

SECTION 03

MAKING DECISIONS



There are a range of reasons why there may be a need to make a decision about the future of a dam. It may have received a letter of deficiency and be in need of repair. Members of the community may be wanting to restore fish passage to the river. Or maybe there are concerns about water quality as a result of the dam.

Depending on the dam, the community and the decision, every process will look different. Many decisions around dams can take a long time and require patience. While there maybe a desire to move fast to make a decision, it is important that the decision is not rushed to ensure that everyone has a chance to participate.

In this section, we present a method that was developed by a team of researchers from the Rhode Island School of Design working with colleagues on the National Science Foundation funded Future of Dams team. The methods that were developed bring together elements of design charrettes with Structured Decision Making (SDM).

These materials are made open source in the hope of improving the way communities are brought into the decision making process and improve the ability of communities to work together to find creative solutions to addressing the competing demands of rivers and dams. We acknowledge and honor that there are many ways to engage communities in conversations about dams. The goal is not to claim that there is one correct or best method but rather to encourage the sharing of methods. We hope others are able to use, test and adapt these methods and continue to share challenges and successes with other practitioners in the watershed.

DECISION MAKING PROCESS

Decisions about aging dams in New England can be contentious with community members coming out on both sides of the debate. While it may make sense to remove legacy dams from an ecological, economic or safety perspective, over 50 dams that were identified for potential removal have been stalled or delayed due to community opposition¹. In some cases this resistance is based on the perceived threat to the “cherished local landscape”, in other cases there may be different interpretations of which “nature” to preserve or restore, and in many cases it was the process whereby the community was brought into discussions about the future of the dam that made the discussion more divisive and controversial. Researchers have found that when outsiders from agencies or non-profits are involved in the decision making, there was a sense that the process ignored the opinions and rights of community-based stewardship of local resources. There has been the perception by local communities that agencies come in with the resources and desire to remove the dam irrespective of what the local communities’ desires. Power dynamics have been identified as one of the key factors that undermine community engaged restoration efforts².

The most common form of public engagement around dams is in Town Hall style meetings or public hearings. These are open public meetings intended to allow for both information sharing as well as to provide the opportunity for the public to express their position about a dam decision. In some cases, the meetings are run by an outside neutral trained facilitator however, in many cases they are often organized and facilitated by local government officials, conservation commissions, or environmental organizations that are looking into dam removal options. Depending on the level of community interest or apathy about a dam decision, the meetings can be dominated by strong voices on either side of the dam removal debate. In some cases, the microphone can be dominated by people who feel comfortable talking in front of large groups and are very vocal about their position. This approach doesn’t allow for a back and forth exchange amongst participants and often leads to the more moderate participants not contributing which could help balance the discussion.

In addition to these existing methods, there are an increasingly wide range of decision support tools that are being developed to help stakeholders make decisions about the future of the dams. However, in most cases, these decision support tools are aimed at decision makers (town officials, federal and state agencies, etc.), but not the general public. In addition, while they may help support prioritization based on scientific facts, they often fail to provide a significant way to incorporate social values that are often important to community members, such as history, sense of place, and aesthetics.

EXPLORING NEW METHODS

One of the best ways to incorporate social dimensions into river restoration projects is through direct community participation throughout the restoration planning process. Some of the values of community engaged restoration projects include: providing insight into local social, ethical and political values; providing opportunities for social learning; and leading to broader acceptance, legitimacy and support of the planning process and final decision. However, within any community engaged restoration project, there exists the possibility of tension between the desire to encourage community participation and the desire to restore rivers. While participation is the foundation of environmental democracy, some have warned that participation may not necessarily enhance the quality of the outcome from a purely ecological restoration perspective because of the interaction of competing interests. This has been the case with dam removal projects that have stalled or failed as a result of community opposition.

Although there is growing agreement on the importance of engaging citizens in the planning of restoration projects, it is unclear how best this should happen and what form it should take. Our work aims to contribute to this discourse by providing a unique perspective from landscape architecture, a profession that has also been working to create meaningful opportunities for communities to participate in design decisions. By bringing together methods from Structured Decision Making (SDM) and design charrettes, we developed a trans-disciplinary approach to community engagement around dams.

