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Casco Bay Currents Winter 2019/20

1 message

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Casco Bay Currents, an email newsletter of the Casco Bay Estuary Partnership

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Winter 2019/20

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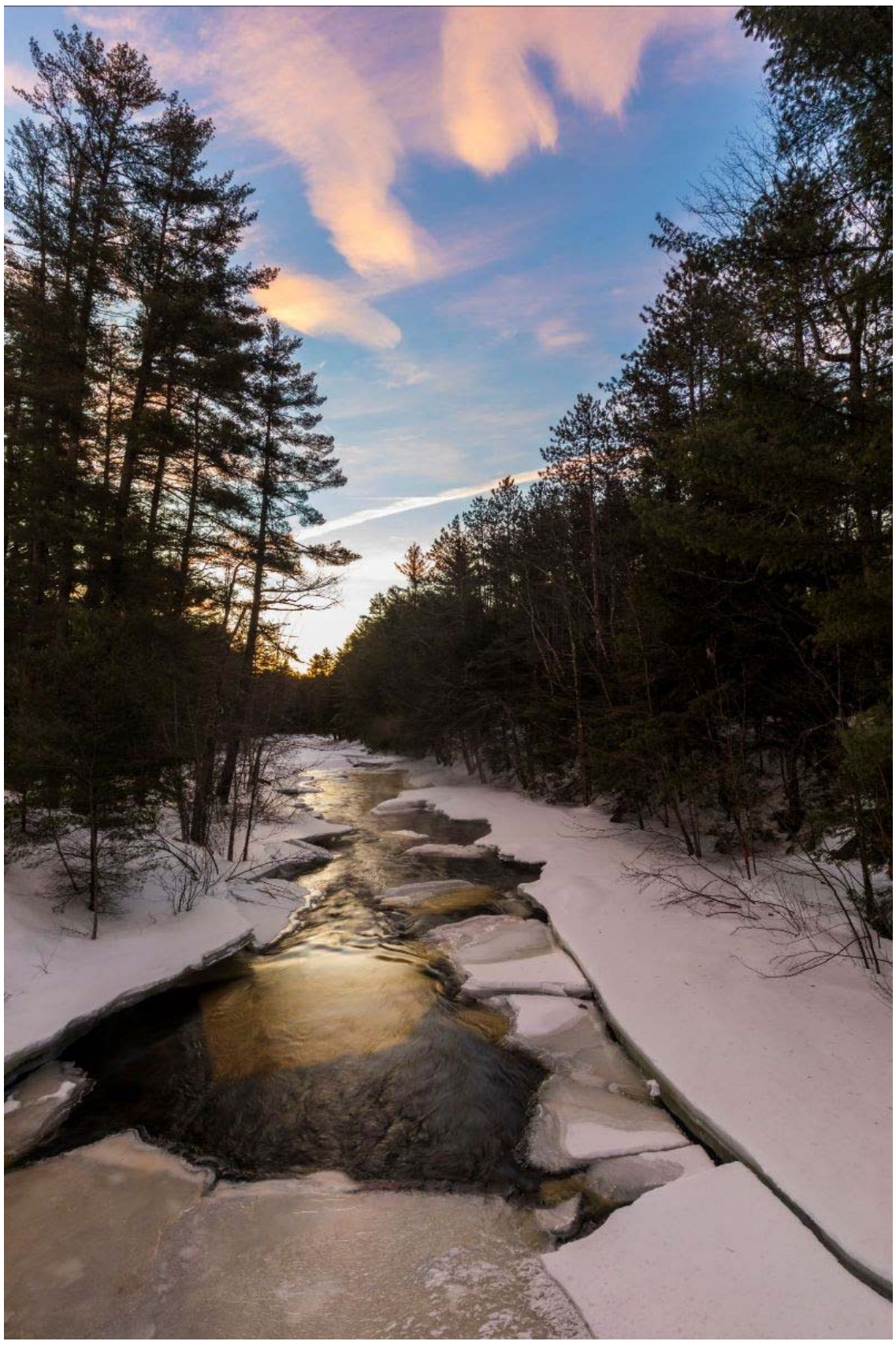
Welcome,

to the Winter 2019/20 edition of *Casco Bay Currents*, the newsletter for Casco Bay Estuary Partnership (CBEP).

You are receiving this quarterly email newsletter because you signed up for our newsletters in the past. If you wish to unsubscribe, please click the link at the bottom of the newsletter.



Dawn over the Crooked River
@Jerry and Marcy Monkman/**EcoPhotography**
Photo courtesy of **Sebago Clean Waters**, a coalition focused on protecting Sebago water quality through voluntary forestland conservation.

Maine eDNA: Advancing Understanding of Coastal Ecosystems

A $20 million grant from the National Science Foundation EPSCoR program will fund a five-year environmental DNA initiative. The University of Maine is partnering with Bigelow Laboratory for Ocean Sciences and other collaborators in education, government agencies, citizen groups and local industry statewide. The new program will focus on two pressing issues for the coast of Maine: sustainable fisheries and harmful species.

