



**Program Evaluation for Groundswell Michigan**  
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**Table of Contents**

Executive Summary .....3

Introduction.....5

    What is Groundswell?.....5

    What is PBE?.....5

    Purpose/Goals of Evaluation.....5

Methods.....6

    Research Questions.....6

    Data Collection and Analysis.....6

    Identifying Recommendations.....7

Results.....8

    Professional Development Data.....8

    Teacher and Partner Interviews.....11

Recommendations.....25

Conclusion.....26

Appendix.....27

## Executive Summary

Groundswell requested a program evaluation to measure how well it is supporting place-based education (PBE) in the Kent County community by providing funding to and building partnerships between teachers and community partners to engage students in hands-on environmental learning projects and teach them to be environmental stewards in their communities. For this evaluation, Groundswell professional development (PD) data and interviews with Groundswell teachers and community partners were analyzed to answer the following evaluation questions:

1. What are the benefits of PBE?
2. What are the challenges and barriers to implementing PBE?
3. What is Groundswell doing well?
4. What can Groundswell do to improve?

Key findings from PD data show that PD participation varies based on the program, the school year, the school, and the individual teacher. Workshops for Teachers were the PD which logged the most hours. The 2014-2015 school year logged the most hours, but based on the increased participation per year, it is likely that 2015-2016 logged even more hours than 2014-2015. And finally, schools with more Groundswell teachers tended to log more hours than schools with fewer Groundswell teachers, however, the school at which a teacher teaches was not indicative of participation in this analysis.

From the teacher interviews, it was found that Groundswell teachers have a strong understanding of PBE. While teachers find it difficult to implement PBE in their classrooms, they know that PBE has a large positive impact on students including increased student engagement and awareness. Teachers struggle with finding projects and identifying community partners with whom projects align well—they are unsure of who needs to be responsible in coming up with projects, making the connections with partners, and building those relationships. Teachers think Groundswell PDs are useful, however, they are hard to attend due to a sub-shortage. Teachers need to be better communicated with as many are unaware of where to find information which is available to them. Without Groundswell support, teachers would be unable to incorporate PBE in their classes due to a lack of time, funding, and community support.

From the partner interviews, it was found that Groundswell has a strong community presence which it uses to build partnerships between teachers and students. These partnerships are valued by community partners and they help community partners fulfill their missions and educate more students and families about issues in their local environments. Partners see Groundswell as a great resource for making more community connections providing funding and support for PBE projects, but sometimes the specificity of the grants by which Groundswell is funded can be limiting in completing PBE projects. Additionally, partners say that they are often unsure of what

their roles are as Groundswell partners and unsure about who else in the community is a Groundswell partner.

Overall, this evaluation found that Groundswell is doing well in supporting educators, engaging students, and building partnerships. From these findings, recommendations for growth are as follows:

- Groundswell should provide teachers and partners with better communication and transparency as to clarify what is available to them, who else is part of Groundswell, and information on previous Groundswell projects.
- Groundswell should create a guide for teachers and partners which specifically lays out the expected responsibilities of teachers and partners as being part of Groundswell.
- Groundswell should provide teachers with support in finding PBE projects to do.
- Groundswell should better align its deadlines for teachers and partners with the school year schedule, including the date of the Showcase which should be later in the year.
- Groundswell should seek out additional funding sources as to remove the limitations which the current funding sources have on project possibilities.
- Groundswell should continue to listen to teacher and partner needs and continue to be adaptable and responsive to these needs.

## Introduction

### What is Groundswell?

Groundswell Michigan is one of six organizational hubs funded by the Great Lakes Stewardship Initiative (GLSI) which encourages and supports place-based education and environmental stewardship in the Great Lakes Region. A branch of Grand Valley State University's Center for Educational Partnerships, Groundswell began working with K-12 schools and community partners in Kent County in 2009 to "engage students, build partnerships, and support educators." It fulfills this mission by providing and connecting teachers with the resources and partnerships they need in order to complete hands-on environmental learning projects with their students. These projects and partnerships work to mold K-12 students into active and engaged learners and environmental stewards in their communities.

