The following chapters recommend how to reach CRC Milestone One, "Initiate Your Climate Resiliency Effort":

chapter 6 build your climate change preparedness team

To conduct your climate resiliency study, you will need to coordinate activities across departments, jurisdictions and levels of government. This coordination may be achieved through a climate change preparedness team (the focus of this section) and/or by designating a climate change "point person" within your government. This chapter will help you create your climate change preparedness team by answering a series of common questions related to:

- when, why, and how to form a preparedness team
- characteristics to look for in team leader(s) and members
- typical work efforts and products
- launching your preparedness effort.

A brief description of the creation, staffing, and responsibilities of King County's climate change preparedness teams is also included in Box 6.3 at the end of the Chapter.

6.1 Why Form a Team

For many governments, as in King County, climate change (and planning for its impacts) will affect many services, operations and infrastructure, including: water supply, flood control, wastewater treatment, public health, environmental protection, planning and zoning, parks and recreation, economic development, and emergency preparedness.

To the extent that you can, cast your net wide in recruiting your team. One or two people may not be sufficient to accomplish this workplan. How well your government and community respond to the consequences of climate change may not only depend on the preparedness of an individual department, but also on numerous, cumulative actions across departments, divisions, and programs. Forming a climate change preparedness team with a cross-section of representatives from relevant departments or programs is therefore useful for overseeing, coordinating, and advocating for preparedness efforts.

However, you may find that a full-scale cross-departmental preparedness team is not feasible in your circumstances. For example, your resources may be limited. Please note that you may still be able to develop your preparedness plan within your current framework by finding expertise outside

of your organization, as described in 6.5. You can assess your need for an expanded preparedness team as more information becomes available. Questions to consider when establishing a team are listed in Box 6.1.

Box 6.1 – Questions to Consider When Establishing a Climate Change Preparedness Team

- What are the major impacts and priority planning areas that your preparedness team will address? Are the departments responsible for managing these impacts and priority planning areas represented on the team?
- What is the specific charge of your preparedness team? (The range of the team's roles might include research about impacts, public education and policy development, and implementation of an adaptation plan. These roles will likely evolve over time based on conversation between members and the team leader.)
- Is your preparedness team being established as a permanent working group?
- How much time does the team have to accomplish this charge?
- What deliverables are expected and to whom? (Typical products include an agreed-upon summary of the impacts of climate change in the region, a description of how these impacts could affect different departments or programs, and a preparedness plan, based on how each department or program intends to prepare for impacts.)
- What resources are available for the team to accomplish its work? (This evaluation should include financial resources, staff support, and/or access to technical consultants in the public and private sectors.)
- What authorities does the team have to accomplish its task? (The team should be able to: draft proposed legislation from the county executive or mayor; review and revise operational plans, managerial priorities, and capital investments.)
- Will team decisions be made by consensus, through voting, or by decision of the team leader in conjunction with department heads?
- Who will lead the team?
- To whom is the team accountable?
- How will the team manage input from the public and other jurisdictions/ governmental entities potentially affected by adaptation strategies?

6.2 How to Select Members for Your Team

The number and background of team members will vary. The team makeup that is appropriate for your community will depend on the specific impacts likely to occur in your region; the governmental operations, infrastructure, and policies that will be affected; and how your community government intends to interact with other local governments, stakeholders, and the public to prepare for climate change. This understanding can and will evolve over time, and team members can be added over time as needed.

At a minimum, include one or more representatives from each department or division which is likely to be affected by climate change. Table 6.1 provides a quick reference list of departments and divisions that may need to be included in your preparedness team. Your team leader can work with department heads to have appropriate staff assigned to the preparedness team. Team members should have technical familiarity with the work areas being reviewed for adaptation planning. Technical briefings at the team meetings can help team members get familiar with climate change impacts and preparing for climate change.

POTENTIAL PARTICIPANTS IN A CLIMATE CHANGE PREPAREDNESS TEAM	
Planning Areas	
Agriculture	Planning and zoning
Economic development	Public health
Emergency management	Stormwater management
Fire	Transportation
Flood control	Wastewater treatment
Natural resources / environmental protection	Water supply
Parks and recreation	Coastal zone management and port and harbor management
Forestry and forest resources	

Other Potential Team Members	
Business community	Non-profit organizations
Consultants	Science advisor(s)
Native American Tribes	State and federal agencies
Neighboring governments	Metropolitan planning organizations

Table 6.1 – Potential participants in a climate change preparedness team. Potential participants in a climate change preparedness team. The actual make-up of your climate change preparedness team will depend on your organization's particular responsibilities, vulnerability to climate change, and relationships with the broader community.

