Questions and Answers on 4th Climate Change Assessment: Non-Energy Research

**Question 1.** I am eligible to apply as a scientist working for my own private company, a LLC?
**Answer.** Yes your LLC is eligible to apply with you as the Principal Investigator.

**Question 2.** I’m writing to ask a question regarding the scope of the RFP for the CA Climate Change Assessment. Is the eligibility limited to research institutions and the private sector? I’m specifically asking if governmental agencies are allowed to apply for this RFP?
**Answer.** Eligibility is not limited to research institutions and the private sector. Government agencies are allowed to apply.

**Question 3.** Please advise if the award will be a contract mechanism or a grant mechanism.
**Answer.** The award will be a contract, not a grant.

**Question 4.** I have a few questions about this solicitation -
1. Can you provide more information about the land use scenarios? Will they be projections in a geospatial format? What will the spatial resolution be? What land use categories will be included?
   **Answer.** The characteristics of the land use scenarios are still being worked out. The intention is to work with the U.S. EPA and use a new generation of outputs from the EPA’s Integrated Climate and Land-Use Scenarios (ICLUS). For information of what is available at the moment, please go to http://www2.epa.gov/iclus. Note that EPA is working on updates to these scenarios.

2. When will the downscaled climate model outputs and other scenario data be available for use?
   **Answer.** Temperature and precipitation projections at 1/16 degree and daily resolutions are already available as well as the outputs from the Variable Infiltration Capacity (VIC) model. Enhancements to these scenarios will be available in the second quarter of 2016.

3. Re project 2a - Economic Potential and Climate Benefits of Carbon Sequestration on California's Rangelands and Croplands: When you mention rangeland management regimes under Proposed Work, are you referring, among other things, the use of mulch and composed food waste? An investigation of this activity is covered under project 2b.  
   **Answer.** Project 2A is broader in the management techniques that can be considered (including mulch and compost), whereas 2B is specifically limited to mulch and compost. Read the RFP and Conceptual Sketches descriptions carefully to determine which project is a best fit for your application.

**Question 5.** I am working on a collaborative proposal to address “Migration Corridors and Refugia as Adaptation Strategies: Critical Review” and have the following questions.

1) Are you willing to contract with more than one institution for a single project
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proposal?

Answer. No. More than one institution can be involved in a single project proposal. In such cases one institution will receive a contract from BECI, and that institution will need to issue subcontracts to the other institutions supporting it on its project.

2) With respect to the critical review, to what extent do you expect new data to be delivered?

Answer. As stated in the RFP and in the Conceptual Sketches, the emphasis of this project is to critically review existing methods. Researchers “may also develop and test spatial models to identify potential corridors and/or Refugia and to map climate velocity” (Conceptual Sketches, page 11) if funding resources permit, such as with match funding. Therefore the delivery of new data is not required.

3) If matching funds are available to include examples of climate refugia, linkage analysis, and consequences for species survival, will such examples be restricted to reliance on a common set of primary and secondary scenario products, listed under the “Coordination” section?

Answer. As stated in the RFP (page 3), “all research projects will use a common set of primary (climate, sea level, socioeconomic, and land use) as well as secondary (wildfire) scenarios.” Applications that propose to use different scenarios may lose points on the scientific/technical merit criterion relative to applications using the common scenarios.

a. Do you have a list of this common set of data.

Answer.

Scenarios for RCP8.5 and RCP4.5:

- Temperature
- Precipitation
- Relative humidity
- Wind speed and direction
- Solar insolation
- Snowpack and runoff
- Streamflows in certain locations
- Quasi probabilistic sea-level rise projections

Drought Scenarios (scenarios that assume long droughts lasting for 20 to 30 years)

Socioeconomic/land use scenarios based on the Integrated Climate and Land Use Scenarios developed by USEPA

Wildfire scenarios including number of fires, burned area, emissions, and property risks, using statistical models with the hydroclimatic data listed above.
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**Question 6.** I am a state employee but also a registered principal investigator at the Public Health Institute, a 5013c non-profit research organization based in Oakland, CA. Would I be eligible to able to apply for the 4th assessment funds through the Public Health Institute?

**Answer.** The Public Health institute, with you as the Principal Investigator, may apply. However, note that there may be conflict of interest issues that may preclude your state agency from reviewing and scoring proposals in your area of work.

**Question 7.** We are planning to submit a proposal for theme 3B, Identification of Natural Infrastructure Options for Adapting to Sea Level Rise. Should proposals try to cover all of the California coast or could a proposal focus on a specific region with the intention of making lessons learned applicable to other regions?

