

**Lake Champlain Basin Program**  
*Approved Executive Committee Meeting Summary*  
March 24, 2020 9:45 AM – 12:45 PM  
VIA WEBINAR/TELECONFERENCE

**9:45 AM Teleconference and webinar open**

**Committee members:** Bob Stegemann (Meeting Chair, NYS DEC), John Krueger (Chair, HAPAC), Vic Putman (Chair, NY CAC), Mark Naud (VT CAC), Buzz Hoerr (Chair, E&O Committee), Stéfanos Bitzakidis (Quebec MELCC), Neil Kamman (Chair, TAC), MaryJo Feuerbach (EPA R1), Pierre Leduc (Chair, Quebec CAC), Pete Laflamme (VT ANR), Mario Paula (EPA R2), Brian Steinmuller (NYS Dept. Ag & Markets), Stephanie Mikesell (NYS Empire State Development)

**Staff:** LCBP: Colleen Hickey, Lauren Jenness, Jim Brangan, Matthew Vaughan, Mae Kate Campbell, Elizabeth Lee, Eric Howe, Meg Modley, Kathy Jarvis; Heather Radcliffe (NEIWPCC), Fred Dunlap (LCBP NY Coordinator; NYS DEC), Koon Tang (NYS DEC), Lauren Townley (NYS DEC), Bryan Dore (EPA R1), Bethany Sargent (VT ANR)

**Guests:** Tom Berry (Sen. Leahy's office)

**10:00 AM Meeting begins**

- **Introductions.** *Bob Stegemann, NYS DEC will Chair this meeting.*  
Bob welcomed the group. Bob announced that retires on Friday this week and Joe Zalewski will be his acting replacement for NYS DEC.
- **Public Comment:** None.
- **Approval of minutes from previous meeting**  
**ACTION ITEM:** Approve Meeting Minutes from February 12, 2020 Executive Committee
  - Motion to approve by: John Krueger.
  - Second by: Buzz Hoerr
  - Discussion on the motion: Bethany should be added to attendance list.
  - Vote: All in favor. None opposed.
  - Abstentions: None

**10:05 Brief Updates**

- **Congressional Updates**  
Tom Berry: There is a significant recovery bill that will probably be passed today in Senate. Need to conference with the House within 24 hours. Encourage everyone to stay in touch with Leahy's office for help with resources. Tom has talked to Eric and the Senator is in favor of any resources LCBP can bring to help with the COVID response. All hands-on deck right now. The FY21 appropriations process is proceeding. Leahy's request was submitted to Senate Appropriations Committees earlier this week. Will be seeking increase in funds for LCBP and GLFC funding.
- **Updates from partners**  
**NYS DEC:** Bob Stegemann reported that DEC is celebrating the 50-year anniversary of the formation of the Department. There is a \$3 billion "Restore Mother Nature" bond act going through State legislature. Plastic bag ban went into effect March 1. Legislation by governor to ban single use and packaging Styrofoam by 2022. Plans to upgrade Lake George WWTP in process.

**Quebec:** Stefanos Bitzakidis reported that the Quebec Premier is working on staffing plans for next few weeks. Will be telecommuting for at least three weeks. Similar situations in New York and Vermont.

**Vermont:** Bethany Sargent is covering for Pete Laflamme today, who will be joining the meeting later in the agenda. Vermont is adapting business processes so they are electronic. Developing guidelines to limit contact. Most samples go through VT State Agricultural and Environmental Laboratory (VAEL) – they are still taking samples and are fully functional but, uncertain on how that will continue.

**EPA Region 1:** Bryan Dore reported that EPA R1 has activated a Continuity of Operations Plan, all staff are telecommuting. Order is currently through April 7. Please contact Bryan if there are any grants for projects that have been delayed, any that need changes, etc. Permeable reactive barrier siting assessment is now live on Southeast New England Program webpage. Several reports have gone out on permeable reactive barrier work.

**EPA Region 2:** Mario Paula reported that EPA R2 has a similar update to Region 1. New York has been epicenter of the crisis. 1 out of 700 NYC residents have a confirmed case. Will be slow going through this crisis.

**NY CAC:** Vic Putnam reported that the NY CAC met yesterday to discuss the new CAC position concept. Vic thinks that there was complete support for moving ahead with the position. Some members were concerned about funding it in the long term.

**Quebec CAC:** Pierre Leduc reported that all staff are telecommuting, financials are strong so not looking at layoffs. All face-to-face meetings have been cancelled. Farming community is concerned about starting the growing season on the right foot.

**VT CAC:** Mark Naud added that the CAC is trying to determine whether to continue meetings, it has been difficult with everything going on.

**HAPAC:** John Krueger provide a historical perspective regarding the end of hostilities in region of CVNHP in 1760s.

**Education and Outreach Committee:** Buzz Hoerr reported that E&O is moving forward with all projects and grants. Colleen Hickey added that ECHO is closed until April 15, resource room staff are working remotely. CBEI partners have met twice, including yesterday to continue online instruction on Lake Champlain. There is a National hashtag to share science: #schoolsoutscience Teachers and public are using it. World Water Day will continue online tomorrow. Elizabeth Lee is working to get that material up and posted. Will see more coming soon.

- **TAC:** At the March 4 meeting, the TAC reviewed the FY19 TMDL implementation project outline: *How Does Groundwater from the Fractured Bedrock and Surficial Aquifers Affect Nutrient Levels in Surface Waters from the Lake Carmi Watershed?* A project workplan will be submitted for review later this spring. The TAC also reviewed technical full proposals, and the Executive Committee will review their recommendation today. Later this spring, the TAC will be reviewing core project interim reports and workplans, and wrapping up some large technical projects focused on tile drained field management and BMP implementation.
- **LCBP Updates**
  - Continuous Process Improvement (Lean) for LCBP budget: Eric is still working on setting this up with the Core Group that has been selected to work on the initial steps of this process. Justin Kenney, VT Agency of Administration, has given Eric a questionnaire – will circulate this to the Core group soon. Justin will come in at the June SC meeting. The core group includes MaryJo Feuerbach or Bryan Dore, Pete Laflamme, Koon Tang, Mark Naud, Stefanos Bitzakidis, Eric Howe, Heather Radcliffe
  - Staff all are working remotely now, for the time being. Grant awards went out a few weeks ago. LCBP will work with partners to grant extensions where needed.

## 10:25 April 14-15 Steering Committee meeting - Coronavirus contingency planning

- The meeting has been moved to a tele/video conference format. No in-person elements. We need to hold this meeting to approve the budget and submit workplans to EPA and the GLFC.
- The group agreed to two 4-hour days.

## 10:40 AM FY20 Begin Budget development and review

- **Key Functions** – Eric Howe
  - Eric briefly reviewed the key functions budget.
  - Discussion of new LCBP CAC Coordination task. Many shared concern that there should be a connection to state processes and programs for each CAC. Pete Laflamme commented that the timing to add this new position may be difficult with current fluid budget situations. This may not be the right time, and the group might consider waiting for things to sort out over the next 6 months. Tom Berry asked if there are any conflicts of interest for this position to consider. Staff would report to LCBP and to staff groups that are parts of the state, reporting to the governors. Bethany responded that one challenge for a position that is outreach focused is conveying the voice of committee and not the voice of the staff person carrying that message for the Committee. There will always be that challenge. Buzz added that he chaired the VTCAC for a long time. One advantage of having a shared person with the state, was that that he was getting a Vermont Administration representative, and it felt like they could get a VT answer very quickly when they needed it. Can be a difficult line to walk to represent citizen interests. Mark Naud commented that there is the potential for the loss of direct connectivity to each State – that is a concern and part of the work of both the new position and the relationship development within the state agency. However, Mark acknowledged that we're all in this together and will find a way to sort it out.
- **Education & Outreach** – Eric and Bob asked for feedback on E&O budget. These were already discussed at length at past EC meetings. No additional questions were asked.
- **Heritage Budget** – No additional questions on the Heritage budget.
- **Technical Budget:** Neil Kamman, Matthew Vaughan, Meg Modley
  - **The group was offered the opportunity to review the components of the Technical budget:**
  - Core projects – discuss any remaining questions
  - Long-Term Monitoring Program Upgrade (new submission)
  - Line-Item requests – discuss any remaining questions
  - TMDL projects – discuss any remaining questions
  - Technical Proposals (Executive Session)

Eric reminded the group that they have seen the core project tasks (BLS, WC, LTMP, cyanobacteria monitoring, Enhanced BMP, AIS RR, agronomy, etc.) in previous meetings.

- Core projects – No additional questions.
- Long-Term Monitoring Program Upgrade

Matt provided a brief overview of the options for LTMP upgrade. Strength is longevity and continuity of the LTMP program. The LTMP has many strengths but some challenges, for example there are fewer sampling events and there is a delay in the timeframe for when stakeholders can access the data. QA/QC usually takes a year. Other elements of the monitoring program have near-real time access. There are newer technologies available that could enhance the monitoring program.

