

Field Trip

ADAPTING TO RISING TIDES PROGRAM

Purpose

The project team and working group collectively explore landscape conditions and geographic and functional relationships among assets within the project area.

Approach

Through visiting multiple sites in the project area, the project team, asset managers and others actively participating in the project, together consider geographic and functional connections among different shoreline assets.

Outcomes

1. Collectively, project participants – project staff, asset managers and others actively engaged in the project– increase their understanding of:
 - On-the-ground conditions and challenges to managing assets in the project area
 - Current and future functional and physical vulnerabilities for the assets
 - Geographic and functional relationships among assets that lead to cascading impacts and broad consequences caused by damage or disruptions to an individual asset or system of assets
2. Helps the project team maintain engagement with the working group in between meetings.
3. Building relationships among owners and managers of neighboring, and functionally linked assets.

When to use this exercise...

This exercise is most helpful during a longer break between project meetings, for example, while staff is conducting the assessment. It can provide an effective means of maintaining the working group's awareness and interest in the project during what could be perceived as a lull in the project. Site visits can also lead staff and participants to a much better understanding of underlying causes and components of vulnerability and consequences in the project area, and help confirm and/or correct information being collected for the assessment.

Logistics

The total amount of time needed for this exercise can vary a great deal depending on the number of sites visited. At each site, allow 30 to 40 minutes for the site host to provide a brief introduction and for the group discussion. Be sure to factor in travel times between field trip sites when planning the agenda.

1. Prepare

Selecting Field Trip Site(s)

Select a location or series of locations within the project area to visit that include different asset types and managers represented in the planning effort. Consider:

- How well the site or sites will illustrate how geographic and functional connections among assets affect vulnerability and consequences of impacts.
- Opportunities for project staff to improve upon the analyses of vulnerability and consequence by visiting (alongside the asset managers) sites for which information about physical conditions and management challenges is lacking or requires ground-truthing.
- Opportunities to engage specific asset managers more closely in the project.
- Ease of travel among multiple sites for the field trip attendees.

Begin planning by reaching out to the asset manager(s) for the selected sites to request their active participation and address their questions and concerns. Ensure that they can attend the site visit and are willing to serve as guides for the attendees. Remember to ask about and arrange for special access or passes needed at sites.

Supplies

1. Field trip guide (see example, below) that includes:

- The purpose and expected outcomes of the field trip:
Learn about on-the-ground conditions and vulnerability of assets from asset managers, and explore geographic and functional relationships among assets that can lead to cascading impacts and broad consequences

- A verbal description of the field trip itinerary along with a (driving) map with the sites (numbered in order).

- Relevant contacts, safety information and logistics

- Key questions for consideration and discussion at each field trip site. Example questions could include:

Has this asset experienced disruptions, loss of function, damage, etc directly or indirectly because of a storm event or other hazards or disruptions? What were the circumstances of the impacts and resulting consequences?

Are there ways that this asset can accommodate changing storm impacts (e.g., extra flow capacity in a discharge system)? How could management of this asset help it adapt to new conditions? Are there onsite management measures to accommodate disruptions?

What is needed for the continued function of this asset/asset component/system of assets (asset)? And, conversely, what other assets rely on this one? Who manages/owns these related assets?

Questions more specific to the conditions, functions and relationships of the assets.

- Additionally, it may be helpful to have in the handout a brief description of each site and the assets that participants will be seeing.

2. Labeled map of the project area: using GIS or any digital mapping software, create a map that shows the project boundaries, labeling the field trip sites as well as other relevant features and information. Examples might include: roads and other infrastructure; management responsibility, ownership and jurisdiction; locations of community services; hazards, such as contaminated lands; etc.). Plot or print a large format map (e.g., 36" wide) if possible.

3. Blank stickers or sticky notes, pens and markers, clipboards, a camera.

Other Prep

Multiple project staff members should attend and be prepared to take notes and, if there are a large number of attendees, facilitate discussions (based on the exercise questions) among smaller groups.

In the invitation and event reminders, be clear about what participants should bring and/or wear depending on the sites and conditions.

Project team members should visit the field trip sites in advance to confirm drive times and/or other logistics, and modify existing and identify additional exercise questions based on site conditions.

2. Do

1st

At the meeting location, hand out the field trip guide, and clipboards and pens. Review the purpose, outcomes, itinerary and other relevant logistics for the field trip exercise. If needed or appropriate, divide the attendees into smaller groups with an assigned project team lead.

