



**California Landscape Conservation Cooperative (CA LCC)
Steering Committee Meeting Summary**

December 15, 2011

9:30 am – 3:30 pm

NRCS State Office, 430 G Street, Davis 95616

Participants:

Steering Committee Members and Alternates

Diana Craig, Chair, US Forest Service (USFS)

Ellie Cohen, Vice Chair, PRBO Conservation Science (PRBO)

Whitney Albright, CA LCC Liaison, CA Department of Fish and Game (DFG)

Grant Ballard, PRBO

David Graber, National Park Service (NPS)

Tom Hedt, US Department of Agriculture, Natural Resources Conservation Service (NRCS)

Rick Kearney, US Fish and Wildlife Service (FWS)

Tom Kimball, US Geological Survey (USGS)

Scott Morrison, The Nature Conservancy (TNC)

Nadine Peterson, CA State Coastal Conservancy (SCC)

Patrick Rutten, National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS)

Michelle Selmon, CA Department of Water Resources (DWR)

Bob Shaffer, Central Valley Joint Venture (CVJV), Joint Ventures Representative

Wayne Spencer, Conservation Biology Institute (CBI)

Tom Suchanek, US Geological Survey (USGS)

Michael Tansey, Bureau of Reclamation (USBR)

CA LCC Staff

Rebecca Fris, CA LCC Science Coordinator

Debra Schlafmann, CA LCC Coordinator

Consultants

David Ceppos, Center for Collaborative Policy (CCP)

Grace Person, CCP

Action Items:

- Debra will develop and modify survey questions for Phase II of the Strategic Planning Process for review and approval by the Steering Committee in mid-January.
- The Steering Committee will reconvene on Strategic Planning Process Phase II to complete the discussion and agree to next steps.

- The Science Subcommittee will develop a plan early next year to evaluate previously funded projects and results.
- The CA LCC staff will develop timelines for the top ranked Subcommittee tasks and priorities.
- The CA LCC staff will provide the Subcommittees with the tasks and priorities that the Steering Committee generated. All info will go to all subcommittees.
- The Subcommittees will develop funding recommendations by mid-February to the Steering Committee
- The Subcommittees will refer to the meeting summaries and priorities from the southern California LCC meetings held in January 2011.
- Debra will investigate connecting with the Tribal Coalition associated with the California Water Plan as a potential representative for tribal representation on the CA LCC Steering Committee.

I. Welcome and Introduction

Tom Hedt welcomed the group to NRCS. Debra Schlafmann introduced herself and also introduced Rebecca Fris, the CA LCC Science Coordinator. Debra then introduced Dave Ceppos and Grace Person from the Center for Collaborative Policy. Debra shared that Brady Mattsson, CA LCC's Research Ecologist, and while not in attendance, assisted with the Strategic Planning Process. Debra also thanked Diana Craig and Ellie Cohen for their leadership roles as Chair and Vice-Chair for the CA LCC

Diana welcomed the group, shared her appreciation for everyone's attendance and reviewed the agenda and meeting objectives.

CA LCC Communications Position Update

After much interest, the CA LCC staff has selected Michael Ward for the position. His experience includes working with the Science, Technology, Engineering and Mathematics (STEM) Program at Sacramento State. He will start in mid-January.

II. Steering Committee Introductions

As a way of getting to know each other, Diana asked each attendee to share his/her answers to the following questions:

- What is your name, organization, and role within the organization?
- How does your organization address climate change, and please share one example?
- What is the most important issue you would like the CA LCC to address?

Attachment 1 presents the responses of each member.

In summary the CA LCC Steering Committee members identified the following most important issues:

