

TO: RMBL scientists, students, staff, and other stakeholders
FROM: Ian Billick, Kelly Sudderth, Jennie Reithel, Brett Biebuyck and Steve Jennison
RE: Review of 2020 Operations
DATE: November 16, 2020

Thank you for another great year of science and education at RMBL! Each year, we ask for your feedback and formally assess operations at the close of the summer season. We do this so we can: 1) identify changes that would be beneficial, and 2) prioritize those changes, balancing financial and staffing constraints. This memo communicates:

- 1) Our synthesis of the feedback we received this year,
- 2) Goals for improving future operations (both in 2021 and longer term), and
- 3) Our progress on the goals we set after the 2019 season.

As a reminder, this summer RMBL published a visual guide on RMBL decision-making. The objective of this project was to equip the active scientist community and other interested stakeholders to more effectively engage in and shape decision-making at RMBL. If you have not already done so, we encourage you to study the guide, which can be found on our website: [Visual Guide on RMBL Decision Making](#).

RMBL & COVID-19

We are not aware of any cases of COVID-19 at RMBL this summer. We attribute this success to our detailed and conservative operating plan and to the buy-in and compliance that we saw with the community. We learned that RMBL is resilient, and while we do not know what next summer brings, we know we can handle whatever comes our way.

We are planning for COVID-related disruptions Summer 2021

For budget and planning purposes, *at this time* we expect to experience continued disruptions caused by COVID-19 through next summer. This means, at a minimum, we could reduce occupancy in Gothic in 2021 as we did this year. We will continue to evaluate the situation and communicate important updates with you via the website and the PI listserv as we did throughout the spring and summer of this year. We expect that demand may exceed the supply of housing in Gothic, and we are exploring the feasibility of offering temporary housing (tents, temporary structures, etc.) should that become necessary. As a reminder, in 2016 the RMBL community established a policy for prioritizing housing assignments in Gothic. We will continue to follow that policy, which can be found on the RMBL website: [RMBL Housing Prioritization Policy](#).

What did the evaluation process look like this year?

As in other years, we established a “flash” survey which was available throughout the summer so we could get a quick take from you on how the summer was going. Despite the low-density summer, we received 65 responses for the online exit survey at the end of the summer. Staff conducted in-person exit interviews with 14 members of the community. We also relied on staff observations and informal feedback.

How do we use your feedback and responses?

You are the RMBL users – so your feedback is important to us. You see things that we don’t or won’t see because of how you interact with what RMBL offers. We compiled the results of the online surveys, exit interviews and other informal feedback, which we are using to inform our planning and budgeting for 2021.

Operational goals for 2021

Implementation of the items below is contingent upon the 2021 budget and availability of staff time. These items were selected because they were mentioned numerous times in surveys, interviews, or via informal feedback and they are actionable within our financial means (i.e. specific enough to design a solution).

1. Update Remington cabin.
2. Continue to facilitate better bike management in Gothic. We are exploring the feasibility of establishing a bike maintenance area, offering bike maintenance/use orientation, and piloting an e-bike rental program.
3. Offering online documentation and/or training opportunities for RMBL researchers, students, and staff, including:
 - a. Responsible Conduct of Research
 - b. Diversity training
 - c. Title IX training
4. Offering resources (web links, literature) on our website for labs to incorporate cultural safety into their lab safety plans.
5. Incremental improvements to cabin plumbing, to standardize plumbing infrastructure and thereby facilitate cost effective and quicker repairs.
6. Replace Moodle for the undergrad program with a different online platform.
7. Enhance RMBL's fire mitigation program around the Gothic townsite, which could include: trimming trees, removing trees and establishing larger defensible spaces around cabins.
8. Provide better instructions for the laundry machines.

Atmospheric sensor installation coming to RMBL in 2021

A two-year installation of sensors to better understand hydrology in the mountains is coming to RMBL next summer. The Surface Atmosphere Integrated field Laboratory (SAIL) campaign will run from Sept, 2021 through June, 2023 and will bring a suite of instruments measuring precipitation, aerosols, clouds, winds, radiation, temperature and humidity across a wide range of spatial and temporal scales. These data provide opportunities to quantify the major processes in the Upper Colorado River that are known for their qualitative impact on mountainous watershed hydrology. The installation during June-August next summer involves placing up to 10 shipping containers and three dozen sensors of various sizes at or near the base of the RMBL research meadow, as well as planning for a release location for weather balloons. Details of this project are under review by the RMBL Research Committee. Contact the Science Director with questions. To learn more, visit <https://sail.lbl.gov/>.

Updates on long-term goals for operations

The strategic plan includes important long-term goals for operations. We made significant progress on these goals in 2020:

- **Addressing deferred maintenance at Gothic.**
 - In August and September this year, the work crew, working with a local excavator, completed an upgrade of the sewer system on the Upper East Side of Gothic. The project included the connection of Baker, Calder and Remington Cabins to the Gates Leach Field, construction of a new outhouse to serve area residents, building berms to divert snowmelt away from the leach field and installation of a culvert to handle surface drainage. As part of the cabin sewer connections two obsolete septic tanks and leach fields were removed from service. There was some ground disturbance as a result of this project, which is shown in the photos below. Locally collected native seed was planted to help revegetate the site. Additional revegetation efforts will be done in 2021.



