COMMUNITY ADVISORY COMMITTEE MEETING

COVID-19 NOTICE: RCEA OFFICES ARE NOT OPEN TO THE PUBLIC

Pursuant to the Governor’s Executive Order N-29-20 of March 17, 2020, and the Humboldt County Health Officer’s March 30, 2020, Shelter-in-Place Order, the RCEA Community Advisory Committee meeting will not be convened in a physical location. Committee members will participate in the meeting via an online Zoom video conference.

To listen to the meeting by phone, call (669) 900-6833 or (253) 215-8782. Enter webinar ID: 822 2338 1610. To watch the meeting online, join the Zoom webinar at https://us02web.zoom.us/j/82223381610.

You may submit written public comment before and during the meeting by email to PublicComment@redwoodenergy.org. Please identify the agenda item number in the subject line. Comments received before the agenda item is heard will be read into the record, with a maximum allowance of approximately 500 words per comment. Comments received after the agenda item is heard and before the meeting’s end will be included in the meeting record but not read aloud during the meeting.

To make a comment during the public comment periods, raise your hand in the online Zoom webinar, or press star (*) 9 on your phone to raise your hand. You will continue to hear the meeting while you wait. When it is your turn to speak, a staff member will unmute your phone or computer. You will have 3 minutes to comment.

While downloading the Zoom application may provide a better meeting experience, Zoom does not need to be installed on your computer to participate. After clicking the webinar link above, click “start from your browser.”

In compliance with the Americans with Disabilities Act, any member of the public needing special accommodation to participate in this meeting or access the meeting materials should email Ltaketa@redwoodenergy.org or call (707) 269-1700 at least 3 business days before the meeting. Advance notification enables RCEA staff to make their best effort to reasonably accommodate access to this meeting and its materials while maintaining public safety.

Pursuant to Government Code section 54957.5, all writings or documents relating to any item on this agenda which have been provided to a majority of the Community Advisory Committee, including those received less than 72 hours prior to the Committee’s meeting, will be made available to the public at www.redwoodenergy.org.
# COMMUNITY ADVISORY COMMITTEE MEETING AGENDA

<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>What / Action</th>
<th>When</th>
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<tbody>
<tr>
<td>1. Open</td>
<td>Roll Call:</td>
<td>6 - 6:05 (5 min.)</td>
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<td>Roger Hess</td>
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<td>Norman Bell</td>
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<td>Richard Johnson</td>
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<td>Elizabeth Burks</td>
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<td>Luna Latimer</td>
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<td>Jerome Carman</td>
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<td>Christopher Honar</td>
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<td>Colin Fiske</td>
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<td>Ethan Lawton</td>
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<td>Catherine Gurin</td>
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<td>Dennis Leonardi, V. Chair</td>
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<td>Lara Goldberg, Chair</td>
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<td></td>
<td>Kit Mann</td>
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<td>Pam Halstead</td>
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<td>Chris Curran, Board liaison</td>
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<td></td>
<td>Review meeting agenda and goals.</td>
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<tr>
<td>2. Approval of Minutes</td>
<td>Action: Approve minutes of July 13, 2021, CAC meeting.</td>
<td>6:05 - 6:10 (5 min.)</td>
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<tr>
<td>3. Non-Agenda Item Public Comment</td>
<td>This item is provided for the public to address the Committee on matters not on the agenda. At the end of public comments, the Committee may respond to statements, or refer requests requiring action to the Executive Director or the Board of Directors.</td>
<td>6:10 – 6:15 (5 min.)</td>
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<tr>
<td>4. Wave Energy Report</td>
<td>Hear presentation on wave energy development status. (Information only)</td>
<td>6:15 – 6:25 (10 min.)</td>
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<tr>
<td>5. Humboldt Sawmill Company Alternative Biomass Uses MOU</td>
<td>Receive a report on the proposed memorandum of understanding with Humboldt Sawmill Company for periodic review of alternative biomass uses and provide feedback.</td>
<td>6:25 – 6:40 (15 min.)</td>
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<tr>
<td>6. RePower Humboldt Strategic Plan Update</td>
<td>Hear semi-annual strategic plan progress report. (Information only)</td>
<td>6:40 – 7:05 (25 min.)</td>
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<tr>
<td>7. CAC Goal-Setting &amp; Annual Report</td>
<td>Enlist members for Board Annual Report Subcommittee.</td>
<td>7:05 – 7:15 (10 min.)</td>
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<tr>
<td>8. Member Reports</td>
<td>This time is provided for Committee members to share information on topics not on the agenda. At the end of member reports, the Executive Director will set requests requiring action to a future agenda or refer requests to staff or the Board.</td>
<td>7:15 – 7:25 (10 min.)</td>
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<tr>
<td>9. Close &amp; Adjourn</td>
<td>Summarize actions, outcomes, Board communication items, next steps</td>
<td>7:25 - 7:30 (5 min.)</td>
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**NEXT REGULAR CAC MEETING** – Tuesday, November 9, 2021, 6 - 7:30 p.m. Location to be determined.
COMMUNITY ADVISORY COMMITTEE MEETING

