



ADVANCED FACILITATOR GUIDE FOR IN-DEPTH RIPPLE EFFECTS MAPPING

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Introduction

Welcome to Ripple Effects Mapping! This evaluation technique is a creative, visual way to depict relationships and identify the ripple effects—defined by Merriam-Webster as “a spreading, pervasive, and usually unintentional effect or influence”—of your program on individuals, groups, and communities. It is an engaging way to capture impacts and compelling stories and will help participants find the intended and unintended outcomes of their work (Emery et al. 2015).

Ripple Effects Mapping (REM) is a multi-step process used to engage participants in an evaluation. It starts with Appreciative Inquiry questions to guide participants in telling their stories of success to one other person (Hammond 2013). A facilitator then brings the group back together in a focus group setting and writes these accomplishments on a large piece of paper. Through the use of a mind-mapping technique, partnerships, unique contributions, and outcomes start visually appearing in front of the group (Buzan 2013). These stories then build on each other as participants interact and add details, insights, and interconnections. The display of program results reveals multiple ripples and clusters of positive feedback to program members and leaders. It is an evaluation tool that engages and energizes participants with stories to share, while providing valuable data to a diverse body of stakeholders. You can also use REM as a team building exercise and celebration of completed work—even if you do not need the data for other purposes.

This REM Facilitator Guide will help you understand the numerous benefits of using this method and how to apply it to your program. We have included a step-by-step agenda with general timing, scripts that can be customized and personalized, adaptable templates for your participants and programs, as well as notes and advice. Finally, we share examples of best practices for organizing, coding, and reporting your data. For additional case studies that illustrate the benefits of REM and process variations, see Chazdon et al. (2017), an e-book that can be downloaded from the University of Minnesota Libraries Digital Conservancy.

Benefits of Using Ripple Effects Mapping

REM is a useful tool when total program impact is difficult to conceptualize and measure with other evaluation methods. It can also be used in mixed method evaluation strategies, as it can complement and ground truth quantitative methods. With information gathered during a REM session, you can determine the public value of your program, which can then be shared with funders, partners, and decision makers (Kalambokidis et al. 2015). The flexibility of REM enables either mid-program (formative) and/or post-program (summative) data collection. Additional benefits include:

- A participatory and appreciative approach that engages stakeholders
- Group validation of results
- Activities connected to a larger purpose for participants to see emerging patterns and trends
- An opportunity for reflection, growth, and celebration; participants are often more positive and hopeful when they see what they have accomplished
- Adaptable to a wide-range of ages, cultures, communities, and content areas
- A good starting point for strategic planning

Conducting a Ripple Effects Mapping

Components of In-depth REM

Essential (Core) Components:

1. Conversations: Appreciative Inquiry
2. Group Activity: A Participatory Approach
3. Group Activity: Interactive Group Interviewing and Reflection
4. Group Activity: Radiant Thinking (Mind Mapping)

Secondary Components:

5. Data Management: Collection and Digitizing the Map
6. Data Management: Sorting and Coding
7. Reporting: Ways to Share Stories and Data

Pre-event Work

Identify a 2- or 3-person Ripple Effects Mapping Team

Roles include:

A Facilitator and Mapper who is adept in managing a small group. Skills include: an ability to encourage full participation, pay attention to time and flow, and respect individuals' responses. Mapping skills involve writing the “ripples” on butcher paper using mind-mapping techniques to organize shared stories and information. Skilled facilitators can easily manage group conversations and write on the map. We have found that we are more in tune with the story thread when we are prompting and writing at the same time. However, if you prefer, you may choose to split these roles.

A Transcriber types or writes detailed responses and quotes from participants as they share outcome stories and impacts. You will populate these details into the digitized map post-event.

A Computer Mapper types ripples and connecting stories into a software such as Xmind (Xmind.net) as the event unfolds—this helps keep ripples organized as they are created. The Computer Mapper is an optional role, as the task can be completed following the event as long as there is a transcriber available to take notes.