The existing buoys may not have enough space for a solar platform to support additional monitoring devices, and after some discussion the TAC recommendation was acquisition of a new buoy. When

LTMP field crews are out on the lake they can service the buoy equipment while out there. Vic Putman commented that adding more data points in tributaries is what folks are interested in. The gages don't work when the water is frozen. The IJC may be interested in more buoys and other partners might also be interested in supporting these efforts. Matt noted that these devices would be deployed for the field season. The IJC is most interested in quantity instead of quality of water for their current flood mitigation reference. The Missisquoi water quality reference is complete. TAC is in support of adding a buoy, but is still considering where it should be located. Neil added, on behalf of the TAC, supporting doing work of this nature. Most advanced programs in the world are using a combination of manual sampling and automated sampling. This represents a step forward in understanding better the dynamics of our lake. If this could be made available to the lay person that would be great. Maybe we can work with USGS to partner for efficiencies. Neil asked for Executive Committee support for this upgrade to the monitoring program, and thanked Fred Dunlap for his help obtaining quotes for the equipment. Bob Stegemann noted the project looks intriguing, and this type of project always is debated as to whether now or later is better, and he agreed that now is the time for this upgrade. MaryJo Feuerbach agreed. The group discussed possible locations for the new equipment, including Missisquoi Bay, Saint Albans Bay, and Mallets Bay. It would be most effective to co-locate the tributary and lake buoy for better information, but they can be placed separately. Bob asked if there is an opportunity to put a unit in a NY tributary with a co-located lake station. There are more options than are proposed. Tom Berry noted that between this upgrade and the new CAC position we are adding sinks to our budget, and this will limit our ability to support other projects down the line. Be aware we are adding ongoing annual expenses to the base budget. Pierre asked if there will be a financial consideration about reducing the cost of the LTMP? Matt responded that this is a possibility. It is hard to determine if this would lead to cost savings, but it will provide better data resolution. MaryJo asked how the data will be evaluated and who would do the evaluation, and how would this data be used. Neil responded that the TAC would evaluate its use and application. We have stellar staff at LCBP to look at these data and the ability to tell an interesting story in the State of the Lake report and other outreach materials, and as we understand more about how pollution translates into cyanobacteria impacts, we will learn more and be able to tell more detailed stories. There is an annual review of the LTMP. MaryJo wants to ensure we have the bandwidth to use the data that we get out of it.

- Line-Item requests – discuss any remaining questions

Eric informed the group of one change to the VT agriculture water quality partnership support line item. Support for this task has been increased to \$100,000. LCBP was approved to support this task at \$45,000 and USFWS would also like to support at \$45,000. USFWS asked to support this project through LCBP/NEIWPC with part of their share of the FY20 GLFC funding, so their \$45,000 was added to the LCBP line in this budget. Eric moved this total task up to \$100,000 because it would then be exempt from NEIWPC indirect costs and would save the program approximately \$4-5,000.

- TMDL projects – discuss any remaining questions

These have been reviewed with the exception of the Green Schools Initiative to support stormwater compliance which was reduced by \$4,000 to meet the TMDL award amount. Neil added that the line for Lake Carmi at \$600,000 contains two projects and one of those projects may be able to be funded from the VT State Revolving Fund. If that comes to pass then we will propose to pivot \$400,000 over to the Green Schools project to comply with the stormwater general permit. Neil will know by the June Steering Committee meeting if we move forward that way. MaryJo commented that EPA would be pleased if less funding went to Lake Carmi. EPA would prefer to see these Lake Champlain TMDL funds used for projects that will directly impact Lake Champlain. Lake Carmi is important but work

on that lake will not have an immediate impact on Lake Champlain. There was support from other Executive Committee members regarding this comment.

o Technical Proposals (Executive Session)

Core projects might be able to be reduced to put in more \$ towards technical projects. Eric wanted to remind the EC that the SC will make the final decisions and Matt and Meg and Neil will review the projects for your consideration.

**ACTION ITEM: Motion to enter into Executive Session to consider Competitive Grants for the FY20 Technical Budget.**

- Motion by: Neil Kamman.
- Second by: Buzz Hoerr
- Discussion on the motion: None.
- Vote: All in favor. None opposed.
- Abstentions: None

Exit Executive Session.

**ACTION ITEM: Motion to nominate a new individual from New York to the Technical Advisory Committee, for the Steering Committee to consider in April.**

- Motion by: Vic Putman.
- Second by: John Krueger
- Discussion on the motion: None.
- Vote: All in favor. None opposed.
- Abstentions: None

**ACTION ITEM: Motion to send the FY20 draft budget for the Steering Committee.**

- Motion by: John Krueger.
- Second by: Pete Laflamme
- Discussion on the motion: None.
- Vote: All in favor. None opposed.
- Abstentions: Vic Putman

Eric thanked the group for their patience with the technology for the meeting today, and thanked Bob for his work with the LCBP for the past eight years. All members of the group supported this comment as well. Bob noted LCBP is a very fine and talented group of people that work with a great deal of passion. All the best to Bob!!!!!!

**12:45 Adjourn**

**Anticipated Outputs for this meeting include:**

1. Approval of Meeting Summary from February 12, 2020
2. Decision regarding new LCBP CAC Coordination Task in Key Function Budget
3. Preparation of FY20 Budget for April Steering Committee meeting

**(see next page for remote participation information)**

January 2020 Draft FY2020 LCBP Budget

TASK #	Funding			Key Functions	Task Management	Draft 2020 TASK Request	FY2019 Approved Budget	DRAFT TASK Cumulative Total	NPS Allocation	EPA Allocation	GLFC Allocation
KF-1	0.0%	100.0%	0.0%	VT Coordination	VERMONT	\$ 161,412	\$ 161,427	\$161,412	\$0	\$161,412	\$0
KF-2	0.0%	100.0%	0.0%	NY Coordination	NEIWPC/NEW YORK	\$ 195,850	\$ 195,850	\$357,262	\$0	\$195,850	\$0
KF-3	0.0%	95.0%	5.0%	E&O Coordination	NEIWPC	\$ 210,000	\$ 180,000	\$567,262	\$0	\$199,500	\$10,500
KF-4	0.0%	95.0%	5.0%	Communication and Publications	NEIWPC	\$ 275,000	\$ 275,000	\$842,262	\$0	\$261,250	\$13,750
KF-5	0.0%	98.0%	2.0%	Technical Coordination	NEIWPC	\$ 285,000	\$ 245,000	\$1,127,262	\$0	\$279,300	\$5,700
KF-6	0.0%	98.0%	2.0%	ANS Coordination	NEIWPC	\$ 230,000	\$ 190,000	\$1,357,262	\$0	\$225,400	\$4,600
KF-7	2.0%	98.0%	0.0%	LCBP Administrative Assistance	NEIWPC	\$ 120,000	\$ 122,000	\$1,477,262	\$2,400	\$117,600	\$0
KF-8	2.0%	96.0%	2.0%	Program Direction	NEIWPC	\$ 170,000	\$ 160,000	\$1,647,262	\$3,400	\$163,200	\$3,400
KF-9	2.0%	73.0%	25.0%	Office Operations	NEIWPC	\$ 72,000	\$ 80,000	\$1,719,262	\$1,440	\$52,560	\$18,000
KF-10	0.0%	100.0%	0.0%	Resource Room	NEIWPC	\$ 195,000	\$ 185,000	\$1,914,262	\$0	\$195,000	\$0
KF-11	2.0%	96.0%	2.0%	NEI Administration	NEIWPC	\$ 198,000	\$ 195,000	\$2,112,262	\$3,960	\$190,080	\$3,960
KF-12	100.0%	0.0%	0.0%	CVNHP Coordination	NEIWPC	\$ 185,000	\$ 165,000	\$2,297,262	\$185,000	\$0	\$0
KF-13	0.0%	100.0%	0.0%	Gordon Center House rent	VERMONT	\$ 18,500	\$ 18,500	\$2,315,762	\$0	\$18,500	\$0
KF-14	0.0%	100.0%	0.0%	State of the Lake 2021: Printing, copy-editing, full translation for website	NEIWPC	\$ 20,000	\$ -	\$2,335,762	\$0	\$20,000	\$0
KF-15	0.0%	95.0%	5.0%	Local Implementation Grants PP (300k) / AIS (200k) / OS (50k)	NEIWPC	\$ 550,000	\$ 550,000	\$2,885,762	\$0	\$522,500	\$27,500
KF-16	0.0%	100.0%	0.0%	LCBP CAC Coordination	NEIWPC	\$ 120,000	\$ -	\$3,005,762	\$0	\$120,000	\$0
-	0.0%	100.0%	0.0%	Additional LCBP office space	NEIWPC	\$ -	\$ 15,000	\$3,005,762	\$0	\$0	\$0
Funding Scenario FY2020					EPA FY20 base	\$7,000,000	Category Sum		\$196,200	\$2,722,152	\$87,410
					EPA-2016 TMDL	\$6,386,000					
					NPS (CVNHP)	\$336,388					
					GLFC	\$664,500					
					Total	\$14,386,888					
TASK #	Funding			Heritage Area Tasks	Task Management	Draft 2020 TASK Request	FY2019 Approved Budget	DRAFT TASK Cumulative Total	NPS Allocation	EPA Allocation	GLFC Allocation