- Prioritize information gaps and maximize use of information already available.
- Help upper management in various agencies use science and decision support tools (e.g. from NGOs) to help make informed decisions.
- Better coordinate climate science and actions between and across agencies.
- Help define and understand what climate-related management decisions need to be, what they will look like on the ground, and remove decision processes from an abstract concept to tangible conditions and outcomes.
- Focus on outreach to create partnerships that in turn successfully pursue climate-related projects that have beneficial results.
- Bridge the gap between science and conservation implementation. Lead as an organization to help more people be aware of local climate change impacts.
- Make better connections between climate science and conservation efforts.
- Help agencies understand the landscape context of climate change, what actions to take, and how such actions change the environment yet still offer rich ecological opportunities.
- Develop synergy between USBR Research and Development staff and other CA LCC funded researchers, particularly in regards to impacts on water supply, habitats, species, etc.
- Create tangible science application strategies that can inform, be real, and be implemented.
 - Particularly support opportunities to understand the salmonid's early life cycle use of the San Francisco Bay Estuary.
- Take conservation science products and actually use them to recommend a multi-jurisdictional adaptation strategy.
- Develop early examples of how agencies measure and achieve success in the climate science/conservation interface. Need to support the FWS collaborative steps and organizational change.
- Define measures of success so there is shared understanding and expectations.
- Create new partnerships and bring in new/other groups not commonly involved or aware of climate science efforts. Also, engage agency research expertise.
- Continue to develop partnerships and use them to leverage shared opportunities, communicate, and educate.

Debra reminded the Steering Committee that there are two Steering Committee seats open for a tribal and fisheries representative. Members recommended that for the tribal representative position, the CA LCC contact the Tribal Coalition that works with the California Water Plan since it has strong connections with tribal communities in California. It was also noted that the Tribal Conservancy from Southern California would be a potential representative Diana shared that a tribal representative had approached her with interest in the CA LCC. She'll share that information with Debra.

III. Strategic Planning Process

Rebecca described the first phase of the Strategic Planning Process that will help generate common conservation objectives across the landscape. The CA LCC used a standard set of questions to identify conservation objectives, management actions, and communication techniques. Rebecca mentioned partnerships were selected from different interests and geographic areas of the state.

The CA LCC staff interviewed the following partners:

- Bay Area Ecosystem Climate Change Consortium
- California Fire Science Consortium
- California Habitat Conservation Planning Coalition
- California Rangeland Conservation Coalition
- Central Valley Joint Venture
- San Francisco Bay Joint Venture
- Sonoran Joint Venture
- Southern Sierra Conservation Cooperative
- Southern Sierra Partnership

III a. Results of Phase I Survey

Recommendation of Communications Focus for 2012

Many respondents stated that they need translation and better access to climate science. They would like facilitated information exchange opportunities like workshops, webinars, and fieldtrips. They requested a central resource of ongoing activities and tools, like a clearinghouse and decision support tools, as well as support for climate change research like monitoring. The results emphasized partners need better access to information.

Thus, the CA LCC staff recommends that its focus for 2012 be to improve the science delivery across partners to support natural resource decision-making to increase effectiveness of conservation as this an opportunity to capitalize on the CA LCC's unique role.

Discussion

There were clarification questions about the purpose or the process of the CA LCC's Strategic Plan and whether the CA LCC needs to look for areas of research where efforts are not yet directed. Debra and Rebecca were asked what they hoped to gain through interviews with the Steering Committee partners.

Debra explained that the CA LCC staff needs the Steering Committee to determine a focus for 2012, because it relates to the staff's effort to develop the CA LCC's conservation objectives. Also, the Steering Committee must decide whether to showcase future projects or previous projects, and create workshops on how to apply the science and tools from those projects. At

the same time, it is important for the CA LCC to determine its conservation objectives. It is critical that the CA LCC select priorities for 2012.

Deb shared that the partners were appreciative that the CA LCC asked about their needs. Their needs include opportunities to be more interactive through enhanced communication.

Identify Managers' Needs: Steering Committee responded that communication must not be one-directional, and that it must engage resources managers to learn about the managers' needs. Rebecca elaborated that the second phase of the process is to better understand what management decisions are occurring.

The group discussed the question of the CA LCC's focus and scale. The CA LCC's uses a landscape-scale approach; and there are vast amounts of information available on issues such as precipitation, sea level rise, species diversity, and connectivity corridors. The CA LCC needs to understand what tasks are feasible. Yet the current need of resource managers and others is at a local-scale.

Workshops to Apply Science: A comment recommended that the workshops do not turn into a climate need discussion, but stay focused on science application. The California Fire Science Consortium is one example of a group that works to translate the global science to help resource managers create local solutions.

