



Minutes for the February 23, 2021 meeting

RSC Representatives present: Anne Slugg, Chair (Sudbury), Emma Lord (NPS), Larry Buell (Lincoln), Amber Carr (SVT), Ron Chick (Framingham-Alt), Christine Dugan (Lincoln-Alt), Bill Fadden (Framingham), Alison Field-Juma (OARS), Ralph Hammond (Bedford), Marlies Henderson (Billerica), Linh Phu (USFWS), Trek Reef (Billerica-Alt), Tom Sciacca (Wayland)

RSC Representatives absent: Mary Antes (Wayland-Alt), Joseph Piantedosi (Bedford-Alt), David Witherbee (Concord)

Guest: Ethan Nedeau of Biodrawiversity, LLC

Location: Zoom Video Call

7:05 pm

Ms. Slugg opened the meeting

7:08 pm Mussel Study update

Mr. Nedeau spoke about the September 2020 follow up to his 2017 study of mussels in the Sudbury River. Eastern pondmussel, a species of Special Concern, was the primary interest. He visited the same five sites in both 2017 and 2020. The study's objectives were to increase understanding of how mussel populations respond to low-flow periods, to better understand mussel population viability in the study area, and to consider opportunities for long-term monitoring of mussel populations and habitat in the Sudbury River.

The water depth in 2020 was about 32 cm lower than it was in 2017. Mr. Nedeau pointed out that mussels in shallow depth in 2017 would have had to bury themselves or move during the lower flow period in 2020, but he saw no obvious signs of distress. This showed that the mussels had time to respond to low flow.

Mr. Nedeau concluded that freshwater mussels are prevalent in the Sudbury River. The mussel community is dominated by 2 common species and 3 species appear to be rare within the study areas. There is some evidence for declining populations, but analyses are constrained by low sample sizes and only 2 years of data collected 3 years apart under different environmental conditions. The Sudbury River supports an important eastern pondmussel population. Most were found in the reach from Danforth Street to Little Farms Road. Population viability is uncertain. Persistent low-flow conditions, extending for weeks or months of the year, may have lasting effects on the viability of mussel populations. Mortality or displacement from shallowest areas seem likely during low-flow periods. He did not observe mass movement of mussels, or evidence of dewatering, mortality, or thermal stress during the September survey.

7:36 pm

Mr. Nedeau took questions from Council members. On whether he could speak to the impact that removing the Billerica Dam could have on Sudbury River mussels, he said that while he was not familiar with the river below the sampling area, in general dams can concurrently affect mussels positively and negatively. Increasing flow is good, but slow flow gives them stability. He believed that a restoration to pre-dam conditions would probably be good for mussels because any actions to promote fish health would benefit mussels in the long term. Responding to a question about what it could mean that "no juveniles were detected" during the survey period, Mr. Nedeau said that in healthy, large eastern pondmussel populations juveniles are usually easy to detect. Not finding them can be of concern. If recruitment was occurring, his team had ample opportunity to detect it. Mr. Nedeau did not want to say that reproduction is of grave concern in this case but in other cases where researchers are only finding large adults, the population has been seen to dwindle over time. On whether a follow up study should be considered in the future, Mr. Nedeau said that he is worried about the eastern pondmussel population. There is some evidence that it has declined over the past 3 years even though 2018-2019 were good water years and there was not a lot of stress on mussel populations. He said that monitoring would be advantageous, perhaps every third or fifth year.

8:00 pm Minutes

Two edits were submitted. Ms. Henderson motioned to adopt the minutes with the future edits included. Ms. Slugg seconded, and the motion passed unanimously.

8:05 pm Hill Week

Ms. Field-Juma spoke about this year's virtual Hill Week sessions with our Massachusetts legislators in Washington. She will speak to them about how the RSC spends its federal funds and to request that they vote for full funding for Partnership Wild and Scenic Rivers this year. She said that March 18th is Massachusetts Rivers state lobby day and that bills regarding drought and invasive plant species will be voted on during this session.

8:10 pm Budget discussion

Ms. Slugg said that this year marks the last year of a 5-year budget cycle. She stated that all remaining funds should be used by the end of August of next year as they cannot be rolled over after the 5-year agreement period. In response to a question from Mr. Buell about whether our partners receive the same level of support each year, it was noted that approximately two-thirds of our budget usually goes to our key and unique partners each year to fund projects of shared concern. Ms. Slugg noted that each Partnership WSR operates differently and that not all of them fund key partners in this way each year.

8:21 pm Internal Projects

The topic of hiring a seasonal river steward was discussed. Interest centered on this opportunity for outreach, what we could learn about our WSR visitors by employing a river steward, how administrative costs would be covered, and how many river stewards would be hired. Ms. Lord said that we would be working with a partner organization which would be in charge of administration. This could be an opportunity for new work with new partners, such as the Hispanic Access Foundation. She thought a good model for river stewards is the Upper

Farmington WSR, which hires out between 3-5 river stewards for summer outreach work by partnering with the local watershed association, which handles the administration.

8:40 pm Mobile app for Wild & Scenic River

Ms. Slugg said that the proposed mobile app was an internal project in need of further investigation. Ms. Phu said that two helpful uses would be to download maps and river information. Start-up costs are about \$2,500 and we should budget \$2,500 for annual maintenance. Ms. Carr asked if the app would still be accessible if we didn't have the funding for maintenance one year. Ms. Phu said that it would not, because we must pay for hosting. Ms. Phu suggested using an API plug-in for multiple language translations.

Ms. Slugg said that the continued discussion focusing on improvements to our website would be moved to a later meeting.

8:50 pm

Ms. Slugg said that the RSC may choose to spend \$15,000 on future interpretive signage. She noted Mr. Chick's recommendation for two Framingham locations that would benefit from signage and encouraged other representatives to find sites in their towns that would also benefit from interpretive signage. She suggested that we discuss the content of the signs later in the year once the locations are known.

8:57 pm Discussion on 2021-2022 Partner proposals

Ms. Carr and Ms. Field-Juma left the meeting for the evening as partner proposals for 2021-2022 were discussed. These proposals included: SVT's request for \$18,850 for land protection and stewardship, OARS' request for \$27,775 for its project "Building a Climate-Smart Watershed", Mass Audubon's request for \$24,000 for its Riverschools Program, CISMA's request for \$7,560 for Administrative support for small grants and its website, and Lowell Parks & Conservation Trust's request for \$3,100 for its Concord River Anadromous Fish Restoration Project. After a discussion on each project, a motion to fully fund all partner projects passed by a vote of 8-0.

Ms. Lord said that we will continue discussing our internal projects at our next meeting.

9:38 pm

The meeting was adjourned.

Minutes respectfully submitted by Christine Dugan