### What is place-based education (PBE)?

PBE is a pedagogy based upon students' understanding of place integrated with learning principles. The GLSI defines PBE as follows.

Place-based education is a hands-on, inquiry-based, contextually embedded, and community-supported approach to teaching and learning that occurs in and with a place or community, is about a place or community, and yields benefits for a place or community.

PBE encourages deeper and more engaged learning as it puts learning in students' hands, allowing them to ask questions, make connections, and draw conclusions about their environments while engaging with learning concepts and materials. PBE projects expose students to new environmental and community perspectives while empowering them to make significant impacts. Therefore, Groundswell supports PBE in classrooms by supporting teachers in developing and completing projects which challenge students to be hands-on and take initiative in their communities as stewards for the environment.

### What purposes does this Groundswell evaluation serve?

The purpose of this evaluation is to take a preliminary look at how well Groundswell is supporting PBE in Kent County schools. The questions asked in this evaluation aim to measure the current state of Groundswell's presence in Kent County, including how well it is currently "engaging students, building partnerships, and supporting educators." In this, the evaluation aims to identify what Groundswell is doing well, understand where it can improve, and recommend opportunities for growth.

## Methods

### Research Questions

In this program evaluation, Groundswell is looking to understand how PBE is being addressed through its organization. Groundswell identified research questions around how well it is doing the following three things: engaging students, building partnerships, and supporting educators. Therefore, the research questions for this evaluation were understood as follows in Table 1.

*Table 1: Research questions for Groundswell evaluation*

Engage Students	Build Partnerships	Support Educators
<p>What are the perceived impacts Groundswell is making on students?</p> <p>How does PBE engage students?</p>	<p>How does Groundswell build partnerships in the community?</p> <p>What do these partnerships look like?</p>	<p>What impacts on teaching practices has Groundswell made for teachers?</p> <p>What are teachers' understandings of PBE?</p>

These research questions provided direction to the overall evaluation. This evaluation, then, aims to answer the following evaluation questions in identifying recommendations for growth:

- 1. What are the benefits of PBE?**
- 2. What are the challenges and barriers to implementing PBE?**
- 3. What is Groundswell doing well?**
- 4. What can Groundswell do to improve?**

### Data Collection and Analysis

Data from this evaluation were shared via Google Drive to ensure security and confidentiality. Groundswell shared previous data as well as literature resources to this Drive in order to help develop an evaluation scope and research questions. Quantitative data collected prior to this evaluation were shared as Excel files through the Google

Drive folder. Qualitative data were transcribed and shared to the same folder. Groundswell, therefore, had full access to primary and secondary data of the analysis.

### *Professional Development Data*

Professional Development (PD) data were shared as Microsoft Excel files. These files were merged into one master file, which was then cleaned for analysis of attendance by school and by program. This analysis used built-in Excel functions such as pivot tables to summarize counts of teacher PD data.

### *Teacher and Community Partner Interviews*

This evaluation used teacher and partner interviews to help answer the evaluation questions. The questions asked in these interviews can be found in the Appendix of this report. This evaluation used random sampling to select the sample contacted for interviews. Excel files used to store teacher and community partner contact information were run through a random number generator to select 36 teachers and 16 community partners to email requesting an interview. These teachers and partners were sent two additional follow-up emails in hopes of increasing the response rate. The response rate for teachers was approximately 28 percent while the response rate for partners was approximately 38 percent. A total of 16 interviews were conducted throughout March and April of 2017—ten teacher interviews and six community partner interviews. These interviews were conducted in various locations which the interviewees suggested. Each interview lasted approximately 30 minutes. These interviews were not audio recorded; notes were taken to record verbatim quotations. These notes were cleaned to remove identifying data of the participants. These notes and quotations were then analyzed for common themes, and results were written as found in the Results section of this report.

### **Identifying Recommendations**

From both the analyzed PD data and the primary interview data, this evaluation makes recommendations for improvement of the Groundswell program. These recommendations were identified from the analyses which answer the evaluation questions regarding what Groundswell does well and how it can improve. Based on what PD programs are most popular, what teachers and partners find helpful, and what they find challenging in participating in Groundswell projects, these recommendations are purposefully made to be directly actionable and backed by research.

