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Subtask 1.10: Recommendation Development for the North Carolina Flood Resiliency Blueprint to NCDEQ

North Carolina Flood Resiliency Blueprint

Prepared for the North Carolina Department of Environmental Quality by AECOM

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Definitions

A comprehensive list of definitions applicable to multiple Flood Resiliency Blueprint documents is provided in a separate document.

Acronyms

NCDEQ – North Carolina Department of Environmental Quality

NCORR - North Carolina Office of Recovery and Resiliency

NGO - Non-Governmental Organization

PAG - Principal Advisory Group

Sub-TAG - subordinate Technical Advisory Group

TAG - Technical Advisory Group

1 Introduction

The purpose of this document is to propose and refine a process for the North Carolina Flood Resiliency Blueprint (Blueprint) Advisory Groups to provide recommendations to the North Carolina Department of Environmental Quality (NCDEQ) to build alignment and establish how final decisions are made, specifically targeting the process to deal with differing perspectives. This is a brief document, including diagrams, to identify the decision workflow, who participates, level of participation, and who is accountable for final decisions regarding implementation of the Blueprint. The recommendation document is considered a supplement to the Outreach and Engagement Plan (Subtask 1.3) for the Blueprint and can be more efficiently used in combination with that plan.

There are six Technical Advisory Groups (TAGs): Governance, Partnership/Funding, Hazard Identification, Vulnerability/Risk/Impact, Resilience/Mitigation/Reduction, and Tool Development/Acceptance and one regional advisory group (Neuse Regional Advisory Group) that will provide advisory input and feedback during development of the Blueprint. The Principal Advisory Group (PAG) is looking at the input and recommendations provided by the Neuse Advisory Group and the TAGs to understand policy and implementation impacts to agencies and organizations outside of DEQ. All recommendations provided by the Advisory Groups and the PAG will be provided to the Core Advisory Group, which is comprised of NCDEQ staff. Representatives from local, state, tribal and federal governments; universities; non-governmental organizations (NGOs); and other subject matter experts, were invited to participate on the TAGs and Neuse Regional Advisory Group by NCDEQ. The Neuse Regional Advisory Group will work with the TAGs to test the implementation and application of recommendations as applied at a basin level. In a future project phase, each basin will have a basin-specific advisory group that advises NCDEQ on how Blueprint information will be integrated into that basin.

All Advisory Groups will provide feedback by reviewing and submitting comments on reports and other deliverables across all Phase 1 tasks in writing and during TAG meetings. In Task 3, recommendation options will be provided for the Blueprint Phase 1 effort to the TAGs. The TAGs will review, discuss, and comment on these recommendations to determine how the Blueprint will be structured. TAG Chairs will help determine the path forward by addressing agreements or points of contention, documenting, and providing final recommendations or providing documentation of disagreement where alignment is not reached. This document will identify the recommendation workflow for TAGs including type of participants, examples of level of participation, and accountability for final recommendation determinations. These documents will drive the conversations to help provide options for the TAG recommendations provided to NCDEQ for final Blueprint development. Deliverable review is assigned to specific TAGs based on subject matter content.

Recommendations from the TAGs will be provided through the TAG Chairs to the Core Advisory Group, a NCDEQ group reviewing all recommendations from the TAGs to determine decisions for the Blueprint. The Core Advisory Group will determine best fit for recommendations and work to make informed decisions on the recommendations provided. The Neuse Regional Advisory Group will follow and track TAG discussions and assess whether results directly apply to the Neuse River Basin. The Neuse Regional Advisory Group implements potential recommendations from the TAGs into the Neuse

basin but could also provide information to the TAGs that would adjust suggested recommendations moving forward.

Summary information will also be provided from the TAGs to the PAG. The PAG will provide targeted recommendations based on NCDEQ or TAG Chair request. The PAG will also provide perspective to NCDEQ on potential impacts to outside entities such as other state agencies. The PAG is comprised of federal, state, local, NGO, and other representatives, who would be directly impacted by the output of Blueprint. The PAG will assist NCDEQ by providing additional assessment and synthesis regarding difference of views among TAGs or within a TAG. The PAG's recommendations will be relevant across organizational levels, as well as help determine if there are local, state, or federal requirements that would cause recommendations to be of concern or provide a risk in implementation.

Once the PAG has provided input, NCDEQ will receive these final recommendations and determine approval of each deliverable or key Blueprint decision at either the Core Advisory Group or Executive Leadership level at NCDEQ.