Provide What Managers Should Have, Not Want: A recommendation expressed the CA LCC provide resource managers with important tools and information they should have, not resources or tools the managers think they want. The CA LCC may not be able to help resource agencies meet their conservation objectives, as those objectives may not be realistic. The CA LCC can help agencies be pragmatic about the objectives. The CA LCC can help agencies be cooperative on projects, and move past historic cultural and jurisdictional barriers.

Encourage Agency Collaboration: It was noted that the agencies have started to look for new ways to work together, and the CA LCC has an opportunity to set a precedent for agencies to change their engagement with each other. However, for this to work there must be specific examples of where agencies cooperate across jurisdictions.

Create A System of "Nested" Partnerships: There was a question if CA LCC needs to focus on the larger conservation objectives. It can look at potential solutions, project, or programs that already exist in different agencies. For example the FWS and Caltrans' report that links conservation easements and activities is a planning tool that informs conservation decisions.

It was noted that there were challenges and success with that example. Specifically, the map in the report was a hypothesis, but the CA LCC could move that kind of approach down to regional and local plans. The CA LCC could select a place or region, and help them collaborate on the implementation of the plan. Thus the CA LCC helps to create a system of "nested" partnerships,

based on collaboration and science products, that local groups can use as reference to develop solutions at their level.

Communicate Successes: The Steering Committee believes that the CA LCC needs to showcase its successes, and that the communications person will need to work to highlight those accomplishments. One member pointed out that success includes management decisions that apply climate adaptation science, and that it is important to select projects that will cultivate recognition for the CA LCC. Rebecca shared the example of one project that crosses jurisdictions and recently highlighted in a FWS Refuge magazine.

CA LCC needs to show successes in order to sustain funding for the LCC effort.

Private and Public Land Managers' Needs: A few members reminded the committee that it is difficult for private landowners to accept regulatory approaches that seek to conserve the landscape. The CA LCC must integrate private sector needs into its focus since most land management decisions and outcomes occur on private property.

Summary of Discussion

Diana summarized that the discussion so far has led to two possible approaches. The first is to showcase projects and tools. The second is to conduct outreach to local managers with focused topics. For example, the Steering Committee can pick the top ten things that the managers need that the CA LCC can work on, and enhance communication around those issues.

III b. Next Steps in Strategic Planning Process

Deb described the second phase of the Strategic Planning Process that includes interviews with individual conservation groups and resource managers to better understand local needs. From those interviews, the CA LCC will synthesize the responses and generate recommendations for common conservation objectives. They will get feedback from the Alliance on those recommendations. The goal of the process is to be strategic and adaptive over time.

Decision: Diana asked if the Steering Committee is comfortable with the adaptive process. **The members indicated they support the concept of an interactive and adaptive approach to the Strategic Planning Process.**

However, the Steering Committee concluded that the CA LCC must do some science work in the next year, not just develop communication activities.

It was suggested that the CA LCC leverage the connections of regional collaboratives to work on climate adaptations strategies, and provide support for the collaboratives' implementation plans. As part of the first year the CA LCC identifies individual plans, then the following year, help some of the groups implement on-the-ground action plans. The Central Valley Connectivity Project is an example of an opportunity to leverage a collaborative's efforts and help

implement on the ground actions. The Bay Area will also develop a linkage plan, and the CA LCC can help them assess climate change impacts.

The CA LCC staff reiterated that the Steering Committee must first determine conservation objectives for the CA LCC. Then the Steering Committee will identify the focus for 2012 products. Next, the group must define the measures of success, and articulate those in the Strategic Plan. The CA LCC will seek to engage the Alliance members as way to get additional feedback on its conservation objectives.

Discussion took place on the method to conduct Phase II of the strategic planning process; interviews with Steering Committee members and with land managers. Ideas of on-line survey methods versus in-person surveys were discussed. Clarification on who the Steering Committee members would interview, if they did, is needed.

There was also a question of whether the survey will request information about resource managers needs in the context of climate science. The Steering Committee also requested that the CA LCC staff evaluate the purpose and use of the information collected from the interviews. Thus, the CA LCC needs to have different questions for different groups, like conservation and research organizations.

