

Watershed Regional Risk And Resilience (R3) PLAYBOOK

Using an AI Assistant to Operationalize the Playbook

A *Watershed R3 Assistant* powered by artificial intelligence can provide a useful and practical tool to help implement the guidance in the Watershed Regional Risk and Resilience Playbook. The Assistant's purpose is to: (1) help users quickly become familiar with the Playbook and the seven-step watershed risk and resilience planning process it outlines; (2) direct users to the most relevant resources, tools, and data based on the nature and scope of their particular initiative or project; and (3) automate and streamline the creation of key planning products, such as stakeholder engagement letters, meeting agendas, scenario-based exercises, and initial assessments.

The Watershed R3 Assistant supports users by prompting them with step-appropriate questions, summarizing relevant Playbook content, recommending specific resources, and generating outputs tailored to local needs. However, users should note that while the AI Assistant can significantly accelerate and simplify the planning process, it does not replace the need for subject matter expertise in critical areas, such as engineering, environmental science, emergency management, or infrastructure analysis. Collaboration with such experts remains essential for a successful and credible resilience planning effort.

Watershed R3 Assistant instructions are included in this document. Initial testing of using an AI Assistant was performed using ChatGPT and Google Gemini, and suggested queries that appear in this document have been tested using Google Gemini. Rather than base the Watershed R3 Assistant on a specific model and platform, given rapid advances in AI technologies, this instruction set is designed for users to employ the AI model and platform of their choice. Consequently, this document provides directions for how to accomplish this and a series of suggested queries to help users get started using a Watershed R3 Assistant. At the same time, users are cautioned that they should verify responses from the Assistant before using them in their risk assessment and planning process. The Watershed R3 Assistant also does not replace expert knowledge, so users should engage experts whenever there is a question or need to design a project.

What a Watershed R3 Assistant Does

The Watershed R3 Assistant, based on the following instructions, can work in tandem with the Watershed R3 Playbook's seven-step planning process. The Assistant can:

- Provide a plain-language summary of each step and its purpose.
- Suggest questions and prompts users might ask to get started.
- Recommend specific federal, state, or non-profit tools and resources cited in the Playbook.
- Automate select tasks such as drafting planning documents, risk assessment outlines, or stakeholder communications.

This capability enables users to move forward quickly, even if they are just beginning their resilience planning efforts or have limited experience with infrastructure resilience assessment and planning.

Setting Up the Watershed R3 Assistant

AI platforms allow users to set up custom applications on their accounts. Different AI platforms use different terminology, for example ChatGPT simply calls custom applications, “GPTs,” while Google Gemini calls them “Gems,” and Anthropic’s Claude calls them, “Projects.”¹ In any of these cases, the approach to setting up a custom application is quite simple, and be accomplished by taking the following six actions.:

- 1. Find the editor function in the AI platform of your choice.**
- 2. Name the custom application/project: “Watershed R3 Assistant”**
- 3. Add a description of the custom application/project: “Watershed R3 Assistant for using the Watershed Regional Risk and Resilience Playbook”**
- 4. Insert the instructions below by copying and pasting them into the instruction box in the AI platform of your choice.**

Instructions:

You are the Watershed Resilience Assistant, designed to help planning professionals, local governments, practitioners, and stakeholders develop regional or local regional resilience Action Strategies and Implementation Plans to improve multi-hazards resilience.

The guidance that you provide is based only on the Watershed Regional Risk and Resilience (R3) Playbook, the background information on the Changing Risk Landscape, the Holistic Resilience Approach and seven-step planning process articulated in the Playbook, the fifteen resilience principles found in the Playbook, and the guidance, tools, and resources referenced by the Playbook.

The role of the Watershed R3 Assistant is to:

- Guide users through the Playbook’s step-by-step planning process.
- Assist users with building a regional resilience Action Strategy and Implementation Plan using the Playbook and referenced tools and resources in the Playbook by: (1) helping to identify key stakeholders, information characterizing regional communities and supporting critical infrastructures and essential services, existing plans, hazard data, and other information that will help them organize and execute their planning effort.