DRAFT MINUTES

July 13, 2021 - Tuesday, 6 - 7:30 p.m.

The agenda for this meeting was posted on July 10, 2021. Community Advisory Committee Chair Larry Goldberg called the meeting to order at 6:03 p.m., stating that the meeting was being conducted by teleconference pursuant to Brown Act waivers included in Governor Newsom’s COVID-19 State of Emergency Executive Orders and in response to local efforts to reduce the spread of the virus. Chair Goldberg stated that the posted agenda outlined instructions for the public on listening to the meeting and providing comment.

Members present:

- Norman Bell
- Elizabeth Burks
- Jerome Carman
- Colin Fiske
- Larry Goldberg, Chair
- Dennis Leonardi, Vice Chair

Members absent:

- Richard Johnson
- Ethan Lawton

Staff and others present:

- Chris Curran, Board Liaison
- Matthew Marshall, Executive Director
- Oona Smith, HCAOG Senior
- Lori Taketa, Board Clerk
- Amin Younes, Schatz Energy Research Center Fellow

Minutes Approval

A member asked when the committee would provide input on Community Choice Energy program priorities. Staff replied that the topic would be addressed at a future meeting. There were no comments from members of the public. Chair Goldberg closed the public comment period.

Motion Leonardi, Second Halstead: Approve minutes of May 11, 2021, CAC meeting.

There was no public comment on non-agenda items.

**HCAOG 2021 Regional Transportation Plan Update**
Humboldt County Association of Governments (HCAOG) Executive Director Elizabeth Burks and HCAOG Senior Regional Planner Oona Smith presented the Regional Transportation Plan (RTP) draft update with added greenhouse gas emission reduction targets, planning goals highlighting a better quality of place and racial justice, equity and inclusion goals in the transportation sector. Many of the plan’s goals are aligned with RCEA’s RePower Humboldt strategic plan transportation goals such as reduction of transportation greenhouse gas emissions by reducing vehicle miles traveled (VMT), increasing vehicle efficiency, accelerating electric vehicle (EV) adoption and expanding advanced fuel infrastructure. RePower Humboldt and the RTP also share transportation efficient land use planning goals. The RTP is due to be adopted in December.

The group discussed whether the plan could impact how existing streets can be repurposed to promote multi-modal transportation when jurisdictions undertake development projects or change zoning. The group discussed which agency should encourage telecommuting, whether telecommuting reduces VMT and the issue’s connection to economic and regional broadband development. Members expressed the need for EV workforce development, mobile battery charger roadside service, and additional EV infrastructure in Eastern Humboldt, especially along Highway 96 between Willow Creek and Yreka. Staff described RCEA’s EV workforce development efforts and the five existing EV charging stations along Highway 96.