Debra stated that the CA LCC will modify the questionnaire as suggested and schedule a follow-up call with the Steering Committee in mid-January to continue this discussion. She will also prepare a CA LCC Introduction Power Point Presentation that the Steering Committee members can use when they contact representative organization.

Decision: The Steering Committee members need more time to discuss the methods for conducting phase II of the Strategic Planning Process. Deb will set up a follow-up conference call.

IV. Additional Considerations for this Year

Due Dates and Timelines for Funding Projects

Due to timeline constraints that relate to an RFP process and available funding, the Science Subcommittee must determine immediately on the process for utilizing 2012 project funds e.g. whether to conduct an RFP or decide to engage in other project funding scenarios.

The Science Subcommittee will set a meeting for mid-January to develop a recommendation for the Steering Committee. The challenge is that a large RFP may take 6-8 months to complete. The Science Subcommittee must create a plan of action that can be implemented in a reasonable timeframe.

The Southwest Climate Alliance (SWCA) also announced at a meeting of the USGS Climate Science Centers earlier in the week, that it has a task to develop a science agenda by June 2012.

The science agenda should include input from all the LCC in the Southwest region and the CALCC needs to make sure input is provided into this process.

Staff Funding

The CA LCC received money for staff positions and projects. The CA LCC waited to fill certain positions because it wanted to identify conservation objectives first, and then allocate staff to best address the objectives. There was a question of how the CA LCC justifies hiring a data manager if it does not have data to manage. The CA LCC staff explained that there is data to manage, but there was a conscious decision to wait to fill the Data Manager position until the Steering Committee had the opportunity to provide guidance on data management.

That led to the questions of whether the science and communication coordinators can conduct outreach to the Alliance now, and thus may not need to hire for the additional positions. Yet, the CA LCC does require a technical person to coordinate the science tools, and the Science and Communication Coordinators will communicate information about how to use the tools.

Decision: In order to address how to best accomplish the goals of communicating science application and continue to support science projects, all three Subcommittees will look at the CA LCC staff needs.

2010 project updates

The Steering Committee asked what results have come from the projects funded in the last two funding cycles, and how to apply the available results to address the needs that exist. Of the eleven projects, seven are complete, and the other four are almost complete. Rebecca wants to have the Science Subcommittee help evaluate the outcomes and distribute the available product information.

There was a question of whether the FWS has quality control standards that the CA LCC can use to verify products. Rebecca's goal is to have the Science Subcommittee develop a plan early next year to evaluate previously funded projects and results.

V. Subcommittee Tasks and Priorities

The Steering Committee broke into three groups to discuss the tasks and priorities for the three Subcommittees.

Reports from the Breakout session:

Group 1

Communications Subcommittee

- Task 1. Compile information from the projects and track the use of the information over the short- and long-term.
- Task 2. Identify the audiences to receive the science information.

- Task 3. Gather feedback on the CA LCC's effectiveness to distribute information, possibly through surveys, workshops, and/or direct work with managers.

Science Subcommittee

- Task 1. Link science priorities to the needs. This includes connecting with other sectors, and must ensure quality control standards are in place to evaluate tools and products.
- Task 2. Identify a mechanism that the CA LCC can use to accomplish the science objectives, for example through an RFP process, directed actions, or staff development.
- Task 3. Use the Subcommittee's role in the application of the science, as it relates to the distribution of products, to work directly with managers.

Strategic Planning Subcommittee

- Task 1. Identify the needs of managers, regional needs, and then topical needs.
- Task 2. Prioritize the needs as existing knowledge or as gaps in the information, and categorize by the group that identified the need.
- Task 3. The Subcommittee should develop a timeframe to implement responses to coincide with the priority of the stated need.

Group 2

Communications Subcommittee

- Evaluate the California Fire Science Consortium and other delivery models to emulate, and create a model for the CA LCC to use.
- Examine potential communications roles for Alliance members.
- Communicate the results from the 2010/2011 projects.