Additional Note:

It is more difficult to organize and track the details and outcomes if you delay the process of digitizing the map into the software. If a computer mapper is not available during the event, we recommend that you create the map within two days of the REM session.

Gather Your Supplies:

- Large white butcher paper to post on the wall (approximately 8 ft long by 4 ft wide)
- Several colors of flip-chart markers (be sure they will not bleed through your paper onto the wall)
- Masking tape
- Participant Guide (See Appendix A, below)

Meeting Notes:

- Set up the room so participants can gather around one table or in a semi-circle
- Post the butcher paper so all participants can view the mapping
- If possible, allow enough space for pairs to have a quiet spot for their Appreciative Inquiry conversations

Construct your Appreciative Inquiry Questions

As the REM event begins, participants are paired up and instructed to interview each other about particular ways the program affected their lives, including achievements or successes they have experienced as a result of

the program (Hansen-Kollock et al. 2012). Guiding questions are structured using an Appreciative Inquiry framework: “What you seek, you find more of” (Cooperrider et al. 2008). When positive and inspiring stories are shared through REM, more ripples and successful outcomes are identified and revealed. See Step 2 below and the Participant Guide (Appendix A, below) for sample questions to choose from or adapt, as well as Appreciative Inquiry literature listed in the References for more information on constructing questions that will fit your program.

Recruiting Participants

Ripple Effects Mapping events typically take between 1½ to 2 hours. If a group is particularly active and engaged, it could take up to three hours, but group process fatigue sets in around that time. Hold the event at a convenient time for participants and in a location that has wall space for a large piece of butcher paper.

REM works well with 8–12 participants; if a group is too large (i.e., more than 15), there is not enough time for all to share their stories before process fatigue sets in. In addition to including people who have been involved in the project, consider inviting others who were involved for a short time, or those not at all involved in the project. We have invited outside observers—such as reporters, elected officials, or other stakeholders—to demonstrate the value of the work and to offer unique perspectives.

An event can be framed as a reunion or celebration, with an added benefit of capturing their stories and an opportunity to reflect on successes. Regardless, refreshments or sharing a meal before or after is appropriate.

Ripple Effects Mapping Event—Step-by-Step Process

Step 1: Brief overview of the session and objectives [5 minutes]

Additional Note:

Introductions, including each individual’s role in the program or community, can happen either at the beginning or when it is the participant’s turn to share (after the interviews). Follow the group’s lead, and consider the familiarity participants have with one another. For example, do they need an icebreaker to draw them together? Or do they already know and trust each other enough to dive right into the REM session?

Script Example:

“This Ripple Effects Mapping exercise will help us discover the intended impacts of your work as well as impacts you didn’t anticipate. Imagine throwing a rock into water—eventually you can’t see the rock anymore, but it creates waves that keep going. Your work is to be the rock, the results are the ripples. REM differs from other evaluation processes, because it is interactive and focuses on positive story-telling. When we are finished today, you will have a visual depiction of your collective efforts. Reflecting on resulting patterns of impacts can help you understand more about your work and where you want to focus your future energies.

This process will also help you visually illustrate to yourselves and stakeholders the impact this program has had on you and your community. It can validate the effects of your work and thereby create stronger support. And finally, it is a good way to figure out why and how things happen, because the difficult work you do does not happen in a vacuum.”

Additional Note:

Depending on how long ago the target program or activity took place, participants may need a reminder of the program objectives, activities, initial outcomes, and so forth, before launching into the Appreciative Inquiry interview steps.

