



Midpeninsula Regional
Open Space District

Memorandum

DATE: December 9, 2020

MEMO TO: Board of Directors

THROUGH: Ana Ruiz, General Manager *AR*

FROM: Sophie Christel, Management Analyst I, Project Manager
Kirk Lenington, Natural Resources Manager

SUBJECT: Progress Report on Science Advisory Panel Work

SUMMARY

The Science Advisory Panel (SAP) provides an independent science-based review of land management topics to inform the Midpeninsula Regional Open Space District's (District's) open space management decisions and practices. This memorandum updates the Board of Directors (Board) on the work of the SAP. In addition to the Grazing topic literature review, which was completed and presented at the November 4, 2020 Board Meeting (R-20-129), the SAP is working on two other Board-selected topics, Recreation and Monitoring. The first phase of research on these topics will be completed in early 2021. The Board authorized the General Manager to approve a second phase of research upon satisfactory progress. (R-19-32). However, staff is planning to return to the Board in early 2021 to request a slight increase in the contract amount to account for COVID-related impacts (see Board FYI "Updated Scope and Timeline for the Science Advisory Panel" dated August 12, 2020).

BACKGROUND

On August 28, 2019 (R-19-120), the Board awarded a contract to the San Francisco Estuary Institute (SFEI) and subconsultant Point Blue Conservation Science (Point Blue) to form the SAP. These institutions were described at the 2018 Board Retreat (R-18-148) and further discussed by the Board on March 27, 2019 (R-19-32). SFEI was awarded a contract of \$100,000 for the first round of research and the Board approved an additional \$100,000 for a second round to be added to the contract with the General Manager's authorization upon satisfactory progress and demonstrated benefits.

The initial responsibility of the SAP is to prepare summary white papers on three key topics of interest to the District, as approved by the Board on January 8, 2020 (R-20-05):

Topic 1. How can the District effectively and efficiently monitor changes in priority plant and animal populations at the landscape scale?

Topic 2: What are the visitation and recreational use benefits and trade-offs to fulfilling District goals, including natural resource protection and ecologically-sensitive public enjoyment and education?

Topic 3: Review cattle grazing benefits and impacts:

- What is the net climate impact of cattle grazing (e.g., potential increase in soil carbon minus cattle methane emissions)? What are the options, such as grazing regimes or dietary additives, to reduce emissions from cattle grazing?
- What are the current scientific results on the effectiveness of managing grasslands and reducing fire risk with cattle grazing?
- How does cattle grazing as a land management strategy compare to alternatives in achieving District goals including climate protection and what are the trade-offs?

Topic 3 is complete. Findings were presented to the Board on November 4, 2020 (R-20-129). Topics 1 (“Monitoring”) and 2 (“Recreation”) will continue through the summer of 2021. The General Manager will confirm authorization of the second phase in January 2021 after reviewing the initial deliverables on the monitoring and recreation topics.

PROGRESS AND NEXT STEPS

Monitoring Topic

Point Blue is developing a monitoring framework to address Board questions raised on this topic and to guide District monitoring efforts in the long term. Point Blue is drawing on peer-reviewed studies and methodologies to construct a monitoring framework tailored to District lands and needs.

Thus far, Point Blue has hosted two virtual workshops with a focus group of District staff. Staff provided Point Blue with relevant documents regarding the District’s biological resources, current monitoring practices, and goals. During the workshops, District staff agreed with Point Blue on two monitoring objectives and the criteria for selecting indicator plants and animals for monitoring.

The next steps in the first research phase are to hold a third staff workshop on December 15, 2020, at which Point Blue will present a draft list of target species. A draft monitoring framework will be presented to the Board in early 2021. Deliverables for the second phase are the final monitoring framework and Board presentation, projected for June 2021.

Recreation Topic

SFEI is conducting the research on this topic in two discrete phases. In Phase I, they are investigating the benefits to people associated with recreation in open spaces. In Phase II, which is expected to commence in March of 2021, they will investigate the ecological tradeoffs. Specifically, regarding tradeoffs, the SAP will present the state of the peer reviewed scientific understanding regarding the types and scale of impact on the natural environment associated with recreational uses.

To date, SFEI has reviewed District materials related to public access and recreation and held two workshops with a District staff focus group. They have also assessed over 30 peer-reviewed papers for the Phase I research, focusing on benefits to both physical and mental health and well-being from recreating in large, natural open spaces. In the workshops, SFEI and District staff refined the research question and discussed selected scientific papers and how the findings can

apply to the District. Preliminary findings from SFEI's literature review support the District's current understanding of the importance of open spaces to human health and wellness.

The next steps are the final report and presentation on the Phase I findings (benefits) to the Board on February 24, 2021. The Phase II (tradeoffs) process will be similar to Phase I, with the addition of a Technical Advisory Committee. The final report and Board presentation for Phase II are expected in June or July of 2021.

Selection of Topic 4

The contract with SFEI includes a fourth topic, to be selected after the General Manager authorizes the second phase of research. The Board would select the fourth topic on March 10, 2021 from the list previously reviewed by the Planning and Natural Resources Committee (R-19-149).

FISCAL IMPACT

After the General Manager authorizes the second phase of research in January 2021, staff will return to the Board to request an amendment to the contract increasing the total dollar amount by an additional \$19,000 to \$219,000. The \$19,000 increase over the original \$200,000 Board-approved amount is due to COVID impacts that complicated coordination efforts to complete the initial scoping process. SFEI estimated this increase in August (see Board FYI "Updated Scope and Timeline for the Science Advisory Panel" dated August 12, 2020).

To date, \$56,609 of the \$100,000 for the first phase has been spent. A total of \$37,503 was spent in Fiscal Year 2020 (FY20) and \$19,106 has been spent in FY21. The FY21 budget includes \$150,000 for the SAP, which should be sufficient for work through the end of the fiscal year, including the start of work on Topic 4. Topic 4 will likely continue into FY22. Staff will be requesting funds in the proposed FY22 budget for the remaining contract amount.

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