2nd

At the first field trip site, use the plotted map to orient the group to the location in the project area, assets at the site, and other relevant features, e.g., homes and neighborhoods, schools, hospitals, fire and police stations, transit centers, commuter and goods movement corridors; employment sites, utility corridors, recreation areas, habitat and natural features, etc. Depending on the site and assets it may be appropriate to have asset manager(s) do this orientation.

3rd

Ask the asset manager or other attendee most familiar with the site and asset(s) to begin the discussion by addressing the exercise questions as well as questions from other participants. If participants are struggling



to identify geographic and functional connections or aspects of vulnerability or resilience, prompt them with examples. Before moving on to the next field trip site, give the asset manager(s) an opportunity (if they wish) to share any new insights that might have emerged from the site visit and discussion. Project team members should be taking notes throughout. Encourage participants to note their observations on the handouts as well.

4th

Continue a similar pattern at the next field trip stops (if applicable).

5th

At the last field trip site, a project team member should summarize the key points about geographic and functional relationships and associated vulnerabilities that came out of the discussions. Ask for additions, modifications or general comments. Collect any feedback or comments that were written by participants.

3. Follow-up

Summarize the field trip from the notes (with meeting notes), and first send a draft to the managers/hosts for the different sites to review for accuracy. Incorporate their input and share the revised summary with all attendees and the working group.

Incorporate relevant new information from the field trip into the assessment of vulnerability and consequences and development of adaptation responses (e.g., sequencing adaptation actions and identifying possible processes and actors involved in implementation).

Example Materials & Outcomes

The following example materials and outcomes are taken from the Hayward Shoreline Resilience Study, an extension of the ART Pilot Project in Alameda County. The study took a closer look at two miles of shoreline in Hayward that included extensive parks and natural areas, major wastewater infrastructure, and the approach to the Hayward-San Mateo Bridge. From September 2013-September 2014, working group members and ART Program staff developed asset and focus area vulnerabilities and adaptation responses.

Field Trip Guide

Hayward Resilience Study Field Trip

December 19, 1:30-3:30pm

Description:

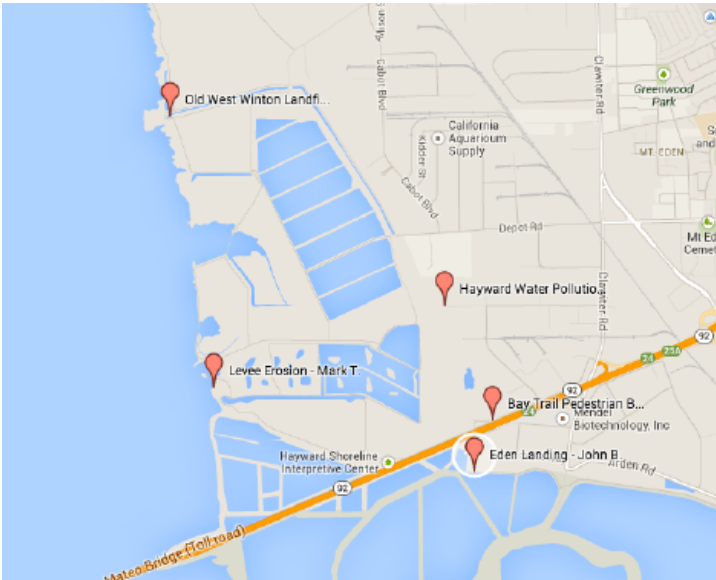
The working group will visit five sites within the project area with assets or systems of assets that are being considered in the study. We will have opportunities to learn about key vulnerabilities from asset managers, and visualize and experience the geographic and functional relationships among assets within our study area.

Logistics:

- Contact person and cell number
- Map and driving directions
- Safety information

Field Trip Stops:

- 1) Eden Landing.
- 2) Bay Trail Pedestrian Bridge.
- 3) Levee Erosion.
- 4) Hayward Water Pollution Control Plant.
- 5) Old West Winton Landfill.



Questions for each stop:

- 1) Have you experienced disruptions or loss of function because of storm events or other events?
- 2) Does the asset (e.g., wastewater treatment facility) or system (e.g., levees) have excess capacity to accommodate impacts?
- 3) How could management of this asset adapt to new conditions? Are there on-site management measures in place that help accommodate disruptions?

Geographic & Functional Relationships

In the Hayward Shoreline Resilience Study, the field trip started a working group conversation about creating transitional habitat for tidal marshes. When viewing the entire focus area at once, the need for an integrated marsh plan that includes land owned by the city became apparent. Staff representatives from the park districts and wastewater treatment plant were able to discuss the possibility of eventually converting overflow oxidation ponds to marsh. Without visiting the shoreline together, it would have been difficult for working group members to analyze and plan for the shoreline landscape as whole instead of their individual properties.