

Adaptation Roadmap

Workbook 3: Set Local Context and Sense of Place

Worksheets 3A-3M

Outcomes include:
**Lists of Plans and Processes to Align
Local Stories of Place
Nature-Based and Physical Considerations and Planning Units
Planning Horizons**

Tracking Progress

Name(s):
Title/Dept./other Identifier:
Jurisdiction/Organization:
Date Worked On:
Worksheets Worked On:
Name(s):
Title/Dept./other Identifier:
Jurisdiction/Organization:
Date Worked On:
Worksheets Worked On:
Name(s):
Title/Dept./other Identifier:
Jurisdiction/Organization:
Date Worked On:
Worksheets Worked On:

Workbook 3

3.1 Align Local and Regional Plans
(Worksheets 3A-3E):

3.2 Integrate Community Values
(Worksheets 3F-3G):

3.3 Environmental and Physical Conditions
(Worksheets 3H-3J):

3.4 Frame Discussion for Uncertain Futures
Using Adaptation Pathways
(Worksheet 3K-3M):

Print Your Local Context Outcomes

Adaptation Roadmap

INSTRUCTIONS

Workbook 3 and Outcomes

This workbook is designed to accompany Chapter 3: Set Local Context and Sense of Place to gather data to support future visioning and adaptation solutions in Chapters 4 and 5. The worksheets within provide fillable PDF spaces to list and record your responses.

List of Local Plans and Processes to Align

Section 3.1 **Align Local and Regional Plans and Processes** provides three subsections to support reviewing your vulnerability assessment review and aligning local and regional plan and process efforts. The outcomes result in a series of worksheets:

- **Vulnerability Assessment Review (Worksheet 3A)**
- **Local Plan Alignment (Worksheets 3B-3D)**
- **Regional Alignment or Coordination (Worksheets 3E)**

Local Stories of Place

Section 3.2 **Integrate Community Values** provides three subsections to support having meaningful conversations with communities and stakeholders on values, concerns, and stories of place. Additional conversations from section 3.4 **Frame Discussions for Uncertain Futures Using Adaptation Pathways** on conceptual framing can also be part of a community's local story. The outcomes result in a series of worksheets:

- **Stories of Place (Worksheets 3F-3G)**
- **Adaptation Pathways Conceptual Framing (Worksheets 3K)**

Nature-Based and Physical Conditions, Shoreline Planning Units

Section 3.3 **Incorporate Environmental and Physical Characteristics** provides four subsections to support gathering key information on local environmental nature-based opportunities and physical conditions that affect the shoreline. The outcomes result in a series of worksheets:

- **Nature-Based and Physical Considerations (Worksheets 3H-3I)**
- **Shoreline Planning Units (Worksheet 3J and 3L)**

Planning Horizons

Section 3.4 **Frame Discussions for Uncertain Futures Using Adaptation Pathways** provides four subsections to introduce and advance adaptation pathways. The outcomes result in one worksheet:

- **Planning Horizons (Worksheet 3M)**

Supplemental Pages

The supplemental pages provide extra space to list additional notes, as needed.



See Adaptation Roadmap guidance on pages 82-90.

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Worksheet 3A: List Plans and Processes

3.1 Align Local and Regional Plans

Vulnerability Assessment

Review your 3.1.1 Vulnerability Assessment to document key information that will be useful moving forward. Check the boxes and use the space to include relevant details. Tip: Be consistent in data and language used throughout your process.

Name of Study:

Date and Authors:

Link to study:

3.1.1: The vulnerability assessment includes....

Sea Level Rise Projections Mapped

Impacts to:

Communities and Housing

Contamination

Critical and Community Services

Industry and Business

Natural Areas and Habitats

Transportation

Other

Emerging Topics

Were these included?

Combined coastal and riverine flooding

Shallow groundwater rise from sea level

Something else:

Updates or Use of Vulnerability Assessment

Based on a critical review of the 3.1.1 Vulnerability Assessment (and 1.2.3 Sea Level Rise and Flooding Science), determine if any additional analysis is needed. If additional analysis or updates are needed, document what is needed and how those updates are going to be completed. If no updates are needed, describe how the results of the vulnerability assessment will be shared with communities and stakeholders across the remaining sections of Chapter 3.

Updates needed

Notes on how they will be used



See Adaptation Roadmap guidance on pages 82-90.

