

California Department of Fish and Game (CDFG)
Climate Change Program Activities
April 2010

CDFG is committed to minimizing to the maximum extent practical the effects of climate change on the state's natural resources. Our approach involves integrating climate change into our activities and adaptation planning at federal, state, and local levels. CDFG has a full-time Climate Change Advisor, Dr. Amber Pairis, whose responsibility is to coordinate CDFG's internal and external climate change efforts. The following are some of the activities of the Climate Change Unit.

- **California Climate Action Team:** CDFG Director McCamman sits on this team, which oversees climate change activities across state agencies. CDFG is now the lead on the CAT Biodiversity Working Group (BIO-CAT). The BIO-CAT is hosting a cross sector discussion in April with other state agencies to look for ways to work more closely together as adaptation strategies are implemented. Specifically, identifying those opportunities where we can work more closely together to support actions or where potential conflicts exist minimize them to the maximum extent practicable.
- **CDFG Climate Change Stakeholder Meetings:** The Department is very proud of its climate change stakeholder group. Meetings are well-attended and composition of participants reflects an inclusive process with NGOs, state, federal, academic, private industry, and local land trusts at the table. Four working groups have been formed that focus on outreach, workshops & research, creating a framework (policy) for successfully implementing climate change adaptation strategies across the state, and a regional working group in southern California (details below).
 - **Outreach:** This group is focusing on crafting messages that can be used to engage the public, landowners, and organizations on a variety of topics that help us as a group tell the story and engage partners in adaptation and mitigation efforts. The first meeting covered elements of a successful communications plan and examples of different kinds of outreach materials that the group could pursue. At this time several members of the group have submitted media plans and messages for a group outreach document/magazine. CDFG is currently compiling these ideas and putting it into a format for the group to review.
 - **Research and Workshops:** This working group has been meeting regularly via conference call to put together a workshop on downscaling climate models. The intent of this workshop is to bring together those individuals doing cutting edge research on downscaling in California with key land managers and partners. This workshop will provide a summary of the strengths and weaknesses of various approaches such as dynamic vs. statistical modeling and provide an opportunity for discussion on data needs and the challenges of dealing with uncertainty, scale and resolution. The workshop is tentatively scheduled for November 2010 and will be web cast and archived.
 - **Policy Framework:** This work group has been focusing its discussion on how to design a framework to successfully implement climate

change adaptation strategies across agencies-organizations. This group has focused on key elements that will create a structure and process for implementing adaptation actions effectively across the state as well as within regions and local jurisdictions. With the recent publication of the 2009 Climate Change Adaptation Strategy, the state of California is one of the first to develop a comprehensive approach to addressing the impacts of climate change. As the state ramps up its efforts to address policy and management issues concerning energy production, hazard mitigation, and vulnerability, the CA State Wildlife Action Plan could provide critical guidelines for incorporating the impact of climate change on natural resources into statewide planning. By clarifying climate change related goals, objectives and priorities in the plan, the CDFG will be uniquely positioned among other statewide interests to provide critical information on the current status and condition of wildlife and habitat as well as projected future vulnerabilities under climate change. The State's Wildlife Action Plan is scheduled to be revised by 2015. A primary objective of the revision will be to update the Species of Greatest Conservation Need (SGCN) and re-examine the stressors and actions described. A critical new component of the revision will be the inclusion of this comprehensive climate change adaptation strategy. The group is currently reviewing ideas for how public workshops that are held as part of the revision can help build support, buy in, and input from partners to create a collective vision for implementing adaptation actions across the state.

- **Southern CA Regional Work Group:** This regional work group had its first meeting in February. At the meeting attendees were unanimous in moving from conceptualizing climate adaptation strategies to implementing many of the strategies identified in the Department's Climate Change Strategy document and the Department's Wildlife Action Plan. Many of the organizations present have been on the cutting edge of conserving natural communities and linking conserved areas with broad landscape linkages throughout Southern California. Local, state and federal agencies, developers and non-profits have expended hundreds of millions of dollars in these efforts and climate change will undo much of what has been accomplished unless adaptation strategies tested, monitored and modified as necessary to achieve identified goals. This group plans to reconvene over the summer and pursue a discussion about a possible workshop to bring key conservation and management organizations together as well as proposals for regional monitoring priorities.
- **California Climate Adaptation Strategy (CAS):** CA Resources Agency led the creation and release of the first comprehensive multi-sector climate change adaptation strategy across the nation. CDFG and State Parks co-lead the Biodiversity and Habitat Sectors and relied heavily on input from CDFG workshops, public meetings, and stakeholder input. The Strategy document was released December 2009. <http://www.climatechange.ca.gov/adaptation/>