## Results

### Professional Development Data

#### *Total PD Hours by PD Program*

Groundswell teachers logged a total of 7899.5 hours of PD from 2009 through 2016. The most hours of PD logged by Groundswell teachers were from Workshop for Teachers with a total of 4390.5 hours, accounting for over half (56%) of the total logged hours. The second highest total hours were logged for Summer Institute with 2235 total PD hours, or 28 percent of all hours. The third highest total hours were logged for Dinner and Dialogue with 485 hours, or 6 percent. See Figure 1 for a breakdown of total teacher hours by each PD program.

These counts suggest that Workshops for Teachers are the most popular PD, followed by the Summer Institute and Dinner and Dialogue. However, these counts are likely influenced by the frequency with and times at which certain PD programs are offered throughout the year. Therefore, we cannot certainly conclude that Workshops for Teachers are the most popular PD due to programming alone based on these counts.

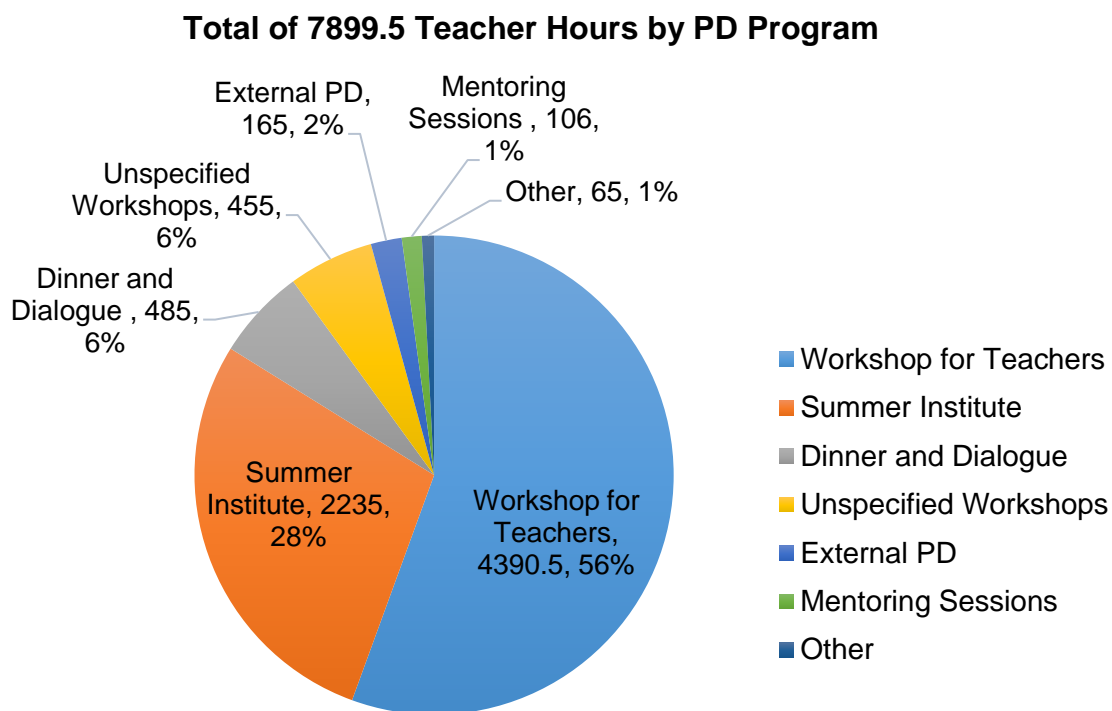


Figure 1: Pie chart of total logged teacher hours broken down by the type of PD program



### Total PD Hours by School Year

Total teacher hours were also broken down by year of participation. The most logged teacher hours for all PD programs took place over the 2014-2015 school year, with 2218 hours, or 28 percent. The year with the second-highest count of logged PD hours was 2013-2014 with 1762 hours, or 22 percent. The year with the third-highest count of PD hours was 2012-2013 with 1271.5 hours, or 16 percent. The school year with the least logged hours was 2015+ with 518 hours, or 7 percent, but this is likely due to the date at which Groundswell stopped collecting data. With the exception of the school years 2009-2010 and 2010-2011, these counts suggest that teacher participation in PD has increased yearly since 2009. See Figure 2 for a breakdown of total teacher hours by school year.

