



Oregon

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TO: Land Conservation and Development Commission

FROM: Brenda Bateman, Director
Patty Snow, Ocean and Coastal Services Division Manager
Christine Shirley, Climate Change Resilience Coordinator



SUBJECT: **Agenda Item 9, May 19-20, 2022, LCDC Meeting**

BRIEFING ON CLIMATE CHANGE RESILIENCE ASSESSMENT

I. AGENDA ITEM SUMMARY

The Department of Land Conservation and Development (DLCD or department) has initiated the work of producing an assessment of how climate change is likely to affect the wellbeing, livelihoods, and cultural identity of Oregon's population.

This report describes how the department plans to produce a people-centered climate change resilience assessment.

Objective. Staff will provide information to the Land Conservation and Development Commission (LCDC or commission) on the approach and techniques to produce and engage community members during development of the assessment. Staff will introduce commissioners to the project team and review the project schedule. The presentation will conclude by inviting commissioners to comment on the proposed approach.

II. BACKGROUND

In a previous report provided to the commission, staff described the objectives of a statewide climate change vulnerability assessment to be coordinated by DLCD using funds provided by the Legislature. Staff later changed the name of the assessment to the "Climate Change Resilience Assessment." The objective of the project is to discover where gaps exist in community resilience, in particular for marginalized and underserved populations, so that climate adaptation investments can be targeted where they are most needed.

III. AGENCY STRATEGY FOR PRODUCING AN OREGON CLIMATE CHANGE RESILIENCE ASSESSMENT

The multi-agency team who prepared the Climate Change Adaptation Framework recommended that the state assess how climate change is likely to affect the people who live and work in Oregon. The assessment will focus on the question of how the physical effects of climate change are likely to affect wellbeing, livelihoods, and cultural identity of Oregonians. In 2021, the legislature provided funding to perform the assessment. The department developed an agency strategy comprised of five parts as follows:

- Convene an advisory group to act as a sounding board throughout the project term
- Conduct interviews with prominent community-based organizations
- Invite Tribal coordination or consultation
- Conduct a series of regional public workshops
- Summarize what we heard and make recommendations for further action.

Using the state's Department of Justice roster for facilitators and public participation practitioners, DLCD hired Jeanne Lawson & Associates to manage the advisory group. The department contracted with the University of Oregon's Institute for Policy Research and Engagement (IPRE) and Oregon State University's Oregon Climate Change Research Institute (OCCRI) to facilitate interviews and workshops and provide technical assistance. The resulting information will be imported into a model used to identify adaptation policies and projects that enhance wellbeing, livelihoods, and cultural identity by region and statewide.

1. Climate Change Resilience Assessment Work Group (CCRAAG)

DLCD staff assembled a group of twelve people representing a diverse range of community interests to serve as project advisors. The Climate Change Resilience Assessment Work Group or CCRAAG will provide a sounding board for the project team as they develop workshop approaches, materials, and outreach strategies. The CCRAAG also will review the draft project report to ensure community concerns were appropriately captured. The first meeting of the CCRAAG was held on April 21, 2022, during which time staff introduced the project aims and its strategy and invited comments. Participants were supportive of the strategy.

2. Interviews

DLCD staff with support from IPRE, will conduct 12-15 interviews with regional community leaders to learn more about issues of concern related to climate change. The department and IPRE also will ask interviewees questions about appropriate workshop venues, dates, and times.

3. Tribal Coordination and Consultation

On March 15, 2022, the department emailed invitations to coordinate or consult on the development of the plan to Oregon's nine federally recognized Tribes. The Coquille Indian Tribe expressed interest in participating in the CCRAAG. A representative of the Coquille Indian Tribe participated in the first work group meeting. Representatives of the Confederated Tribes of the Umatilla Indian Reservation responded to the invitation by providing written material but stated that they did not have the capacity to engage more fully. They asked to be kept informed of progress and of local workshop dates.

4. Regional Workshops

Staff plans to host 12 in-person workshops with at least one workshop in each of the eight regions defined by the Office of Emergency Management for hazard mitigation planning. These will take place between July 2022 and March 2023. Workshops will be facilitated by IPRE. Using input from the CCRAAG, IPRE staff are designing workshop activities designed to encourage conversation, storytelling, and playful engagement to discover public perceptions about how climate change is likely to affect participant's wellbeing, livelihoods, and cultural identity. OCCRI will be on hand to provide information to participants about physical changes expected because of climate change in the region being visited.

5. Information Coding and Reporting

The project team anticipates collecting a large amount of information from the interviews and workshops that will require transparent organization into actionable themes. Staff have identified a method known as "Fuzzy Cognitive Mapping" to aid in this task. A Fuzzy Cognitive Map (FCM) enables large amounts of qualitative information to be organized graphically and creates links between concepts, resulting in a causal network. Links are given values ranging from -1 to 1 to depict the strength of each causal relationship and well as its negative or positive influences on connected concepts. FCMs from different interviews and workshops can be combined by region and statewide to reveal differences and similarities. Furthermore, FCMs can be used to test the effects on the entire network of various climate change adaptation strategies by manipulating the strengths and valences of the links that connect concepts. Researchers increasingly use this tool to explore solutions to "wicked problems" of which climate change is one (Attachment A). The department will follow the FCM workflow depicted in Table 1 of the Supplementatry Information section of Attachment A.

The project team will prepare a written summary report as well as a set of regional FCMs to be used for further development of climate change adaptation options. The department will deliver the summary report and FCM to the Legislature in July 2023.

For further information about this report, please contact Christine Shirley, Climate Change Resilience Coordinator at (971) 239-9457 or christine.shirley@dlcd.oregon.gov.

IV. NEXT STEPS

Commissioners Boyer and Jacobson have expressed interest in serving as commission liaisons to the CCRAAG. Staff welcome their participation.

The next meeting of the CCRAAG will be June 16, 4 – 6 pm, to be held virtually, where participants will hear from the Oregon Climate Change Research Institute about a set of regional posters that they are designing to depict the physical effects of climate change. Participants also will discuss workshop venues and formats. At a meeting in July, the CCRAAG will develop an initial set of concepts to be used at the workshops to encourage conversation and seed development of regional FCMs.

V. CONCLUSION

Staff welcomes questions or comments on the project and the strategies they intend to employ.

VI. ATTACHMENTS

A. [ENHANCING CAPACITY OF LOCAL GOVERNANCE FOR CLIMATE CHANGE ADAPTATION.](#)