You may also want to include external scientific advisors such as representatives from a nearby NOAA-RISA office and/or members of the broader community. External scientific advisors can direct team members to appropriate information sources and summarize climate change science and information about climate impacts into a less technical format (see Box 6.2). Members of the broader community may include non-governmental organizations, businesses, other jurisdictional governments and agencies (including those who may be affected by climate change impacts and/or adaptation strategies), and informal community leaders. Engaging these groups in a broader conversation will help ensure that workable strategies are developed and supported by the broader community.

Ideally, a majority of the team members should be authorized to make changes recommended by the collective team in the adaptation planning process. The best case scenario would be for the team to contain a large percentage of managers from the government, as well as advisory technical experts, so that the plans made by the team can be funded and confidently implemented once recommendations are made. If managers are not able to serve on the team, the team should contain credible staff members who have strong working relationships with department and division managers and can secure managerial support.

Box 6.2 – Tips for Selecting Science Advisors

Science advisors can help your climate change preparedness team understand the science of climate change, projected regional impacts, and the confidence with which projections of future change are made. They can "translate" scientific information into terms understandable by an educated layperson and help identify additional sources of information. In selecting a scientist to serve as a climate change science advisor, it is important to consider both their professional credentials and their communication skills.

To evaluate professional credentials, consider whether the individual has earned an advanced degree(s) in a pertinent scientific discipline from a recognized university, the number of years of relevant experience, ability to produce peer-reviewed publications, and/or familiarity with both the global and regional consequences of climate change.

To evaluate communications skills and appropriateness for involvement in a governmental planning process, make sure the person under consideration is:

- Interested in and willing to provide guidance on the use of scientific information in the planning process, including guidance on dealing with scientific uncertainty;
- A clear communicator. Consider inviting the advisor to give a talk to your team on an aspect of climate change or regional impact science (e.g., "Observed and projected global climate change," "Causes and consequences of climate change," or "Local impacts of climate change"). Note how well s/he communicates scientific information and how willing and able s/he is to answer questions and engage in discussion in an understandable and approachable manner.
- Understanding of, or at least willing to learn about, the timescales and constraints of governmental planning processes.

Good starting points for identifying potential scientific advisors are local universities, professional and/or technical societies, NOAA-RISA teams (see Appendix D.5), and non-governmental organizations involved in climate change related activities. It is important to recognize that time and funding constraints can limit a researcher's interest and ability to serve as a science advisor. This may be particularly true in areas where the demand for potential advisors exceeds supply.

External Advisory Boards

Preparedness planning and the specific strategies that come out of your planning process will need to reflect a sense of region-wide partnership and collaboration, and involvement from the general public will also be important. Depending on the scale of your planning effort, however, you may want to consider establishing an external advisory board instead of undertaking a major public process. Other reasons to expand the ownership of climate change preparedness to an external advisory board include the following:

- **Climate change crosses jurisdictions, sectors, and disciplines.** Climate change preparedness is not the exclusive task of government. On the contrary, government needs to urge businesses, non-governmental organizations, and residents to undertake their own preparedness activities, in concert with regional planning. It may also eventually be necessary to ask these groups to support changes in zoning, building codes, utility rates, or best management practices in the course of implementing a preparedness plan.

- **Preparedness strategies may benefit from fresh perspectives.** Building an outside team can bring fresh perspectives on how to adapt public

operations and services, from those not involved in those operations on a daily basis. A diversity of opinion and background can benefit the greater good, such that low income and vulnerable populations are represented as well as manufacturers, developers, engineers and scientists. If government feels "stuck" on a particular problem or solution, an external advisory board can provide outside perspectives on the issue.

- **Bold preparedness strategies may need political support.** Some governments may benefit from building an external advisory board of community leaders in the public and private sector to gain expert input, political capital, or other resources that the government might not have on its own. If board members are influential community leaders or well-connected professionals, they could prove to be very useful in spreading the word about the climate change preparedness effort, among the public and their broader networks of colleagues.

6.3 How to Select a Team Leader

Assign someone, or some combination of individuals, the responsibility of assembling the team and leading its efforts. This individual will also probably be different from your public "champion" who develops support for the cause but does not manage the efforts directly (see Section 5.1). Given that team members will come from various departments, the ideal team leader will be centrally located, have a good grasp of the organization's overall responsibilities and objectives, and be able to communicate well with colleagues from other departments or divisions.

Your preparedness team leader should have authority and technical familiarity to work with staff members across the broad scope of government agencies. S/he should have authority to require deliverables from the departments represented on the team, as well as a strong working relationship with the government's leadership, whom s/he will advise on the climate planning recommendations and progress over time. Without appropriate authority, the team leader may not be able to count on the willingness of departments to contribute.

It will be necessary for your team leader to have a general sense of which departments or divisions have authority over areas that are vulnerable to climate change. The leader should be able to identify the government functions likely to be affected by climate change based on the initial scoping of projected regional effects of climate change (Chapter 4). The team leader can then work with the relevant department heads to have appropriate staff assigned to the preparedness team. For this purpose, the team leader should have a strong relationship with department heads.