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H-1	37.0%	0.0%	63.0%	CVNHP Proposals	NEIWPCC	\$ 240,586	\$ -	\$3,246,348	\$122,188	\$0	\$151,520
H-2	50.0%	0.0%	50.0%	Local Heritage Grants*	NEIWPCC	\$ -	\$ 36,000	\$3,246,348	\$0	\$0	\$0
H-3	50.0%	0.0%	50.0%	Interpretive Theme Grants*	NEIWPCC	\$ -	\$ 36,000	\$3,246,348	\$0	\$0	\$0
H-4	0.0%	0.0%	100.0%	Quebec Regional Stakeholder Coordination*	NEIWPCC	\$ 2,200	\$ 2,200	\$3,248,548	\$0	\$0	\$2,200
H-5	100.0%	0.0%	0.0%	Wayside Exhibit Program Continuation*	NEIWPCC	\$ 10,000	\$ 12,000	\$3,258,548	\$10,000	\$0	\$0
H-6	100.0%	0.0%	0.0%	Annual International Heritage Summit*	NEIWPCC	\$ 8,000	\$ 7,200	\$3,266,548	\$8,000	\$0	\$0
<b>NHA Totals</b>						<b>\$260,786</b>		Category Sum	\$140,188	\$0	\$153,720

TASK #	Funding			Education & Outreach	Task Management	Draft 2020 TASK Request	FY2019 Approved Budget	DRAFT TASK Cumulative Total	NPS Allocation	EPA Allocation	GLFC Allocation
EO-1	0.0%	95.0%	5.0%	E&O Grant Programs (Annual EO local grants (240k), Professional Development (14k), Enhanced Outreach Grants (270k), Boots-n-Bugs 24k)	NEIWPCC	\$ 548,000	\$478,000	\$3,814,548	\$0	\$520,600	\$27,400
EO-2	0.0%	0.0%	100.0%	StreamWise Stewardship, Phase 2	NEIWPCC	\$ 47,200	\$24,500	\$3,861,748	\$0	\$0	\$47,200
EO-3	0.0%	0.0%	100.0%	Outreach Professional Development Trainings for Watershed Managers	NEIWPCC	\$ 20,000	\$15,000	\$3,881,748	\$0	\$0	\$20,000
EO-4	0.0%	100.0%	0.0%	Unifying stormwater technical assistance on private properties basin-wide	NEIWPCC	\$ 126,000	\$72,000	\$4,007,748	\$0	\$126,000	\$0
EO-5	0.0%	100.0%	0.0%	TMDL Tool Video Dissemination	NEIWPCC	\$ 23,600	\$62,000	\$4,031,348	\$0	\$23,600	\$0
EO-6	0.0%	0.0%	100.0%	State of the Lake Newspaper Insert	NEIWPCC	\$ 7,080	\$35,000	\$4,038,428	\$0	\$0	\$7,080
EO-7	0.0%	100.0%	0.0%	Vermont LakeWise	VERMONT	\$ 72,000	\$60,000	\$4,110,428	\$0	\$72,000	\$0
EO-8	0.0%	0.0%	100.0%	Education & Outreach Stewards	NEIWPCC	\$ 70,800	\$61,000	\$4,181,228	\$0	\$0	\$70,800
EO-9	0.0%	0.0%	100.0%	TMDL Tool Website	NEIWPCC	\$ 23,600	\$5,000	\$4,204,828	\$0	\$0	\$23,600
<b>E&amp;O Total</b>						<b>\$ 938,280</b>	\$812,500	Category Sum	\$0	\$742,200	\$196,080

TASK #	Funding			Technical Tasks	Task Management	Draft 2020 TASK Request	FY2019 Approved Budget	DRAFT TASK Cumulative Total	NPS Allocation	EPA Allocation	GLFC Allocation
T-1	0.0%	90.0%	10.0%	CORE PROJECT: Lake Champlain Boat Launch Steward Program 2021	NEIWPCC	\$ 205,324	\$ 138,050	\$205,324	\$0	\$184,792	\$20,532
T-2	0.0%	100.0%	0.0%	CORE PROJECT: NEIWPCC-- Lake Champlain Long-Term Water Quality and Biological Monitoring (LTMP)	NEIWPCC	\$ 154,000	\$ 150,000	\$359,324	\$0	\$154,000	\$0
T-3	0.0%	100.0%	0.0%	CORE PROJECT: VERMONT DEC - LTMP	VERMONT	\$ 239,478	\$ 267,629	\$598,802	\$0	\$239,478	\$0
T-4	0.0%	100.0%	0.0%	CORE PROJECT: New York DEC/SUNY Plattsburgh LTMP	NEW YORK & SUNY-Plattsburgh	\$ 185,000	\$ 185,000	\$783,802	\$0	\$185,000	\$0
	0.0%	100.0%	0.0%	LTMP UPGRADE	TBD - NY/VT	\$ 71,000	\$ -	\$854,802	\$0	\$71,000	\$0
T-5	0.0%	100.0%	0.0%	CORE PROJECT: Cyanobacteria Monitoring	NEIWPCC-LCC	\$ 105,000	\$ 100,000	\$888,802	\$0	\$105,000	\$0
T-6	0.0%	100.0%	0.0%	CORE PROJECT: Water Chestnut Management	VERMONT	\$ 150,000	\$ 90,000	\$1,038,802	\$0	\$150,000	\$0
T-7	0.0%	100.0%	0.0%	CORE PROJECT: LCBP Enhanced BMP Grants	NEIWPCC	\$ 650,000	\$ 633,347	\$1,688,802	\$0	\$650,000	\$0

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T-8	0.0%	0.0%	100.0%	CORE PROJECT: AIS Rapid Response Fund	NEIWPC	\$ 59,000	\$ 69,900	\$1,747,802	\$0	\$0	\$59,000
T-9	0.0%	100.0%	0.0%	CORE PROJECT: NY Lake Champlain Basin Agronomy Support and Agriculture BMP Implementation	NEIWPC	\$ 160,000	\$ 160,000	\$1,907,802	\$0	\$160,000	\$0
T-10	0.0%	100.0%	0.0%	LINE ITEM: WWTF Optimization in Lake Champlain Basin - NEW YORK: YEAR 2 of 3	NEW YORK	\$ 110,000	\$ 110,000	\$2,017,802	\$0	\$110,000	\$0
T-11	0.0%	100.0%	0.0%	LINE ITEM: WWTF Optimization in Lake Champlain Basin - VERMONT: YEAR 2 of 3	VERMONT	\$ 150,000	\$ 150,000	\$2,167,802	\$0	\$150,000	\$0
T-12	0.0%	100.0%	0.0%	LINE ITEM: NY/VT Forest P Load Allocation	VT/NY	\$ 200,000	\$ -	\$2,367,802	\$0	\$200,000	\$0
T-13	0.0%	100.0%	0.0%	LINE ITEM: Rural Roads General Permit & BMP Implementation: New York	New York	\$ 100,000	\$ -	\$2,467,802	\$0	\$100,000	\$0
T-14	0.0%	100.0%	0.0%	LINE ITEM: Rural Roads General Permit & BMP Implementation: Vermont	VERMONT	\$ 100,000	\$ -	\$2,567,802	\$0	\$100,000	\$0
T-15	0.0%	0.0%	100.0%	LINE ITEM: VAWQP Coordination Support	NEIWPC	\$ 100,000	\$ -	\$2,667,802	\$0	\$0	\$100,000
T-16	0.0%	100.0%	0.0%	LINE ITEM: NY Agricultural Engineering Capacity Building	New York	\$ 25,000	\$ -	\$2,692,802	\$0	\$25,000	\$0
T-17	0.0%	95.0%	5.0%	Technical Tasks via Competitive Grant Program	NEIWPC	\$ 1,000,000	\$ -	\$3,692,802	\$0	\$950,000	\$50,000
T-23	0.0%	100.0%	0.0%	TMDL Project: Deer Brook Restoration Project	VERMONT	\$ 400,000	\$ -	\$4,092,802	\$0	\$400,000	\$0
T-24	0.0%	100.0%	0.0%	TMDL Project: Winooski Headwaters Targeted Intervention	VERMONT	\$ 825,000	\$ -	\$4,917,802	\$0	\$825,000	\$0
T-25	0.0%	100.0%	0.0%	TMDL Project: Lake Carmi Watershed Restoration	VERMONT	\$ 600,000	\$ -	\$4,692,802	\$0	\$600,000	\$0
T-26	0.0%	100.0%	0.0%	TMDL Project: Green Schools Initiative to Support Stormwater Compliance	VERMONT	\$ 1,761,000	\$ -	\$6,453,802	\$0	\$1,761,000	\$0
T-27	0.0%	100.0%	0.0%	TMDL Project: Priority Wetland Acquisition, Restoration, and Conservation to Improve Water Quality in Vermont's Lake Champlain Basin	VERMONT	\$ 1,650,000	\$ -	\$8,103,802	\$0	\$1,650,000	\$0
T-28	0.0%	100.0%	0.0%	TMDL Project: Enhanced Agricultural Practice Implementation	VERMONT	\$ 1,150,000	\$ -	\$9,253,802	\$0	\$1,150,000	\$0
T-29	0.0%	100.0%	0.0%				\$ -	\$9,253,802	\$0	\$0	\$0
T-30	0.0%	100.0%	0.0%				\$ -	\$9,253,802	\$0	\$0	\$0