Science Subcommittee

- Task 1. Develop a 2012 RFP and evaluate proposals.
- Task 2. Assess current projects, identify gaps in the existing projects, and share with the Communications Subcommittee the Science Subcommittee's priorities and recommendations.
- Task 3. Inventory past and current science tools in California to prioritize and then facilitate organizations efforts. This priority would result in a report, product, or online tool.
- Recommend, in collaboration with the Strategic Planning Subcommittee, a 5-year science priority plan.
- Establish a long-term process to identify science priorities, and develop a business plan to outline how the projects will spend funds.
- Participate in discussion of and develop recommendations for future informatics positions.

Strategic Planning Subcommittee

- Develop a five-year vision that measures outcomes; evaluate other projects and delivery models for effective communication.

- Develop a plan to leverage capacity of the CA LCC member organizations.
- Establish a long-term process, possibly a five-year outlook to help the Science Subcommittee identify priorities.

Group 3

Communications Subcommittee

- Task 1. Identify what information managers need to have to make decisions.
- Task 2. Conduct on-going and adaptive communication with managers about new and existing science and applications.
- Task 3. Use marketing strategies to communicate the CA LCC's successes to targeted interest groups, as well as explain how those successes support the CA LCC's strategic objectives.

Science Subcommittee

- Task 1. Identify and prioritize the most significant science gaps as related to climate research and the CA LCC's goals.
- Task 2. Share priorities with the Climate Science Centers and other groups.
- Task 3. Use the science gaps to inform priorities for funding projects and staff resources.
- Task 4. Develop and facilitate requests for science proposals, specifically review and rank the submissions.
- Review existing work products to determine successes, concerns, gaps, and communicate that information.

Strategic Planning Committee

- Identify the highest conservation objectives, as multi-scale perspectives, from the interviews and the Science Subcommittee, which relate to climate and other stressors.
- Determine the measures of success, and show short-term steps to reach the goal.
- Develop measures that ensure the sustainability of the CA LCC, specifically to maintain funding to communicate successes.

The Steering Committee recognized that all Subcommittees must engage in two-way communication. The CA LCC staff will provide the Subcommittees with the tasks and priorities the Steering Committee generated, as well as all three Subcommittees will receive the other Subcommittee tasks for reference.

There was a request to access information from the CA LCC meetings conducted in Southern California. Also, it was recommended that the subcommittees review the meetings and priorities from southern California.

Composition of Subcommittees:

There was discussion on the criteria of the subcommittee membership, specifically that geographic location as well as topical expertise or affiliation needs to be a factor to determine eligibility. There was a request that the Science Subcommittee have a representative from the

Bureau of Land Management, as well as a NOAA representative. It was determined that the Subcommittees will decide additional members for each Subcommittee.

It was reminded that Subcommittee members can participate on ad hoc basis depending on the issue.

It was voted on last meeting that Debra is the Chair for the Strategic Planning Committee, Rebecca is the Chair for the Science Subcommittee, and the Communications Coordinator will be the Chair for the Communication Subcommittee.

The Steering Committee developed the following roster for the three Subcommittees. Note that some of these names are nominations and have not yet been asked to participate.

Communications Subcommittee

<i>First Name</i>	<i>Last Name</i>	<i>Organization</i>	<i>SC Member</i>
Rick	Kearney	FWS	SC Member
Melissa	Pitkin	PRBO Conservation Science	
Michelle	Selmon	DWR	SC Member
TBD		SCC	

Science Subcommittee

<i>First Name</i>	<i>Last Name</i>	<i>Organization</i>	<i>SC Member</i>
David	Ackerly	UC Berkeley	
Grant	Ballard	PRBO Cons Science	Alternate
Giselle	Block	FWS	
Armand	Gonzales	DFG	Alternate
Dave	Graber	NPS	SC Member
Andy	Gunther	BAECCC	
John	Hopkins	CHCPC	
Chrissy	Howell	USFS	Alternate
Rick	Kearney	FWS	SC Member
David	Levinson	USFS	
Michelle	Selmon	DWR	SC Member
Christina	Sloop	SFBJV	
Wayne	Spencer	CBI	SC Member
Tom	Suchanek	USGS	SC Member
Mike	Tansey	USBR	SC Member
Jim	Weigand	BLM	
Greg	Yarris	CVJV	
TBD		SWCA	
TBD		SWCSC	