Basic understanding of climate change and climate change impacts is desirable but this knowledge can be improved through literature reviews, meetings with local experts, seminars, and other modes of public education. More critical are the leader's managerial skills, including their ability to facilitate large meetings on complex topics and keep the team focused. Preparing for climate change requires input from a number of diverse disciplinary experts and departmental representatives, and new ways of working together across public organizations. Your team leader will therefore need to be able to facilitate group interaction and develop a sense of commitment from team members to feel collectively vested in the same outcome. For this important but somewhat intangible aspect of team management, you will want to select a team leader who is respected personally without a personal or institutional agenda that could conflict with

productive teamwork. An ability to communicate clearly with the public and community leaders will also be essential.

6.4 What the Team Will Do

Your community's preparedness team can serve multiple purposes but its primary responsibility is to guide how the government entity adapts to climate change. Ideally, the team will (over time) review all programs and services provided by the government organization, identify those potentially affected by climate change, and propose strategies for adaptation. Large governments might consider instituting teams on two levels: a senior-level team that coordinates preparedness activities for the government as a whole, and technical-level teams that coordinate activities within individual departments. For smaller governments, a single interdepartmental team may be all that is needed.

Your team should engage in a five basic stages of work – effectively the five major process steps of this guidebook (or the Climate Resilient Communities program Five Milestones):

- conduct a climate resiliency study;
- identify priority planning areas for action, based on assessments of your vulnerability and risk in selected planning areas;
- set goals and develop your plan;
- implement your plan;
- measure your progress and update your plan.

Typical products include a consensus-based description of the regional impacts of climate change, how these impacts will affect the objectives, outcomes, and operations of different departments or programs, and how each department or program intends to prepare for these impacts.

Once the team is formed, the team as a whole should be briefed on what is currently known about climate change and major projected regional impacts. It is important for participants to know what the science can and cannot tell us at this point in time and how confident the scientific community is about various projected impacts. This step is valuable for establishing a common baseline of understanding among team members since it is unlikely that all team members will begin with the same degree of understanding or knowledge. The team will also need to address any remaining procedural issues noted in Box 5.1 and discuss how they would like to move forward in the planning process (using the remainder of this guidebook as a reference point for those discussions).

Establishing your team (or point person) and getting the necessary authorities and resources for the team will likely require action from your executive level leadership, which may be a mayor, city or county council, governor, or state legislature. This stage is therefore another good opportunity to launch your preparedness planning effort officially, with a resolution, press release, or another public event that would highlight the proactive steps your community is taking to address climate change impacts.

Be prepared for your team and its workplan to change. As you move through the vulnerability assessment detailed in Chapter 8, stop periodically to reflect on whether the team membership

appropriately reflects the impacts of climate change that matter to your region. It may be that climate change will affect more sectors or resource areas in your community than initially realized, meaning that additional team members from other departments or divisions or from different external organizations may be needed. Conversely, some members may not be needed if fewer or different vulnerabilities in certain sectors are found. Periodically evaluating the match between team members, identified regional consequences of climate change, and potential response strategies will ensure the right personnel are in place for preparedness planning.

6.5 How to Make Progress with Limited Resources: Assign a Point Person

When limited resources mean that forming a team is unrealistic, consider assigning a "climate change point person" to coordinate preparedness efforts and seek outside help. Your point person may be an existing staff member who takes on the additional responsibility of coordinating preparedness activities, or a new hire dedicated specifically to this task. Regardless, it will be important for that point person to have the following authorities, skills, and/or position in the government:

- authority to request meetings with government staff and to require informational updates and climate planning products from across work areas;
- technical familiarity with the roles, responsibilities, policies and practices across most or all areas of government, or an ability to learn quickly about those work areas;
- working relationship with the government's top leadership, for purposes of advising the leader(s) on plan and organizational recommendations;
- ability to research, write, and communicate about regional climate change impacts and community vulnerabilities in a policy context;
- personal initiative to champion a climate change planning process;
- resourcefulness in finding and using outside resources to produce a government adaptation plan.

Without these characteristics, especially appropriate authority, the success of a point person to lead an adaptation planning process may be limited. Note that the description of this point person mirrors that of the climate change preparedness team leader, and we strongly suggest that the role is important enough to be delegated to a high-level staff member of the government.

Checkpoint: *Upon finishing this section, you should have formed an interdepartmental climate change preparedness team representing the disciplines and departments appropriate for the climate change impacts you preliminarily scoped for your region. This team should have strong leadership and top-level support.*

Box 6.3 - Case Study: King County's Climate Change Preparedness Teams

In January 2006, the King County Executive established an interdepartmental "climate change action team," led by the Executive's Deputy Chief of Staff. This team was charged with developing planning, policy, and investment strategies to reduce climate change emissions and prepare for regional climate change effects.