Tech Total \$ 10,149,802

Category Sum \$0 \$9,920,270 \$229,532

	Budget	Allocated	Remaining
EPA FY20 base	\$ 7,000,000	\$6,998,622	\$ 1,378
EPA-2016 TMDL	\$ 6,386,000	\$ 6,386,000	\$ -
NPS (CVNHP)	\$ 336,388	\$ 336,388	\$ 0
GLFC	\$ 664,500	\$ 666,742	\$ (2,242)
	\$ 14,386,888	\$ 14,387,752	\$ (864)

**DRAFT:** 18 March, 2020

## **LCBP CAC Coordination position**

### **Description:**

Incumbent is responsible for coordination of New York and Vermont Citizen Advisory Committees. Coordination is to include working with Committees to establish meeting schedules, agendas, and annual goals for each committee. Incumbent will work with LCBP, New York DEC, and Vermont ANR to develop and fulfill committee membership for each jurisdiction.

Incumbent will recruit speakers, secure meeting spaces, provide necessary meeting supplies, and meeting documentation. Incumbent will conduct outreach to communities to promote CAC meetings, activities, and annual goals or priorities. Incumbent will work closely with New York and Vermont State staff to ensure coordinated messaging and communication between the States, LCBP, and the CAC membership. Incumbent will arrange legislative days for CAC committee members to engage in discourse with State legislators and other officials. Incumbent will not engage in advocacy or lobbying efforts. Incumbent will attend the Quebec CAC (OBVBM) meetings on a regular basis. Incumbent will coordinate one joint meeting among the three CACs annually to foster collaborative work, communication, and messaging across the jurisdictions of the Lake Champlain basin. Incumbent will attend LCBP Committee meetings as appropriate.

### **Cost options:**

Option A: Part-Time (less than 1,000 hours annually or 15-20 hours per week) \$66,000

- General responsibilities would include coordination of NY and VT CACs, including working with Committee chairs to develop agendas, recruit speakers, and handle meeting logistics for each CAC and an annual joint CAC meeting for all three CACs. Arrange legislative days and coordinate development of annual priorities documents for NY and VT CACs. Attend LCBP Committee meetings as needed. Represent LCBP at additional watershed group meetings across the Basin and participate in outreach events as time allows.

Option B: 80% of Full-time (1664 hours annually or 32 hours per week) \$120,000

- General responsibilities include all of Option A, increasing expectations for watershed group meeting attendance and participation in outreach events to average at least 4 per month outside of the CAC meetings, with office work to include follow-up work as outputs from those meetings. Anticipate additional publications and outreach to communities on behalf of the CACs.

Option C: Full time position (2080 hours annually, 40 hours per week) \$145,000.

- General responsibilities include all of Options A and B, increasing expectations for watershed group meeting attendance and outreach work. May include some grant management work or additional coordination support for LCBP-driven workgroups (e.g. Healthy soils, CBEI, others).

All options include:

- Salary, fringe, and indirect scaled to position level and number of work hours
- Travel support (mileage reimbursement, etc., also scaled to work hours)
- Supplies (publication/printing costs for CAC publications, meeting support supplies, computer support, etc.)

**Background:** Incumbent will have a background in environmental planning, environmental science, environmental studies, natural resource management or planning or related field. Experience should reflect a broad suite of watershed or ecosystem issues addressed in *Opportunities for Action*, LCBP's management plan for Lake Champlain. Important areas of focus include water quality, including nutrient reduction and cyanobacteria blooms, fisheries and aquatic habitat restoration, aquatic invasive species. Experience in public relations, outreach and public communications, and meeting facilitation preferred.

**Requirements:** Experience working with communities or stakeholder groups, coordinating meetings and event planning, education background in water quality or watershed management. Fluency in French preferred. Ability to travel to various meeting locations in Vermont, New York, and Quebec for which a private means of transportation, a valid driver's license, and a valid passport or smart-license is required.

**Committee details (Current activity level):**

New York CAC:

Meets approximately 9-10 times per year, fourth Monday of each month from 1-4 PM. Annual products include a two-page NY CAC annual priorities flyer. Committee does not currently engage in State legislative activities.

Vermont CAC:

Meets approximately 7 times per year September to May, second Monday of each month from 5-7 PM, plus an additional 1-day retreat in summer. Committee schedules one Legislative Day to meet in VT State House and present annual report and Action Plan with State legislators. Annual products include production of 2-page Legislative Action Plan and report to legislature.

**Lake Champlain Basin Program**  
**Conceptual Education and Outreach Task Description**  
**FY2020 Budget**  
**Task #1**

1. **Task Title:** Developing and Implementing an Outreach Plan to Disseminate TMDL Outreach Films
  
2. **One-sentence abstract of task:** Short films to build knowledge of TMDLs and phosphorus will have broader impact through dissemination via a planned communications effort.
  
3. **Submitted by:** [Include name(s) and organization(s). *Note: the proposed task should not be specific to any one organization.*] Kris Stepenuck, UVM, Lake Champlain Sea Grant
  
4. **Describe the task and the specific work-product(s) or output that might result.** [Identify specific Task Areas in [Opportunities for Action](#) that this task will address. Include a brief explanation of how this project will address the OFA Task Area, what outputs might be delivered (e.g. for a summer watershed program, anticipated outputs might be delivery of 30 watershed model demonstrations and 30 field trips/citizen action opportunities with summer camp kids at XYZ locations), and what the big-picture outcome will be (e.g. a better understanding of water quality and ecosystem concepts with an opportunity for hands-on citizen action).]

A series of short films is currently being developed to help improve understanding by a targeted segment of the general public of the actions they can take to minimize the movement of phosphorus across the landscape, and the influence such action will have in their lives. Behavior change outcomes that will result are that people will make different choices in their day to day actions that result in implementation of recommended best practices to minimize P runoff. However, for these films to be most effective, an outreach plan must be developed that will allow specific targeted audiences to see these films. Passive release of the films may limit their effectiveness. Funds should be dedicated to share these films in a targeted and repeated manner to reach intended audiences (e.g., at gas station pumps, in movie theaters, at farm industry meetings, in the Legislature). An outreach plan might also include presenting the films and supporting those with a community discussion about issues raised or concepts introduced in the films to help improve people's understanding of phosphorus, its movement across the landscape, and their role in minimizing that.

5. **Please provide the estimated cost of this task, and a timeframe (# months or years).** [Please note that funding for this task will likely not be available until at least 12 months from now.] \$20,000 estimated
  
6. **Post-Project monitoring:** [Please provide a brief description of how the success of this program could be monitored/measured after the project is complete.]

If films are shown at events, evaluations of those could be carried out. A larger evaluation that compares general public to those audiences targeted with the outreach could be carried out at additional cost.

**Lake Champlain Basin Program**  
**Conceptual Education and Outreach Task Description**  
**FY2020 Budget**  
**Task #2**

1. **Task Title:** Professional Development Trainings for Watershed Managers
  
2. **One-sentence abstract of task:** Watershed Professionals will engage in professional development trainings, increasing their ability to share scientific information and effect behavior changes.
  
3. **Submitted by:** [Include name(s) and organization(s). *Note: the proposed task should not be specific to any one organization.*] Kris Stepenuck, UVM, Lake Champlain Sea Grant
  
4. **Describe the task and the specific work-product(s) or output that might result.** [Identify specific Task Areas in [Opportunities for Action](#) that this task will address. Include a brief explanation of how this project will address the OFA Task Area, what outputs might be delivered (e.g. for a summer watershed program, anticipated outputs might be delivery of 30 watershed model demonstrations and 30 field trips/citizen action opportunities with summer camp kids at XYZ locations), and what the big-picture outcome will be (e.g. a better understanding of water quality and ecosystem concepts with an opportunity for hands-on citizen action).]