Ms. Smith explained the next steps for Plan adoption, how the Plan’s priorities will emerge, HCAOG’s planning and fund distribution role, and the Regional Transportation Plan’s usefulness for jurisdictions to point to as a guiding document when pursuing project funding. No member of the public commented on this item.

**Exploring Humboldt County’s Renewable Energy Futures Presentation**
Former CAC member Amin Younes shared findings from his master’s thesis for Humboldt State University’s Energy Technology and Policy Program. Mr. Younes, a Schatz Energy Research Center Fellow, observed disagreement among Humboldt County residents about the kinds of energy needed to meet local energy demand. He conducted interviews and performed other research to understand the different ways Humboldt County might develop renewable energy to meet its energy needs through technically feasible methods consistent with residents’ goals and mandated renewable portfolio standards.

Mr. Younes explained Humboldt County’s grid conditions, why it is not possible to import all the County’s needed energy with current transmission lines, and how the natural gas-powered Humboldt Bay Generating Station is critical to maintain current grid stability. Local renewable energy development is needed because of these grid constraints.

Mr. Younes’ qualitative findings were that residents are divided on whether renewable energy should come from distributed or centralized sources. However, interviewees all wanted to mitigating climate change impacts through renewable electricity, cared about how energy burdens and benefits are distributed across the county and want to ensure that the planning process for these projects is fair and open. Mr. Younes performed a
quantitative analysis of different renewable energy sources to try to address qualitative differences. He calculated the cost, land use needs, projected job growth and greenhouse gas emissions of different energy source scenarios.

Mr. Younes calculated how much distributed solar with battery storage, local utility scale solar with battery storage, large utility scale solar without biomass, offshore wind and biomass power would be needed to meet Humboldt County’s renewable portfolio standard of 60% renewable energy by 2030. He found that local energy needs can feasibly be met with local renewable resources such as solar, offshore wind and biomass, although opinions on each as well as impacts vary. He suggested a next step of creating a venue for multi-party conversations about Humboldt County’s energy future.

The group thanked Mr. Younes for his research, discussed his carbon emission data source, whether substrate transport costs were factored into cost calculations, and how subsidies will affect costs. There was discussion about the need for open conversations beginning early in project development instead of at the end when it is only possible to express support or opposition. Humboldt State University, the Schatz Energy Research Center or RCEA were named as possible organizations who could create platforms for discourse. Mr. Younes cites some European examples of open energy development conversation in his thesis.

Chair Goldberg invited public comment. No member of the public made comment.

Committee-Board Work Coordination
Executive Director Marshall proposed a plan for the CAC to create work goals and coordinate with and receive assignments from the RCEA Board of Directors. The Committee agreed to work with staff to draft an annual work plan in November, receive Board input in December, and present the next year’s goals and past year’s accomplishments to the Board during a January annual report.

Board Liaison Curran expressed interest in receiving a mid-year update to the Board. There was unanimous support to adopt the practice of reporting annually on CAC accomplishments and goals to the RCEA Board of Directors at the January Board meeting. No member of the public commented on this item. There was a request to form a subcommittee to help draft the report at the next meeting.

Member Reports
Colin Fiske informed the group of an upcoming U.S. Department of Energy roundtable webinar on streamlining solar permitting.

Chair Goldberg adjourned the meeting at 7:23 p.m.

Lori Taketa
Board Clerk
COMMUNITY ADVISORY COMMITTEE
STAFF REPORT
Agenda Item # 4

AGENDA DATE: September 14, 2021
TO: RCEA Community Advisory Committee
PREPARED BY: Colin Mateer, Power Resources Specialist
SUBJECT: Wave Energy Report

SUMMARY

Both RCEA Board directors and Community Advisory Committee members have previously requested staff to provide information on the current status of wave energy as a possible component of RCEA’s renewable future power portfolio. The attached report provides the requested information. Staff will also provide a slide presentation of wave energy developments at the CAC meeting.