¹ Note that as of September 2026, the creation of Customs GPTs is no longer available on personal accounts. It is available on business and enterprise accounts if permitted by the system administrator. It is possible to get similar functionality by uploading the playbook and pasting the instructions into the chat window. After completing these two steps, the user will be able to make queries and ChatGPT will function as an AI Assistant for the Playbook.

- Provide complete and accurate summaries of the Playbook, including the planning steps and all fifteen resilience principles as listed in the "Regional Resilience Principles" section (pp. 14–16), and the full set of tools and resources.
- Recommend only tools and resources cited in the Playbook to assist users in executing each step in the planning process. Always refer to and utilize the Selected Tools and Resources tables throughout the Playbook version 2.0 (pp. 8-9; 12-13; 18-19, 24–26; 35–37; 39–42; 46).
- When users select the "Summarize the Watershed R3 Playbook" button or ask to summarize the Playbook, provide a detailed summary of the Playbook. Include its purpose, each of the seven-steps of the planning process, each of the 15 regional resilience principles, mission space, focus areas, needs and capabilities, attributes and enablers, and resilience requirements. Identify the seven steps and describe each step using three sentences. Identify the fifteen Regional Resilience Principles and describe them using 3 sentences each. Use the exact titles from the Playbook for the seven steps of the planning process and for the fifteen Regional Resilience Principles. Do not provide a list of referenced tools and resources as part of the summary—only refer users to the appropriate pages of the Playbook where these tools are listed in tables.
- When users ask for a list of tools and resources referenced by the Playbook, deliver only Selected Tools and Resources tables from the Playbook, as presented in the tables.
- In response to user queries, provide specific outputs and products to assist in tasks associated with each step in the Playbook, informed by the tools and resources cited in the Playbook.
- If users ask for assistance executing a regional resilience planning effort in a particular region direct them to authoritative referenced sources for understanding dependencies and interdependencies of critical infrastructure and facilities that support essential services in that region.
- Caution users that they should not upload any information that is not publicly available or that when combined with other information could be sensitive. Since many of the resources in the Watershed Regional Risk and Resilience Playbook are designed to help users analyze data and information to inform their planning project, direct users to the appropriate referenced resources.

How You Respond to Users:

- Use plain, actionable language.
- When referring to Playbook content, cite the section title (e.g., “Step 1, second bullet point– Creation of a Core Team”) or page range (e.g., pp. 14–16 for resilience principles).

- Deliver the complete list of resilience principles and referenced tools when asked, not just summaries.
- Avoid location-specific advice unless specified by the user.
- If the user states that they are interested in beginning a resilience planning effort, ask them for their location (geographic boundaries) and for the scope (e.g., what infrastructure systems to include, what buildings to include, etc.).
- Assist users to identify relevant plans, hazard data, and other information to inform planning. Direct users to the appropriate tools or resources to analyze data. Where possible instruct users how to use cited tools or what data is needed to perform certain analyses.

5. Upload the Watershed Regional Risk and Resilience Playbook. The Playbook is available for download at: <https://nr3c.org/resources-1>.

6. Select which AI model to use. The deep thinking versions tend to produce the best results to queries, often providing additional detail that the fast models do not provide. *Users are encouraged to test the faster models and deep thinking models to see which best meets their needs.*

Once these six actions are completed, you are ready to begin using the custom application.

Tips on How to Use the Watershed R3 Assistant

Re. selecting the AI model to use: Before using the Watershed R3 Assistant, the user may want to select the model to use. Most AI platforms default to faster version, which is suitable for many inquiries, and a thinking version, which provides more detailed results but takes longer to run. The faster versions have been improving rapidly and often return results that are almost as thorough as the thinking version. Users may want to experiment with both as they work with the Watershed R3 Assistant and may find it useful to toggle between versions depending on the task they are using the Watershed R3 Assistant to support.

To get started: Simply tell the Watershed R3 Assistant the geographic region that is the focus of the Watershed Regional Risk and Resilience Initiative and its scope. Two examples:

- "We are conducting a watershed resilience planning effort for the Upper Green River Basin, focused on flood risk and water infrastructure."
- "We are conducting a Watershed Regional Risk and Resilience Initiative focusing on major wildfire risks to communities and their supporting critical infrastructures in Colorado's Fountain Creek Watershed Region that includes Colorado Springs and El Paso and Pueblo counties."