This project will ultimately address OFA objective IV.B, to build awareness through informal learning of Lake Champlain Basin issues, and objective IV.C, to facilitate changes in behavior and actions of citizens. The project will engage a cohort of approximately 25-30 watershed professionals. They will attend three professional development trainings: a one-day training focused on best practices in watershed science communications (*Water Words That Work*), a 2-day training focused on designing and implementing social marketing campaigns, and a 1.5 day training focused on designing and implementing evaluations of educational programs and social marketing efforts. As a result, watershed professionals will be better able to share technical science information with targeted audiences, design social marketing campaigns that result in behavior changes that benefit the environment, and evaluate social, environmental and economic outcomes. Each participant in the professional development series will be asked to provide a minimum of three outreach programs in which they use communications skills learned in the *Water Words That Work* training, to plan and implement one social marketing campaign, and to conduct short and longer term evaluations following guidance learned through the evaluation training. The evaluation training may be focused on development, use, and evaluation of Logic Models and/or most significant change technique ([https://www.betterevaluation.org/en/plan/approach/most\\_significant\\_change](https://www.betterevaluation.org/en/plan/approach/most_significant_change)).

5. **Please provide the estimated cost of this task, and a timeframe (# months or years).** [Please note that funding for this task will likely not be available until at least 12 months from now.]

*Estimated costs:*

Water Words That Work: \$4000

Community-based Social Marketing Training: \$8000

Evaluation Training: \$5000

**Total: \$17,000**

Timeframe: This series of professional development trainings, ideally for the same cohort of ~30 people, would be scheduled to take place between fall and spring, estimated to take place between November 2020 and March 2021.

6. **Post-Project monitoring:** [Please provide a brief description of how the success of this program could be monitored/measured after the project is complete.]

The project will be able to be monitored by asking participants in the trainings to complete both post training and post series of trainings evaluations, as well as by having them evaluate programs they offer as a result of having received these professional development trainings. Specifically, each participant would be asked to conduct at least three outreach events during which they utilize information learned in the Water Words That Work training, and evaluate these events as well. In addition, groups of participants would be asked to plan and carry out a social marketing campaign. It is estimated that six campaigns would be planned and carried out as a result of having offered this training to watershed professionals here in the Lake Champlain Watershed. Each social marketing campaign would be required to be evaluated by those implementing it. (Note that some longer-term outcomes may take a few years to be known based on how the campaigns are implemented and to allow time for results to take place.) In addition, each participant will be asked to plan and carry out an evaluation of a separate educational event they implement using skills learned in the evaluation training.

**Lake Champlain Basin Program**  
**Conceptual Education and Outreach Task Description**  
**FY2020 Budget**  
**Task #3**

1. **Task Title:** Unifying stormwater technical assistance on private properties basin-wide.
2. **One-sentence abstract of task:** [Please include a brief description (20 words or less) of the anticipated outputs or deliverable for this task. This is extremely helpful for the final budget review phase in the process.]

Capitalizing on recent efforts to aggregate and share existing stormwater education and outreach tools and materials, this proposal suggests taking the next step in aligning tools and messaging and implementing an intentional and coordinated property assessment and homeowner education initiative.

3. **Submitted by:** [Include name(s) and organization(s). *Note: the proposed task should not be specific to any one organization.*]
  - Gianna Petito - Winooski Natural Resources Conservation District
  - Hilary Solomon - Poultney Mettowee Natural Resources Conservation District
  - Amanda Holland - Northwest Regional Planning Commission
  - Corrie Miller - Friends of the Mad River
  - Michele Braun - Friends of the Winooski River
  - Lyn Munno - Watersheds United Vermont
4. **Describe the task and the specific work-product(s) or output that might result.** [Identify specific Task Areas in [Opportunities for Action](#) that this task will address. Include a brief explanation of how this project will address the OFA Task Area, what outputs might be delivered (e.g. for a summer watershed program, anticipated outputs might be delivery of 30 watershed model demonstrations and 30 field trips/citizen action opportunities with summer camp kids at XYZ locations), and what the big-picture outcome will be (e.g. a better understanding of water quality and ecosystem concepts with an opportunity for hands-on citizen action).]

Numerous partners across the Lake Champlain Basin on the VT side currently perform some variance of stormwater outreach to private homeowners which has led to a diversity of messaging, site assessment tools, recommendations, and incentive structures. A recent Stormwater Outreach and Education collaborative supported by the Lake Champlain Sea Grant has identified opportunities to better strategize and coordinate stormwater technical assistance on private lands to stretch resources and amplify messaging for stronger impact. This collaborative proposes a LCBP E&O grant that would support up to 8 partners in the following tasks:

- Up to six meetings to evaluate and develop shared assessment tools, messaging, certification, monitoring and incentive structures. To be facilitated by consultant.
- Trial implementation: Each partner will reach up to 20 properties through this initiative, leading to 160 private properties assessed and educated on better practices and structures to alleviate stormwater flow and pollutant loading into Lake Champlain.

Expected outputs are as follows:

*Outputs from collaborative meetings:*

- Regional partnership buttressed by MOUs and shared work-plans to deliver stormwater education and technical assistance on homeowner properties.
- Consistent assessment tool and homeowner recommendations with space for respective partner logos
- Consistent messaging to minimize confusion for the lay audience
- Consistent public outreach to solicit participation → shared press release on partnership and new assistance provided to homeowners
- Shared certification plaque and follow-up monitoring/recertification so that the same contributions from different homeowners face the same accountability.
- Roadmap for other basins/regions or the state to imitate initiative
- Case studies of success

*Outputs from property assessments:*

- At least 160 parcels and 160 acres of private lands and roads assessed for SW impact
- 160 homeowners receiving direct technical assistance in property assessment and project design/implementation
- 50 BMPs funded/installed → 20 acres of SW run-off treated/retained on-site

Expected outcomes from this collaboration are as follows:

- Consistent messaging, certification, and follow-up will amplify the voice of stormwater work and the value to homeowners for participating. When their efforts are recognized more regionally there is a stronger social incentive to participate. Using the same terminology across partners will help with education and minimize confusion as well.
- Shared work plans, MOUs, and funding source for this assessment work will cut back on competition and allow partners to focus on respective geographies collaboratively. Leveraging a regional partnership will help incentive payments and cost-shares trickle down to smaller scale BMPs that typically get overlooked in existing funding opportunities.
- It will also ensure private homeowners across the basin receive an equivalent level of technical assistance, consistent recommendations for implementation, and consistent incentives to participate.

The proposed scope of work will address the following LCBP OFA tasks:

I.A.1.b: Support innovative management approaches likely to achieve results. Solicit new management-oriented research projects that address clean water priorities, including nutrient issues, toxic substance issues, and monitoring programs that will directly inform management or policy decisions.

I.C.3.b: Fund Research and Implementation Programs to Reduce Effective Impervious Surface Area. Address nutrient runoff from impervious surface areas in critical watersheds, incorporating predicted effects of climate change on precipitation events. → Green stormwater Infrastructure (GSI) projects implemented → Improved understanding of efficacy of interventions that reduce stormflows and associated nutrient loading from urban areas and increase resiliency to flood damage.

\*\*I.C.3.c: Fund design and implementation of GSI/LID projects in critical areas. Support a grant program targeting design and installation of green stormwater infrastructure (GSI) projects in critical watersheds. → Twenty new GSI projects installed or designed (shovel-ready) in critical watersheds and twenty new projects in remaining watersheds in the Basin. → Reduced stormflows from urban areas in critical watersheds.

I.C.4.b: Support Projects to Restore and Protect Riparian Forests & Corridors. Support forestry projects that reduce nutrient loading and increase stream bank stability along riparian corridors, with priority to projects that also can manage riparian invasive species spread or protect wildlife habitat. → Five conservation easements or BMPs on riparian forest corridors that reduce nutrient loading to waterways. → Improved riparian corridor stability.

I.C.4.c: Educate and Assist Landowners to Promote Clean Water Regulations on Forested Lands. Support water quality BMP training programs associated with forested lands. → Five training workshops for water quality in forested lands targeting forest managers or landowners. → Increased implementation of best management practices and reduced pollutant load from forested lands.

5. **Please provide the estimated cost of this task, and a timeframe (# months or years).** [Please note that funding for this task will likely not be available until at least 12 months from now.]

#### *Timeframe*

Total timeframe for the project is roughly 2.5 years. We expect to spend half a year (or six months) working on the framework for the initiative, aligning messaging, tools, and executing MOUs. We would then execute property assessments and BMP installations over two field seasons.