FINANCIAL IMPACTS

None

STAFF RECOMMENDATION

None. Information only.

ATTACHMENTS

An Overview of Wave Energy
An Overview of Wave Energy
Written by Colin Mateer, Power Resources Specialist

The turbulent movement of water across the world’s oceans is a large source of kinetic energy. The energy is concentrated at the water’s surface and decreases rapidly with depth. Waves can travel thousands of miles with little energy loss, and in combination with storms and other wind-driven events, create very energetic seas (OpenEI, 2021).

Innovative technologies are continuing to explore opportunities to harness the kinetic energy from the movement of waves. Such devices are referred to as wave energy converters (WECs). Methods for harnessing this energy source typically involve placing WECs on or just below the water’s surface. However, the wave energy industry is still in development, and WEC technologies vary significantly.

North America is estimated to have the greatest power per meter of coastline, unmatched by any other continental coastline worldwide (see Figure 1). Off the coast of the United States, there is an estimated 2.64 trillion kWh of annual energy potential, equal to approximately 64% of U.S. electricity generation in 2019 (EIA, 2020).

Figure 1: Global Wave Resources

(Image Source: Gunn and Stock-Williams, 2012)
Wave energy is measured as the annual average power per meter of wave crest width, which can be approximated as power per meter of coastline. The kinetic energy in waves is abundant, however, the actual energy that is turned into electricity could be substantially less due to efficiency limitations of the WECs, and environmental regulations along coastlines (OpenEI, 2021).

The California Energy Commission oversees the Renewable Portfolio Standards (RPS) program, which specifies the amount of electrical energy that RCEA and other load serving entities must procure from qualifying (RPS-eligible) renewable sources. The CEC recognizes wave energy as an RPS-eligible resource. However, there have been no wave energy generating facilities that have been developed, or certified by the CEC, within California to date.

In 2007, PG&E launched the WaveConnect project which was intended to demonstrate the technical and economic viability of wave power adjacent to PG&E’s service territory. WEC developers could apply to test and demonstrate full scale WEC devices at designated offshore locations, providing invaluable real-world performance data and experience. The multi-stage process included:

1. Site selection, permitting, pilot plant design, and assessment of technology and commercial readiness
2. Development of infrastructure, undersea cabling, and pilot plant deployment of WECs
3. Large scale deployment of WECs in larger quantities and connected to the grid

Offshore areas in the Eureka region were identified by PG&E as one of two potential project sites. However, WaveConnect was halted in 2010 near the end of the first stage for a combination of reasons. WaveConnect was poised to pioneer the permitting and regulatory process for wave power projects in the United States. However, since no wave power projects had ever been licensed by federal or state agencies at the time, the permitting process proved to be complicated, time-consuming and expensive. Additionally, WECs were found to be early-stage devices with evolving designs and little real-world operating experience, raising concerns for cost, performance, and reliability (PG&E, 2011).

The Humboldt County offshore region continues to be an area of interest for potential WEC deployment. On April 8, 2021, RCEA was approached by WEC developer Atargis Energy Corporation. Although their proprietary technology is yet to be commercially deployed, Atargis has successfully secured permits for offshore WEC demonstrations in Ireland. The timeline for commercial deployment is estimated to be approximately 3 – 3½ years should financing be secured from investors.

On July 6, 2021, the U.S. Department of Energy (DOE) released a Funding Opportunity Announcement for up to $27 million in federal funding for open water Research and Development at the PacWave – South test site that is being constructed off the coast of Newport, Oregon (see Figure 2). This funding opportunity will only fund projects that perform testing at the PacWave - South test site, but will help advance WECs toward commercial viability (DOE, 2021).
It is unclear when wave power will become competitive with renewable energy alternatives. WECs are still pre-commercial in terms of their technological maturity, in part due to the harsh ocean environment in which WECs operate and the complex regulatory requirements for coastal and off-shore areas. Significant additional investment in design, testing, and demonstration will be needed to improve viability, reduce costs, and assess environmental impacts.

