Questions and Answers

WEBINAR 3: RSAP ATLAS: DATA AND MAPPING PLATFORM FOR PLANNING

Data Included in the RSAP Atlas

Question: Will the Atlas include only hazards, or will it also identify opportunity areas such as potential wetland restoration or migration zones as sea levels rise?
Answer: Yes, opportunity areas are included in the Ecosystem Health and Resilience Strategic Regional Priority and those data layers are included in the Atlas. In developing the RSAP and the supporting Atlas data, we worked closely with partners including the San Francisco Bay Joint Venture and the San Francisco Estuary Institute to incorporate analyses identifying potential marsh migration space, transition areas, and undeveloped adjacent uplands. These areas represent opportunities for habitat restoration, enhancement, or accommodation.

Question: Does the Atlas include property ownership data that can be obtained from counties?
Answer: No, the Atlas does not currently include property ownership data.

Question: Is city and county data included in the Atlas?
Answer: Yes, the Atlas includes most data summarized at the city and county scale (as well as operational landscape units (OLUs)) where it is relevant to shoreline adaptation planning. Summaries are also presented for relevant census designated places (CDPs). The RSAP Atlas uses modified geographic boundaries reflecting the Bay shoreline, Bay watershed, and Bay coastal flood hazards (and do not include those assets and areas outside the RSAP analysis area). You can explore the data layers in the Atlas or review the Data Sources and Analytical Methodology Report for more information.

Question: Is there data in the Atlas for flows from creeks, streams, rivers, etc.?
Answer: Yes. In Element B: Existing Conditions we require local governments to identify the location of creeks and streams under B2-a: Coastal and nearshore hydrological conditions. The Atlas includes data on creeks and streams from SFEI (2016) as well as Creek to Baylands

Reconnection Suitability dataset (SFEI & SPUR 2019), which is part of the Nature-Based Adaptation Suitability data in the Minimum Categories and Assets Standard. The RSAP Atlas does not include information about creek/stream flow, sediment transport, and combined riverine/tidal flooding.

Question: Is the BCDC jurisdiction (e.g., 100 foot inland, etc.,) also available through this tool?
Answer: The Atlas does not provide a separate layer for BCDC's regulatory jurisdiction (i.e.,Bay, 100-foot shoreline band, etc.). The Atlas is designed to support Subregional Shoreline Adaptation Plan requirements as outlined in the RSAP, not BCDC's permitting. The RSAP requires Subregional Plans to include inland areas defined by at least the RSAP's 6.6 ft (2100 High) sea level rise scenario. BCDC is working on developing a separate jurisdictional layer and will consider integrating into the Atlas if it helps support RSAP requirements.

Question: Where can we access information on FEMA's consideration of wave run-up and the mitigating effects of marshes when planning for flood risk and determining levee heights in sea level rise adaptation projects?
Answer: The Atlas includes some related resources, such as modeled wind wave heights and FEMA 100-year flood hazard zones, which also provide base flood elevation information. However, other data on wave run-up is not currently included. While FEMA flood maps account for wave run-up, there is no regionally available data that predicts how wave run-up will change with sea level rise. If such a dataset becomes available, it would be considered for inclusion in the Atlas. You can find data layers related to FEMA, including the 100-year and 500-year flood zones in the Map Layers section under Coastal Nearshore Hydrological Conditions. In addition to the data above, the RSAP also requires an evaluation of Baylands Resilience Characteristic and ecosystem services. Visit the San Francisco Estuary Institute Baylands Resilience Framework Project webpage to find information relevant to this Plan requirement.

Question: Is there a way to upload our local data into the Atlas to fill in the gaps in regional data?
Answer: Not at this time. However, BCDC and our regional partners aim to serve as a data steward, helping to compile local datasets and, where appropriate, publish them through the Atlas to enhance and fill gaps in the regional data.

Question: Are the contacts within Planning Project Team and Affected Parties different? Or is it more that you would use them to catalog for different uses: who could be on the project team vs. who might be affected?
Answer: The data provided in the RSAP Atlas for both RSAP Element A: Planning Project Team and Affected Parties is the same, the Community Based Organization Directory Map (BCDC 2025). The information can help identify potential community-based organization partners for the planning project team and help identify potential community-based organization partners that may represent affected parties. This data is not required to be used in the RSAP but is available to support the planning process.