From there, the Assistant will:

1. Guide you through each step of the Playbook process.
2. Prompt you with recommended questions and tasks.

3. Provide tailored resources and templates.
4. Generate documents and outputs on request.

At each step, users can type or speak natural language questions, such as:

- "Help me identify key stakeholders organizations and agencies in this region."
- "Draft a stakeholder invitation letter for our kickoff meeting."
- "Summarize the threats and hazards we should consider for this region."
- "Recommend resources to evaluate infrastructure interdependencies."

General and Suggested Queries to Get Started

The following are suggested queries to help the user begin to use the Watershed R3 Assistant to navigate the Playbook. The suggested queries are organized, starting with general questions, then working step-by-step through the seven step process articulated by the Playbook. The general queries are intended to familiarize the user with the Playbook, while the suggested queries for each of the steps are intended to help the user implement the Playbook for a particular project. The queries below are suggestions only; users may formulate their own queries based on the specifics of their R3 Initiatives or other resilience planning projects.

Disclaimer: All of the queries recommended below have been tested using Google Gemini. Results using other platforms may vary. Users are cautioned that results from Generative AI platforms should be validated before using.

1. Provide an overview of the Watershed R3 Playbook.

(This query will return an overview of the Playbook including the seven-step planning process and descriptions of each step; the fifteen regional resilience principles; and brief discussions of the mission space, focus areas, needs and capabilities, and resilience attributes and enablers).

2. Provide a list of the each of the referenced resources, brief description of each, and where to find each resource.

(This query returns tables of the referenced resources, organized as they appear in the Playbook. This provides the user with a quick means of accessing any of the referenced documents for information that may be useful.)

3. Walk me through the seven steps of the Watershed Regional Risk and Resilience Playbook planning process.

(This query returns each of the seven steps with a description of each step. It also asks a user to provide more details about the nature of their planning process, including the geographic location and the scope of the Initiative or project.

Queries on the Seven-Step Process

Step 1. Lay the Foundation

1. I want to start a Watershed R3 Initiative (or resilience planning project) for [insert location or geographic boundary]. The scope is [insert the hazard(s) and infrastructure system(s), buildings, or other features you want to include()].

(This query returns information about the site of interest, including geographic characteristics and hazards to consider. It provides an overview of the key stakeholders to mobilize for the area of interest. It will provide the user a list of authoritative tools referenced by the playbook that will be useful to the risk assessment and resilience planning process. The Watershed R3 Assistant also gives the user recommendations for data needed to perform their resilience analysis. The Watershed R3 Assistant will ask what existing disaster response or hazard mitigation plans are currently in place that can be leveraged for the gap analysis. Providing the list of existing plans (in Gemini, the Watershed R3 Assistant will ask the user to list these), will return recommendations for how to leverage the existing plans and identify specific information to pull from each of the identified plans. The Watershed R3 Assistant lists Playbook-referenced tools for analyzing the data, including:

- *How to integrate and align the plans,*
- *Categorizing infrastructure and buildings,*
- *Geospatial mapping of hazards and facilities,*
- *Aligning economic and infrastructure to keep our continuity.*

The Watershed R3 Assistant will ask for specific points-of-contact for local utilities that should be invited to help validate infrastructure dependencies. The user should note that this response includes some actions that overlap with Steps 2 and 3 or the Playbook planning process.)

2. We have a [insert description of population that may have special concerns based on cultural traditions, heritage, or other reasons]. What resources are available to help us recognize their concerns and cultural considerations while developing a R3 Action Strategy that works for all of our stakeholders?

(The Watershed R3 Assistant refers the user to resources that assist with “Whole Community” inclusion. It provides references to examples of successful regional resilience practices and recommends outreach steps described in the Watershed R3 Playbook. The Watershed R3 Assistant may follow up with additional questions about these populations to provide tailored recommendations on outreach and inclusion in regional risk and resilience planning.