- We received funding from the NSF for a new, four-season cabin that will be constructed in 2021-2022 next to the new Crystal cabin. We may shift some cabins down in the fee structure when this cabin comes online. Note that a general trend we're seeing in the community is a request for more privacy with housing.

- **Improving (or replacing) Wi-Fi.** Most buildings and all cabins on the east side of Gothic road have

received upgraded Wifi. West of Gothic road, the cabins around the bbcc and Happy Valley area have been upgraded. Summer 2021, we will focus initially on the larger cabins west of Gothic road (Ore House & Mammal Lab), then head south, upgrading cabins that have direct line of site to the GRC. We will then start upgrading the southwest portion of the townsite. Due to several WiFi relays, the southwest portion of the townsite will have more upgrades that need to be completed at the same time to avoid disruptions.

- **Expanding RMBL's data infrastructure.**
 - RMBL's new cloud-based portal for administering research, submitting applications, making reservations and other functionality will go live in the coming weeks and months. This will reduce the administrative burden for scientists, students and staff.
 - RMBL offers [data services](#) including but not limited to drone imagery acquisition, data curation and archiving assistance, and support for spatial data analysis.
 - Spatial data and other data products and datasets are found on the RMBL [data catalog](#).
- **Improving navigation and information flows on the RMBL website.**
 - As part of the portal project discussed above, we will make improvements to the annual application process and the RMBL website, relocating useful information to the portal where appropriate. Those changes will be made this winter.
- **Developing and realizing a sustainable financial model which adequately supports building, lab, equipment and IT infrastructure for the RMBL community.**
 - We expect to launch a capital campaign in 2021 to support investments in the North Village campus, RMBL's spatial ecology program and data management. Additionally, we are pursuing federal funding for these investments.

We know that strong connections among community members is one of the factors that has made RMBL both scientifically productive and a great place to discover, work, learn and live. This was especially challenging in 2020 due to COVID restrictions. Communication and building a strong community become more challenging as RMBL diversifies and grows, so how should our operations evolve in response? We don't have all the answers yet, but we know it's an important issue.

Inflationary pressures (cost of materials, healthcare, housing in the Gunnison Valley) combined with a tougher regulatory environment and growing needs of the scientific community (longer field season, big data, more equipment) means that RMBL needs a different financial model – one that will allow us to address deferred maintenance and support the evolving needs of field scientists without compromising RMBL's ability to attract a diverse scientific community. We continue to actively work with the Board of Trustees to develop that model. Until then, RMBL can only make incremental progress toward some of these longer-term goals.

Progress report on goals set for 2020

In 2019 we set seven primary goals. Below is a list of those goals and our progress this year.

1. **Update Remington cabin.** We postponed this upgrade in favor of the leach field work and the new outhouse discussed above.
2. **If resources permit, install a new outhouse. Options for locations include: (1) a public outhouse near Town Hall (to reduce visitor traffic up by the shower house and Barclay classrooms) and (2) near Richards cabin.** We installed a new outhouse near Richards cabin. (see photo)
3. **Facilitate better bike management in Gothic.** We added storage for bikes outside of the Barclay administration building and we repaired several abandoned bikes so undergrads could use them so safely access field sites near Gothic.
4. **Improve security during winter and shoulder seasons for lab spaces. (A few items went missing, so we want to make sure it doesn't become a larger issue.)** We began locking the Gothic Research center (GRC) and bbcc at quieter times of the year (fall, spring), providing access codes as necessary to RMBL researchers and staff. We did not receive any reports of missing items this year.
5. **Stronger consideration of how to diversify the seminar series.** The RMBL seminar series was cancelled this year due to COVID-19. The community diversity committee hosted a series of seminars focused on topics of inclusion and diversity.
6. **Explore ways to continue to diversify the scientific community.** The board of trustees appointed an ad hoc committee to address this issue, and that community worked with the community diversity committee and the staff to develop a plan for addressing this issue. The committees are currently finalizing a demographic and climate survey which will be distributed to the RMBL community before the end of the year. Additionally, the board of trustees has tasked the board diversity committee with developing strategies for diversifying the board of trustees.
7. **Find ways to reduce public impacts in Happy Valley and near the bbcc. (i.e. reduce instances of the general public "wandering" in.)** We removed signage along Gothic road and at the bbcc that encouraged visitation. That seems to have solved the issue.



Other ways you can provide feedback

While we strongly encourage participation in the annual online exit survey, we welcome your feedback at any time. We encourage you to give us your thoughts on pretty much anything, including items you think we have missed, feedback on how we have analyzed the information we received, or how we have prioritized our responses. You can contact Kelly, RMBL's Chief Operating Officer, at kelly@rmbll.org or (830) 358-3501 or Brett Biebuyck, RMBL's Director of Administration, at brett@rmbll.org or (970) 349-7231 at any time throughout the year.

If you have any feedback that might have budgetary implications for 2021, please provide feedback no later than December 1 so we have time to consider that for the 2021 budget cycle.