Step 2: Appreciative Inquiry Interviews [15 minutes]**Script Example:**

“Appreciative Inquiry (AI) actually translates to ‘Positive Questions.’ This concept and theory has been around since 1990 and is a way of thinking about the world around us (Hammond 2013). AI invites us to think about things we appreciate and value about the world by asking positive questions—what do we want more of in our lives? Appreciative Inquiry is a philosophy of seeing possibilities in life, of seeing the glass half full. Using AI sets a hopeful tone where change comes with anticipation and encouragement for a better future. Usual approaches focus on what did not work and what is lacking. Appreciative Inquiry works because we know that people move in the direction of the stories they tell about themselves. You will make better progress by focusing on what is working well and then look for ways to apply those lessons to efforts that may be stalled or not having the impact you anticipated would occur.

We are going to use these concepts to find out why you feel good about the work you have done. We will start with conversations using a few specific positive questions, for example, ‘As a result of participating in this program...’ I would like you to answer one or more of these questions on the handout. These are guiding questions, and you don’t have to answer them all, but try to be specific about why you feel good about your story. You will spend about 15 minutes in these conversations, after which we will map your stories on the butcher paper.”

Instructions for the Group:

Find a partner (preferably not a good friend); take turns sharing a story using one (or as many as you would like) of the following Appreciative Inquiry questions: As a result of participating in this program...

- What has been the most helpful piece of information you learned?
- What action steps have you taken relating to the work you do?
- What changes are you most proud of? For example, has there been economic benefits, cost savings, changed plans, or new ways to work? Have you shared your knowledge with others?
- What was the most critical action you have taken?
- Have you seen any unexpected results?
- Are you or others thinking about and doing things differently as a result?

Step 3: Mapping on the Wall [45 to 75 minutes]**Script Example:**

“Let’s all come back to the table and start the Ripple Effects Mapping. Who would like to tell the first story to get this started? You can tell your own story or tell your partner’s story.”

- People may be shy about sharing their own personal successes but may be more willing to talk about how others have used the information.
- Ask each pair to offer one story and then go around the room in a round-robin format, so everyone has an opportunity to share.

Script:

“If you have anything to add to the story, raise your hand, and we will capture it.”

- Ripple out each story, working to tease out some of the details, but do not get bogged down on a particular story if further details are not easily being recalled by participants.
- Welcome input from all.
- Use a different color marker for each story and its ripples (see Figure 1 for an example map).



Figure 1. An example of a wall map. Image: Lorie Higgins.

Additional Note:

We do not ask for answers to specific questions in the interview guide, but, instead, ask for whatever stories pairs most want to tell. The focus is on the story, not the interview questions.

Process:

To find the ripples of the work, you will need to ask probing questions to tease out details. See Figure 2 for how the probing questions lead to more ripples.

Examples of probing questions:

- Then what happened?
- Who was involved?
- Did you learn anything else?
- How many people were there?
- How did that help your community?
- What has been the impact of doing those things?
- What is different in the community as a result (people, organizations, relationships)?
- What have you done with that information?
- What changes have you made as a result?
- How many jobs were created?
- How many partnerships were created? How did they contribute to the project?
- Did others contribute? And how?

Additional Note:

Sometimes you have to ripple backwards because people start with outcomes and not what led to them, so you have to ask questions like “How did that get started?”

Process:

Continue until all stories have been captured and rippled.

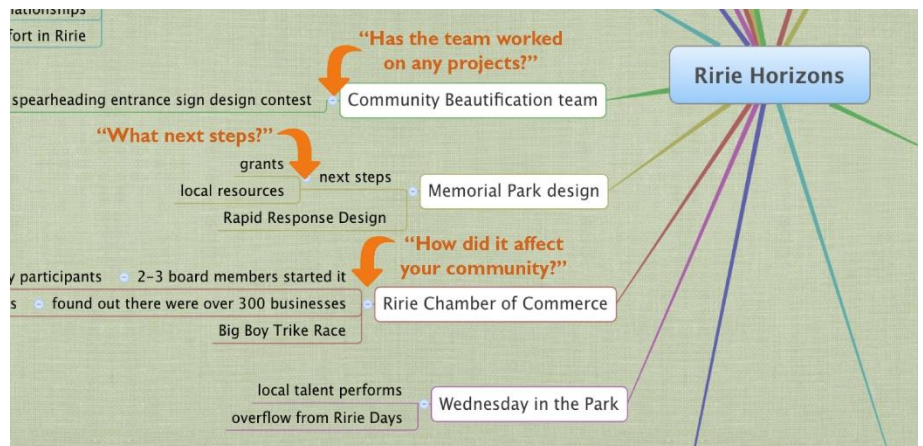


Figure 2. Probing questions and ripples example (orange text = probing question).