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3.1 Align Local and Regional Plans

Worksheet 3B:

List Plans and Processes

Local Plan Alignment – List Plans or Elements to Align

If you are considering plan alignment, use the space to identify what plans (and/or plan elements) should be aligned, and include relevant details such as goal or purpose, last update, lead department, the update frequency, if there is a required due date, if plan updates can be concurrent or should be sequential and any notes, as needed. Consider reviewing the following sections: 3.1 on Local Plan Alignment, 1.2.1 Foundational Studies, and 1.2.3 Connected Issues to help you think about what plans or processes might be useful to align and/or integrate.

3.1.2: What plans are you interested in aligning?

Goal or Purpose	Last Update	Lead Department(s)	Update Frequency	Required by	Dependencies on other Updates?	Notes
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*General Plan
Overall Update*

*General Plan Element(s)
Update*

Specify Element:

Specify Element:

Specify Element:

*Local Hazard
Mitigation Plan*

*Update or Create
"Stand-Alone" Climate
Action or Adaptation Plan*

Other

Specify:

Other

Specify:



See Adaptation Roadmap guidance on pages 82-90.

Adaptation Roadmap

Worksheet 3C: List Plans and Processes

3.1 Align Local and Regional Plans

Local Plan Alignment – Describe Data or Information to Align

The previous **Worksheet 3B** is designed to help you identify relevant plans to align and gather key information on each plan, while this section provides a space to explore and articulate what you mean by "plan alignment". In the Adaptation Roadmap, we consider plan alignment to be about ensuring the same underlying and/or complementary data exists across plans. However, there may be other ways you want to identify or articulate plan alignment in your adaptation effort. Use the space to list your goals or definitions, followed by specific types of data or information to be aligned across your plans.

3.1.2: How do you define plan alignment in this effort?

3.1.2: Data or data sources to consider for alignment:

(Data to be aligned might include: Sea Level Rise Projections, Community Assessment Data, Vision and Principles, etc.)

*General Plan
Overall Update*

*General Plan Element(s)
Update*

Specify Element:

Specify Element:

Specify Element:

*Local Hazard
Mitigation Plan*

*Update or Create
"Stand-Alone" Climate
Action or Adaptation Plan*

Other

Specify:

Other

Specify:



See Adaptation Roadmap guidance on pages 82-90.

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Worksheet 3E: List Plans and Processes

3.1 Align Local and Regional Plans

Neighboring or Regional Coordination or Alignment

Consider if there are neighboring or regional plans or processes that may be useful to review, align and/or incorporate into your adaptation effort. Based on what you find during this review, it may be important to go back to the stakeholder and communities identified in **Chapter 2** and consider if additional people should be brought into the process in some capacity.

3.1.3: Other plans, processes, or projects to consider...

Regional Studies or Data

Regional Plans or Programs

Regional Climate Collaborative

County Climate Collaborative

Place-Based Stakeholder Group

Regional Assets/Infrastructure

Who Are Your Neighbors and Potential Shared Flooding Impacts?

Two regional resources may be particularly useful to review. The [SFEI/SPUR Adaptation Atlas](#) created Operational Landscape Units (OLUs) to identify "Nature's Jurisdictions" for multi-jurisdictional planning. Consider reviewing what OLU you are in and what other jurisdictions are in your OLU (see Appendix 1, page 186 in the Adaptation Atlas). The [ART Bay Area](#) study identified regional sea level rise vulnerabilities, including conducting a subset of Local Assessments at the OLU scale, and a regional "Hot Spot" analysis of areas with shared significant regional flooding consequences. Consider reviewing this resource to explore if your jurisdiction is included in one of the Local Assessments (see page 3-16 for a list of OLUs included), and/or if your jurisdiction is within one of the regionally identified "Hot Spots" (see page 2-8 for the starting point of Regional Hot Spots.).

Name of OLU:

Link: [SFEI/SPUR Adaptation Atlas](#)

ART Bay Area Local Assessment or "Hot Spot"

Link: [ART Bay Area Regional Sea Level Rise Vulnerability Assessment and Adaptation Study](#)

3.1.3: List your neighbors in your OLU...

3.1.3: Shared vulnerabilities and consequences...

*Local
Assessment*

*Regional
Hot Spot*



See Adaptation Roadmap guidance on pages 91-96.

