and inquiry, while; being close-minded (dysfunctional)
	OBSERVING	**ASKING**
	Sensing: Watching the conversation flow without saying much but keenly aware of all that transpires **Bystanding:** Making comments which pertain to the group process but not to the content **Withdrawing:** Mentally checking out of the room and not paying attention (dysfunctional)	**Interviewing:** Exploring others points of views and the reasons behind them. **Clarifying:** What is the question we are trying to answer **Interrogating:** Why can't you see that your point of view is wrong? (dysfunctional)
LOW		

LOW ⟵——————————— INQUIRY ———————————⟶ HIGH

(Adapted from The Fifth Discipline Fieldbook by Senge et al., 1994)

Tools & Resources for Implementation

This section has resources and tools that you can use to implement future Collaborative Learning events related to the issue you addressed in this training or other projects. Copies of templates in an editable format are available from https://www. wellsreserve.org/project/the-resilience-dialogues

"The way I see it…" Worksheet

Name: _____

Phone_____

Email: _____

Think about the current challenges of the situation concerning _____. Draw from your personal experience and professional expertise. Reflect on the group discussion when you created the situation map, listened to presentations or reviewed a proposed plan of action.

What part of the situation is important to you?

What are your specific concerns and interests about these issues and why are these issues important to you?

What can be done to improve this situation? (For this activity, choose one improvement as your focus.) An improvement may be an action, project, or management approach you think is desirable and feasible. Describe the improvement, being as specific as possible.

Why is this improvement desirable?

Is this a short-term or a long-term improvement?

How is this improvement feasible? For example, who might be responsible for implementation?

How might your improvement be funded? Be as specific as possible.

What obstacles currently stand in the way of making this improvement? How might those obstacles be overcome?

How does this improvement relate to other aspects of the situation?

What people or views must be considered when designing the improvement?

Ask yourself… "What am I forgetting?"

Implementation Step 4: Ideas to Actions Worksheet

Facilitator will create a flip chart with these headings to capture group brainstorm. Notetaker can capture ideas during discussion in a typed spread sheet.

Most promising idea	How will this idea improve the situation?	What actions would make this idea a reality	Who needs to be involved to implement the idea?	What do we need to be aware of?

Measures of Success Worksheet

Facilitator will create a flip chart with these headings to capture group brainstorm. Notetaker can capture ideas during discussion in a typed spread sheet.

Situation to be improved: _____

Outcomes Visualized: _____

Action Items	Measures of Success	Accountability	Comments

Example: Action Item for Branch Brook Watershed Council

Document and evaluate ATV impacts on water quality in Branch Brook watershed. Work with landowners, loggers, and ATV users to reduce erosion and protect buffers on privately owned shore lands within the watershed (Excerpt from Watershed Management Plan).

Information to guide action: Use the documented sources of pollution from the *Merriland River, Branch Brook and Little River Watershed Survey* and the *Watershed Management Plan* as a starting point. Tap into the local knowledge of Watershed Council participants.

Who is responsible? An ATV subgroup will work on this issue. Sue offered to provide GPS support for documenting sites. MDEP offered to assist in site surveys. Ben of KKW Water District is already working on the ATV issue and will be posting KKW land. See details under ACTION section below. Maine Warden Service conducts regular patrols and will address enforcement.

When? Begin field assessment in July 2021. Determine scope of work that can be accomplished by end of August. Break this task into a segment manageable during the summer.

ACTIONS

- **Mapping, photo-documentation:** Sue is willing to map the ATV areas. MDEP is willing to go out with Sue to the sites. By September, Ben will have looked at some of the ATV sites, Sue can GPS some of these spots into GIS

- **Impact assessment:** Ben – doesn't have data on whether ATVs are the cause of increased turbidity or not, thinks they are, need to take water quality measurements

- **Posting:** Ben – is considering posting all 750 acres of KKW land for ATVs; should the entire Branch Brook watershed be posted?