Tips for a Successful Mapping...

- Individual learning and action items may be easiest to start with.
- When mapping, capture as much detail as possible. After collecting information for the “map,” you can provide opportunities for participants can add to it, digging deeper into their stories and outcomes.

Step 4: Reflection and Closing [5 to 15 minutes]

Purpose:

To help understand the outcomes of the group’s work, participants are asked to reflect on the mapping process. As part of this, you may want to ask them to identify what they view as the most significant change(s). Possible debrief questions:

- What is most interesting about the map?
- How might we use the map to help us tell our story about how we are making a difference?
- How can this map guide/inform what we do next (can refer to use of mapped information or with more time, use of the map to identify impact concentration and gaps)?

Thank participants for engaging in the Ripple Effects Mapping Exercise and discuss next steps; including if the map will be digitized and coded, photographed, and shared, as well as ways in which data will be shared with others.

Additional Note:

Facilitators should make a mental note when ideas shared are second-hand instead of based on personal experience. What people “heard” about program impacts may or may not be correct and the researcher/facilitator should always follow up to verify second-hand information, either by asking for clarification during the REM session or by conducting interviews later when characters central to shared stories are not present. Similarly, participants sometimes get excited and start sharing a lot of related and unrelated positive things happening in their community. It is the facilitator’s responsibility to verify the recorded impacts can in fact be directly or indirectly attributed to the target program or activity.

Post-event Work (Data Management): Digitizing, Coding, and Reporting

Purpose:

Putting mapping data generated during a REM session into a format that can be coded to any categories you desire or categories/themes emerging from the data (see the Coding Process below).

Items needed:

- Mind-mapping software
- Original Ripple Effects Map or printed photographs of them

Digitizing It to the Software

There are several mapping software options available, each with unique attributes. We use XMind (XMind.net) for its ease of use and ability to export into Word or Excel for coding purposes. Once data is recorded into the software, you can easily organize the ripples and content. A digitized visual of the data can show expanded clusters of activity—demonstrating to participants where their passion and activity was most apparent. This can be a topic of discussion when presenting the results back to participants. For example, you could ask, “Where are you seeing the most ripples of your work?”

Regardless of software chosen, it should allow for the map to be saved in a pdf format for sharing with participants, funders, partners, or other stakeholders. Map complexity will determine print size for text to be legible; complex projects often have large maps, with supplementary maps displaying robust ripples.

Data can be typed into mapping software during a mapping session or following the event. Regardless of timing, all information shared during a REM session should be entered into mapping software. When mapping intent is to collect detailed data for analysis, it is critical to have a scribe typing stories, quotes, and other specific information shared by participants during the mapping exercise. This detail should be populated into mapping software as soon as possible following the mapping (see Figure 3 for an example).

Additional Note:

An observation can be made that the “Gave people confidence” ripple shows expanded clusters of activity compared to the “Community clean-up” ripple. What to make of that depends on the community context, but serves as good feedback for program participants. Pointing out where clusters of ripples are observed is also helpful for evaluators in comparing program components.