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Worksheet 3F: Stories of Place

3.2 Community Values

Build Upon Local Communities Values, Concerns, and Initiatives

The Adaptation Roadmap encourages creating space to have conversations with communities and stakeholders about what they care about and what existing efforts they may already have to ensure this work integrates and builds upon where people are. We recommend taking notes (and/or recordings) during those meetings, with permission from communities and stakeholders. You may also use this space to identify key themes you heard. If having these conversations with multiple different community and stakeholder groups, consider listing audience or group name, and duplicating this page to add more notes. Additional space for notes is available in the Supplementary pages.

Audience: _____

3.2.1: Familiarity with climate issues

3.2.1: Key concerns and local issues

3.2.1: Key values important to the community and/or stakeholder group

3.2.1: How this process is building on existing community efforts

Duplicate this PDF page to take notes for multiple stakeholder groups.



See Adaptation Roadmap guidance on pages 91-96.

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Worksheet 3G: Stories of Place

3.2 Community Values

Acknowledging and Embedding Local Knowledge

Use the space to describe notes from community and stakeholder conversations on local and indigenous knowledge, and how this process can seek to embed and incorporate and respect this base of knowledge into the adaptation effort. If having these conversations with multiple different community and stakeholder groups, consider listing audience or group name, and duplicating this page to add more notes. Additional space for notes is available in the Supplementary pages.

Audience: _____

3.2.2: Incorporating Local and Indigenous Knowledge notes

Past and Present Stories of Place

Use the space to describe notes from community and stakeholder conversations on exploring the history of local place. This might include discussing landscape literacy, environmental justice, natural habitat changes, and anything else that should be included. While stories can be written, there are many ways to tell stories: such as through art, maps, videos, or other multimedia. Explore how your communities and stakeholders want to tell their shared story. Note: You can also consider including 3.4.1 Conceptual Framing of Adaptation Pathways as part of this story.

3.2.3: Stories of Place notes

Duplicate this PDF page to take notes for multiple stakeholder groups.



See Adaptation Roadmap guidance on pages 97-103.

Adaptation Roadmap

Worksheet 3H: Nature-Based and Physical Considerations

3.3 Environmental and Physical Conditions

Value of Nature – Ecosystem Services

Natural habitats provide enormous benefits to our wellbeing. Use this space to list which ecosystem services resonate and stand out to communities and stakeholders. Understanding and elevating the value of natural habitats will be useful as you begin exploring adaptation solutions in Chapters 4 and 5, as nature can support help flood protection (see 3.3.1 **Value of Nature**). Documenting people's attitudes and perspectives on this topic will be helpful in Chapters 4 and 5 as these nature-based solutions to sea level rise are further explored.

3.3.1: Key ecosystem services to elevate....

Wildlife Habitat

Recreation

Cultural/Spiritual

Flood Protection

Carbon Storage

Value of Nature – "Nature's Jurisdiction" in the Adaptation Atlas








Refer back to the Operational Landscape Unit (OLU) you identified in **Worksheet 3E**. In addition to using this resource to understand your neighbors, it also provides a wealth of information on nature-based opportunities and suitabilities in each OLU. Download the Adaptation Atlas document and explore which nature-based solutions are applicable in your location for easy future reference. *Check the suitability rankings, which come directly from this the Adaptation Atlas document.

Name of OLU:

Link: [SFEI/SPUR Adaptation Atlas](#)

Some suitability*
High suitability*

3.3.1: Nature-based opportunities (notes):

- Nearshore reefs 
- Submerged aquatic vegetations 
- Beaches 
- Tidal marshes 
- Polder Management 
- Ecotone Levees 
- Migration Space Preparation 



See Adaptation Roadmap guidance on pages 97-103.

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Worksheet 3I: Nature-Based and Physical Considerations

3.3 Environmental and Physical Conditions

Critical Infrastructure, Development, or Other Projects

Use this space to note major and/or critical infrastructure, projects, and/or other development that should be considered when discussing the physical realities, constraints, and opportunities of flooding impacts in your area. This information should already have been gathered in the 3.1.1 **Vulnerability Assessment**, and this page provides space for elaboration.

List type of project and project name, and consider including names of project management team member(s), whether you are currently coordinated or need to coordinate, and any other notes about potential integration and alignment with this effort.

3.3.2: Project

Transportation

Flood Control

Critical Infrastructure

Development Area

Habitat Restoration

3.3.2: Project

Transportation

Flood Control

Critical Infrastructure

Development Area

Habitat Restoration

3.3.2: Project

Transportation

Flood Control

Critical Infrastructure

Development Area

Habitat Restoration

Duplicate this PDF page to take notes for additional projects.