2 Participants/Level of Participation

The stakeholder participation chart shows how the differing groups will be organized and the hierarchy of reporting. Each group has a defined list of participants, as well as participant expectations for review and level of effort. All groups will either be informed by or report to the Core Advisory Group in NCDEQ. Figure 1 shows the stakeholders that will be involved in the recommendation process. Participation will include All Advisory groups, community centered participation/engagement, and end user focus groups. All TAGs and the Neuse Advisory Group (considered in the TAG category in the Figure 1) will be able to review and provide input on all project deliverables, if desired.

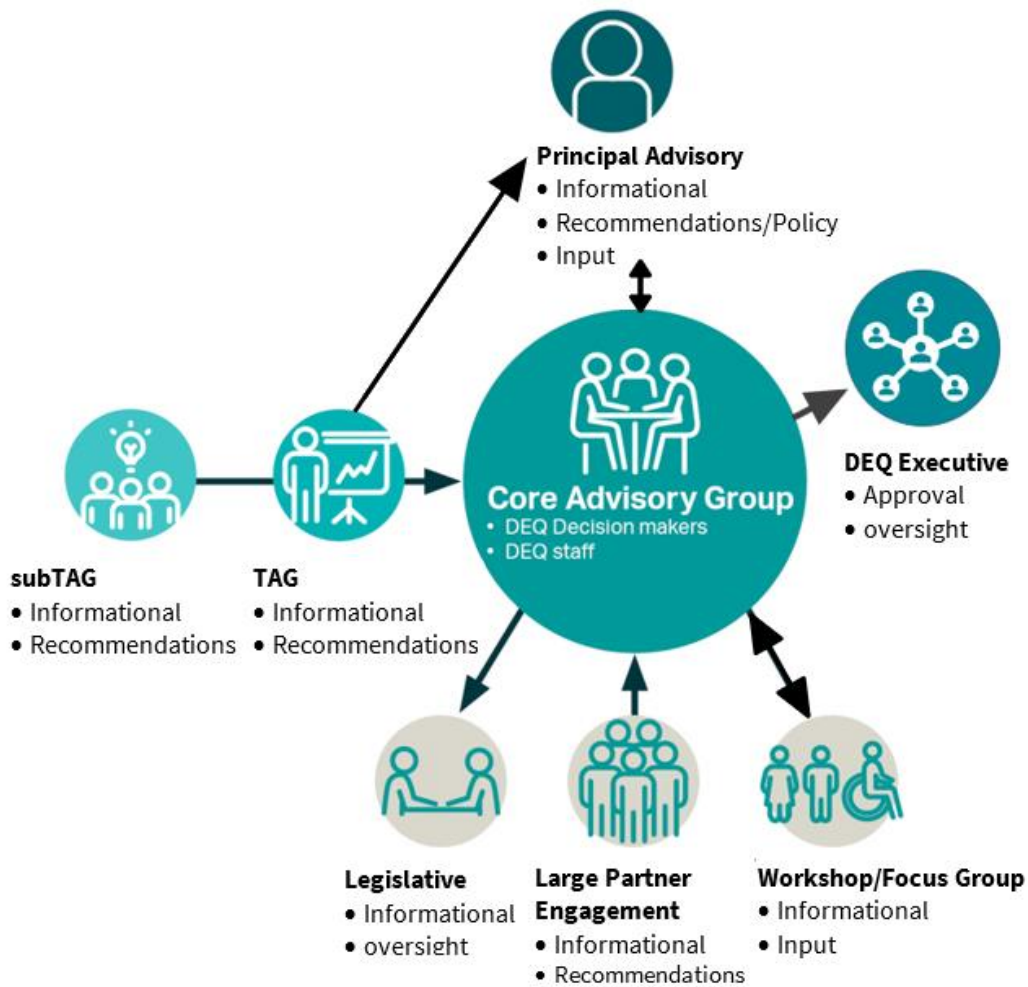


Figure 1: Stakeholder engagement

Table 1: Blueprint Recommendation Entities

Participant	Level of Participation	Primary Roles
AECOM Team	<ul style="list-style-type: none"> • Develop subtask content • Deliver clearly defined options in documentation of the subtasks • Provide recommendations and full comment matrix with reasoning to NCDEQ 	Provide Input Synthesis
Technical Advisory Groups (TAGs)	<ul style="list-style-type: none"> • Review project deliverables • Provide feedback on deliverables <ul style="list-style-type: none"> ○ Identify fatal flaws ○ Provide alternate recommendations ○ Agree or disagree with recommendations • Coordinate a TAG’s recommendations on deliverables through the TAG Chair - documented by consultant 	Recommendations Synthesis
Neuse Regional Advisory Group	<ul style="list-style-type: none"> • Follow TAG discussions • Provide feedback on deliverables relevant specifically to the Neuse Basin • Inform holistic outreach for the Neuse River Basin • Make recommendations to the PAG and NCDEQ on how a basin would use information from the TAGs 	Recommendations Analysis and Application
Principal Advisory Group (PAG)	<ul style="list-style-type: none"> • Application of Blueprint to other missions or organizations. • Provides a forum for elevating select TAG feedback to NCDEQ 	Recommendations Conflict-resolution
Core Advisory Group	<ul style="list-style-type: none"> • Receive TAG, Neuse, and PAG recommendations • Engage in discussion with TAG Chairs, Neuse, and PAG regarding any difference of views • Determine appropriate TAG engagement • Decision-making and, when needed, elevate to NCDEQ executive leadership • Inform NCDEQ executive leadership 	Decision-Making Engagement
NCDEQ Executive Leadership	<ul style="list-style-type: none"> • Decision-making on issues which the NCDEQ Core Advisory Group elevates 	Decision-making

