

California Department of Fish and Game Update: Climate Change Activities

June 2011

Whitney Albright joins Climate Team

Please join me in welcoming Whitney Albright to the DFG's climate team! Whitney is an employee of the California Wildlife Foundation through funding provided by the U.S. Fish and Wildlife Service and will be working with DFG to help advance our climate change related initiatives. Whitney previously worked at the University of Washington in Seattle as a research scientist, studying the affects of climate change on natural systems in the Pacific Northwest. We are very excited to have Whitney on board and I hope you will take the time to introduce yourself at our next stakeholder meeting.

Stakeholder Meetings

For the last three years the DFG has had an ongoing process to address climate change adaptation for biodiversity through an engaged and active group of stakeholders. The stakeholder group includes almost 100 federal, state, NGO, industry, and academic leaders that meet to develop a collective vision for adaptation planning in the biodiversity sector. In order to facilitate progress and accomplish tasks the stakeholder group formed three smaller working groups focused on outreach, research & workshops, and policy that have been very effective in accomplishing their goals. Highlights of accomplishments listed below.

The next public meeting will be September 16th from 10-12 in the auditorium of the Resources Building in Sacramento.

Outreach Working Group

“Confronting the Challenge-Climate Change and the California Department of Fish and Game”

This magazine is the result of a collaborative effort among DFG climate change stakeholders and can be used to communicate with and engage partners in climate change adaptation and mitigation efforts. This publication highlights the actions DFG is taking to address the challenges associated with climate change and illustrates the importance of biodiversity conservation in the implementation of climate change adaptation actions in other sectors. The magazine was printed in November 2010 thanks to the generosity of The Nature Conservancy California. It was also part of a special edition of the DFG's magazine Outdoor California (September/October 2010). “Confronting the Challenge” is available online at <http://www.dfg.ca.gov/climatechange/>.

Research and Workshops Working Group

Bridging the Gap: Downscaling Climate Models to Inform Management Actions

Workshop sponsored by DFG, the U.S. Geological Survey, and USFWS-California Landscape Conservation Cooperative. DFG's climate change work group of stakeholders presented a day long workshop on November 3, 2010 at Sacramento State University. The workshop provided participants with a shared technical understanding of potential downscaling applications to ecological resource management and provided an opportunity for discussion on data needs and the challenges of dealing with uncertainty,

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scale and resolution. The workshop was well attended with in person participation reaching capacity and web cast participants from all over the country. More information, PowerPoint presentations, and archived web cast can be found at <http://www.dfg.ca.gov/climatechange/downscaling-workshop/>.

CAT Biodiversity Working Group: The Biodiversity working group provides a forum among state agencies to guide adaptation and integration efforts at the state level on topics specific to the Biodiversity sector. Specifically, the working group provides a forum within the CAT to focus on integration and implementation of biodiversity adaptation strategies with a focus on cross sector issues, increasing cooperation, and minimizing conflicts during adaptation strategy implementation. The DFG is the lead on this group and the next meeting is scheduled for September 2011.

California Wildlife Action Plan Revision: The state's Wildlife Action Plan is scheduled to be revised by 2015. Primary objectives of the revision are to incorporate new information developed through updates to Species of Special Concern documents for birds, mammals, reptiles, amphibians, and fish; update the stressors and actions affecting fish and wildlife on an ecoregional scale; expand the analysis of threats poised by climate change and down-scale the State's Adaptation strategy to on-the-ground, implemental actions that will build resiliency for species adaptation. Teams have been formed that will guide the development of the two phase update. The first phase will focus on a statewide vulnerability assessment that brings together varied taxon-specific analysis into one assessment that can be used to inform the Action Plan's lists of Species of Greatest Conservation Need (SGCN). The first phase will also include public scoping and coordination with stakeholders, agencies, and tribes with the goal of making the Action Plan more relevant to all levels of natural resource managers in California. The second phase will involve a chapter-by-chapter review of the first Action Plan, incorporating new science on climate change, species status and distribution, and emerging threats and innovations. The update will draw from new tools such as the Areas of Conservation Emphasis (ACE) mapping model, and the California Essential Habitat Connectivity project both recently completed by the DFG.

