



**Join us in launching this great collaborative effort!**

**We have already won notoriety for the quality of our proposal and progress with RACC.**

**Everyone here has an important role in BREE.**

**Today's purpose is to ensure that you know the overall structure of BREE and can find yourself in this very large project.**

**Welcome Aboard!!**



**4.3.1 Workforce Development – Goal:** Prepare and inspire people for STEM careers *Participants: CWDD staff, McCabe, all faculty, graduate students and postdocs must collaborate*

Faculty (1), graduate students (8) and postdocs (4):

Mentoring for Graduate Students, Postdocs and Early Career Faculty  
Strong Postdoc/Grad student mentoring plan

Undergraduates, High School and Middle School:

30 Undergraduate Interns

20 high school teams

Middle School: Rosie's Girls

Classroom visits and CWDD workshops

**Emphasis on Authentic Team Research and Mentoring**

## Undergraduates and High School Students:

**Two examples of projects to integrate intern or high school teams into BREE research:**

1) Quantifying how nitrogen and carbon pools and cycling rates (e.g., N mineralization, soil respiration, decomposition) change between riparian areas with different vegetation, soil and/or topographical characteristics and/or surrounding land uses (e.g., urban, forested, agricultural).

(2) Quantifying how these pools and rates change among different upland uses (e.g., in urban vs agricultural vs forested systems).

Students will take soil samples for N mineralization and/or total soil C and N (these would be extracted and analyzed in the lab), take soil CO<sub>2</sub> flux measurements (using a LICOR 8100a) and set up litter bag experiments, which would involve setting out mesh bags filled with litter and retrieving them later at various time points for analysis. Such projects would support both our understanding of how and why process rates change in space and time in response to variable conditions, land uses and extreme events and our efforts to model the system by providing the necessary biogeochemical data to parameterize and validate the BREE IAM.

## **4.3.2 Seed funding and Emerging Areas**

SBIR/STTR Phase (0)

Pilot Awards

LaunchVT and InnovateHer

Workshops with Karen West



## **4.4 Diversity Plan:**

**Cast a wide net!!**

**We need your help with recruitment!**

Graduate Students, postdocs and new faculty member  
Interns and high school teams

**All BREE faculty, grad students and postdocs will train  
for working with diverse groups**

CCV and Landmark - partners



## **4.5 Partnerships and Collaborations**

**We will work with our stakeholders on several levels – for data acquisition and for engagement with our IAM.**

## 4.6 Communication and Dissemination Plan

Alan Alda Center Workshops

Broad Dissemination and highlights – We need your help!  
Tell us about all your presentations from BREE research

Take pictures!

Always inform Lillian Gamache!!

Data curation and dissemination – after publication! Check the Plan and confer with Patrick Clemins



## **4.7 Sustainability Plan**

### **4.7.2 Post RII Track-1 Extramural funding**

## **4.8 Management, Evaluation and Assessment Plan (See Org. Chart)**

### **4.8.1 Project Management Team** The Vermont Technology Council

### **4.8.2 Evaluation and Assessment**





## Timing

Began year 1 during RACC

Effect on summer research and CWDD programs

Recruitments are on going

When in doubt, ask Judy, Lillian, Patrick, or Arne