# Adapting to Rising Tides

### Governance

#### **Governance and Adaptation**

The effects of climate change present serious challenges for municipalities, agencies, community organizations, businesses, property owners, residents and others in the Bay Area. Overcoming these challenges requires the participation, perspectives, skills and resources of all parts of society.

Governance is broader than the organizations and mechanisms for decision-making that constitute a government. Those regions that are able to build upon and integrate the capacity and resources of all members, including non-profit organizations, emergency responders, business owners, residents, decisionmakers and more, will have greater resilience to climate change, reducing the potential for significant societal, public health and safety, economic and environmental consequences.

Just as financial resources and engineering solutions can increase a community's capacity to adapt to climate change, so can effective institutions when combined with empowered and informed communities, businesses and organizations. Improving a community's resilience requires understanding how institutional arrangements, decision-making processes and regulations can contribute to climate vulnerability, and where changes in gover-nance can offer solutions. For example, capacity can be strengthened through improved coordination across different sectors and jurisdictional and organizational boundaries. In some cases it will require new programs, policies, and institutional arrangements. govern*Ance* extends beyond govern*Ment* to integrate the role that civil society plays in decision-making



#### **Governance in ART**

The Adapting to Rising Tides (ART) Project assessed how sea level rise and storm events will affect shoreline and community assets in the San Francisco Bay Area, and developed a portfolio of potential adaptation responses to reduce and manage these risks. Because the mechanisms for decision-making and participation are critical in determining the Bay Area's ability to adapt to climate change, ART assessed the governance capacities of institutions, organizations, and communities in the project area.

Governance is one of four frames of sustainability that were integrated into each step of the ART planning process. Considering these four frames throughout a planning process helps ensure that a wide range of critical issues is identified and that the outcomes of the process will maintain or increase sustainability of shoreline communities.

#### SOCIETY & EQUITY

Effects on communities and services on which they rely, with specific attention to disproportionate impacts due to existing inequalities.

#### ECONOMY

Economic values that may be affected such as costs of physical/infrastructure damages or lost revenues during periods of recovery.

#### ENVIRONMENT

Environmental values that may be affected, including ecosystem functions and services, and species biodiversity.

#### GOVERNANCE

Factors such as organizational structure, ownership, management responsibilities, jurisdiction, mandates, and mechanisms of participation that affect vulnerability and risk.

#### "Adapting Governance for Rising Tides"

This ART issue paper evaluates the role of governance in planning for climate change. It examines the institutional capacity of organizations and agencies in the Bay Area that will have a role in increasing resilience in the region. The paper frames the challenges in three broad categories: uncertainty, complexity, and resource constraints.

Current institutional arrangements, decision-making processes, and laws and regulations were reviewed in light of the challenges presented by sea level rise and storm events. The models and case studies presented in this paper are intended to assist the region in the early identification of vulnerabilities facing institutions, organizations, and communities, and provide guidance as agencies, organizations and communities plan for climate change.

Based on the findings in the paper, the following lessons were identified for Bay Area adaptation planning.

- Plan for climate change by planning for effective governance
- Involve the full range of institutions and interests that will play a part in adaptation responses
- Make use of existing arrangements as a starting point
- Provided opportunities for "soft" starts (i.e., informal or low-stakes joint efforts) that might evolve into robust adaptation responses
- Evaluate a coordinated, regional approach for adaptation planning
- Establish and work towards a shared vision of resilience

#### Management/Control Vulnerabilities

The institutions, organizations, regulations and mechanisms for participation used in current decision-making are critical in determining the Bay Area's ability to adapt to the effects of climate change. The ART management/control vulnerabilities identify where gaps in this type of governance capacity exist. Management/control vulnerabilities were identified for assets based on the following characteristics:

- · How assets are currently managed or regulated
- How decisions regarding construction and operation are made
- The availability of financial resources to implement changes
- The flexibility of funding or permitting for the asset



## ADAPTING GOVERNANCE FOR RISING TIDES