Updates to the RSAP Atlas

Question: How will the Atlas be kept up to date as data layers change? What process or system is in place to ensure that evolving regional conditions are reflected through regular updates and remapping?
Answer: That's something we've been keeping in mind throughout the development process. Where possible, we've relied on live connections to authoritative data sources so updates can be as seamless as possible, and we've scripted much of our data access and analysis to make updates efficient. Each dataset has an associated data management plan and update cycle, ranging from weeks to months to about a year, and these will be overseen by BCDC staff to ensure completeness and accuracy. Some datasets, like hazard layers, are on a longer update cycle and depend on best available science, so we're working with the Adapting to Rising Tides Data and Science Team at BCDC to plan near-term updates. One major effort we're looking toward is a region-wide LIDAR and topographic data collection that will capture the most current shoreline conditions.

Natural and Nature-based Solutions

Question: Will the Atlas include the full range of potential natural and nature-based solutions along the shoreline, beyond just migration areas?
Answer: Yes. Within the Ecosystem Health and Resilience topic area, the Atlas includes data from the Adaptation Atlas that show suitability for a variety of nature-based adaptation strategies for local governments to consider, which is also a requirement of the RSAP. We are working closely with the San Francisco Estuary Institute to develop additional guidance on how local governments can use this suitability information, along with insights from the Baylands Resilience Framework, to help design adaptation strategies for their jurisdictions. SFEI is also working on a complementary tool to the RSAP Atlas through the Beneficial Baylands project. This decision support tool will build on and include data from SFEI's Adaptation Atlas and Baylands Resilience Framework.

Question: Does the Atlas provide sufficient guidance or prompting for local jurisdictions to consider natural and nature-based solutions (NNBS) as preferred adaptation strategies, or must jurisdictions determine that on their own when reviewing the mapping?
Answer: Local governments are required to hold a minimum of three consultation meetings with BCDC staff, though we strongly encourage additional meetings. These meetings provide opportunities for jurisdictions to ask questions and for BCDC to communicate expectations for developing Subregional Plans. Prioritizing natural and nature-based adaptation, where feasible, is one of the RSAP's Adaptation Strategy Standards and we communicate this to local governments through multiple avenues, including consultations, resources, and tools. Within the Atlas, there are multiple ways to access different types of data, including Adaptation Atlas nature-based suitability and existing conditions data. The

tool can advance jurisdictions' planning efforts but does not provide all the answers or prescribe exactly which adaptation strategies are suitable for each landscape.

Meeting RSAP Guidelines

Question: Is there a way to work with you to provide the correct geography for unincorporated counties so it can be included in the Atlas?
Answer: Yes, please share any jurisdictional boundary information you have, and we will review it for incorporation. Send it to GIS@bcdc.ca.gov.

Relationship of RSAP Atlas to Other Tools

Question: What is the relationship between the COSMOS modeling and other models and are there any differences between them?
Answer: The groundwater data in the Atlas comes directly from the COSMOS data, though we adjusted some of the binning based on discussions with Professor Christina Hill at Berkeley, particularly for deeper levels around nine feet. These assumptions are key because this groundwater information is a critical input for the hazard layers in the Atlas. We are also working regionally to develop locally refined groundwater mapping for all nine Bay Area counties, leveraging existing monitoring sites across the region. For sea level rise water levels, we use BCDC's data, which may account for some of the differences you're noticing. The main difference is that BCDC's data incorporates local flood infrastructure, such as levees, which COSMOS does not.

Question: What is the relationship between the Adaptation Atlas and RSAP Atlas?
Answer: The nature-based suitability layers in the Adaptation Atlas are included in the RSAP Atlas as we require local governments to look at best available science for natural and nature-based suitability when considering adaptation strategies.

Question: Is the geographic scope of the Atlas data largely limited to BCDC jurisdiction, or do some datasets extend more broadly, such as to entire counties? And would it be possible to clearly indicate the coverage of each dataset, so users know what they are accessing?
Answer: The Atlas data is clipped to the Bay shoreline and Bay watersheds, which in some cases extends inland beyond BCDC's regulatory jurisdiction. The data in the RSAP Atlas does not include the outer coast and eastern parts of Contra Costa and Solano counties, since those areas are not within the scope of RSAP. The data in the RSAP is displayed for relevant Bay areas and watersheds. Language is provided to clarify the geographic boundaries used in the exposure analysis and summary statistics data.

Additional details on geographic scope and methodology are available in the technical methods report. Feedback on clarity and labeling is welcome.

Question: Are there any similar tools available for communities on the Pacific/Outer Coast that you are aware of?
Answer: We're not aware of a comparable tool for the Pacific/Outer Coast that links coastal hazard data to a planning process in the same specific way as the Atlas. While there are many hazard explorer tools available for the outer coast, none that we know of integrate the data and planning guidance in quite this way. Please reach out to Kelsey Ducklow (Kelsey.Ducklow@coastal.ca.gov) at the California Coastal Commission for more information on SB 272 requirements for the outer coast.