Strategic Planning Subcommittee

<i>First Name</i>	<i>Last Name</i>	<i>Organization</i>	<i>SC Member</i>
Susan	Antenen	CBI	
Diana	Craig	USFS	SC Chair
Geoff	Geupel	PRBO Conservation Science	
Tom	Hedt	NRCS	SC Member
Tom	Kimball	USGS	Alternate
Mark	Kramer	TNC	Alternate
Robert	Mesta	Sonoran JV	Alternate
Nadine	Peterson	SCC	SC Member
Bob	Shaffer	CVJV	SC Member
Jerre	Stallcup	CBI	
Mike	Tansey	USBR	Alternate

VI. Next Steps

Decision: The CA LCC staff will provide all the tasks to the Subcommittees. Staff will develop timelines for the top ranks tasks and priorities.

The full Steering Committee needs to have the recommendations from the Subcommittees by mid-February to make decisions about funding projects or activities by mid-March.

Format of Future Meetings:

Debra asked the Steering Committee what meeting format works best. The group opted to conduct meetings via conference call or webinar, with no more than two in-person meetings each year. Debra also shared that some partners had requested the opportunity to give presentations at future meetings on various topics. It was suggested that over time each Steering Committee member's organization or agency give a short presentation at the beginning of each meeting. Additionally, the Interim Climate Director for the Climate Science Center offered to give a presentation to the Steering Committee. The Steering Committee offered that the presentation should first be given to the Science Subcommittee, after which the Science Subcommittee will determine if the Steering Committee should hear the presentation as well.

The meeting adjourned at approximately 3:00pm.

Attachment 1

Introduction of Steering Committee Members December 15, 2011

Diana Craig, Senior Wildlife Ecologist – USFS

- USFS's objective is to not duplicate climate change research other organizations already conduct. USFS has a climate change scorecard, which includes vulnerability assessments, and adaptation efforts.
- The most important issue is to prioritize information gaps, and share that information with other groups.

Wayne Spencer, Senior Scientist – CBI

- CBI provides conservation support to agencies and organizations. Wayne oversees reserve design and climate change model development, as well large-scale conservation efforts. The CBI has a large climate change center called Databasin that has many datasets that people can access. The CBI has a new grant project, funded through Yale that works with the USFS management to downscale modeling efforts to understand the impacts of climate change on carnivores.
- The most important issue is to help upper management of various agencies use science and decision support tools (e.g. from other organizations) to make informed and strategic decisions.

Michelle Selmon, Regional Climate Change Specialist – DWR

- Ms. Selmon is one of four DWR Regional Climate Change Specialists (CCS) located throughout the state, as California is biologically and geographically diverse and requires addressing climate-related and other challenges to water management at regional and local levels. To mitigate the impacts of DWR activities, a Climate Action Plan is being developed that outlines the way the DWR is reducing its emissions and working to meet the goals of Assembly Bill 32, The Global Warming Solutions Act. The CCS's also work on climate adaptation by helping water managers to understand the current and predicted impacts to snowpack levels, precipitation patterns, and flood regimes and incorporate those considerations into their Integrated Regional Water Management (IRWM) planning efforts. DWR recognizes the need to address climate change impacts with cross-sector collaborative efforts such as the LCCs and the CA Climate Action Team subgroups for Water & Energy, Land-use & Infrastructure, and Biodiversity.
- The most important issue is to have the CA LCC inform and promote landscape-level analysis of climate impacts and adaptation options that can ultimately be translated into regional conservation and management of both natural and 'built' environments, whose adaptive capacities are dependent upon one another and are fundamentally connected by water.

Scott Morrison, Director of Conservation Science – TNC

- TNC staffs 300 scientists across the state and conducts many projects that deal with climate change issues directly. TNC uses a three-pronged strategy that informs land use planning, create marketable carbon sequestration through forest conservation, riparian and wetland restoration, and to develop nature-based adaptation plans to help address the risks of climate extremes for both humans and nature. TNC's overall goal is to reduce the threat of human responses to climate change that will drastically impact the natural environment.
- The most important issue is to help people understand what management decisions agencies need to make immediately, and to make the issues and challenges tangible. Overall, the CA LCC needs to help coordinate climate science and actions between and across agencies.