**Answer.** The RFP and Conceptual Sketches do not prescribe the geographic extent or location for projects. However, the Conceptual Sketches document (page 29) does say that the “proposed work will deliver an analysis of non-structural methods for stabilizing shorelines at California State Park (CSP) units.”

**Question 8.**

1. Is it possible (or unadvised) to address more than one project within one theme? For example, using observations for past and current conditions and a model to simulate future pools and fluxes, one could look both at the carbon sequestration potential of forests and rangelands.

**Answer.** You need to submit separate proposals for each project, even if they are under the same theme. You are allowed to win both projects under a theme if you earn the highest score on each of the projects versus the other applicants. See also the last two sentences in the Eligibility paragraph of the RFP.

2. Is there a recommended set of climate projections to simulate future impacts?

**Answer.** Yes, see RFP page 3. These recommended projections are being developed by Scripps Institution of Oceanography for California’s 4th Climate Change Assessment. See also answer to Question 5 #3.

3. Is there a recommended emission scenario (SRES, RCPs, RCP 8.5) and associated land use scenario to simulate future impacts?

**Answer.** The climate projections for California’s 4th Climate Change Assessment are based on RCP 8.5 and RCP 4.5. We may also explore RCP2.6. We expect to use the EPA ICLUS scenarios related to the RCP emissions scenarios.

4. In theme 2, project C requests the use of remote sensing to evaluate carbon sequestration potential. Is there any interest in using other methods (models) to project future sequestration potential assuming future remotely sensed products will help (in)validate the method used. Does this target only models using data assimilation?

**Answer.** As stated in the RFP, the objective of this project is to test aerial remote sensing methods for monitoring forest carbon that are replicable and repeatable.
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Evaluating carbon sequestration potential and projecting future potential are not within the scope of this project.

**Question 9.**
1. Do all research teams need to include at least one university? If so, does the university need to be the proposal lead?
   **Answer.** Research teams do not need to include a university.

2. Can we be awarded funding for multiple projects under a theme or just one project? For instance, if we wanted to submit proposals for Theme 4, Projects A and B, can we get funded for both projects or will we only get funded for one?
   **Answer.** See Answer to Question 8 #1.

3. On page 3 of the Conceptual Sketches document, it states: “This document is ultimately intended to supplement the Request for Proposals (RFP) to be released by the Berkeley Energy and Climate Institute on behalf of the California’s Natural Resources Agency.” Is the RFP that is mentioned here the same one that was released on October 1, 2015? Or a new RFP that will be released at a later date? If it’s a different RFP, can we bid and win on the October RFP and then later bid on the other RFP or would our participation in one prevent us from bidding on the other?
   **Answer.** The RFP that is mentioned is the same one that was released on October 1, 2015. There are no plans to release another RFP as part of California’s 4th Climate Change Assessment.

4. Can you provide additional information on the scope and level of effort required for Theme 7 – Project B: Overcoming Barriers to Adaptation: A Case Study?
   **Answer.** It is up to applicants to determine the scope and level of effort they could provide within the stated funding amount and based upon the description of projects in the RFP and Conceptual Sketches.

5. The RFP states: “funding will be awarded mid-January 2016” and “researchers should plan to complete their projects, including peer---review by December 2017.” We’re assuming the period of performance for the research projects is 2 years. Can you confirm?
   **Answer.** The RFP states that the anticipated completion of the evaluation process is mid-January 2016. Awards will be issued after that, depending on how long it takes to write and execute the contracts. The period of performance will be less than two years, since all awards must end by December 2017.

6. Is there an existing transportation resilience coordinating body discussing adaptation options, strategies, or finance mechanisms?
   **Answer.** There are a great many activities in this area. A few worth noting that were identified in the Draft Safeguarding California: Implementation Action Plans
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Previous Assessments include: Caltrans seeks to incorporate climate resilience into all long-range system planning activities, including the California Transportation Plan 2040 to be completed by end of 2015. Caltrans Strategic Management Plan 2015 calls for completing 25 sustainable, multi-modal corridor masterplans that include climate resiliency components by 2020. In partnership with the Governor’s Office of Planning and Research and the Department of Finance, the Transportation Agency is helping re-frame the State’s Five-Year Infrastructure Plan to include climate resilience considerations into all new transportation investments.

**Question 10.**  
For section 3B:  
· Do the natural infrastructure options have to focus on State Parks?  
· What is the preferred scale—are you looking for more detailed studies vs. evaluating different, less detailed scenarios?  
· Would a case study of a single park be preferred to an approach that incorporates multiple parks?  
· Are there priority regions or areas that have been identified?  
· Are there specific time horizons—targets like 2050, 2100?  
**Answer.** Applicants are directed to what is stated in the RFP and the Conceptual Sketches. Close coordination with state agencies (e.g., State Parks) will also be essential during the execution of the contract to minimize duplication of efforts. Applicants must make their own determination about scale and scope. The RFP states that all projects will focus on impacts and adaptation strategies in the next 20 to 40 years while also considering end-of-century risks. However, for natural systems a long-term perspective is essential so a time horizon to the end of this century is appropriate.

