August 27, 2019

**Subject:** Climate Change Research Grant Program – Round Three Awards

**Reporting Period:** April – August, 2019

**Staff Leads:** Leah Fisher and Liz Grassi, Strategic Growth Council.

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**Recommended Action**

Approve Research Priority and Focus Areas for Round 3 of the Climate Change Research Program and Direct Staff to Develop and Release Research Solicitation for 2019-2020 Climate Change Research program funds.

**Summary**

This report provides the Council with information about the status of the Research Program, outlines recommended changes to the framework and criteria for awarding the third round of grants, and discusses next steps for administering this round of funding.

**Background**

The Legislature passed Assembly Bill (AB) 109 as part of the Budget Act of 2017, creating the Climate Change Research Program within the Strategic Growth Council (SGC) (see Attachment 1, Program Overview). To date, the Legislature has appropriated $34 million of Greenhouse Gas Reduction Fund revenues to support three rounds of research grants. The Climate Change Research program supports “research on reducing carbon emissions, including clean energy, adaptation, and resiliency, with an emphasis on California.” Per statute, the program’s Research Investment Plan (adopted by the Council in September 2018) guides the development and implementation of grant cycles as funding becomes available, and provides the foundation for all of the Council’s research investments. The plan is on a three-year cycle, with the next update scheduled for fall of 2021.

The Research Program supports research that advances tangible climate outcomes, and that leverages the State’s diverse research investments to address policy needs, filling critical research gaps to address the State’s climate goals. The results of the research projects will fill gaps in knowledge and advance implementation of the State’s climate change policies, while also benefiting underserved communities in California. The Research Program emphasizes meaningful engagement, integrating stakeholders - local and regional governments, community-based organizations, and others - into the research process.

In 2018, the Council awarded research grants to fourteen projects (see Attachment 2, Funded Research Projects) that investigate a variety of important issues, including: Avoiding displacement when making climate change investments decisions; Understanding the consequences of sea level rise impacts to toxic sites and surrounding disadvantaged communities; Examining the economic impacts and opportunities to rural agricultural communities from implementing state policies to combat climate change; and, Quantifying and improving carbon dioxide removal and adaptive management in natural and working lands.
**Round 3 Grant Solicitation**

The Budget Act of 2019 (AB 74, Ting) appropriated $5 million to the Council to support the third round of the program. Of this, $4.75 million will be available for award. After organizing a series of engagement events around the state, conducting conversations with research and program staff in other agencies, and convening the program Steering Committee on two occasions (see Attachment 3, Engagement Activities) staff recommends the following changes to the Round 3 grant solicitation:

1. Focus Round 3 grants on three of the five Research Priority Areas listed in the Research Investment Plan:
   - Supporting and protecting vulnerable communities from the impacts of climate change research gaps
   - Accelerating and supporting transitions to climate smart communities
   - Integrating land use, conservation, and management into California’s climate change programs.

2. Add additional guidance that directs researchers to apply a cross-cutting thematic lens to proposed research.

3. Add meaningful engagement as a fifth threshold requirement.

4. Include additional principles and metrics that researchers can use to demonstrate value and co-benefits of their work.

**Limiting Round 3 Research Priority Areas**

Staff recommends that the Council limit the Research Priority Areas for Round 3 in order to address critical policy needs, maximize the benefits of this investment, and to be responsive to feedback received through outreach to researchers and other stakeholders, including local governments and community-based organizations. This focus is important since this round will have far less funding available than Rounds 1 and 2.

Staff recommends that Round 3 focus on the following Research Priority Areas for Round 3 (additional detail on these areas can be found in Attachment 4: Research Priority Areas):

- **Supporting and protecting vulnerable communities from the impacts of climate change:** Research gaps addressing climate adaptation planning and implementation; needs of underserved communities; policy considerations that affect community climate vulnerabilities; disaster/wildfire resilience needs and recovery that promotes both climate adaptation and mitigation.