Climate Change Vulnerability Assessments:

The Department is in the initial stages of conducting a climate change vulnerability assessment for rare plants and updating species of greatest conservation concern for climate change. A vulnerability assessment provides the scientific basis for developing or enhancing climate adaptation strategies and uses information about future climate scenarios with ecological information about climate sensitivity and adaptive capacity to help manager anticipate how a species or system is likely to respond under the projected climate change conditions. The relative vulnerability of species or habitats can be used to set goals, determine management priorities and inform decisions about appropriate adaptation strategies.

DFG Going Green Activities: DFG has had an ongoing effort to address its carbon footprint and create a more sustainable work environment. The Director convened a "Going Green Work Group" to provide guidance and recommendations for consideration by Department leadership. Activities listed below.

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- **DFG Going Green: Next Steps towards Sustainability** DFG is preparing to release a second report from the Going Green work group to report on DFG's efforts to address its carbon footprint and create a more sustainable future for DFG activities and employees. This report is a collection of actions that DFG and its employees are pursuing as well as recommendations for consideration by executive leadership for future actions. The first report "DFG Going Green: Reducing Our Carbon Footprint" and an evaluation of carbon impact of all DFG operations can be found online. The second report will be posted fall of 2011 and will be available at <http://www.dfg.ca.gov/climatechange/activities.html>.
- **Director's Bulletin-Actions for a More Sustainable Workplace:** DFG is planning to release a Director's bulletin to follow up on the Going Green work group recommendations on actions that can be easily and immediately implemented with little disruption or alteration of daily operations and with no increase in operating expenses. During this period of significant and persistent statewide budget shortfalls, this bulletin provides guidelines that will help DFG continue to look for ways to reduce or optimize operating expenses, including fuel and energy costs while also resulting in potentially significant reductions in greenhouse gas emissions. By implementing these guidelines DFG will better embody its mission and continue to set an example of innovation and sustainability. These guidelines put DFG on a path to becoming a more sustainable organization and minimize its contribution to emissions that contribute to climate change. When available the bulletin will be posted at <http://www.dfg.ca.gov/climatechange/bulletins.html>.
- **Paperless Office Pilot Project:** The Department's Going Green Work Group believes that there are significant benefits to be gained by converting many internal forms to an automated, electronic document format utilizing electronic signatures. This simplifies the process of filling out, submitting and routing forms, and saving time and money, while reducing the Department's overall carbon footprint. Documents would no longer have to be printed, manually routed for signatures, copied, mailed and eventually stored as hardcopy, while their security and integrity would be maintained and perhaps even improved. A full proposal is under internal review.

Regional and National Activities

National Fish, Wildlife, and Plants Climate Adaptation Strategy: The DFG is working with Department of Interior agencies and other states to develop a national strategy that will provide decision makers and resource professions with adaptation actions to promote species and habitat resiliency in the face of climate change. The intent is to promote a nation-wide unified approach to climate driven adaptation strategies, reflecting shared principles and science-based practices to safeguard the nation's biodiversity, ecosystem function, and sustainable human uses of fish, wildlife and plants. Chief Deputy Director Kevin Hunting serves on the steering committee representing the

DFG as well as the WAFWA Climate Change Committee. In addition, DFG staff co-chairs one of seven system technical sub-teams.

WAFWA Climate Change Committee (WAFWA): DFG continues to oversee and serve as the chair for the WAFWA climate change committee. Products related to the committees activities including white papers and climate change updates from members can be found online at <http://dfg.ca.gov/climatechange/wafwa/>.

WAFWA Regional Climate Workshops: The Association of Fish and Wildlife Agencies and the WAFWA Climate Change Committee co-hosted a climate change forum at the WAFWA midwinter Director's meeting in January 2011. The forum provided an opportunity for a policy level discussion among directors and their key climate change staff followed by an open forum among state fish and wildlife agencies and other conservation partners. This forum resulted in a prioritized list of needs in the form of action items that will be discussed and acted upon at the climate committee meeting in Montana in July 2011.