**For section 7B:**  
· As stated in the section description, previous Assessments included studies for water and coastal sectors. Does this preclude water supply or riparian/riverine habitat studies from being proposed? If so, which sectors will be considered?  
**Answer.** Previous Assessments studied adaptation barriers in the water sector only focused on water supply for human consumption. For this reason, studies on adaptation barriers to riparian/riverine habitat are acceptable.

**Question 11.** Is it expected that outreach to stakeholders, including farmers, agency decision-makers, and others, would be part of the project and written into the budget and timeline, or are these solicitations intended to mostly cover the research only, and the outreach to appropriate decision-makers will be carried out by CNRA and partners AFTER the Dec 2017 completion deadline? Even if outreach is not expected as part of the funded project, would it be an allowable budget item?  
**Answer.** Stakeholders will be engaged throughout the 4th Assessment, including participation in quarterly meetings of all project leaders. Additional outreach is allowable in the budget if valuable to the technical merit of the application. Applicants
must make their own decision about how valuable they think this outreach is to meet the objectives of the 4th Assessment.

**Question 12.**
All questions for project #5A:
1. The RFP states “Tool development will involve close collaboration with the California Department of Public Health (CDPH), the Office of Environmental Health Hazard Assessment (OEHHA), and local public health agencies, whose needs and preferences will be incorporated into design of this decision support tool.
   a. How many staff hours will be made available from the above mentioned state agencies for consultation and coordination purposes?
   b. How will the final decision be made as to the specifications for the tool?
   c. Will the abovementioned agencies recommend and/or mandate which additional parties are to be included in initial user interviews?

**Answer.** The state agencies make no firm commitments in terms of number of staff hours. Decisions about tool specifications and parties to be interviewed will be made through consultation between the awardee and the agencies.

2. The RFP states in Figure 5, “These primary probabilistic forecasts will be developed by the California Energy Commission and California’s Natural Resources Agency…”
   a. Approximately when will the forecasts and climate scenarios be made available for inclusion in the tool development?

**Answer.** See the response to Question 4 #2.

3. The RFP states, “… this information [will be made] available to participating public health groups in a user-friendly format delivered via Cal-Adapt.”
   a. Can you provide more details on the role will Cal-Adapt play in hosting and/or deploying the tool?

**Answer.** Successful applicants will be expected to coordinate with the Cal-Adapt team to ensure the applicants provide the data in a suitable format and with appropriate documentation so that datasets can be visualized easily by stakeholders. Note that Cal-Adapt will be adding an Application Programming Interface (API) so that third-party tools can be developed that use Cal-Adapt’s database. Applicants, if they choose, may propose to develop this tool using the API.

**Question 13.**
1. Can in-kind labor be considered a source of matching funds? If so, does the in-kind contribution have to come from a member/institution of the proposal team, or could it come from an outside source (such as a partnering water utility that might assist the research team by organizing data, for example)?

**Answer.** Matching funds must come from a member of the proposal team. If the outside party joins the proposal, then its matching funds are eligible. If the outside party wishes to contribute labor as its match, then it needs to document the amount of
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labor and its cost.

2. With respect to Project 4B "Adaptation Options for Local Self-Sufficient Utilities," are water utilities that rely on diversions from the Sacramento or San Joaquin River systems upstream of the Delta, but do not receive any diversions from the state and federal water projects, considered "self-sufficient" utilities for purposes of this research project?

Answer. Yes.

3. Is it acceptable for an individual researcher to be named as a participating researcher in proposals for more than one project? Can a single individual lead proposals for more than one project?

Answer. Yes, an individual researcher can participate in more than one project. Yes a single individual can lead proposals for more than one project. However a single individual cannot lead more than one proposal for the same project.

Question 14. Reading the description of Theme 4A of the call California’s Fourth Climate Change Assessment we find the following statement:

"...Human decision-making, economic markets and institutional behaviors are not realistically characterized in current optimization models. Another approach based on simulation models assumes..."

Please provide the reference to the optimization and simulation models that are referred to here.

Answer.