The team is staffed by over 10 employees from the Executive Office, the Department of Development and Environmental Services, the Department of Executive Services, the Department of Natural Resources and Parks, the Department of Public Health, and the Department of Transportation. The core staff members of the team are:

- The Executive's Deputy Chief of Staff, who provides policy and political guidance for the team, convenes biweekly meetings, and directly advises the Executive;
- The Deputy Director of the Department of Natural Resources and Parks, who demonstrates strong departmental support for the team's work plan, and leads the development of climate change preparedness strategies from an interdepartmental advisory group, as explained below;
- A full-time climate change "coordinator" in the Executive Office, who writes, researches, and develops policy, planning and communications materials for the team;
- An almost full-time analyst in the Department of Natural Resources and Parks who advises the team on policy development and conducts the county's greenhouse gas emissions inventory; and
- An economist in the Department of Transportation, half of whose time is dedicated to the team.

The smooth functioning of the team is also dependent on strong involvement by high level department chiefs and managers who ensure that proposed actions can be funded and implemented. Staff from the Office of Management and Budget help to conduct cost benefit analyses of proposed actions and provide financial support for initiatives such as Chicago Climate Exchange membership and yearly 'carbon budgeting.'

King County has found that a mix of technical advisors and implementers is ideal, so that some team members can be "experts in the room" about climate science, while others can provide a "reality check" about funding and implementation. The key common denominator of all King County team members has been an ability to communicate about the need to adapt, and a problem-solving mindset to begin to develop long term strategies to do so. When returning to their respective workgroups from the preparedness team, these team members have also been expected to be the "champions" and "credible peers" on whom both their preparedness teammates and their colleagues can rely for communication about progress on the preparedness team's work plan.

In March 2006, based on the climate change action team's work, the Executive issued a series of Executive Orders on Climate change Preparedness, which directed departments to develop strategies in land use, public transportation, environmental management and renewable energy, to reduce emissions and prepare for climate change impacts. These Executive Orders also charged departments with developing a single climate change action plan to be submitted to the Executive in early 2007.

Over the course of the 2006 "launch" year, the team worked with the King County Council to develop an ordinance that built on and legislatively implemented the Executive Orders issued in March 2006, and similarly charged the departments with developing a comprehensive climate change action plan by February 2007. The team also worked with the King County Council to pass an ordinance approving entrance of the government into the Chicago Climate Exchange, in order to develop carbon market expertise, advocate for a federal cap on greenhouse gas emissions, and recommend carbon market rules that reward regional governments for actions that reduce greenhouse gas emissions.

The team has also worked extensively with other governments to advocate for broader reduction of greenhouse gas emissions, and to advise federal policy and funding of best practice regional climate change adaptation practices. These government-to-government exchanges include: a resolution by the National Association of Counties to stop climate change; an Urban Leaders Initiative, co-founded with the Center for Clean Air Policy, to develop recommendations for federal policy on how best to prepare regional governments for climate change effects; and a statement of shared action with the Republic of the Marshall Islands, to exchange experiences on how best to adapt to climate change impacts such as drought, flooding, and sea level rise.

In the end of 2006, the Executive Office also asked departments to form an advisory group on adaptation, with approximately 15 representatives from Department of Natural Resources and Parks, Department of Public Health, the Office of Emergency Management, the Department of Transportation's Roads Division, and the Department of Development and Environmental Services. This team is responsible for reviewing vulnerabilities of both government operations and the King County region to climate change impacts, and advising the Executive Office on how best to prepare for climate change impacts to public health, property, roads and transportation infrastructure, water supply, the county's wastewater system, shorelines, forests, agriculture and biodiversity. It has since evolved into a team that will implement both the mitigation and adaptation actions of the climate plan.

As mandated by the King County Executive and King County Council, the climate change action team drafted the county's first Climate Plan in early 2007, with the support of the adaptation advisory group. The plan, which focused on water supply, public health, emergency preparedness, flooding, salmon recovery, and forest health, was transmitted to the Executive and Council in February 2007. The development of this plan was guided by: greenhouse gas emissions inventory data; climate science research from the Climate Impacts Group at the University of Washington and the reported proceedings of the 2005 King County Climate Conference (Box 5.1); a vulnerability "scoping" questionnaire that was distributed in summer 2006 (Error! Reference source not found.); further discussions with technical experts in the county and the Climate Impacts Group at the University of Washington; and conventional public sector cost benefit analysis undertaken by the climate change action team and the Executive Office.

Through the climate change action team, Executive departments will be required to report annually on progress in implementing the plan. The teams are now engaged in implementation. The 2007 King County Climate Plan can be found at: *http://www.metrokc.gov/exec/news/2007/pdf/ClimatePlan.pdf*.