RCEA staff will continue to monitor wave energy opportunities and engage with researchers and developers interested in bringing pilot projects to the Humboldt Coast as a potential addition to RCEA’s local clean energy portfolio. Staff will keep the Board informed as any such opportunities arise.

References


COMMUNITY ADVISORY COMMITTEE
STAFF REPORT
Agenda Item # 5

AGENDA DATE: September 14, 2021
TO: Community Advisory Committee
PREPARED BY: Richard Engel, Director of Power Resources
SUBJECT: Memorandum of Understanding with Humboldt Sawmill Company on Alternative Biomass Uses

SUMMARY
When authorizing extension of RCEA’s power purchase agreement with Humboldt Sawmill Company (HSC) in April 2021, the Board directed staff to "periodically review the contract… assessing current alternate biomass uses and other environmental considerations." The Community Advisory Committee’s Alternative Biomass Uses Subcommittee assisted staff with creating a framework for the requested periodic review. Staff have negotiated the attached memorandum of understanding (MOU) between RCEA and HSC and will ask the Board to review the MOU and authorize RCEA’s executive director to execute it on RCEA’s behalf at the September 23 meeting.

FINANCIAL IMPACTS
There are no expected direct financial impacts associated with the proposed memorandum of understanding.

STAFF RECOMMENDATION
Receive a report on the proposed memorandum of understanding with Humboldt Sawmill Company for periodic review of alternative biomass uses and provide feedback.

ATTACHMENT
1. Draft Memorandum of Understanding between Redwood Coast Energy Authority and Humboldt Sawmill Company Regarding Alternative Uses of Materials Used for Biomass Power Generation
THIS is a MEMORANDUM OF UNDERSTANDING ("MOU") setting forth the understanding between Redwood Coast Energy Authority ("RCEA") and Humboldt Sawmill Company ("HSC"), regarding the periodic assessment of alternate biomass feedstock uses and other environmental considerations during the term of an existing power purchase agreement between RCEA and HSC.

Background

1. RCEA and HSC (the "Parties") have been parties to power purchase agreements since 2017, under which HSC sells renewable biomass power to supply RCEA's community choice aggregation program for Humboldt County electricity users. The current power purchase agreement is dated April 27, 2017, and was amended on March 1, 2019, May 1, 2021, and June 1, 2021 ("PPA").

2. Renewable biomass power provides a needed and financially viable local means of disposing of residual material produced by Humboldt County's forest products industry.

3. Members of the RCEA Community Advisory Committee (CAC) and members of the public have asked that RCEA consider the environmental and public health impacts of local generation of biomass power and explore alternative, lower impact uses of the feedstock material currently used by the plant.

4. The RCEA Board of Directors (the Board) at its April 22, 2021 meeting approved an amendment to its PPA with HSC, extending its term until May 31, 2031. In approving that extension of the PPA term, the RCEA Board directed staff to "periodically review the contract with Humboldt Sawmill Company, assessing current alternate biomass uses and other environmental considerations."

5. RCEA staff discussed with the CAC at their May 11, 2021 meeting the creation of a memorandum of understanding (MOU) between RCEA and HSC to implement the RCEA Board's direction to staff mentioned above. CAC members proposed that such an MOU should include a commitment from HSC to share feedstock supply and plant operation data helpful in assessing alternative biomass uses, and that the assessment consider both financial and non-financial benefits of such alternative uses, including avoided carbon emissions.