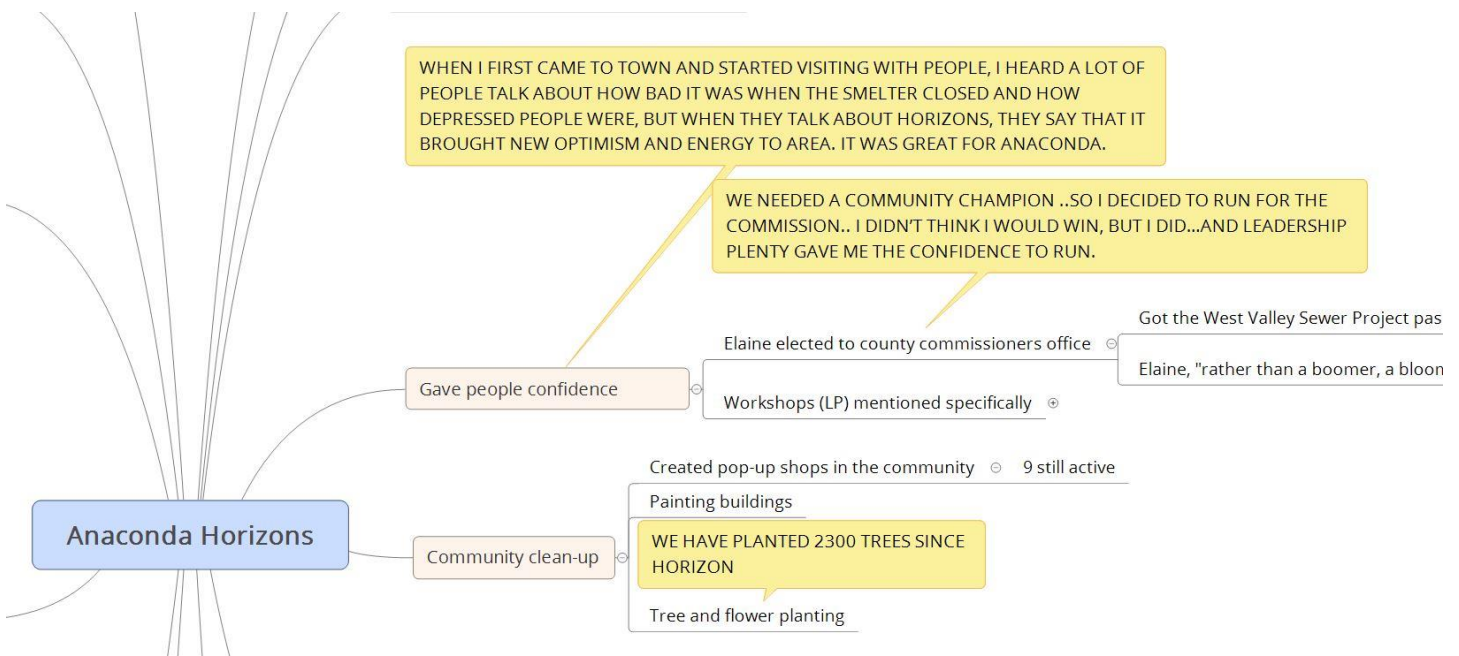


Figure 3. Example of a digitized map with direct quotes (in yellow) added after the mapping exercise. Image: Lorie Higgins.

Coding Process

The coding process will be directed by types of outcomes you want to track. Methods could include coding short, medium, and long-term impacts using deductive codes such as:

- The Community Capitals Framework, which identifies the assets within a community (Flora et al. n.d.);
- The Triple Bottom Line, most commonly identified as people, profit, and planet. Slaper and Hall (2011) outline many other variations for businesses, nonprofits, government entities, and regional economic development initiatives that could be useful to your project; or
- Another evaluation metric that accurately reflects the group’s work.

Alternatively, you could use an inductive coding process, where codes are developed as you process and read data from the mapping exercise. Coding data provides an opportunity to conduct both quantitative and qualitative analyses. Once you export data from the mind-mapping software into a spreadsheet, you can code it to a framework that best fits the group’s activities and impact. See Table 1 and Table 2 for examples of coded data after a REM exercise.