#### *Estimated costs*

A. *Consultant-led coordination meetings* = **\$16,100**

- Six months of coordination meetings = 6 meetings X 4 hours each X 8 partners X \$50/hr billable = \$9,600
- 1 partner working in between meetings with consultant \* 10 hrs of extra work \* \$50/hr billable = \$500
- Consultant assistance = \$6,000

B. *Property assessments and BMP cost-sharing* = **\$93,712**

- Two years of implementation (including outreach, property assessments)= 8 partners each reach X 10 properties per year X 2 years X 2 hours per assessment + 3 hours follow up prescription x \$50/hr writing/implementation assistance = \$40,000
- Mileage = .58 X 40 miles (avg round trip) \* 8 partners \* 10 properties/yr \* 2 yrs = \$3,712
- Cost-share/incentive payments to implement BMPs - assume \$1000 per BMP X 50 BMPs = \$50,000

C. *Grant Administration* = **\$16,472**

- Grant administration = 15% (reporting to LCBP, paying out to partners for assessments and implementation) = 0.15 \* (16,100 + 93,712) = \$16,472

TOTAL = **\$126,284**

6. **Post-Project monitoring:** [Please provide a brief description of how the success of this program could be monitored/measured after the project is complete.]

Stormsmart has existing homeowner follow-up surveys to gauge effectiveness of technical assistance and whether it led to stormwater diversion. This is one of the tools that will be incorporated into a regional-based approach that can inform how we will monitor the impact of homeowner technical

assistance, BMP cost-share assistance, and certifications. Blue VT similarly has a monitoring program that affects recertification of properties and could be used as a model in these efforts.

**Lake Champlain Basin Program**  
**Conceptual Education and Outreach Task Description**  
**FY2020 Budget**  
**Task #4**

1. **Task Title:** SOL Newspaper Insert
  
2. **One-sentence abstract of task:** The task will pay for the printing and distribution of a summary of the 2021 State of the Lake report to be inserted into local newspapers.
  
3. **Submitted by:** LCBP
  
4. **Describe the task and the specific work-product(s) or output that might result.**  
LCBP staff will develop a four-page summary of the highlights of the 2021 State of the Lake (which will be the LCBP 30<sup>th</sup> anniversary) report. The summary will be inserted into local newspapers [once?]. The information included in the summary will be easily understood and digested by readers, and will reach thousands of people that do not receive copies of the full report. This will address Task Area IV.B.1.a of [Opportunities for Action](#). It will result in greater understanding of Lake issues.
  
5. **Please provide the estimated cost of this task, and a timeframe (# months or years).** \$6,000 for newspaper inserts to be distributed in summer 2021.
  
6. **Post-Project monitoring:** [Please provide a brief description of how the success of this program could be monitored/measured after the project is complete.]

**Lake Champlain Basin Program**  
**Conceptual Education and Outreach Task Description**  
**FY2020 Budget**  
**Task #5**

1. **Task Title:** Capacity and Resources to Improve Shoreland Management Practices in Vermont and New York
  
2. **One-sentence abstract of task:** This project would increase capacity and resources offered by Vermont and New York Departments of Environmental Conservation through training and supporting Vermont Lake Wise Evaluators and updating printed and online shoreland management resources that promote nature-based practices for protecting and restoring living shorelands, which are essential for clean lakes and wildlife.
  
3. **Submitted by:**  
Amy Picotte, VTDEC, Watershed Management Division  
1 National Life Drive, Main 2  
Montpelier, VT 05620  
[Amy.Picotte@vermont.gov](mailto:Amy.Picotte@vermont.gov)  
Lauren Townley, NY DEC, Bureau of Water Resource Management  
625 Broadway  
Albany, NY 12233  
[lauren.townley@ny.dec.gov](mailto:lauren.townley@ny.dec.gov)
  
4. **Describe the task and the specific work-product(s) or output that might result.**  
The Vermont Lake Wise Program offers science solutions for restoring and protecting shorelands, the most important line of defense for protecting a lake. The Lake Wise Program represents lake-friendly development practices and serves and connects hundreds of shoreland owners, contractors, native plant suppliers, and projects to improve shoreland conditions for the sake of water quality and lake ecology. The Program needs support to expand from concentrating on a dozen lake communities in the Lake Champlain Basin to better serve more lakes and shoreland clients (towns, state parks, private residences, businesses, lake associations, designers, engineers and contractors) as there is growing interest and requests for shoreland technical help. Hydrologically connected lakes in the Lake Champlain Basin will be prioritized for Lake Wise assessment.

This proposal is to train more Lake Wise Evaluators and grow voluntary Lake Wise participation along the shore while continuing to meet the needs of project logistics, such as working with trained contractors in erosion control methods or developing and updating fact sheets with biodegradable supplies. Currently, there are only two active Lake Wise Evaluators, staff from Natural Resource Conservation Districts (NRCD), who are able to work locally and respond more readily to requests for Lake Wise shoreland assistance. Training more NRCD and Regional Planning Commission staff in the Lake Champlain Basin and other water resource specialist as local Lake Wise Evaluators is an important step in maintaining and growing the Vermont Lake Wise Program and ultimately protecting water quality.

Cultural shifts from lawn to restored natural areas along the shore can happen when information and communication is provided from multiple levels, such as the state level, the town level and the lake association level. Lake Wise Evaluators help distribute information about lake friendly practices and work directly with shoreland owners to make improvements that protect the lake and ecology, addressing the priorities listed in the Clean Water and Healthy Ecosystems Sections of the *Opportunities for Action*.

Building upon the resources developed to support Vermont’s Lake Wise Program, New York is proposing to develop a shoreline best management practice (BMP) guidance document to be utilized by local implementors. Currently, New York only has minimum information on the New York State Department of Environmental Conservation (NYSDEC) website regarding shoreline management and has not developed any informational guides or factsheets. Using existing BMP factsheets and information developed for Vermont’s program, New York is proposing to create a comprehensive BMP guide that can be used as a reference document for project managers when planning or designing potential shoreline projects. The newly developed guide will assist with grant applications for project funding through NYSDEC’s existing Water Quality Improvement Project (WQIP) program.

**Outputs**

- Two Lake Wise Evaluator Trainings
- Two new Lake Wise Evaluators trained and active in the Lake Wise Program
- Two Classroom Natural Shoreland Erosion Control Trainings
- One Field Erosion Control Training
- Ten new Lake Wise participants and shoreland sites assessed
- Ten project sites identified
- One Comprehensive BMP guidance document

**Outcomes**

Additional outreach resources on water quality and shoreland habitat protection practices and the promotion, demonstration, and normalization of those practices will result in improved lake water quality and shoreland habitat.

**5. Please provide the estimated cost of this task, and a timeframe (# months or years).**

**Vermont: \$62,000**

This includes 0.9 FTE personnel support for fieldwork, analysis and design, communication and coordination, instructional training, implementation and reporting; costs for printing fact sheets, bioengineering manuals, best management practice materials and supplies.

**New York: \$10,000**

**Total Cost: \$72,000**

**Timeline: October 1, 2020 – December 31, 2021**

**6. Post-Project monitoring:** Success of the program will be measured through training evaluations, including an assessment of knowledge pre- and post-training; the number of

shoreland assessments conducted; the number of best management and bioengineering practices installed; and the use of publications, including fact sheets and manuals, through online analytics and printed copies distributed.

**Lake Champlain Basin Program**  
**Conceptual Education and Outreach Task Description**  
**FY2020 Budget**  
**Task #6**

1. **Task Title:** TMDL Tool Website
  
2. **One-sentence abstract of task:** The task will pay for the development of a website to serve as the outreach and marketing home of the TMDL tool outreach initiative.
  
3. **Submitted by:** LCBP
  
4. **Describe the task and the specific work-product(s) or output that might result.** The LCBP will contract with a website developer to build a site that serves as the home of the TMDL Tools outreach initiative, including the videos and animations produced under the initial TMDL Tools contract. The site will be modeled closely on the Danish Future Water City website (futurewatercity.com). The site will provide additional information about Phosphorus TMDLs on Lake Champlain, with links to other relevant sites and materials. It will serve as a distinct and cohesive, branded destination for potential advertising of the initiative. This task could be combined with the separately developed TMDL video outreach task.
  
5. **Please provide the estimated cost of this task, and a timeframe (# months or years).** \$20,000 for development of the site over a three- to six-month period.
  
6. **Post-Project monitoring:** The reach of the website will be tracked with Google analytics.