- **Enforcement:** – Wells NERR will contact Maine Warden Service about enforcement and the new law – Ken can convince a warden to enforce the law, it would be good to have a list of sites for him, with photos and GPS coordinates

- **Education/outreach:** during summer field assessment gather information about ATV users, access points, awareness of new law, key contacts in the ATV user community

Report on September 2021 to Town Council/Selectmen of each town

- PowerPoint presentation with GIS map of ATV impact assessed during the summer

- Identification of Hot Spots, access points on map and in database

- Challenges for enforcement identified with Maine Warden Service

- Proposals for education and outreach based on knowledge gained in the field

- Determine next steps during October Watershed Council Meeting

Tools & Resources for Evaluation

Audience Response Systems as a Tool for Collaborative Learning Evaluation (and Assessment)

- Collect demographic information

- Evaluate the Collaborative Learning process

- Gather feedback on participant values, attitudes, preferences

- Engage group members

- Pre and post evaluation for community education

- Select and prioritize strategic planning actions

Turning Technologies: http://www.turningtechnologies.com/

Poll Everywhere: https://www.polleverywhere.com/

Internet Resources to Support Collaborative Learning

- The Collective Impact Forum https://www.collectiveimpactforum.org/

- Theory of Change https://www.theoryofchange.org/what-is-theory-of-change/

- Changing Minds http://changingminds.org/explanations/theories/a_motivation.htm

- Headwaters A Collaborative Conservation Plan for Sanford Maine
  http://tos.wwwbus.metrocast.net/ConservationPlan/Sanford%20Conservation%20Plan%2009.pdf

- The Salmon Falls Watershed Collaborative Action Plan
  https://prepestuaries.org/02/wp-content/uploads/2019/08/sfwc-salmon-actionplan_final.pdf

- The Saco Watershed Collaborative Action Plan https://www.sustainthesaco.org/watershed-resources

- Big Dog Little Dog Performance Learning   http://www.nwlink.com/~donclark/index.html

- The Learning Theory into Practices Database
  http://www.innovativelearning.com/teaching/index.html

- Andy Goodman Good Ideas for Good Causes
  https://www.thegoodmancenter.com/about/

- Learning from Experience, a website of natural resource collaboration case studies
  http://www.partnershipresourcecenter.org/

- Crucial Conversations http://www.vitalsmarts.com/

- Bridging the Science to Management Divide https://www.ecologyandsociety.org/vol11/iss1/art4/

- Walker, G. B, S.L. Senecah, and S.E. Daniels 2006. From the forest to the river: Citizens' views of stakeholder engagement. Human Ecology Review, 13(2):193-202. http://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1010&context=sswa_facpubs

- The Partnership for Coastal Watersheds Collaboration Compact (example of an agreement among partners to collaborate)
  http://www.partnershipforcoastalwatersheds.org/wordpress/wp-content/uploads/2011/09/Compact-revise-6-23-11.pdf

References

Materials in this workbook have been adapted from the following:

- *Working through Environmental Conflict a Collaborative Learning Approach* by Steven Daniels and Gregg Walker (2001)

- *The Fifth Discipline Field Book* by Peter Senge et al. (2004)

- Feurt, C. 2006. *Cultural Models - a Tool for Enhancing Communication and Collaboration in Coastal Resources Management*. Available from: https://dune.une.edu/env_facpubs/17/

- *Protecting Our Children's Water, Using Cultural Models and Collaborative Learning to Frame and Implement Ecosystem Management* by Christine Feurt. PhD Dissertation, 2007.

The practitioner guide **Collaborative Learning Guide for Ecosystem Management**, written by Dr. Christine Feurt, is designed as a companion to this workshop and is available for download at

https://dune.une.edu/env_facpubs/5/ and
https://www.wellsreserve.org/writable/files/archive/downloads/collaborative_learning_guide.pdf

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For more information and technical assistance with Collaborative Learning and Resilience Dialogues training, contact

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The Resilience Dialogues website: https://www.wellsreserve.org/project/the-resilience-dialogues

More about the project: http://www.nerrssciencecollaborative.org/project/Feurt18