Bob Shaffer, Coordinator – CVJV

- As a CA LCC Steering Committee member, Bob represents the five Joint Ventures (JV) within the CA LCC's territory. The JV's are the most successful partnership system to deliver science information to conservation groups. JV's received a CA LCC grant to look at the viability of wetlands as it relates to the reduction of the snowpack.
- The most important issue is to help define and understand what climate-related management decisions need to be, what they will look like locally, and remove this from an abstract concept to tangible conditions and outcomes. Specifically, through outreach to the CA LCC partners and managers, develop partnerships to achieve success.

Ellie Cohen, President and CEO – PRBO

- PRBO has 140 seasonal staff and scientists that study birds and other natural systems, as well as create climate change impact models, to better understand potential changes in the ecosystems. The PRBO's priority is to reduce the negative impacts of climate change, and foster adaptation. The PRBO has a major program that looks to protect watersheds in California and to enhance communication between management and science researchers. The PRBO also works to partner with agencies. One example includes the PRBO's work with the NRCS to improve grazing practice policies that helps improve the water table levels in the Central Valley. The PRBO also works with other groups to leverage partnerships and resources.
- The most important issue is to work to bridge the gap between science conservation and application. There is much research about adaptation in California, and it is important to help people think about how to apply the research. Thus, she would like the CA LCC to focus on outreach to create partnerships that successfully pursue climate-related projects, and produces beneficial results.

Whitney Albright, Climate Change Associate – DFG

- Ms. Albright provides support for the DFG staff on all things related to climate change, as well as to work with external groups as liaison to apply the CA LCC's products. Ms.

Albright currently works to fully incorporate climate change adaptation into the State Wildlife Action Plan.

- The most important issue for the CA LCC is to make a connection between science and on-the-ground action.

Nadine Peterson, Deputy Executive Officer – SCC

- Ms. Peterson oversees climate projects that were traditionally supported by voter bonds. The SCC's jurisdiction covers the entire California coast and coastal counties. The SCC has tried to push the boundaries with partnerships. An example of the SCC's work to address climate change includes a guidance document that is now available for public comment on how to mitigate and engage in adaptation strategies against sea level rise. The SCC's goal is to help move the application of science forward so that people know what they can do to conserve and still have a rich ecologically diverse environment.
- The most important issue is to help groups understand the landscape context, develop strategies to address how to use that information, and give people confidence that there are still opportunities for groups to conserve the landscape as a rich and biologically diverse environment.

Michael Tansey, Climate Change Coordinator – USBR

- Mr. Tansey helps senior management understand and develop policies to address climate change impacts as associated with drought and extreme weather events. He is also involved in the Water Smart Program that has several climate change components, the Westwide Risk Assessment, and other Reclamation activities. These programs work to create downscaled-projections for risk assessments, water demands, and infrastructure. Mr. Tansey is also part of the Basin Studies Program, which is a partnership effort that covers the different regions of California. USBR has a substantial research and development program that can provide science and information support to the CA LCC partners.
- The most important issue is to provide opportunities for synergies between the CA LCC projects and the USBR research that relate to climate change, water supplies, and species.

Patrick Rutten, Southwest Field Supervisor California & Pacific Islands – NOAA NMFS

- The NMFS was designed to provide community-based fisheries restoration, but Congress mandated that the NOAA also provide a climate service. The climate change example of work includes housing the Western offices in Boulder, Colorado to enhance on-the-ground climate change actions, and communicate those efforts between the different divisions. Additionally, the NMFS established a pilot project to predict future storms in the Russian River Valley. There is also the National Integrated Drought Information System (NIDIS), which is a multi-agency online drought information program available at Drought.gov. The Regional Integrated Sciences and Assessments (RISA) through the NOAA's Climate Program Office has California and Nevada

application with academic input. The NOAA works to address ocean acidification and fishery health, and even salmon fisheries health in US Rivers. He appreciates that the Bay habitat has recently received more agency attention to understand why the salmon use the habitat only for transportation.

- The most important issues are to translate the CA LCC into a collaborative, and to create tangible strategies for the managers. Also, he would like the CA LCC to promote estuarine health and habitat conservation.