**Lake Champlain Basin Program**  
**(7) Conceptual Education and Outreach Task Description**  
**FY2019 Budget**  
**Task #7**

**1. Task Title: *Lake Champlain Education and Outreach Stewards***

**2. One-sentence abstract of task:**

*Lake Champlain education and outreach stewards will conduct outreach at public events in NY, VT and Quebec to inform the public and answer watershed questions and provide them with opportunities to take positive steps on behalf of Lake Champlain and its tributaries.*

**3. Submitted by:** [Include name(s) and organization(s).

*LCBP Staff*

**4. Describe the task and the specific work-product(s) or output that might result.**

*Up to 4 individuals would be hired to expand the LCBP lake outreach from Memorial Day – Labor Day. There are many opportunities for expanding our reach, including farmers’ markets, municipal, and lake events. They can visit state parks, river events, upper reaches of the watershed and downtown locations, answering questions about Lake Champlain and offering opportunities for citizen action. They might be recruited through AARP, work force development, watershed groups, etc. (e.g. Summit Stewards and similar programs.) they should be able to discuss a variety of watershed issues with the public and provide resources for getting involved or changing behavior to benefit the watershed. Outputs might include representation at 20 farmers markets, 80 additional summer events reaching up to 4,000 individuals over the summer period.*

*This task addresses Task Areas IV.B.1.c: Personal Interpretation of OFA.*

**5. Please provide the estimated cost of this task, and a timeframe (# months or years).**

Estimate: \$60,000

**6. Post-Project monitoring:**

*The success of the task would be assessed by tracking analytics (numbers greeted, etc) and possibly reported out on LCBP social media through YouTube or other mechanisms.*

**Lake Champlain Basin Program**  
**(8) Conceptual Education and Outreach Task Description**  
**FY2020 Budget**  
**Task #8**

1. **Task Title:** *Education and Outreach Grants*

2. **One-sentence abstract of task:**

*The task will support grants to support education and outreach efforts of partner organizations throughout the Basin.*

3. **Submitted by:**

LCBP Staff

4. **Describe the task and the specific work-product(s) or output that might result.**

*Four categories of grants will support education and outreach efforts within LCBP and by partner organizations in the Basin:*

- i) Local Implementation Grants: Up to \$10,000 for general education and outreach projects that support objectives of Opportunities for Action. Total: \$240,000.*
- ii) Professional Development Mini-grants to watershed organizations: Up to \$500/year. Total: 14,400.*
- iii) Boots and Bugs: Fund a program for teachers/classrooms in grades K-12 for classroom supplies for studying the watershed. (waders, bug nets, etc). Total: \$20,000*
- iv) Enhanced E&O Grants: Larger grant awards for \$20,000-\$75,000, for areas where larger sums of funding would help build better watershed connections and offer outreach opportunities for the public. Total: \$120,000.*

5. **Please provide the estimated cost of this task, and a timeframe (# months or years).**

\$394,000

6. **Post-Project monitoring:** [Please provide a brief description of how the success of this program could be monitored/measured after the project is complete.]

*Success of projects will be measured using a variety of methods, depending on specific programs. The ability of grant recipients to assess the effectiveness of their outreach efforts will be enhanced through implementation of proposed Task K: Outreach Evaluation Workshop for Outreach Partners.*

**Lake Champlain Basin Program**  
**Conceptual Education and Outreach Task Description**  
**FY2020 Budget**  
**Task #9**

1. **Task Title:** Stream Wise Phase 2: Pilot project to deliver coordinated outreach to private landowners
2. **One-sentence abstract of task:** Pilot a community based social marketing campaign developed during phase 1 to educate and incentivize private landowners to adopt BMPs to protect and restore forested riparian buffers.
3. **Submitted by:** Will Eldridge, VFWD
4. **Describe the task and the specific work-product(s) or output that might result.**

Similar to the successful Lake Wise program administered by the VDEC, the goal of Stream Wise is to establish a new normal of riparian landscaping that is proven to help protect streams and rivers. Despite many efforts by State, Federal, and non-profit partners to engage private landowners in riparian buffer plantings, landowner outreach and engagement is far from saturated. In addition, messaging is not coordinate and therefore partners may be diluting rather than enhancing each other's efforts. Social science research has shown that people are most influenced by their neighbors. A property that earns the Stream Wise certificate will represent a "model" property that will in turn inspire others to make improvements so they too can earn the certificate and help protect their shared rivers and streams.

Phase 1, which is in progress, will produce coordinated messaging around riparian buffers that can be applied throughout the Basin, and develop a marketing cookbook that can be used by partners to engage landowners at a local scale. The program itself will be run by local organizations (e.g., watershed groups or conservation districts) who are well positioned to foster watershed communities within the areas they serve. Municipalities will be encouraged to support the program by developing and delivering education and technical assistance on the social, ecological and economic value of riparian buffers, such as through enhancing co-benefits like flood resilience, water quality, or protection of swimming holes. Phase 2 will pilot the marketing campaign in 2 watersheds within each state or province, and provide trainings for additional partners outside of the pilot watersheds.

This program most closely aligns with OFA Task Area IV.C.3.a: Social Marketing - Implement social marketing techniques to foster sharing of information and stewardship ethic, and IV.C.2.a: Outreach materials - Produce web content and print materials that describe lake-friendly products and practices. Because this program would cross developed, agricultural and forestry lands, it would also touch on a number of other OFA task areas: II.A.1.a Support programs to expand protection of river corridors; I.C.1.b fund programs to protect or enhance river corridors for nutrient reduction and flood resilience; IC4c Educate and Assist Landowners to Promote Clean Water Regulations on Forested Lands; III.A.1.b: Technical Resources Provide technical assistance through meetings, workshops, and presentation; III.A.3.a: Outreach - Support and advise municipalities' efforts to educate residents about sound river/ floodplain management; III.B.2.a: Economic analysis: Conduct valuation of clean water and healthy watershed.

Tasks and work products:

1. Identify partner organizations in Vermont, New York and Quebec to pilot the marketing campaign developed during Phase 1, and train in the marketing campaign.
2. Identify audience and needed behavior change for the pilot. The community as a whole will be one audience, while riparian landowners would be the second.
3. Record feedback and document pros and cons that come up with the selected partners
4. Update marketing material based upon feedback from pilot campaigns.
5. Provide 3 trainings for partner organizations in NY, VT and Quebec. The deliverable would be a report documenting feedback on the trainings.

2) **Please provide the estimated cost of this task, and a timeframe (# months or years).**

1. Continue to coordinate and facilitate meetings of self-selected committee of volunteers to include scientists, environmental interests, fisheries related businesses to oversee marketing campaign - \$5,000 (3 meetings over 12 months)
2. Oversee pilot campaigns by watershed partners (6 months)
  - i) Print of marketing materials, \$2,000
  - ii) Trainings for partners - \$3,000
  - iii) Work with partners to identify audience, deliver marketing campaign
3. Update marketing materials based upon feedback - \$15,000 (3 months)
  - i) Revise draft materials
  - ii) Print updated materials
4. Train partner organizations in NY, VT, Quebec \$15,000 – ( 3 trainings over 6 months)

5. **Post-Project monitoring:**

Success of the program would include:

1. Engagement of partner organizations to pilot the program, and successful delivery of campaign in the identified pilot watersheds
2. Number of people reached through the direct marketing campaigns.
3. Number of private landowners who express interest in increased forested riparian buffer and miles of riparian buffer increased in focus communities.
4. Number of landowners who have participated in certification program, and number who have received certification
5. Number of municipalities who recognize certification program in some way (to be determined)
6. Number of partner organization participating in the trainings.
7. Number of partner organizations that adopt marketing slogans, etc.

## E&O FY2020 Budget Task Ranking

Please score all criteria from 0-10 (low to high) for each project. See criteria descriptions below.

Task ID	Task	Average Score	Cost	Cumulative Cost
8	E&O Grants	57.4	\$394,000	\$394,000
9	Streamwise, Phase 2	56.4	\$40,000	\$434,000
2	Outreach Professional Development Trainings for Watershed Managers	56	\$17,000	\$451,000
3	Unified basin-wide stormwater technical	55.2	\$126,284	\$577,284
1	TMDL Tool Video Dissemination	53.8	\$20,000	\$597,284
4	State of the Lake Newspaper Insert	53	\$6,000	\$603,284
5	Vermont Lakewise	51.8	\$72,000	\$675,284
7	E&O Stewards	51.6	\$60,000	\$735,284
6	TMDL Tool Website	49	\$20,000	\$755,284

### Scoring Criteria

(each scored 0-10, lowest to highest, no weighting)

- Compatibility with existing Plans
- Feasibility
- Measurable Outcome
- Cost Effectiveness
- Likelihood of Success
- Extent of Collaboration
- Environmental Impact