3. I am preparing a Kickoff Meeting for the Watershed R3 Initiative (or other resilience planning effort). Help me to draft an invitation letter and prepare an agenda for a one-day workshop to introduce the Initiative (or project) and collect initial stakeholder input on their perceptions of what a resilient region looks like.

(The Watershed R3 Assistant will provide a draft letter to stakeholders inviting them to a one-day kickoff meeting based on the information provided by the user. The user can request the template be provided as a Microsoft Word file to facilitate editing and customization and merging with a mailing list. The Watershed R3 Assistant will also provide a draft agenda for a one-day facilitated Kickoff Workshop and collect data and insights from the participants. It provides tips to assist the facilitator to ensure a productive workshop. The user should be specific about the duration of the workshop so that the Watershed R3 Assistant provides an agenda that fits the planned duration.)

Steps 2 and 3. Identify Regional Infrastructures and Design Assessment and Data Collection

1. How should I go about determining the planning basis (severity of each hazard of concern) for the region and scope of the planning project?

(This prompt refers the user to Step 2 and Step 3 in the Watershed R3 Playbook for background reading on what is involved in these two steps. The Watershed R3 Assistant will provide recommended steps based on the Watershed R3 Playbook and the referenced resources. Certain regions, counties, and larger cities may have already completed risk assessments and resilience improvements recommended by the Watershed R3 Assistant. The Watershed R3 Assistant will provide guidance on how to use data from the recommended actions to inform the determination of the planning basis for each hazard of concern. It may also identify the possibility of compound hazards, such as flooding following wildfire, where that should be a concern.)

2. Our study needs to be completed within [insert timeframe], including determining recommended actions to reduce risk to future events. Can you draft a timeline for our R3 Initiative (or other planning effort)((based on the seven-step process in the Watershed R3 Playbook?

(In response to this prompt, the Watershed R3 Assistant will break down each of the seven steps with a schedule, actions, and milestone for each step. This can be helpful when presenting Initiative timeline and activities to stakeholders and structuring the process for execution. Note that the Watershed R3 Assistant generally will break the schedule into equal times for each step, and it should be modified as needed.)

3. The scope of our Initiative includes [insert infrastructure systems, buildings, or services (e.g., healthcare facilities)]. How do I make sense of the information I have to understand how the different elements might be affected by (insert particular) hazard(s)?

(Based on the Initiative's scope, the Watershed R3 Assistant will provide the user with information on different types of dependencies and interdependencies, then direct the user to specific tools, guidance, and data sources referenced by the Watershed R3 Playbook. It will also provide information on how to use the referenced tools and data and execute the analysis).

4. Can you recommend sources of data for buildings and infrastructure in [insert the name of the region of interest].

(The Watershed R3 Assistant guides the user to authoritative sources of data and information on infrastructure and buildings from reputable federal government data sets. Some of these data sets are not publicly available but can be accessed by contacting regional agency representatives, such as for some of the data collected by CISA. In addition to data collected and maintained by federal agencies, the Watershed R3 Assistant also recommends sources of data and information that may be available locally, such as from county or city public works directors, local emergency managers, and, in some cases, colleges or universities.)

Step 4. Determine Priority Actions

1. We have identified a priority mitigation need and have two options for projects that will mitigate the identified risk. What resources are available to help me evaluate the two project options and determine which best meets our local needs?

(The Watershed R3 Assistant will provide recommendations for resources referenced in the Watershed R3 Playbook that can be used to evaluate costs/benefits of each option to support decision-making. The Watershed R3 Assistant also refers the user to technical planning guides and evaluation criteria that can assist in structuring a collaborative determination of resilient performance goals, identifying significant gaps, and establishing priorities. The Watershed R3 Assistant will follow up by asking what types of projects are being considered. It will use the response to this question to provide more tailored guidance as provided by the Watershed R3 Playbook and referenced guidance documents.)

2. Some of our partners are not able to share detailed data about systems and assets. What guidance is available to help determine what data can be shared to facilitate a common understanding of the issues and hazard impacts and identify solutions that reduce risks and increase resilience?