Environmental DNA (eDNA) is a game-changing conservation tool in which scientists can count fish and other animals just by collecting a small sample of water. In this sample, environmental DNA fingerprinting can reveal species of fish that were recently in the water. Resulting data can show where, when and how species and groups of organisms have interacted with each other and their coastal habitats.

In 2018, CBEP supported a project by the **Wells National Estuarine Research Reserve** (Wells Reserve) to pilot use of eDNA to detect anadromous rainbow smelt in four Casco Bay streams, during spring spawning runs (anadromous fish are those born in freshwater who spend most of their lives in saltwater and return to freshwater to spawn). Using a process developed by Dr. Michael Kinnison at the University of Maine, the project tested and refined methods for collecting and analyzing eDNA samples in streams with known high and low spawning productivity. Smelt were successfully detected using eDNA, and in the process, the study provided important insights for scaling up this technique, which has promise as a low-cost, non-invasive, and reliable method for detecting this and other anadromous species at a larger geographic scale.

Accurate and cost-effective monitoring methods are needed for improving our understanding of the distribution and abundance of rainbow smelt and other diadromous species (fish species that spend portions of their life-cycles partially in fresh water and partially in saltwater).

You can find more information on the Maine e-DNA **website**.

Photo: Rainbow smelt; courtesy of Jacob Aman, Wells NEER.

2020 Casco Bay Community Grants Application Deadline: January 27, 2020

Request for Proposals Here

Photo: Harpswell Forest Playground. Photo courtesy of Harpswell Heritage Land Trust.

Casco Bay Estuary Partnership invites proposals for the 2020 *Casco Bay Community Grants Program*. A total of approximately $11,000 is available in 2020.

CBEP encourages new partnerships and innovative projects that engage communities with Casco Bay and its watershed. Proposals are welcome from educators, land trusts and other non-profit organizations, civic groups, municipal committees, churches, clubs, school groups and neighborhood associations.

The Request for Proposals and application form are available for download on our website (*link in blue box above*). You can choose a fillable application form attached to the RFP or download a separate application in Microsoft Word

format. If you have trouble downloading documents and would like the package emailed or mailed to you, please contact us.

The application deadline is **9 a.m., Monday, January 27, 2020**.

If you have any questions or need further information, please contact **Victoria Boundy** or call (207) 780-5843.

Please share this RFP with others who may be interested.

New Gage Installed on Royal River

Left to right: Nick Stasulis (USGS), Curtis Bohlen (CBEP), Ann Thayer, Walter Anderson (former State Geologist)

After a 15-year hiatus, the US Geological Survey (USGS) recently restored a stream flow monitoring site on the Royal River in Yarmouth. "This is a story of more than a wonky science project and is one of community engagement, persistence, and interagency cooperation on the local, state, and federal level," said Ann Thayer, one of several local scientists who worked to get the gage restored.

The USGS has been monitoring flow in streams and rivers across Maine for over a century. The information is used to monitor floods and droughts; support road and bridge design; manage drinking water supplies; and support many recreational activities.

Monitoring on the Royal River was discontinued in 2004 due to a lack of funding. The new gage collects data at 15-minute intervals and transmits the data hourly via satellite. River flow data are posted in real-time and publicly available on the USGS website **here**.

The Town of Yarmouth and Maine Department of Transportation are sharing operation and maintenance costs for the gage with USGS, which will also provide equipment and data management. CBEP provided a one-time grant to cover installation costs.

REGISTER FOR CASCO BAY COASTAL ACADEMY

Casco Bay Coastal Academy: Nutrient Pollution in Your Community

WHAT: Hands-on workshop to learn about nutrient pollution in Casco Bay and what your community can do to reduce it. Speakers: Curtis Bohlen, CBEP; Ivy Frignoca, Friends of Casco Bay; Fred Dillon, City of South Portland

WHO: Conservation commission members, planning board members, other municipal board members, municipal staff, interested citizens

WHEN: Monday, January 27 (snow date 1/28), 5:30— 8 p.m. (light dinner included)

WHERE: **Maine Audubon Gilsland Farm**

REGISTER HERE!

FMI: Contact: **victoria.boundy@maine.edu**

Check out all of the good work accomplished by CBEP and partners in 2019 (click on thumbnail above)!

CBEP and Partner Events

- **January 27:** *Casco Bay Coastal Academy: Nutrient Pollution in Your Community*, Maine Audubon Gilsland Farm, Falmouth. Register **here**.

- **March 11:** CBEP Management Committee meeting, place TBD. More information **here**.
- **March 20 :** *2020 Maine Sustainability & Water Conference,* Augusta Civic Center. Senator George J. Mitchell Center for Sustainability Solutions, The University of Maine. Conference website **here**.
- **May 11-12:** *Save the Date! 2020 Local Solutions.* Portland, Maine. This conference will empower participants to take action steps that center on climate equity, which ensures that all people have the opportunity to influence and benefit from climate resilience-building solutions. Antioch University New England, in partnership with NOAA and the Island Institute. More information forthcoming **here**.

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