Community participation and public meetings are a key part of understanding and incorporating community values. This input leads to the understanding of recommendations for the end users of the Blueprint. Several meetings will occur with local government officials, tribal officials, and non-elected community leaders to better understand the impacts of hazards to localized areas. There will be four outreach meetings in Phase 1 throughout the state to meet with local government officials and non-elected community leaders. The goal of these meetings will be to hear from locals on how flooding, mitigation, and resiliency have impacted them, and to discuss what actions have been documented in plans or have occurred in the area to help understand what actions are needed for the area. Success will be defined as Information updates from local leaders, input from citizens for how they would like to participate in Blueprint, and local area action items provided for Blueprint. The Blueprint team will also hold community outreach open houses with the public to better understand how individuals deal

with flood hazard impacts, their understanding of resilience, and if mitigation actions are happening at the personal level. The outreach events will include six stations (what is flooding (in Blueprint), what is mitigation, what is resilience, what is the Blueprint, how flooding impacts on a personal level, and a means to tell their flooding, mitigation, or resiliency story). The community outreach open houses will be held in coordination with the four local leader meetings across the state. There will be additional outreach in the Neuse River Basin. It is also proposed that each basin study should have an outreach meeting within their basin in a future project phase in addition to other basin-specific focus group meetings. The community outreach meetings will provide a better understanding of how local individuals and communities are responding to flood hazards to inform the Blueprint.

3 Recommendation Process

Blueprint development will involve creating a recommendation matrix for actionable and outcome-oriented pathways that determine when and how decisions must be made, and at what level of interaction. This matrix will include a breakdown of the tasks and subtasks associated with the Blueprint and determine the necessary TAG providing feedback. There are a total of 43 deliverables which will be provided to the six TAGs and the Neuse Regional Advisory Group for review. Specific TAGs will be asked to review deliverables based on their subject matter expertise. A primary TAG is assigned for review of each deliverable. In some situations, a secondary TAG will also be assigned. All TAG members will have the opportunity to review all documents from the Blueprint if they choose. The following questions shown in Figure 2 will drive NCDEQ’s decision-making process:

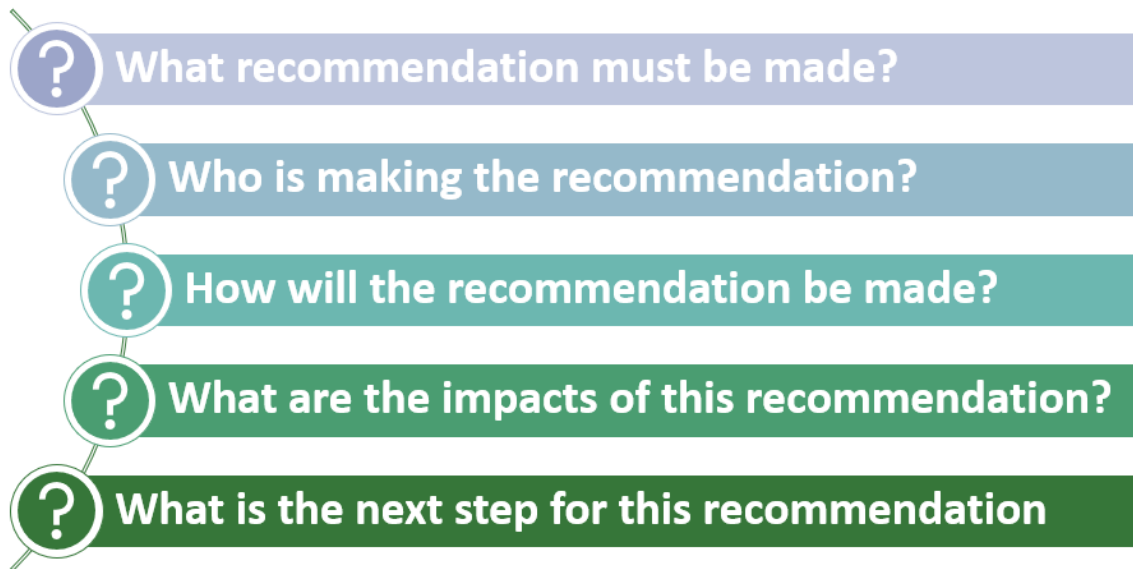


Figure 2: Recommendation Questions

3.1 What recommendation must be made?

Recommendation needs will differ for each TAG. Recommendations and input will be provided by each of the TAGs. TAGs will provide input through comments, questions and concerns submitted on the assigned deliverables and at TAG meetings. TAG meetings will be held on March 15th, May 3rd, June 30th, and July 25th, 2023. Additional meetings may be coordinated by the TAG Chairs. A project checkpoint meeting will be held with the TAGs on November 2nd and a final closeout meeting will be held December 6th. TAG members will have the ability to communicate through Microsoft Teams, as well as at additional meetings as determined by the TAG Chairs. The goal is to have efficient and effective TAG interactions and the ability to review information before the specific TAG meetings occur.

3.2 Who is making the recommendation?

The recommendation matrix will help determine the appropriate parties to provide input on each of the task deliverables throughout Blueprint development. At the beginning of the project, each TAG, through a TAG Chair, will define their preference for interactions within the TAG for review of

documents and questions about content. Should questions or concerns need specific expertise, the TAG, through the TAG Chair or NCDEQ, can create a sub-TAG, which would provide recommendations on specific questions or issues. These sub-TAGs could be created for one question or for the life of the TAG they are assigned to. All information from the sub-TAG will be provided to the TAG and incorporated with other recommendations provided to NCDEQ. Insight from TAG members representing historically marginalized communities will be considered to ensure environmental justice considerations are included during development of Blueprint recommendations. Documentation will set up subtask flow paths (see Figure 3) between the TAGs, helping define to whom the ultimate recommendation belongs, and if a recommendation needs input from multiple TAGs. The Neuse Advisory group has specific deliverables associated with the final Neuse Basin Action strategy. These documents are Neuse specific deep dives to other documents produced for the Blueprint process.

Subtask Flow Paths



Figure 3: Subtask Flow Paths

3.3 How will the recommendation be made?

The TAGs will determine the variables needed to move forward with recommendations, including tools and data. Technical information will also be provided to assist with the understanding of requirements for the Blueprint. Data and documents will be readily available with transparency of access to assist with review and to make sure all information needed for the recommendations is available.

3.4 What are the impacts of this recommendation?

There are a series of receptors used to determine the recommendation's impacts. These receptors are environment, social, economics, infrastructure, and structures and help determine what will be the direct and indirect impacted by a flood hazard. Administrative impacts must also be considered either from a policy, capacity, or capability perspective. Recommendation variables will be provided, prioritized, and weighted for inclusion. This prioritization will be done in coordination with the appropriate TAGs.

3.5 What is the next step for specific recommendations?

Recommendations can take many paths. Questions to be considered by the advisory groups to determine how the recommendation could be implemented such as:

- Is the recommendation an action that needs more input or can it move forward immediately?
- What is the level of effort to put this recommendation into action?
- Who are others needed to help implement the recommendation?
- Who can lead the implementation process?

These questions will be used to work toward a TAG agreement. If there are concerns or participants do not agree with the recommendation, the issues will be documented by notetakers during the meetings and provided by the TAG Chair to the Core Advisory Group. The Core Advisory Group may make a final decision or request a sub-TAG to further review the topic or provide additional resources that would allow for further discussion on the topic.