A range of strategies emerged from our process that may be helpful for future projects that aim to engage communities in dialogue about the future of a dam. These include:

1. RESPECTING LOCAL PEOPLE'S VALUES AND PERSPECTIVES

Similar to many current environmental challenges, the ultimate decision about the future of a dam is often based on moral, ethical or value-based factors, and while scientific information can help inform the decision it does not provide the solution or the answer. In some cases, dam projects have stalled or failed due to project proponents over-reliance on science as the only credible or relevant source of knowledge which led to a disregard for the social considerations that are often the issues that matter to residents. Listening, acknowledging, honoring, and being willing to factor in community and individual values into the decision making process are key to community engaged processes. One of our aims with developing these methods was to ensure that the community members felt comfortable sharing their values. While values may not be able to be quantified in the same way as scientific objectives, the objectives are listed alongside one another and can equally be factored in when evaluating the impact of the alternatives.

2. NEUTRAL FACILITATORS

In order to create a space for dialogue, sharing, and learning, it is important that the facilitators be neutral. Having a neutral third party to help mediate between the restoration team and the local community can help to address some of the unequal power dynamics that have led to dam projects stalling or failing in the past. Our goal in designing this workshop was to develop a process that did not go into a community with a set agenda, but that brought the community into the creative process of exploring alternatives.

3. STRUCTURED DIALOGUE

The facilitated small group discussions help ensure that all community members participate, have a chance to voice their opinions, listen to different viewpoints, ask questions, and participate in a civil exchange with fellow community members. This structure can help participants build an understanding of each other's perspective and open the space for negotiation.

4. HELPING PARTICIPANTS SHIFT FROM POSITION TO INTERESTS

Position are something that participants have decided upon whereas interests are what caused them to make that decision. Unlike positions that lock people into a single outcome, when a problem is defined in terms of interests it is often possible to find a solution which satisfies both parties' interests. Therefore, the goal of our workshops is to get the participants to focus on interests, rather than their positions.

5. EXPLORATION OF A RANGE OF ALTERNATIVES TO MOVE PAST BINARY POSITIONS

Unlike large dams, where there are often very few options beyond removal to achieve multiple project objectives, with small dams, there are often a range of alternatives that can achieve multiple objectives. Although dam modification alternatives may be more costly than removing the dam and require long term maintenance and repairs, exploring a range of alternatives during the workshop allows for the conversation to move beyond what is often perceived as the binary option of either keeping or removing the dam to find a space of negotiation. The goal of our process was to explore the aesthetic, ecological and historical implications of a range of alternatives and to encourage participants to think about creative solutions to addressing the issues and trade-offs.

6. TRANSPARENT EVALUATION OF ALTERNATIVES BASED ON OBJECTIVES

The Structured Decision Making process allows for the transparent evaluation of alternatives based on how well each alternative meets the project objectives. For individual participants, each objective may hold a different weight or level of importance, which will impact their final decision or ranking of preferred alternatives. By laying out the objectives and alternatives clearly in the decision matrix, it allows for a visible way for these subjective values to be openly discussed and ranked.

7. FOSTERING LEARNING BY MAKING INFORMATION ACCESSIBLE AND VISUAL

One of the key tenets of a successful decision making process is a knowledgeable group of participants. When working with the general public, there is the need to translate complex technical ideas into language and decision-relevant information that can allow people without technical expertise to meaningfully consider technical information. For this reason, we encourage the use of visualizations to help facilitate dialogue and develop mutual understanding amongst the group. The visual tools can help foster insights not accessible through other, often more quantitative approaches to communicating information.

REFERENCES and ADDITIONAL RESOURCES

1. Fox, C. A., F. J. Magilligan, and C. S. Sneddon. 2016. "You kill the dam, you are killing a part of me": dam removal and the environmental politics of river restoration. *Geoforum* 70:93–104.
2. Johnson, S. and Graber, B.E. 2002. Enlisting the Social Sciences in Decisions about Dam Removal. *Bioscience* 52 (8), 731–738.
3. Gregory, R., Failing, L., Harstone, M., Long, G., McDaniels, T.L., & Ohlson, D.W. 2012. *Structured Decision Making: A Practical Guide to Environmental Management Choices*. Wiley-Blackwell, Chichester, U.K.