Mutual Understandings

1. Annually on or around May 1 and continuing until the termination of the PPA, representatives of the Parties will meet to review the terms of the PPA and to discuss the
continued viability of biomass power production by the HSC facility relative to other potential or actual uses of the biomass feedstock by HSC or other entities. Such uses to be considered might include but not be limited to those recently analyzed on RCEA’s behalf by a consultant and by a team of Humboldt State University engineering students:

- Soil amendments, including compost, mulch, and biochar;
- Energy products, including gasification, torrefied wood, and wood pellets;
- Chemical products, including ethanol, nanocellulose, and bioplastics; and
- Other products, including construction materials, pulp for tissue manufacture, and wastewater treatment media

2. HSC will make available to RCEA upon request current or recent data on the types, quantities, and quality of feedstock material used by the plant, to the extent such data is tracked by HSC; the facility’s heat rate expressed in million British Thermal Units of biomass fuel consumed per megawatt-hour of electric power generated; and the associated plant emissions reported to regulatory authorities, to the extent disclosure of such data does not directly place HSC at a competitive disadvantage in its forest products or power sales business activities, or cause HSC to violate confidentiality agreements it may have with its various business partners. Data should be made available showing monthly quantities, and disaggregated to show how material is sourced from within or outside Humboldt County, and whether it is sourced internally from the Humboldt Redwood Company and Mendocino Redwood Company family of companies, or externally from other suppliers.

3. RCEA and HSC will observe the confidentiality provisions (section 10.6) in the PPA with regard to any data deemed confidential by either party that is exchanged in fulfillment of this MOU.

4. HSC has engaged a consultant to analyze alternative uses of the biomass residuals produced by the company. This consultant is examining pathways to commercialization for alternative technologies and determining their financial viability. HSC will make the results of the consultant study available to RCEA when it is completed.

5. This MOU does not and is not intended to supersede, replace, or subordinate any provisions, representations, covenants, rights, or obligations in the PPA.

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Signatories to the Memorandum of Understanding

Humboldt Sawmill Company

Name: _______________________

Signature: ____________________

Date: ________________________

Redwood Coast Energy Authority

Name: _______________________

Signature: ____________________

Date: ________________________
AGENDA DATE: September 14, 2021
TO: RCEA Community Advisory Committee
PREPARED BY: Matthew Marshall, Executive Director
SUBJECT: RePower Humboldt Energy Strategic Plan Update

SUMMARY

Following approximately nine months of analysis and gathering public input, in December of 2019 the RCEA Board adopted an update to the RePower Humboldt Plan, RCEA’s comprehensive action plan for energy. The plan establishes goals and strategies to guide RCEA’s work over the 2020-2030 period, and is available online at:

Staff intends to provide RePower Humboldt Plan updates every six months to keep the Committee informed on implementation progress. At the meeting staff will provide a presentation on the status of plan implementation and related activities. This will include updates on the four focus areas of the plan:

1. Regional Planning and Coordination
2. Integrated Demand Side Management
3. Low-carbon Transportation

STAFF RECOMMENDATION

N/A – Information only.
SUMMARY

At the July Community Advisory Committee meeting, the CAC agreed to report the group’s past year accomplishments and upcoming year goals annually to the RCEA Board of Directors. The process aims to organize the body’s work and help the Board thoughtfully utilize the committee as a resource to support Board decision-making and agency public engagement efforts.

The group agreed to the schedule illustrated below:

Community Advisory Committee
Goal-setting & Board Reporting
Proposed Annual Timeline

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<tr>
<td><strong>CAC Meetings</strong></td>
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<tr>
<td>RCEA staff presents proposed/draft goals for coming year, gets CAC input</td>
<td>As-needed: staff gets input from RCEA Board and works with CAC Chair &amp; Vice Chair (or CAC subcommittee) to refine draft goals</td>
<td>CAC adopts goals for the coming year</td>
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CAC representative(s) presents prior-year recap report and coming year’s goals to RCEA Board
STAFF RECOMMENDATION

Informally create an ad hoc subcommittee to work with staff to refine proposed 2022 work goals, incorporate any Board input and prepare the annual report to the Board to be presented in January 2022. This subcommittee may also wish to present a mid-year update to the Board in July 2022.

ATTACHMENTS

None.