Table 1. An example of data from a community arts program—downloaded to Excel from Xmind Map—showing a coding scheme using the Community Capitals Framework with short- and medium-term outcomes. (Outcomes: S = short term/learning; M = medium term/doing; and L = long term/systemic change)

Capitals	Social	Cultural	Human	Financial
Provide a wide variety of opportunities	S	S	S	
Helps youth develop in an environment of unconditional acceptance	S	S		
This is inclusive and accessible to all in the community	S			
There is a cultural value of enrichment		M		
Confidence builder	M			
Has developed the theater into a legitimate organization				M
One youth received a degree from Yale Theater			M	
Now earning his living in Europe performing.				M
“A huge amount of community support.”	M			
A girlfriend of one of the boys in a play (dropped out of college)			M	
Was convinced to become one of the leads.	S			
“The change in her was just phenomenal.”			M	
She went to Spokane and was talking about heading to college				S
Park Avenue Players has gained legitimacy	M	M		

Table 2. An example of coded data from a leadership program to reduce poverty. Long-term systemic change captured by conducting REM two years after the end of the program.

Horizons Program	Social	Cultural	Human	Political
Community Newsletter Established	M			
Participants Elected to Local Government				M
New Connections to Outside Orgs. & Resources	M			M
Learned About Poverty		S	S	
More Health-Conscious Community (Clubs and Events) NOTE: also long term built capital in form of bike/walking paths		L		
Training in Business Skills			S	
Community Focus on the Arts (also long term built: arts center)		L		
Increased Opportunities for Interaction (Events)	M			
Teamwork Ethic / Culture of Partnerships		L		
Ongoing Opportunities for Community Participation (Volunteer Falls City Program)	L			
Youth Council Creates Leadership Pipeline				L

Reporting

There are multiple ways to use and report information you have gathered; you may:

- Take photos of the group with the map and include in a press release to the media
- Print the entire map poster to display in an office or at meetings
- Share stories and the quantitative findings in grant proposals
- Pull specific pieces out for presentations and printed materials
- Use the animation tool function in presentation software to make individual ripples appear during a talk (see Figure 6 for an example)

One of the most powerful aspects of using Ripple Effects Mapping as an evaluation tool is that it enables you to gather detailed stories from a group. As you report your findings to funders, program participants, and other stakeholders, it is highly recommended that you take advantage of this rich and comprehensive data. As Patton (2002) noted about qualitative data, using participants' actual words and personal experiences results in evaluation findings that are stronger and more credible.

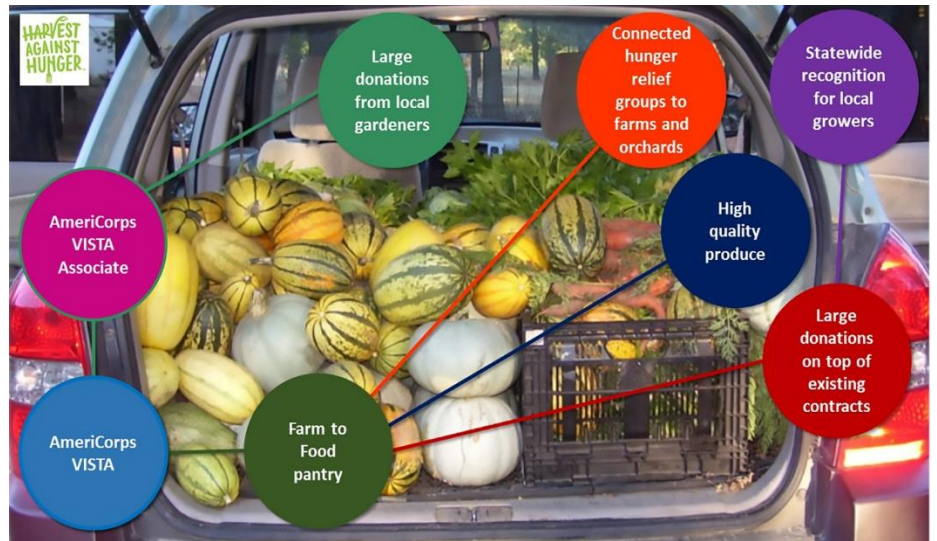


Figure 6. Example of one slide from a presentation slide show. The individual ripples appeared using the animation tool during a speech. Image: Debra Hansen.