STRUCTURED DECISION MAKING

Structured Decision Making provides a structured and collaborative approach to decision making that is able to incorporate both values and facts into the decision making process. Traditional steps in the SDM framework include problem framing, determining objectives, identifying alternatives, estimating consequences, evaluating trade-offs, and deciding and taking actions (Table 1). SDM is based on the idea that there are not “right decisions” so aims to help inform and make decisions transparent rather than prescribe a preferred solution. It seeks to provide a structured way for participants to talk and to learn together, about both the facts and values that will inform the final decision.

STEPS IN PROCESS	UNDERLYING QUESTION	EXAMPLE in the context of dam decisions
1. Problem Framing	What is the context for (scope and bounds of) the decision?	<ul style="list-style-type: none"> • Single Dam • Whole River approach
2. Determining Objectives	What objectives and performance measures will be used to identify and evaluate the alternatives?	<ul style="list-style-type: none"> • Improve Fish Passage • Increase Recreational Opportunities • Reduce Flooding
3. Identifying Alternatives	What are the alternative actions or strategies under consideration?	<ul style="list-style-type: none"> • Do Nothing • Remove Dam • Nature-Like Fishway • Technical Fishway • By-pass Channel
4. Estimating Consequences	What are the expected consequences of these actions or strategies?	<ul style="list-style-type: none"> • 50% improved fish passage • 80 summer days when the river would be passable by canoe
5. Evaluating Trade-offs	What are the key trade-offs among consequences?	<ul style="list-style-type: none"> • Trade-off between fish passage and Hydropower
6. Deciding And Taking Actions.	How can the decision be implemented in a way that promotes learning over time and provides opportunities to revise management actions based on what is learned?	<ul style="list-style-type: none"> • Citizen science • Ongoing stewardship

TABLE 1: Steps in the Structured decision making framework (Modified from Gregory et al. 2012)

Although there are steps outlined in this document, Structured Decision Making is an iterative process - meaning that it may not be linear. As you work towards a decision, new data or issues may become apparent that require that you go back and adjust the project objectives or reconsider alternatives even if you are much further down the process. In addition, you may do multiple rounds of the process- You may start with a scoping round where you use the process to get an initial idea of which objectives and alternatives may be worth pursuing, then you may do an additional round when there are the funds and ability to do a full feasibility study.

These materials and approach have been adapted from the book, “*Structured Decision Making: A practical Guide to Environmental Management Choices.*” It is strongly encouraged that anyone who plans to use the methods outlined in this document consider reading that book as well.