Question 15. These questions are with regard to Theme 2 B:

a) This research focuses on evaluation of composts as climate change adaptation and mitigation. There are other alternatives than composting to using food waste to benefit agricultural lands rather than disposing of food waste in landfills. These other alternatives could also be expected to cause very low greenhouse gas emissions. In this proposal, can such alternative use of food waste be evaluated in addition to uses of compost, or should the proposal be
limited to composting and uses of compost in agriculture?

**Answer.** The RFP specifically requires projects to investigate the application of compost and/or mulch to agricultural lands. If applicants wish to investigate other management practices in addition to these, they are free to do so.

b) Liquid manure without prior composting can also be used in alternative ways that benefit agricultural land without causing large greenhouse gas emissions. Could alternative uses of liquid manure be evaluated in terms of greenhouse gas emissions, water savings and benefits to soil resilience or is the proposal limited to composting and uses of compost in agriculture?

**Answer.** The RFP specifically requires projects to investigate the application of compost and/or mulch to agricultural lands. If applicants wish to investigate other management practices in addition to these, they are free to do so.

**Question 16.** We have the following questions related to the subject RFP:

1. The RFP indicates a preference for researchers based in or with offices in California. Our firm has a number of researchers who work full time as telecommuters based in California. Several of these associates are interested in pursuing this RFP. Does having full-time telecommuting staff in California qualify a team for the preference described below from the RFP?

   “However, preference will be given to institutions based in California or that have offices in California, where most of the work should be conducted.” (page 2 of RFP under Eligibility)

   **Answer.** Telecommuting offices in California for researches are considered offices in California for the purposes of the Eligibility section on page 2 of the RFP.

2. The description for Match Funding (p. 2 of RFP) does not specify the form for matching funds. Are in-kind contributions acceptable, or must matching funds be provided as cash?

   **Answer.** Matching funds do not need to be provided as cash, but they must reflect an actual cash expense for the entity contributing the match. If in-kind labor is contributed, then the entity contributing it needs to document the amount of labor and its cost.

3. The requirements for the Budget (p. 2 of RFP) do not mention fee or profit. May bidders include fee in their proposals?

   **Answer.** Profit or fees in lieu of profit are not allowed.

**Question 17.**

1. The solicitation states that extra points will be awarded for matching funds; however, there is are no guidelines to define what funds are considered matching. For example, if the proposed work will build on or be enhanced by currently funded work, would those current funds be considered a match? Or, must the match be only new money? If the latter, what level of documentation must be provided in order to prove this money is
available? Can the new money start to be spent prior to the start date of funding from this program? There are many related questions I could add, but I think you see where I am going. It would greatly improve the level of certainty and quality of proposals to have further clarification on this topic.

**Answer.** Currently funded work that supports the proposed research can be considered as a match. Funds spent outside of the period of performance are not acceptable as a matching contribution.

2. Under the section on proposal scoring, the solicitation states that the minimum score is 70. Could you please clarify if this means that the scoring rubric is such that the lowest score a proposal can get is 70, or if it means that proposals scoring less than 70 are not eligible to be funded under this program?

**Answer.** Proposals that do not receive a minimum score of 70 during the evaluation process will not be awarded. If a project receives no proposal that earns a score of 70 or higher, then no award will be issued for that project.

**Question 18.**

We are interested in pursuing work for both projects under Theme 7: Funding and Implementing Adaptation Projects. Are we required to submit separate proposals for each project even though they are under the same theme? Is it allowed for one firm to win both projects under a given theme?

**Answer.** You need to submit separate proposals for each project, even if they are under the same theme. One firm is allowed to win both projects under a theme if it earns the highest score on each of the projects versus the other applicants.

**Question 19.** I noticed that the 4th climate assessment correctly want all the researchers to be on the same page with respect to initial model parameters. Given the differences in opinion over which analyses are relevant, will the Agency provide some insight into the common wildfire scenarios?

**Coordination:** Applicants should demonstrate some level of flexibility to foster coordination between and integration of the studies that comprise the Fourth Assessment. To ensure that the Fourth Assessment research results are internally consistent and amenable to cross-sectoral integration, all research projects will use a common set of primary (climate, sea level, socioeconomic, and land-use) as well as secondary (wildfire) scenarios. To increase the likelihood that studies at the local and regional levels are useful to inform decision-making, proposals for local/regional studies should include partnerships with local/regional entities.

**Answer.** The common wildfire scenarios will be similar to those developed for previous climate assessments. E.g., [http://www.energy.ca.gov/2012publications/CEC-500-2012-030/CEC-500-2012-030.pdf](http://www.energy.ca.gov/2012publications/CEC-500-2012-030/CEC-500-2012-030.pdf). However, the statistical modeling will be updated with the new climate projections discussed above. The modeling will estimate size distribution of future wildfires under several climate scenarios.