Conclusion

Ripple Effects Mapping (REM) can be conducted with a variety of groups and constituents—it has been used with coalitions, arts groups, community groups, and agencies. Because REM is very interactive and has no cost, it is easy for participants of all ages and for small and large organizations with a range of resources to access and consider. Because participants' stories are the complete focus of the process, groups often refer back to those “aha” moments by incorporating them in presentations, marketing materials, and grant applications.

“We found the Ripple Effects Mapping fit our evaluation needs perfectly! We brought together diverse participants from a complex regional pilot project and, in a short amount of time, gained a comprehensive overview and a plethora of rich details. We learned specifics well beyond what our standard surveys would reveal. Our engaged and enthusiastic participants seemed to benefit from the lively discussions as much as we did!”

--Gloria Flora, Director of Northeast Washington Forestry Coalition

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Appendix A: Participant Guide



Mapping the Ripple Effects of Your Program

1. Introduction
2. Pair off for Appreciative Inquiry Interviews
3. Facilitated Activity—Mapping on the Wall
4. Group Discussion—What does this tell us about our work?
5. Closing—How the information will be shared?

Guiding Questions for Appreciative Inquiry Interviews:

- Tell a story about how you and/or others have used information from the program.
- Is there anything you are especially proud of you'd like to share?
- Are there any specific achievements or successes you are aware of?
- Have you shared what you have learned with anyone?
- What new resources or opportunities do you (and/or the community) have?
- How has your and/or others' attitudes or behaviors changed?

“To appreciate is the art of recognizing the best in people and their past and present strengths, successes and potentials.”

References

- Buzan, T. 2013. *Mind Map Handbook: The Ultimate Thinking Tool*. London: HarperCollins UK.
- Chazdon, S., M. Emery, D. Hansen, L. Higgins, and R. Sero. 2017. [A Field Guide to Ripple Effects Mapping](#). Minneapolis, MN: University Libraries Publishing.
- Cooperrider, D., D. Whitney, and J. Stavros. 2008. *Essentials of Appreciative Inquiry* (1st ed.). Brunswick, Ohio: Crown Custom Publishing.
- Emery, M., L. Higgins, S. Chazdon, and D. Hansen. 2015. [Using Ripple Effect Mapping to Evaluate Program Impact: Choosing or Combining the Methods that Work Best for You](#). *Journal of Extension*: 53(2). Article 2TOT1.
- Flora, C., M. Emery, S. Fey, and C. Bregendahl. n.d. [Community Capitals: A Tool for Evaluating Strategic Interventions and Projects](#). North Central Regional Center for Rural Development. Iowa State University.
- Hammond, S.A. 2013. *The Thin Book of Appreciative Inquiry* (3rd ed.). Bend, OR: Thin Book Publishing Co.
- Hansen-Kollock, D., L. Flage, S. Chazdon, N. Paine, and L. Higgins. 2012. [Ripple Effect Mapping: A “Radiant” Way to Capture Program Impacts](#). *Journal of Extension*: 50(5).
- Kalambokidis, L., L. Hinz, and S. Chazdon. 2015. Using Economic Principles to Show How Extension Programs Create Public Value. In J.M. Bryson, B.C. Crosby, and L. Bloomberg. eds. *Creating Public Value in Practice* (pp. 311–329). Boca Raton, FL: CRC Press.
- Patton, M. 2002. *Qualitative Evaluation and Research Methods* (3rd ed.). Newbury Park, CA: Sage.
- Slaper, T., and T. Hall. 2011. [The Triple Bottom Line: What Is It and How Does It Work?](#). *Indiana Business Review*: 86(1).



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