Dave Graber, Chief Scientist, Pacific West Region – NPS

- Mr. Graber's primary responsibility is to ensure that the NPS resource managers are fully informed by trustworthy science. The NPS has made internal efforts to minimize the Agency's carbon footprint, and used that experience to educate school children as part of its instructional programs. The NPS also invests in vulnerability assessments regionally. The NPS wants to learn how to work with other groups. The NPS struggles with how to determine the future purpose of Parks if climate change impacts radically alter the environments the Parks work to conserve.
- The most important issue is to create conservation science products and identify an adaptation application to use across jurisdictional areas and organizations.

Rick Kearney, Assistant Regional Director for Climate Change and Science Application – FWS

- Mr. Kearney works to integrate climate change into the full functions of the FWS. The FWS has adopted a Climate Action Plan with a suite of activities to address adaptation. Mr. Kearney's other major role is to oversee the LCCs to help partners integrate science information. The goal for the LCCs is to take the challenges and issues learned from the JVs and broaden the focus to spread that knowledge and create connections with other regional partnerships. He expressed appreciation for California's State Leadership and the well-educated public, through the use of science and research for local application, to foresee the need to help agencies adapt to climate change issues. Mr. Kearney's goal is to help the FWS engage in organizational transformation, as the FWS looks to change its practices and engage in more collaborative conservation efforts that links with other groups that share common objectives with the FWS. He also noted that Congressional support in the form of funding for the LCCs would disappear without documented successes by the LCCs.
- The most important issue is to define and create measures of success.

Tom Suchanek, Research Manager and Climate Change Coordinator – USGS

- The Climate Center has 30 principle scientists, and conducts research on diverse topics and issues including, migratory birds, sea otters, the Desert Tortoise in Southern California, restoration efforts of the San Francisco Bay, sea-level rise impacts on migratory birds, and droughts in the Sierra Nevada. Mr. Suchanek shared that there is a new post-doctoral position with the USGS, in collaboration with NOAA, to develop indicators to evaluate how climate change will change California's coast and Farrallon Islands. Even though there are research positions with the USGS and at UC Davis that

create climate change models, the ultimate goal to increase monitoring efforts for the NOAA along the coast. Also, Brady Mattsson, who a staff person for the USGS, collaborates with the CA LCC. Plus, the USGS has many interactions with neighboring LCCs.

- The most important issue is to assist partners to conduct and develop the best science possible in regards to climate change impacts.

Tom Kimball, Research Manager – USGS

- The USGS conducts on-the-ground place-based research and fieldwork. The USGS works with other federal and state agencies and departments to conduct science and distribute that information. Mr. Kimball works to build partnerships and to link the research to necessary decisions at the resource management level. Some climate change work examples include the studies in the Redwood Forest, to understand the interconnection of climate change, fire, management practices, and drought. Another question the USGS works on is how much carbon is sequestered in the forests worldwide.
- The most important issue is to define measures of success early to set a clear path to demonstrate progress.

Grant Ballard, Climate Change and Informatics Group Director – PRBO

- Mr. Ballard leads ecologists, quantitative analysts, and statisticians in efforts to understand the data that is available across the various fields in California, Mexico, the Pacific West, and Antarctica. The PRBO created a specific project that the CA LCC supported, to develop conservation priorities, establish the current status of the priorities, the possible changes to those priorities, and assess the changes that occur.
- The most important issue is to identify and bridge data gaps from the managements' perspective, and then bring critical groups together to work on issues. Additionally, the science that the CA LCC helps develop must be feasible and applicable.

Tom Hedt, State Conservationist for Landscape and Planning – USDA's NRCS

- Mr. Hedt works one-on-one with individual landowners to facilitate voluntary decisions that relate to conservation of private land. His specific role is to expand the Agency's broader processes to include climate change impacts and adaptation. For example, Mr. Hedt is the contact person for the NRCS to participate in the CA LCC. The NRCS has a Climate Change specialist on staff to look at climate change influences on the landscape. However, he noted that the global perspective is difficult, especially for local landowners. The Climate Change Specialist looks at planning standards for to address climate change impacts for individual private property conservation plans.
- The most important issue is to continue to focus and leverage the CA LCC partnerships, so that the NRCS gains information to incorporate into its broader conservation processes.