4 Final Decisions

Final recommendations will be provided to the Core Advisory Group from the TAGs, Neuse Regional Advisory Group, and PAG. The Core Advisory Group will have the ability to ask for more information from the TAGs or request the creation of a sub-TAG for specialty information. All final decisions will be determined by NCDEQ.

5 Recommendation Workflow

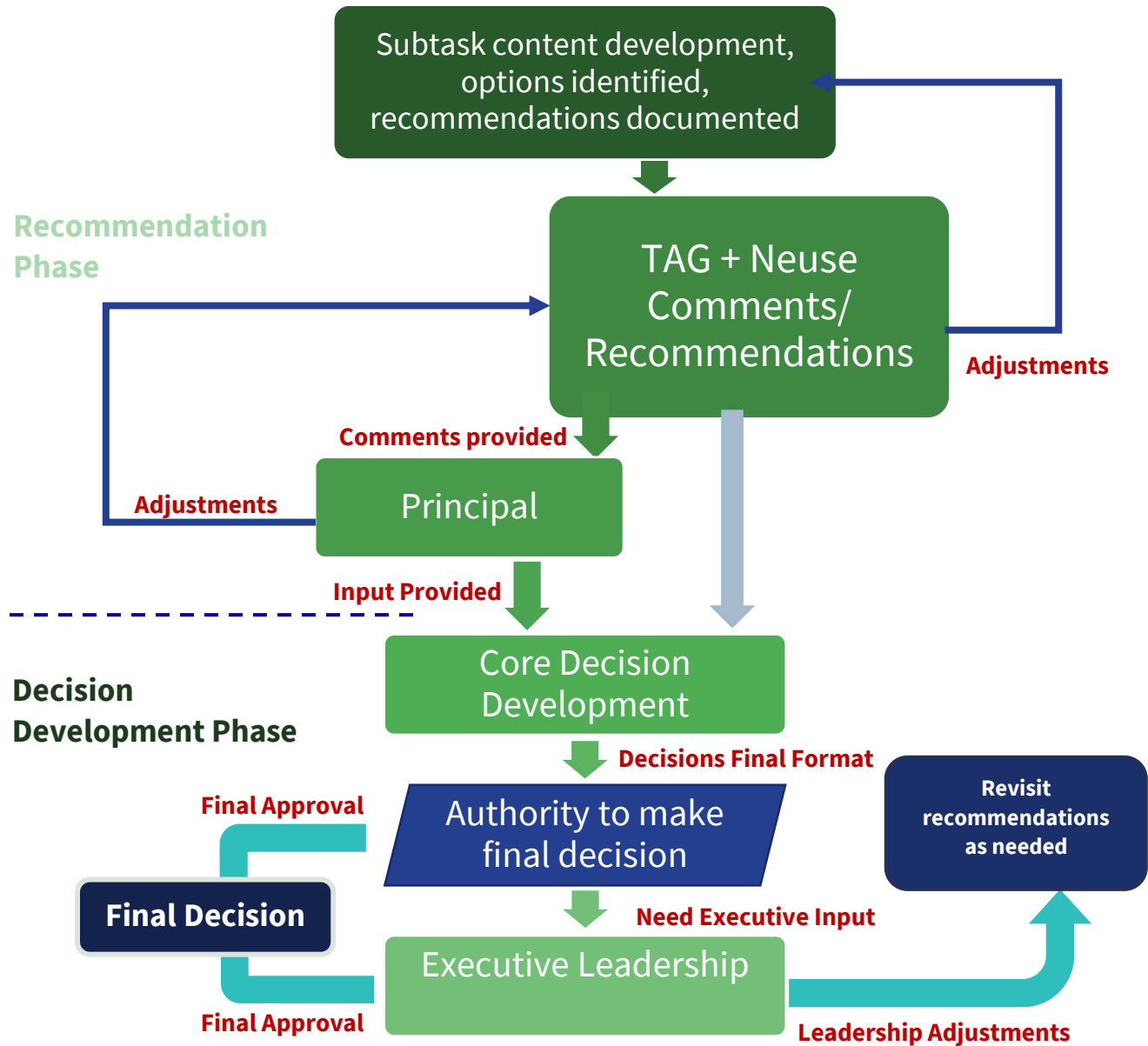


Figure 4: Recommendation Workflow

The recommendation workflow (see Figure 4) starts with the development of content by the consultant. Content is based on task and subtask scope. Task 1 includes review of existing data, plans, and documents. Deliverables will be reviewed by the TAGs with comments provided for comprehensive inclusion of needed foundational information. Task 2 includes a gap analysis, where foundational data is reviewed to make sure it has everything needed for recommendations. These are reviewed by TAGs for feedback on missing or excluded data. Task 3 involves providing recommendations on Blueprint needs in order to be comprehensive and effective for the state. These recommendations will be at a state-wide level and will need to be clarified and potentially adjusted for basin needs. The Neuse River Basin Advisory Group will work to incorporate these