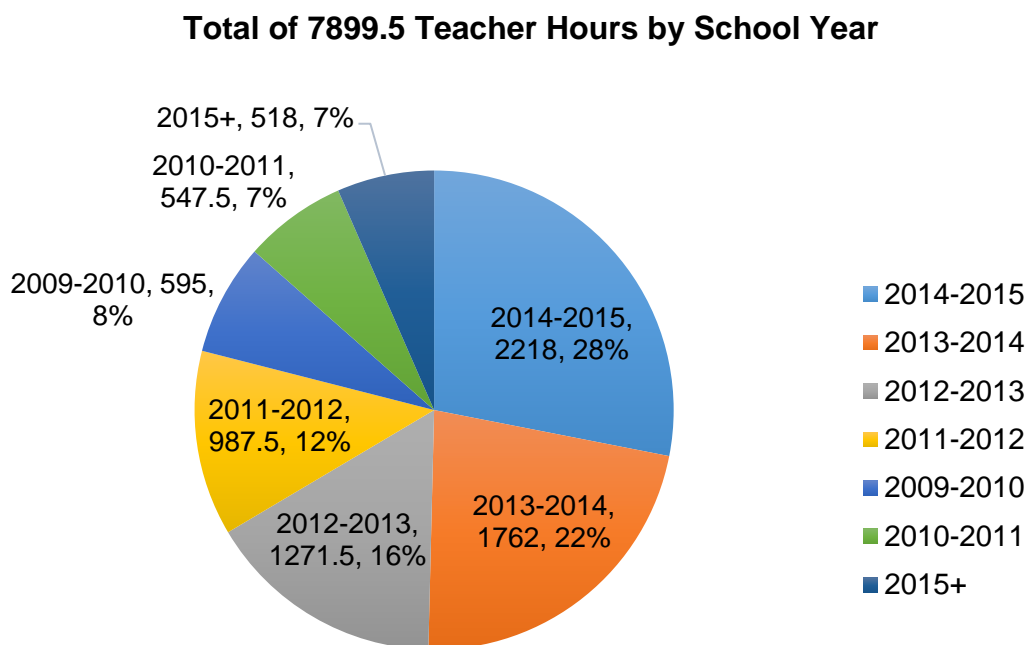


Figure 2: Pie chart of total logged teacher hours broken down by the type of PD program

### Total PD Hours by Teacher

Total PD hours were broken down by teacher to see the variation between teachers' participations. The teacher with the highest number of PD hours logged 402.5 hours. The teacher with the second-highest number of PD hours logged 303 hours, and the teacher with the third-highest number of PD hours logged 291 hours. The nine teachers who logged the fewest hours logged only two PD hours, and the seven teachers who logged the second-fewest PD logged only 2.5 hours. This suggests that teacher

participation PD varies greatly depending on the individual teacher. There was no evidence in this analysis which suggested that the school at which a teacher teaches was indicative of PD participation.

#### *Total PD Hours by School and Number of Teachers per School*

Finally, total PD hours were broken down into a total of 40 schools across all school years (see Appendix A). Then, these totals were divided by the respective numbers of teachers for each school in order to find which schools had the most teachers who participated in PD across all school years.

The school which logged the highest number of PD hours was Eastern Middle School with a total of 1135.5 hours across ten teachers for an average of 113.55 hours per teacher. The school which logged the second-highest number of hours was City Middle/High School with a total of 734 hours across 18 teachers for an average of 40.77 hours per teacher. The school with the third-highest number of hours was East Rockford Middle School with a total of 680 hours across five teachers for an average of 136 hours per teacher.