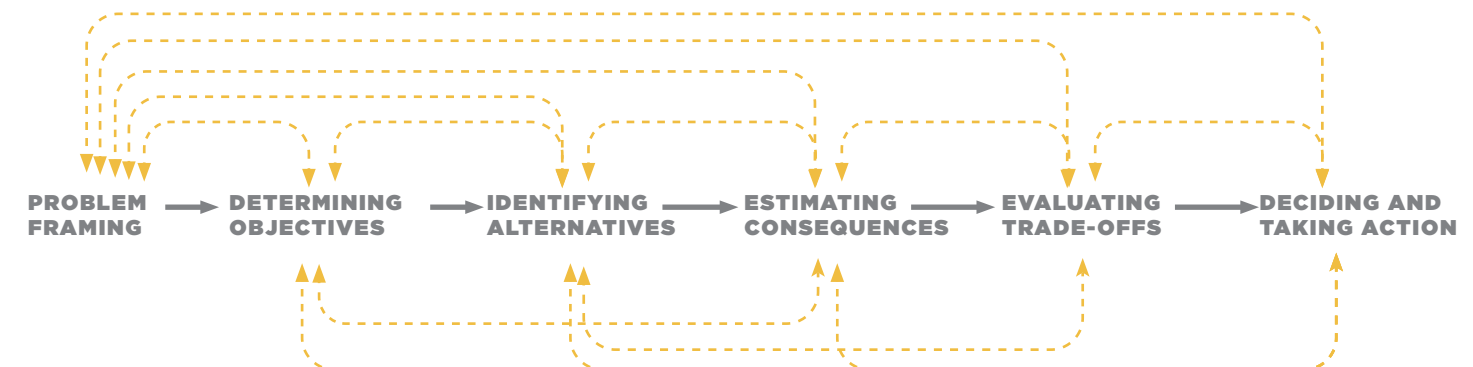


Figure x : Iterative Process

DESIGN CHARRETTES

Design charrettes are an approach commonly used within the architectural design professions to involve community members in the design and planning of public space. Similar to environmental decision making, design has and continues to struggle with issues of inclusion and power. Design charrettes are intended to democratize design by bringing the general public into the design process. Coming from the architectural design fields (architecture, landscape architecture, urban planning), charrettes rely on a range of visual and graphic tools that designers often use to ideate, test ideas and communicate to broader audiences. These graphic tools can include maps, rendered views, models, sections, diagrams and plans to communicate the physical consequences of various decisions and show alternatives that can then be debated.





HYBRID APPROACH

While providing a valuable framework for environmental decision making, SDM is primarily intended for a group of 5-25 stakeholders/decision makers and not the general public. In previous examples of SDM being used to support dam decisions, the participants represented state-and province-based fish and wildlife agencies, federal agencies, universities, tribes, non-governmental organizations, utility companies, and the fishery commission, but not the general public. In the book, *Structured Decision Making: A practical Guide to Environmental Management Choices*, the authors briefly mention the possibility for integrating SDM with public engagement and suggested running 3 parallel processes with an advisory committee, technical working groups, and a public process. However, the authors provide little guidance on how to structure the public process or how the information that is gathered at the public meeting will inform the final decision. In the book, the authors state:

Although approaches such as SDM might be used to encourage well-structured input from smaller groups, in most cases little methodological rigor is applied to engaging the public. As a result, key sectors of the community are alienated, choose not to participate, or shrink at the prospect of endless meeting at the same time that keenly interested, 'professional citizens' appear at all town-hall meetings and often dominate the entire process. Information open houses barely scratch the surface of engagement and opinion surveys rarely offer substantive insight into key aspects of the decision making process, such as creating responsive alternatives or making defensible trade-offs that characterize wise, long-term resource-management decisions. Yet accountable decision makers-from small city councils to the office of state governors- may not have faith in recommendations if they feel the broader public values are not well represented"

Our goal in bringing together structured decision making with design charrettes is to address some of these challenges and find meaningful ways to engage a broader public in the decision making process. We find that the benefits of one method helps to address the limitations of the other method (Table 2). Structured decision making has a clearly defined process for coming to a decision and a systematic ability to evaluate a set of alternatives based on performance measures. However, as described earlier, there is limited guidance on how to engage a broader public audience. Charrettes offer guidance on how to organize and facilitate large public meetings as well as the use of visuals to help participants understand the alternatives. However, charrettes provide little guidance on how to make a final decision. The integrated approach offers a clearly defined process for coming to a decision as well as guidance on working with the public.

It is important to recognize and to communicate to the public about the roll of the community input in the final decision. The SDM process rarely makes decisions but, instead, usually serve in an advisory capacity providing insight to decision makers.

STEPS IN PROCESS	BENEFITS	LIMITS
STRUCTURED DECISION MAKING	<ul style="list-style-type: none"> Clearly defined process for coming to a decision Ability to evaluate alternatives based on performance measures 	<ul style="list-style-type: none"> Limited guidance on how to engage the public in decision making
CHARRETTES	<ul style="list-style-type: none"> Geared toward groups of the general public Use of visualizations to communicate about complex alternatives Guidance on facilitation 	<ul style="list-style-type: none"> Often more open ended design process without clear guidance on how to make a final decision.

TABLE 2: Benefits and limitations to the Structured Decision Making process and Charrettes that lend themselves to a hybrid approach

WHO SHOULD BE INVOLVED?

Although many dams in New England are privately owned, they have a significant impact on a public resource- the river. Rivers are a commons- a resources whose benefit is to be shared by the surrounding communities. Who participates in decision making about a dam will vary based on ownership, geographical context, funding and motivation for removal. The underlying goal is to work towards environmental democracies - where communities participate in the decisions about shared resources- and through this process to build a community of stewards who feel connected to their local landscapes, and feel a responsibility to help care for these resources.

It is suggested that three main groups participate in this work. Their involvement can inform one another at various stages of the decision making process.