FFY20 Vermont TMDL IMPLEMENTATION PROJECT PRIORITY LIST - 02/01/2020			
Project #	Project	Cost	Project Summary
1	Deer Brook Restoration Project	\$ 400,000	The Deer Brook, in Milton and Georgia, is impaired due to sediment and is a significant source of phosphorus to Lake Champlain within the Lamoille River basin. There are numerous project opportunities in South Georgia Village, chief among which are the restoration of the Deer Brook Gully and related stormwater practices. In this location, stormwater flows collect together and discharge to a severely eroding gully, causing substantial amounts of sediment and phosphorus to be delivered each year to the Deer Brook. The brook is on the 2018 federal 303d list of impaired waters for sediment pollution. This project will fully address the most significant sources of sediment pollution to the brook by treating all stormwater sources located in the VTrans right-of-way discharging to the gully, as well as restoring the gully itself. The project elements, all in the VTrans road right-of-way will include construction of 3 gravel wetlands, construction of 2 catch basin risers, one deep sump catch basin installation and a closed drainage system upgrade; and the gully stabilization. Over the projected 50-year project lifespan, Deer Brook gully stabilization alone will result in an estimated reduction of total suspended solids load of more than 53,000 lbs./year and a reduction of the total phosphorus load by nearly 20 lbs./year. This project is located near I-89 Exit 18 in Georgia just northeast of the intersection of Rte. 7 and Rte. 104, and is one of the highest priority projects in the Lamoille Tactical Basin Plan.
2	Winooski Headwaters Targeted Intervention	\$ 825,000	This Project will construct several erosion control and stormwater management projects in a headwaters of the Winooski River, including a particular high priority, longstanding, and problematic erosion site to implement a shovel-ready stormwater remediation opportunities identified in the Winooski Tactical Basin Plan; the so-called "Plainfield Gully." For the Plainfield Gully project, the Plainfield Health Center will create a step pool system for small stream to arrest long-standing gully erosion and headcutting. Coupled with in-gully restoration, this project will yield an estimated 163 lbs/year reduction in phosphorus delivered directly to the Winooski River, costing \$225,000. In addition, the following projects in this same general geographic vicinity are also proposed: Berlin Chimney Sweep Subsurface Chamber; Berlin Fire Department Bioretention; Woodbury Elementary School and Fire Department Gravel Wetland and Subsurface Chamber; Woodbury Fire Station and Post Office Subsurface Chambers; and the Kingsbury Branch Moscow Woods Road Post Office Stormwater Detention/Gully Restoration project. On top of the Plainfield gully work, these additional efforts will yield 830 lbs/year of phosphorus at a cost of \$600,000.
3	Lake Carmi Watershed Restoration	\$ 600,000	This initiative focuses on Lake Carmi, including its largest tributary, Marsh Brook. Lake Carmi is itself impaired for phosphorus, and also feeds the headwaters of the Pike River, which drains into the heavily impaired Mississippi Bay. A coarse calculation for data collected 2010 to 2018 indicates that Lake Carmi's outlet could deliver up to 4000 lbs / year phosphorus to the Pike River. This initiative would implement the highest priority shovel-ready remediation opportunities, focusing on stream corridor projects and mitigating runoff from private roads, to reduce phosphorus and sediment loading to Lake Carmi and the Pike River, addressing phosphorus impairment in Lake Carmi and the Mississippi Bay Section of Lake Champlain. In addition, this project will also build upon an FY2019 TMDL project in the Lake Carmi Watershed which has funded a complete private and park road erosion inventory, and will construct a small number of road erosion projects later in 2020. We propose to add an additional \$200K into this project to implement high-priority road remediation projects in support of Lake Carmi improvement for 2021, reducing phosphorus runoff to the Pike River and Lake Champlain. The Clean Water Performance Report for 2019 documents a median cost of ~\$900/lb phosphorus reduced from road erosion remediation. Using this figure, a \$200K investment could result in over 200lbs/year phosphorus reduction.
6	Green Schools Initiative to Support Stormwater Compliance	\$ 1,765,000	This project would provide additional funding to the Green Schools Initiative to assist public school compliance with the state's 3-acre impervious surface stormwater general permit, by supporting design and construction of green stormwater infrastructure (GSI), which will result in reduced phosphorus loading to Lake Champlain. Federal Fiscal Year 2020 funding would expand the initiative to include the Vermont State College System, which has three college campuses in the Lake Champlain Basin: Blair Park-CCV campus, Castleton University and NVU-Johnson State College. Three stormwater master plans are needed for these campuses, which will comprehensively identify opportunities to improve stormwater management on the campuses and include preliminary designs suitable for future funding opportunities. Already, NVU-JSC has identified a proposed modification to their existing stormwater pond to improve its performance and treat runoff from additional areas of the campus. The NVU-JSC Bentley parking lot pond has a design and cost estimate and could provide treatment for as much as half the campus and be modified to meet modern treatment standards. This project will also support design, permitting, and construction of stormwater practices for public schools in the Lake Champlain Basin. Of the estimated total \$1.77M cost, \$75,000 will support State Colleges stormwater master plans, \$250,000 will support bringing up to 12 public schools to 100% design and permit coverage, and the remainder will support construction of stormwater practices to comply with the permit. For the public schools, the investment of federal funds will support compliance of school districts with new stormwater requirements without adding additional substantial pressure to local school budgets, at a time where local school financing in Vermont is particularly challenging.
7	Priority Wetland Acquisition, Restoration, and Conservation to Improve Water Quality in Vermont's Lake Champlain Basin	\$ 1,650,000	This initiative continues implementation of the highest-priority, shovel-ready wetland acquisition, restoration, and conservation projects to improve water quality in Vermont's Lake Champlain Basin. Projects are currently being prioritized using a set a qualitative criteria established by technical experts from both within and outside ANR, while the Agency works to develop robust, quantitative estimates of the nutrient and sediment reductions that can be ascribed to a typical acre of restored wetlands (expected in late-2020). One example of this work, supported by FFY19 Lake Champlain TMDL implementation funds, is the restoration and acquisition of a 124-acre property abutting Rock River Wildlife Management Area, which will reduce sediment and phosphorus run-off into the Rock River, in the last wetland system before emptying into Lake Champlain. This \$400,000 project, a collaboration of Vermont Fish and Wildlife Department (FWD), Vermont Department of Environmental Conservation and the Vermont Housing and Conservation Board, includes the following elements: wetland construction; conservation of significant wetland habitat; removal of grazing operations and manure application; conservation of buffer habitat; significant public access benefits through the addition of the lands to the Rock River Wildlife Management Area. With FFY20 funding, FWD anticipates acquiring as much as 900 additional acres of marginal farmland whose acreage, on average, is more than 2/3s restorable wetlands, which is expected to yield roughly 600 acres of restored wetlands within these acquisitions.
8	Enhanced Agricultural Practice Implementation	\$ 1,150,000	Federal NRCS support for agronomic and conservation practices will be lower in FFY20 than in prior years, due to the expiry of the so-called "Vilsak funding," which provided an additional \$8 million/year to the Lake Champlain Basin for the past five years. These Vilsak funds complemented annually appropriated NRCS funding, and Regional Conservation Partnership Program support, both of which are on-going. This proposed \$1.15 million funding will provide a combination of support for the following: 1. \$750,000 to Vermont Agency of Agriculture, Food and Markets (AAFM) Farm Agronomic Practices Program between 2020 and 2022: The AAFM Farm Agronomic Practices (FAP) Program utilizes state funding to help Vermont farms implement soil-based agronomic practices that improve soil quality, increase crop production, and reduce erosion and agricultural waste discharges. Eligible practices include cover cropping, crop rotation, strip cropping, cross-slope tillage, conservation tillage, and manure injection; some of the most cost-effective phosphorus reduction practices available. A minimum of \$75,000 will specifically support implementation of the UVM Extension grassland manure injectors in the Lake Carmi watershed. We further propose up to \$300K to augment manure injection capacity in another high-priority watershed, such as the Rock River. 2. \$250,000 for installation of field ditch floodplains (i.e., two-tier ditch): Two-tier ditches are agricultural field ditches that have been modified by adding benches that serve as floodplains within the channel. The vegetated benches allow for high water to rise, slow, and deposit sediment and nutrients, improving water quality and creating a more stable system that can reduce erosion and increase flood resilience. With this funding, approximately 10 ditches, covering nearly 20 miles of streambank will be installed, extending the visibility and demonstration value of the first pilot two-tiered ditch project installed in Franklin County in 2018. 3. \$50,000 for tile drain management, specifically, drainage control structures. Tile drain water management is achieved through the use of water control structures installed at the end of tile drains, allowing for "closing off" the flow during key time periods (e.g., while spreading manure, during drought) and opening to increase field drainage during wet periods. With tile drains estimated as being a high contributor of phosphorus, especially soluble phosphorus, methods to manage this drainage are critical. The cost of the structures can range from \$300 to \$1,000 each, depending on installation locations and current status of tile. Funding of \$50,000 would enable the installation of 20-40 structures. 4. \$100,000 for barnyard/production area silage leachate system: Development and implementation of several low-cost innovative silage leachate systems. Silage leachate can be extremely high in phosphorus, with some tests revealing total phosphorus concentrations in excess of 20 milligrams/liter, or 100 times the concentration of modern wastewater treatment effluent.
<b>TOTAL</b>		<b>\$ 6,390,000</b>	