See Adaptation Roadmap guidance on pages 97-103.

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Worksheet 3J: Shoreline Planning Units

3.3 Environmental and Physical Conditions

Shoreline Planning Units – Methods

Use this space to list which datasets and information have been used to develop shoreline sections, reaches, or other organizations of the shoreline. Use the boxes to check which datasets are being used and the space provided to include details.

3.3.3: Information/data used to create shoreline units:

Shoreline Type

Vulnerability Index

Shoreline Geometry

Areas of Overtopping

Environmental Features

Inland Development

Social Issues

Shoreline Planning Units – Descriptions

Use the boxes to name and list shoreline reaches and descriptions. These descriptions should include enough detail to clearly define why specific shoreline segments were created, while also being accessible to your communities and stakeholders involved.

Shoreline Unit Name **Description**



See Adaptation
Roadmap
guidance on
pages 104-112.

Adaptation Roadmap

Worksheet 3K: Stories of Place

3.4 Framing Adaptation Pathways for Uncertain Futures

Adaptation Pathways – Conceptual Framing

Discuss adaptation pathways concepts with communities and stakeholders. Use this space to note reactions or responses to this information. See section 2.3 **Effective Communication** for tips on how to build upon community and stakeholders values, interests and motivations to help them connect with the adaptation effort. Consider checking the boxes to highlight key areas of conversation. Or, use the space as needed to capture feedback from these conversations with communities and stakeholders. This can also be part of a community's local narrative and story of place: past, present and *future* from **Worksheet 3G**.

3.4.1: Notes on conversations with communities and stakeholders

Shared Vocabulary

Geographic Scales

Non-Traditional Time Horizons

Iterative Nature of Adaptation

Acknowledging Uncertainty

*Separate Long-Term
Brainstorming from Decisions
Today*

Additional space for notes, as needed



See Adaptation Roadmap guidance on pages 104-112.

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Worksheet 3L: Shoreline Planning Units

3.4 Framing Adaptation Pathways for Uncertain Futures

Shoreline Planning Units – Descriptions

Shoreline unit names and descriptions from Worksheet 3J are populated here. Use the additional boxes to describe specific thresholds and/or triggers and monitoring considerations for each of these reaches. This information may have been part of the reason for creating shoreline reaches, and if so, describe the details here.

Shoreline Unit Name	Description	3.4.2: Thresholds	3.4.3: Triggers / Monitoring
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See Adaptation Roadmap guidance on pages 104-112.

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Worksheet 3M: Planning Horizons

3.4 Framing Adaptation Pathways for Uncertain Futures

Adaptation Pathways – Planning Horizons

Use the spaces to articulate planning horizons that make sense for your communities and stakeholders given local conditions and all of the information gathered thus far in Chapter 3. For each planning horizon, include the name (if giving a new name), what water levels were used, impacts or thresholds that occur in that planning horizon, time estimates (with citations to most recent science), and lifespans of critical infrastructure and relevant plans, if applicable. Additionally, include other information as you see fit. Include maps of impacts where possible. These planning horizons will be used to explore adaptation solutions and adaptation pathways in Chapters 4 and 5.

3.4.4: Immediate-term / Today Or other name:

Include maps

Link:

3.4.4: Short-term / Near-term Or other name:

Include maps

Link:

3.4.4: Medium-term / Mid-term Or other name:

Include maps

Link:

3.4.4: Long-term / Far-term Or other name:

Include maps

Link:

SUPPLEMENTAL PAGES

Workbook 3 and Outcomes

Extra space for additional notes as needed.

Adaptation Roadmap

Supplemental Page #

Extra space for additional notes as needed.

Duplicate this PDF page to take additional supplemental notes.

Workbook 3 is a complimentary resource to the **Adaptation Roadmap: A Practitioner's Guide to Plan and Implement a Collaborative, Equitable, Integrative, and Flexible Approach to Sea Level Rise Adaptation**. These resources were created by the Adapting to Rising Tides Program at the San Francisco Bay Conservation and Development Commission. March 2022.

This workbook has been made to meet Web Content Accessibility Guidelines (WCAG) Level AA Requirements to the extent feasible. We acknowledge parts of this document may still require additional assistance. Please contact us at BCDC at:

415-352-3600

Bay Area Metro Center (375 Beale St., Suite 510, San Francisco, CA 94105)

Accessibility@bcdc.ca.gov