(Access to data is a common issue for resilience planning efforts. The Watershed R3 Playbook recognizes this hurdle and provides guidance for how to work within a data-constrained environment. This query will summarize the recommendations from the Watershed R3 Playbook and recommend federal resources to help fill data gaps and using Memoranda of Understanding to facilitate data sharing.

Step 5: Develop Action Strategy with an Implementation Plan

1. Our collaborative planning team has completed our resilience assessment and identified a series of actions to be implemented over the short-, medium-, and long-term. What resources are available to guide the development of our Action Strategy and Implementation Plan?

(This query will provide the user with examples from real projects that demonstrate how action strategies and implementation can be organized. It also provides references to federal planning and implementation guides that can help users with structuring their Action Strategy. Finally, the Watershed R3 Assistant will provide reminders of specific elements that

need to be part of the implementation strategy. The Watershed R3 Assistant will also ask if there are specific projects that require external federal grant funding or if the projects will utilize local, public-private cost sharing arrangements. Responding to the follow-up question will allow the Watershed R3 Assistant to provide more tailored guidance on the structure of the Action Strategy.

Step 6: Identify and Secure Resources

1. We are planning [insert description of the project] to [insert a description of what the project will accomplish]. What sources of funding are available to support our planned project?

(Depending on the type of project and what it will accomplish (e.g., flood protection to enable economic development), the Watershed R3 Assistant will provide suggested funding sources. Note that the funding resources cited in the Watershed R3 Playbook are federal funding sources. States may also have funding available for certain types of projects and users are encouraged to contact state agencies to explore whether such options exist and how to apply. Local governments may also have mechanisms available to fund certain types of projects through bond initiatives or other means. The Watershed R3 Assistant will follow up with a question about how the community will pursue funds that will help further tailor the guidance provided.)

Step 7: Implement, Monitor Progress, and Sustain Continuous Improvement

1. Our Action Strategy and Implementation Plan are completed and have been approved by local government. We want to make sure that our Action Strategy and Implementation Plan are not static and that they are tested and updated regularly to account for progress made and adapt as conditions change. What steps should we plan to take to ensure that our community continues to build resilience over time?

(This query will return a series of actions that can be implemented along with references to guidance to help ensure that the Action Strategy and Implementation Plan remain dynamic and adapt to changing conditions. The Watershed R3 Assistant will follow up with a question about whether the community has designated a specific entity to manage the implementation effort. Depending on the user's response to the follow-up question, the Watershed R3 Assistant may ask additional follow-up questions to better tailor guidance based on the Watershed R3 Playbook and referenced resources to assist the user with implementation).

Best Practices for Using the Assistant

It should be kept in mind that the Watershed R3 Assistant is most effective when used as a facilitator and co-planner in partnership with human experts. Here are a few best practices:

- Use it as a first step: Let the Assistant help you develop an initial understanding of risks, stakeholder groups, and planning tasks.
- Supplement, not substitute: Use its outputs to inform meetings, briefings, and exercises, but always validate with subject matter experts.

- Embed in workflows: Incorporate the Assistant into regular team check-ins or planning sessions to streamline recurring tasks.
- Leverage automation: Take advantage of its document drafting, scenario generation, and tool recommendations to save time and reduce administrative burdens.

Limitations to Keep in Mind

The Watershed R3 Assistant does not have access to classified or proprietary data, and it cannot conduct technical analyses such as hydrologic modeling or detailed economic assessments. It also cannot substitute for in-depth local knowledge or decision-making authority. It is designed to assist, not replace, the collaboration, coordination, and expertise that are foundational to successful Watershed Risk and Resilience Initiatives.

Final Note

The Watershed R3 Assistant is part of a broader effort to broaden access to resilience planning resources by diverse cross-sector stakeholders and to accelerate the pace at which they can understand and undertake steps to reduce regional and organizational vulnerabilities. Users are encouraged to use the Assistant often and pair it with the collaborative processes and tools outlined throughout the Watershed R3 Playbook. By doing so, they can unlock its full potential to support effective, inclusive, and actionable regional risk and resilience planning.