1. PROJECT TEAM

The project team is made up of the consultants that are helping support the decision. This may include engineers that are doing an Hydrology and Hydraulics study to look into the impact of dam removal on flow or a feasibility study to understand the feasibility and design of alternatives. It also can include local environmental planning agencies that are helping to manage the project. Ecologists may be part of the project team to analyze the impact of various alternatives on migratory fish and wetland habitats. Landscape architects may be part of the project team to study the impact of various alternatives on the recreational, spatial and aesthetic landscape and to help envision how public access can be incorporated into the design of the site if the dam is removed.

It is highly recommended that a neutral facilitator be brought into help with the community engagement. In order to create a space for dialogue, sharing, and learning, it is important that the facilitators be neutral. Having a neutral third party to help mediate between the restoration team and the local community can help to address some of the unequal power dynamics that have led to dam projects stalling or failing in the past. Ideally, the facilitators would help

develop a process that did not go into a community with a set agenda, but that brought the community into the process of exploring alternatives. This work may be able to be led by the landscape architects or a separate facilitator can be brought in.

2. STEERING COMMITTEE

The Steering Committee can be made up of key local stakeholders in the project. This can include representatives from local, state, federal agencies, local tribes, local river advocacy organizations, non profits, and local historical societies. It is important that the steering committee is made up of representatives that can speak to all the major issues about a dam. The steering committee will work closely with the project team to help guide the work and the process and so it is key that all trade offs are being considered within this group.

3. COMMUNITY

The involvement of the community will vary based on the project and how engaged the local community is in the outcome of the dam decision. Inevitably, contentious dam decision will attract a greater number of participants than less contentious decisions. Even if there is very good attendance, as is common in many public processes, the people who attended the meeting are often only a very small subset of the larger population and are primarily people who have leisure time and therefore the results are skewed towards an older, richer and formally educated public. Acknowledging these limitations, it is important that the project team make a concerted effort to develop additional methods to reach out to a broader and more diverse audience. A multi-pronged approach to engagement is important to engage the broader community in conversation about the future of a dam and can include both community workshops, like those discussed in this guide, as well as finding opportunities to go out into the community rather than expecting the community to come to meetings. This can include attending family-oriented community events and festivals, setting up at local grocery stores or attending existing meetings in the community.

HOW TO USE THESE TOOLS:

In the following section, a range of tools are shared that have been designed to support various stages of the Structured Decision Making process. Some tools are intended for the project team, others for the steering committee and others for the general public. The level of involvement of the community will largely depend on the nature of the dam and how active the community is or wants to be in the process. In addition to these larger public meetings, it is recommended that prior to any public meeting that the project team meet one-on-one with any adjacent property owners, including business and residents, especially if those properties may be directly impacted by any decision.

It is recommended that at a minimum there are 3 points within the process at which the general public is involved in the decision making process. The first meeting (or series of meetings) can gather input on project objectives, the second meeting (or meetings) gather input on project alternatives, and the third and most significant workshop(s) ask participants to evaluate the alternatives. This process can allow for more meaningful involvement by the public in defining the project objectives and brainstorming possible alternatives.

On page 158, one possible sequence is shared but the exact structure and interaction between the project team, steering committee and public will vary depending on the specifics of each project. We encourage practitioners and community members to adapt and incorporate any of the tools that are helpful for the process that they are guiding.

1. PROBLEM FRAMING:

What is the context for (scope and bounds of) the decision?

- ①.1 Roll-Playing Board Game
- ①.2 Data Collection/ Reconnaissance
- ①.3 Problem Sketch
- ①.4 Paddle The River

2. DETERMINING OBJECTIVES:

What objectives will be used to identify and evaluate the alternatives?

- ②.1 Brainstorming Objectives
- ②.2 Objective Cards
- ②.3 Developing Performance Measures

3. IDENTIFYING ALTERNATIVES:

What are the alternative actions or strategies under consideration?

- ③.1 Case Studies
- ③.2 Brainstorming Alternatives
- ③.3 Site Visit

4. ESTIMATING CONSEQUENCES:

What are the expected consequences of these actions or strategies?

- ④.1 Feasibility Studies
- ④.2 Visualizing the Alternatives

5. EVALUATING TRADE-OFFS:

What are the key trade-offs among consequences?

- ⑤.1 Decision Matrix

6. DECIDING AND TAKING ACTION:

How can the decision and implementation promote learning and stewardship?