- **Accelerating and supporting transitions to climate smart communities:** Research tackling sustainable and equitable development in a variety of communities, integration of resilience needs and considerations into development and climate smart priorities/planning, and integrated transportation research at the nexus of land use, housing, and development.

- **Integrating land use, conservation, and management into California’s climate change programs:** Research focusing on climate impacts on natural and working lands, adaptive management strategies, pilots and models of land conservation strategies and adaptive management techniques, and approaches for successfully using natural infrastructure systems to increase resilience.
This focus will exclude investment in two remaining Research Priority Areas included in the Research Investment Plan:

- Increasing data accessibility and planning support for local and regional climate change planning, and,
- Low-GHG transformative technology development and deployment.

However, Rounds 1 and 2 invested heavily in these areas. Round 2 focused solely on Low-GHG transformative technology development and deployment, and in Round 1, six projects are developing a variety of tools to increase data accessibility and planning support for local and regional climate change planning.

Beyond maximizing Round 3 investment potential, the proposed limited suite of priorities for Round 3 also helps to avoid redundancy with other State grant programs and with past rounds of SGC funding, and to focus investment in areas with high potential for near-term impact.

Adding a Crosscutting Thematic Lens

In addition to the three Research Priority Areas described above, the SGC has identified two crosscutting themes that were priorities raised by stakeholders, researchers, and State agency partners. These two topics were common themes from all outreach conducted. Staff are proposing that these be included in the research criteria to provide additional direction and guidance for researchers and to advance the SGC’s mission of supporting and developing sustainable communities. A proposed research project can address one or both of these themes, and a project that addresses needs identified in the three Research Priority Areas, but does not include either theme, may still be awarded a research grant.

The two themes are:

- Research integrating climate vulnerability/adaptation and climate-smart communities:
  ~Research into understanding climate vulnerability (or vulnerability in an adaptation context) and implementing pilot practices that contribute to creating climate-smart communities; research that advances both climate adaptation and mitigation, including how local governments can plan and implement actions for both.
  ~Researchers, along with key partners, community groups, and other stakeholders, should consider research moving beyond vulnerability assessments to developing pilot projects, studying the economics of addressing climate adaptation and mitigation, and other related topics that are key needs identified by non-academic research partners.

- Social dimensions of change:
  ~Research that explicitly supports the advancement of best practices identified through prior research, with a focus on social dimensions/determinants of change and social elements of climate adaptation and mitigation. This can be addressed in any Research Priority Area; it is an important consideration for developing an interdisciplinary/cross-sectoral research project that will move beyond identifying vulnerabilities to activating change in communities.
Increase the Emphasis on Meaningful Engagement

While Round 3 will continue to weight 30% of a research proposal’s evaluative score on meaningful engagement, it is important that the solicitation itself clearly and consistently convey the importance of this component. This topic came up repeatedly during outreach as needing additional attention and clarity in the solicitation. Staff are proposing that in addition to including criteria as part of the merit review, it is recommended that engagement also be included as a threshold requirement, which will be reviewed when conducting the initial intake and screening of proposals. If this threshold requirement is not met, a proposal will not advance to merit review.

The proposed threshold requirement is:

- The submission meets the threshold requirements for meaningful engagement; **specifically that at least one non-academic partner is funded in the budget, and that engagement is iterative and includes an outreach and communications strategy.**

Metrics and Principles – Demonstrating Value

In response to feedback received through a number of outreach events, the Round 3 Solicitation will encourage the use of specific metrics to demonstrate the value of the research and to address and measure the co-benefits of the research. The solicitation will integrate the concept of using evaluative tools such as public health analyses, ecosystem evaluation/water impacts, economic analysis, and interdisciplinary research approaches into the technical review criteria and research narrative considerations. Whether or not these should be included in proposed research projects will be evaluated during technical review.

Timeline and Next Steps

Upon Council approval, staff will move forward with developing a grant solicitation for awarding the 2019-20 funding, provide proposal assistance to potential researchers, conduct merit and programmatic review processes, and make award recommendations to the Council in Spring 2020.