recommendations into a Neuse level implementation. This will eventually need to be done for each basin throughout the state. The TAG and Neuse comments will be provided to the Core Advisory Group and the PAG. The PAG will review for potential impacts to outside sources such as other state agencies, local governments, tribal councils, and other entities.

Task 4 is the final North Carolina Flood Resiliency Blueprint Draft, the Neuse River Basin Action Strategy, and the requirements for the Decision Support Tool. The Core Advisory Group will review all documents in Task 1 (literature review) Task 2 (Gap Analysis), and Task 3 (recommendations) for inclusion and clarification of the Draft Blueprint. NCDEQ Executive Leadership will determine final inputs into the North Carolina Flood Resiliency Blueprint Draft to be provided to the General Assembly as a deliverable.

6 Challenges Specific to Recommendations Within the TAGS

A risk register will be created for the Blueprint with potential pitfalls, mitigation of the common challenges, and potential risks throughout the recommendation processes. Many of these challenges can be managed through proper planning and coordination. Recommendation issues may need special consideration. Table 2 includes a portion of the Risk Log for the stakeholder engagement processes. This list will be updated as issues arise during the project.

Table 2: Risk Log with Challenges Specific to Decision-Making

Challenges	Mitigation Strategies	Impacts
Assemble the proper stakeholders	<ul style="list-style-type: none"> Allow TAG members to help determine sub-TAGs and assist in selecting members for the sub-TAG that may be unknown to NCDEQ Division of Mitigation Services or the contractor 	TAG
	<ul style="list-style-type: none"> If there are others that would be valuable to the process, their names can be submitted to the TAG Chair which will provide them to NCDEQ to determine if they can be added to the team 	Blueprint
Misinterpretation of role or responsibilities	<ul style="list-style-type: none"> Clearly define roles and responsibilities of the participants Provide education and clarification on roles and interactions 	Blueprint
Defining level of participation	<ul style="list-style-type: none"> If initial TAG members are not able to participate, others will be brought in to ensure representative participation 	Blueprint
	<ul style="list-style-type: none"> Each group, at the first meeting, will define their collective expertise, how the groups participate within the project, and the level of participation expected from the group 	Blueprint
Stakeholders may try to influence the outcome for their own means	<ul style="list-style-type: none"> Clear and concise request for needed input from participants 	Blueprint
Engagement methodologies	<ul style="list-style-type: none"> At the first meeting, the groups will determine engagement processes to show how they wish to participate within the TAG, with other TAGs, and with the Core Advisory Group 	Blueprint
Decisions and actions may be slower to reach than planned	<ul style="list-style-type: none"> Frequent schedule updates so all participants understand where we are with timing of products 	Blueprint

Challenges	Mitigation Strategies	Impacts
Group feedback	<ul style="list-style-type: none"> • A feedback loop will be defined for each group. It will show how information will move from one group to the other, and to the Core Advisory Group allowing for open and clear communication. • Contractor leads will participate in multiple groups as transition members sharing information between groups and ensuring information pertinent to multiple groups is coordinated. 	Blueprint

7 Conclusion

Recommendations from all Advisory Groups will be a key factor in the success of Blueprint development. This workflow shows how information will flow from through all Advisory Groups for formalizing recommendations that will be provided to NCDEQ. The different TAGs will provide a holistic look at the needs of the Blueprint from several different perspectives within their subject matter expertise. Working through the Advisory Group Chairs, the participants of all groups can review and comment on questions and concerns related to the Blueprint deliverables. Alignment for final recommendations will have many drivers including environmental justice, subject matter expertise, and data and models. Information from literature review, other state plans, local and regional plans, technical models, and new methodologies will be considered and put forth for the TAGs to consider in providing recommendations. This recommendations document is considered a supplement to the Stakeholder Engagement Plan for the Blueprint and can be more efficiently used in combination with that document.