- ⑥.1 Final Report
- ⑥.2 Permitting
- ⑥.3 Implementation
- ⑥.4 Stewardship

PROBLEM FRAMING + DETERMINING OBJECTIVES

Project Team:

- Research into the river system
- Modeling of existing conditions
- Review existing studies

1st Steering Committee Meeting:

- Discuss the framing of the project
- Outline and discuss the process
- Identify objectives/and performance measures
- Determine what additional technical expertise might be needed

1st Public Meeting:

Intro Presentation:

- What is known about the river and dam
- Explain the public engagement process + timeline
- Introduce Project team and Steering Committee

Small group discussion:

- Discuss initial set of project objectives

Wrap-Up

IDENTIFYING ALTERNATIVES

Project Team:

- Reflect on public meeting
- Gather data on existing conditions
- Site Surveys field work, etc

2nd Steering Committee Meeting:

- Reflect on public meeting
- Choose case studies and alternatives to present at second public meeting.

2nd Public Meeting:

Intro Presentation:

Case Study Presentation:

- Present Case studies of alternatives

Small group discussion:

- Consequence Cards
- Review Case Studies
- Brainstorm other possible alternatives

Wrap-Up

ESTIMATING CONSEQUENCES + EVALUATING TRADE-OFFS

3rd Steering Committee Meeting:

- Reflect on public meeting
- Finalize list of alternatives

Project Team:

- Reflect on public meeting
- Model the alternatives
- Feasibility studies (H&H study, ecological studies, etc)
- Estimate impacts + Costs

3rd Public Meeting:

Intro Presentation:

Matrix Presentation:

- Present the methods used to estimate consequences and the results

Small group discussion:

- Consequence Cards
- Review Matrix
- Evaluate and rank project alternatives based on consequence matrix

Wrap-Up

DECIDING AND TAKING ACTION

4th Steering Committee Meeting:

- Reflect on public meeting
- Finalize preferred alternatives

Project Team:

- Write final report
- Send report to Steering Committee for review

Final Report and Presentation:

- Present to decision makers and public about process and determine next steps

A Diagram of one possible way that the steps in the Structured Decision Making process can align with a broader public engagement process.

PROBLEM FRAMING + DETERMINING OBJECTIVES

SAMPLE AGENDA FOR 1st PUBLIC MEETING:

INTRODUCTION PRESENTATION:

- **Introductions-** Introduce project team and steering committee
- **Background to the Project-** information about the watershed, river, dam, why the dam is being discussed.
- **Project Timeline -** what will be the timeline of work for the project and specific points the public will be involved in the process
- **Overview of Approach-** Describe the approach that is being taken for decision making around the dam and how the public input will be factored into the final decision

BREAK OUT GROUPS:

2.2 Objective Cards Exercise (Printed Objective Cards)

- Ask people to introduce themselves by selecting or writing-in 5 objective cards in response to the question: What Do You Think Are The 5 Most Important Project Objectives?
- **Post-it Exercise-** ask the group to respond to the following questions:
 - What do we want to make sure to protect in this process?
 - What are some of the key issues that you want to make sure are addressed in this planning process?
 - When you imagine a healthy resilient river, what does that look like to you?
 - How can the community be good stewards of the river?

WRAP-UP

- **Debrief-** The facilitator or members of the group can share highlights from their break out group discussions.
- **Review Next Steps -** Revisit timeline and opportunities for the public to be involved.
- 1.4 **Paddle of River-** If the project team is able to organize a paddle of the river, announce it at the first public meeting

IDENTIFYING ALTERNATIVES

SAMPLE AGENDA FOR 2nd PUBLIC MEETING:

INTRODUCTION PRESENTATION (20 min):

- **Introductions**- Introduce project team and steering committee
- **Background to the Project**- information about the watershed, river, dam, why the dam is being discussed.
- **Project Timeline** - what will be the timeline of work for the project and specific points the public will be involved in the process
- **Overview of Approach**- Describe the approach that is being taken for decision making around the dam and how the public input will be factored into the final decision
- **Review Objectives**- Review project objectives and how the information from the first public meeting was incorporated into the project objectives.

