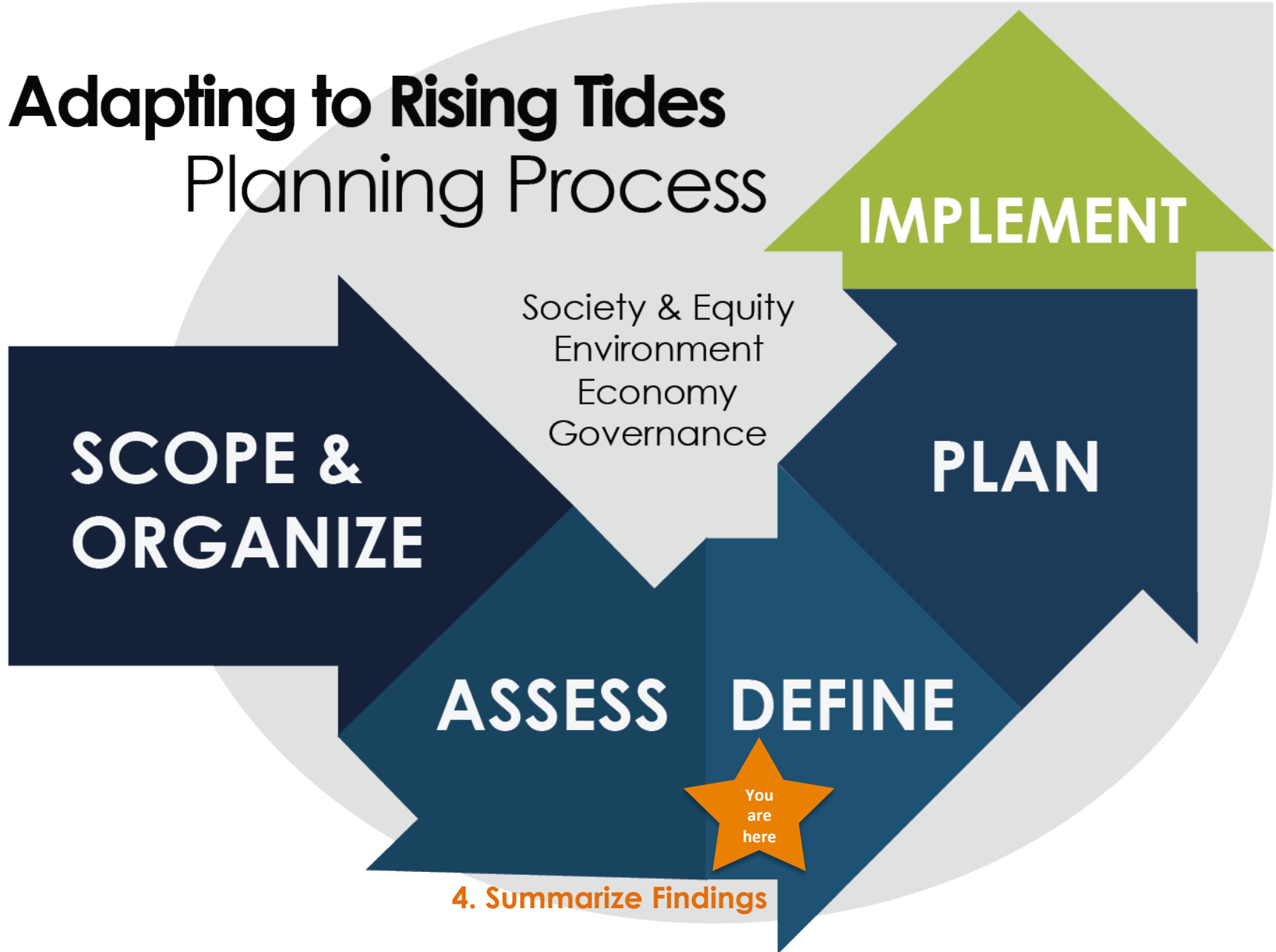


# Adapting to Rising Tides Planning Process



4. Summarize Findings

# Recall...



## Outcomes of Step 3-Do the Assessment

- **Assessment answers identifying causes of vulnerability and consequences**
- **An exposure analysis identifying which climate scenarios might affect different assets**

# Now onto...



- **Summarize answers to the assessment questions into clear, outcome-oriented vulnerability and consequence statements**



*Organizing is what you do before you do something, so that when you do it, it is not all mixed up. – A.A. Milne*

**DEFINE**

# assessment findings

**Statements that summarize the vulnerabilities and their consequences.**

**Example VULNERABILITY:**

**The transportation network cannot accommodate rerouted commuter traffic or goods movement if rail service or significant roadways are disrupted.**

**Has CONSEQUENCES on:**

- **People where they live and commute**
- **Social equity**
- **Local, regional and national economy**
- **Environmental quality**





- **Share profile sheets that have the assessment findings with working group members, and incorporate their input**





# profile sheets

A one or two-page summary, or profile, of the asset, sector or service assessed.

**Adapting to Rising Tides**

### Hazardous Material Sites Vulnerability and Risk Profile

Hazardous materials are substances that pose a risk to human health and the environment. They can be liquid, solid, sludge, or gas; and may be the byproducts of industrial/manufacturing operations or discarded commercial products such as pesticides and cleaning solvents. Facilities that generate and store hazardous materials in the ART project area include laboratories, manufacturing facilities, gas stations, and transportation operation maintenance facilities. Hazardous materials can be stored inside buildings or outdoors, depending on the type of substance and local regulations. Geo-referenced data was only available for generators of hazardous waste, a subset of hazardous materials, and exposure analysis was only conducted for large and small generators of hazardous waste (LQGs and SQGs), as defined by the Resource Conservation and Recovery Act (RCRA).

### Key Issues

There are 152 LQGs and SQGs in the ART project area. These facilities are concentrated largely in Oakland, Hayward, and Emeryville, and storm related flooding at mid-century could affect numerous facilities at the same time. A lack of well-coordinated information about the location and type of materials at these facilities reduces managers capacity to prepare and respond to emergencies. A multi-hazard, multi-site emergency could have adverse impacts on public and environmental health. Additionally, the lack of publicly available information about sites where hazardous materials are present, but which do not fall into the LQG or SQG classification, creates additional challenges in properly preparing for and responding to emergencies that could result in the release of hazardous materials.

Vulnerabilities	Consequences
<p><b>Timing</b></p> <ul style="list-style-type: none"><li>At mid-century, approximately 30% (54) of the hazardous waste facilities in the ART project area will be exposed to wind waves during storm events.</li><li>By the end of the century, 20% (31) of the hazardous waste facilities in the ART project area will be exposed to regular tidal flooding, and more than 50% (68) to periodic storm events flooding.</li></ul> <p><b>Physical and Functional Qualities</b></p> <ul style="list-style-type: none"><li>Flooding during a storm event could cause releases of hazardous materials if they are not well contained, exposed to wind waves during storm events.</li></ul>	<p><b>Scale</b></p> <ul style="list-style-type: none"><li>Adjoining properties and neighborhoods</li><li>City-wide</li><li>Throughout the ART project area</li></ul> <p><b>People</b></p> <ul style="list-style-type: none"><li>Flooding of hazardous materials sites could expose people where they live, work, and recreate to substances harmful to human health and safety.</li><li>Facilities that generate or store hazardous materials are often job sites, and their disruption or closure can affect people's livelihoods.</li></ul>



# Next up...

- **Write issue statements for the profile sheets**
- **Identify the project's key planning issues**
- **Refine the project resilience goals**