- **CDFG Adaptation Strategy:** CDFG’s internal climate change adaptation strategy “Confronting Climate Change: Adaptation Actions to Conserve California’s Natural Resources” is nearing completion. The strategy contains many of the same elements as the CAS but goes even further to identify the steps necessary for implementing the actions and the staff and funding requirements. The strategy also identifies the existing tools the Department will rely on to deliver actions on the ground and will be an important communication tool as well as a vision for actions needed to help species persist in a changing climate. A draft document is expected to be released in early summer.
- **California Wildlife Action Plan Revision:** The climate change program is working closely with the wildlife program to provide a stronger climate change component within the revision. Internal discussions are underway to begin planning for the revision. Even though the revised document is not due until 2015 the CDFG wants to get the process moving early.
- **Association of Fish and Wildlife Agencies (AFWA)-U.S. Fish and Wildlife Service National Strategy:** Director McCamman is a participant with AFWA and the USFWS on discussions about the creation of a national strategy for climate change. CDFG is the Western States representative for AFWA in this effort; this includes all states west of the Mississippi.
- **Western Association of Fish and Wildlife Agencies (CDFG initiated this group, which includes all states west of the Mississippi, and Canada and Mexico):** Director McCamman is the chair for the WAFWA climate change committee. This newly formed committee already has several products related to the committee’s activities. A working group is being formed to provide guidance to WAFWA members on the required elements of a state adaptation strategy to prepare member states for possible federal climate change legislation.
<http://CDFG.ca.gov/climatechange/wafwa/>
- **CDFG Going Green: Reducing our Carbon Footprint:** On October 30, 2009 a Director’s Bulletin was sent out to all staff regarding the completion of a guidance document to help the Department reduce its carbon footprint and save the Department valuable resources <http://CDFG.ca.gov/climatechange/activities.html>. A CDFG Going Green Working Group is currently meeting to come up with an implementation strategy for some of the ideas in this document. This effort has strong support from both the Director and executive staff as well as CDFG employees from across the state.
- **Regional Climate Change Committees:** The Northern Region Climate Change Committee (see below) has been meeting for one year. Other Regional Committees are in planning stages.
- **BAECCC:** CDFG is involved in a recently formed group “Bay Area Ecosystems Climate Change Consortium,” a group of federal, state, and NGO partners looking to create a demonstration project in the Bay Area for large-scale climate change adaptation activities.
- **Council on Environmental Quality /General Accounting Office (GAO):** CDFG was requested to participate in a survey on climate change adaptation activities being conducted by the GAO. The final report was recently released recommending that the Federal Agencies begin working on a national climate

change strategy. As follow up, the CDFG was requested to participate in a listening session held by the White House Office Council on Environmental Quality.

- California CDFG Climate Change Program website:
<http://www.CDFG.ca.gov/climatechange/>

CDFG Northern Region* Climate Change Committee

Committee lead: Mark Smelser; Committee members: Jennifer Carlson, Vicki Frey, Gayle Garman, Eric Haney, Sharon Hope, Tony LaBanca, Gordon Leppig, Rich Lis, Linda Miller, Amber Pairis, Bruce Webb, Mark Wheatley

This CDFG regional committee was formed to assist CDFG Regional staff in better understanding and managing the numerous issues associated with climate change in our personal and professional lives, and to help move CDFG forward on climate change issues. The Committee works closely with CDFG's Climate Change Advisor, Amber Pairis. The Committee meets monthly.

Initiatives/Goals:

- Keep informed of current literature and Climate Change news; inform ourselves and staff of local impacts to the resources in our region; summarize existing literature to share with staff
- Integration of climate change issues into CEQA Guidelines, both for project proponents (public), and for internal guidance to CDFG staff responsible for reviewing projects
- Maintain Northern Region Climate Change Intranet Portal, to increase communication among Regional staff
- CDFG Going Green. Assisted in development of CDFG Going Green document
<http://www.CDFG.ca.gov/climatechange/>
- Paperless Office. Goal is to reduce our production/consumption of paper in office communications and business
- High Elevation Species Loss. Will be evaluating climate change and its impacts on wildlife habitat at higher elevations, e.g., Sierra Nevada Red Fox, American Pika
- Coastal Watershed Impact Analysis. Investigate strategies to predict and assess the impacts of climate change at the scale of a small watershed (e.g., less than 100 sq miles).
- Sea-level Rise. Goal is to educate ourselves and inform staff about impacts of sea-level rise, and develop recommendations for incorporating into project review process. Pilot project is a presentation with maps showing potential impacts to Humboldt Bay resources
- Give input to statewide documents such as the Resources Agency Climate Adaptation Strategy, and CDFG's Climate Adaptation Strategy
- Understand and communicate both sides of Climate Change argument
- Keep abreast of what local partners are doing, cross-communication

* CDFG's Northern Region includes California's eight northernmost counties plus Mendocino County