ALTERNATIVES PRESENTATION (20 min):

- 3.1 Introduce case studies

BREAK OUT GROUPS (1 hour):

- 2.2 Objective Cards Exercise (Printed Objective Cards)
- Ask people to introduce themselves by selecting or writing-in 5 objective cards in response to the question: What Do You Think Are The 5 Most Important Project Objectives? Are there any objectives that are missing?
- 3.1 Case Studies (Printed Case Study Cards)
- Ask the participants to take time to review the case study cards.
 - Are there any questions about the case studies?
 - What aspects of each case study seems relevant to the dam being discussed?
- 3.2 Brainstorming:
- Given what was learned from the case studies, ask the group to consider which alternatives might be good for the dam being discussed?
 - With the printed plans and photos of the site, ask participants to sketch on trace any ideas of other alternatives that may be worth considering for the project.

WRAP-UP (20 min):

- **Debrief**- The facilitator or members of the group can share highlights from their break out group discussions.
- **Review Next Steps** - Revisit timeline and opportunities for the public to be involved.

EVALUATING TRADE-OFFS

SAMPLE AGENDA FOR 3rd PUBLIC MEETING:

INTRODUCTION PRESENTATION (20 min):

- **Introductions**- Introduce project team and steering committee
- **Background to the Project**- information about the watershed, river, dam, why the dam is being discussed.
- **Project Timeline** - what will be the timeline of work for the project and specific points the public will be involved in the process
- **Overview of Approach**- Describe the approach that is being taken for decision making around the dam and how the public input will be factored into the final decision
- **Review Objectives**- Review project objectives and how the information from the first public meeting was incorporated into the project objectives.

MATRIX PRESENTATION (20 min):

- **Present the Matrix** - Review the methods used to estimate consequences and the results as they are represented in the Matrix

BREAK OUT GROUPS (1 hour):

- 2.2 Objective Cards Exercise (Printed Objective Cards)
- Ask people to introduce themselves by selecting or writing-in 5 objective cards in response to the question: What Do You Think Are The 5 Most Important Project Objectives? Are there any objectives that are missing?
- 5.1 Matrix (Printed Matrix for each participant)
- Ask the participants to take time to review the Matrix.
 - Ask if there are any questions about the Matrix.
 - What aspects of each case study seems relevant to the dam being discussed?
- 5.1 Rank Alternatives:
- Ask the participants to use the sticky dots to indicate the alternatives they endorse, accept or oppose
 - Have participants share with the group their reasoning for their selection
 - Optional second round of ranking following the discussion

WRAP-UP (20 min):

- **Debrief**- The facilitator or members of the group can share highlights from their break out group discussions.
- **Review Next Steps** - Revisit timeline and opportunities for the public to be involved.

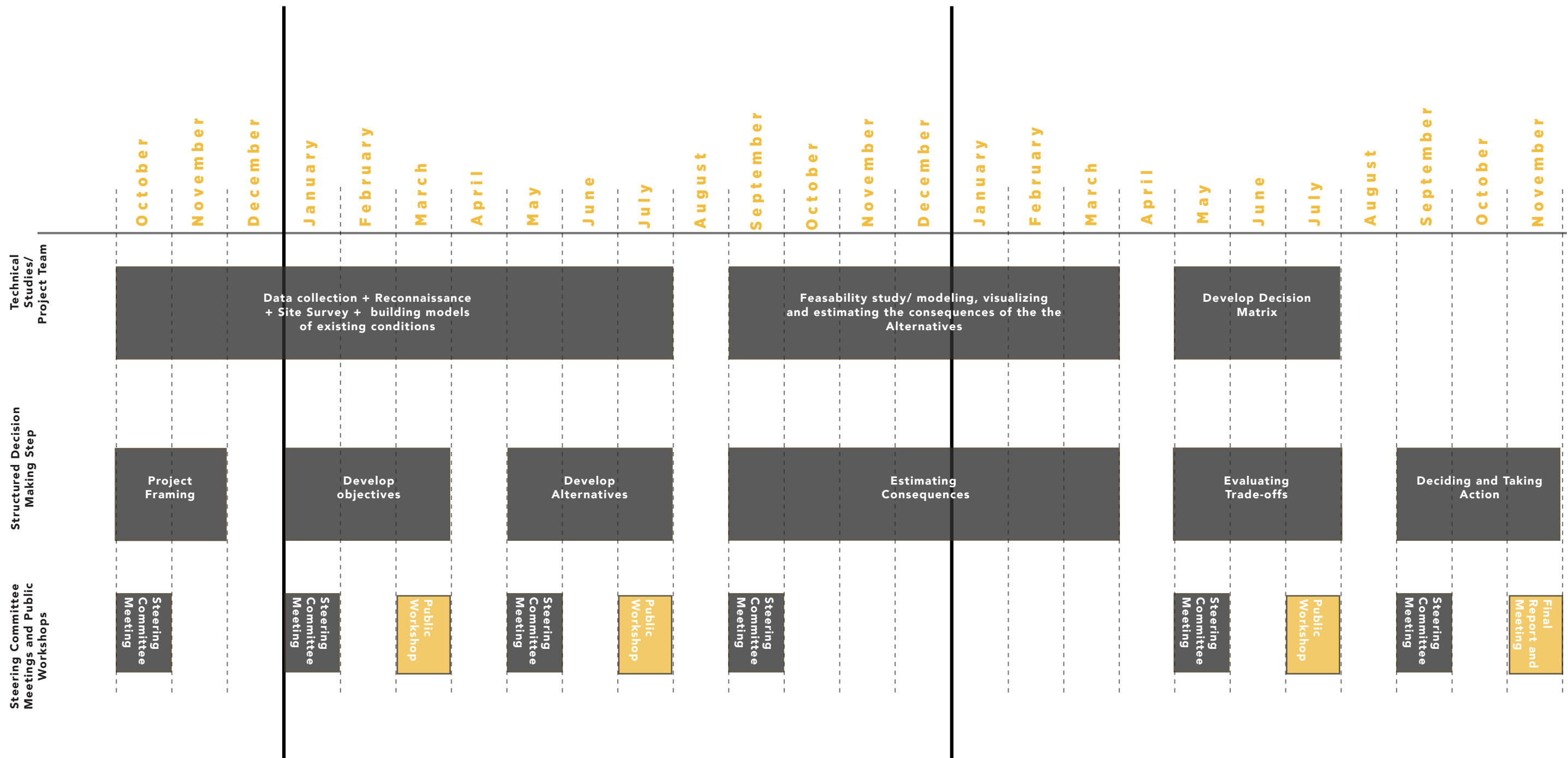


FIGURE x: Example of Project Timeline

MEETING SETUP

Whether you are setting up for public meeting as part of a single exploratory workshop or multiple meetings, it is important to think about how to create the space for a productive conversation.

VENUE:

It is important to choose a neutral venue for the public meetings. A local library, gymnasium, community center may have venues that can be used by the community free of charge.

SIGN UP AND DISTRIBUTION OF PARTICIPANTS

As community members enter the venue, they should sign in. This allows for follow emails and correspondence especially if there will be multiple meetings as part of the process. After signing up, it is best to randomly divide up the attendees into tables with groups of 5-8 people. By dividing up the groups, it ensures that there is a mix of participants representing different interests at each table rather than grouped together. This is especially important since people may come to the meeting with friends or other people who may share the same view points.

To randomly distribute the participants, you can have color groups- each table can have a piece of construction paper on it and when participants enter, they are randomly given a piece of small piece of construction paper and asked to find the table that corresponds to the color.

GROUP TABLES

The break out tables are an important part of this process because dialogue is a central part of any community engaged process. Small group dialogues allow community members to listen to different viewpoints, ask questions, and participate in a civil exchange with fellow community members. Facilitated small group discussions help ensure that all community members participate and have a chance to voice their opinions. In the large town hall or public hearing style meetings that are common in dam decision making, the microphone is often dominated by people who feel comfortable talking in front

of large groups and are very vocal about their position. This approach doesn't allow for a back and forth exchange amongst participants and often leads to the more moderate participants not contributing which could help balance the discussion. Facilitated small group discussions can help participants build an understanding of each other's perspective and open the space for negotiation.

Each table should have a facilitator from the project team and a note taker. The facilitators are responsible for guiding the conversation during the small group discussions, explaining the decision making tools, and answering basic questions about the dam. Since not everyone will hear everyone else's comments- the note takers have an important roll. During the break out discussions, the note takers record participant comments so that the comments can be included in the minutes, discussed by the project team and factored into the decision making.