The school which logged the lowest number of PD hours was Lee Middle School with only one teacher logging 2.5 hours. The school which logged the second-lowest number of hours was Grand Rapids Christian Middle School, which also only had one logged teacher who attended seven total hours of PD.

On average, the schools with the least number of hours logged for PD participation only had one Groundswell teacher logging hours. Therefore, schools with more Groundswell teachers in them were more likely to log more hours than schools with fewer Groundswell teachers. The number of teachers per school who participate in Groundswell were cross-referenced with these totals to confirm.

#### *Overall PD Results*

Overall, PD participation varies based on the program, the school year, the school, and the individual teacher. Workshops for Teachers were the PD which logged the most hours. The 2014-2015 school year logged the most hours, but based on the increased participation per year, it is likely that 2015-2016 logged even more hours than 2014-2015. And finally, schools with more Groundswell teachers tended to log more hours than schools with fewer Groundswell teachers, however, the school at which a teacher teaches was not indicative of participation in this analysis.

## Teacher and Partner Interviews

Ten Groundswell teachers were interviewed in order to explore how well Groundswell is supporting its teachers in implementing PBE in their classrooms through PBE project support, PD, and building community partnerships. Teachers were asked about the benefits and challenges of implementing PBE in their classrooms and working with community partners as Groundswell teachers. Finally, teachers were asked about the ways in which Groundswell can support them better and improve the overall program.

Six Groundswell community partners were interviewed in order to explore Groundswell's community presence, how well Groundswell is supporting teacher-community partner partnerships, and what it can do to improve. Partners were asked about how they came to know about Groundswell, their levels of engagement in Groundswell projects, the nature of their engagement, and the benefits and challenges related to being a Groundswell partner. Finally, partners were asked about their suggestions for improving the Groundswell program.

### *Defining Place-Based Education for Educators*

A key purpose of this evaluation was to give Groundswell a preliminary look into how well it is incorporating PBE into classrooms. Consequently, Groundswell teachers' understandings of what exactly how PBE is defined are instrumental in how they implement PBE in their classes. Therefore, teachers were first asked to define what PBE means to them in order to understand Groundswell teachers' definitions of PBE compared to the GLSI's definition: "a hands-on, inquiry-based, contextually embedded, and community-supported approach to teaching and learning that occurs in and with a place or community, is about a place or community, and yields benefits for a place or community" (year).

Overall, teachers had a strong understanding of PBE which included most of, if not all of the components of the GLSI PBE definition. One teacher's definition of PBE was "when you do a field trip on your own home grounds, in your own community, in your own neighborhood, and learn about the natural function of where you're based." Another teacher said the following: "to me, **PBE means connecting students to their place...their school campus, their community, their region, their state...through their learning.**" Another teacher said that "PBE is the opportunity to go out into the real world...to go out into our local setting...giving students an opportunity to give learning an authentic experience." Yet another teacher defined PBE as "a kinesthetic approach to learning," claiming that PBE "means to go and experience the community in a way that helps them understand the material better." Two more definitions were "[PBE] is the importance of having kids actually doing stuff and applying what they learn" and "[PBE is] becoming community members and working with community partners." Therefore, teachers have a very strong overall understanding of what PBE is, and their definitions include PBE as hands-on and community-based.

However, while all teachers had a strong understanding of PBE, teachers learned about PBE from various sources. Some teachers learned about PBE from Groundswell: “I came to know about [PBE] about four years ago, but I never heard of it before that...I went through a PD through Groundswell,” “I learned about PBE from [another Groundswell teacher] and from grad classes,” and “my first experience with PBE was with Groundswell eight years ago.” However, other teachers learned about PBE elsewhere, for example, one teacher said, “I learned about PBE through my teaching degree.” Therefore, regardless of how Groundswell teachers learn about PBE, they have a firm grasp of it as a concept.

### *Benefits of Place-Based Education*

Groundswell teachers and partners agree that Groundswell has provided support which has been positively impactful to the community—**“Groundswell creates impact that wouldn’t happen otherwise.”** These impacts were mostly spoken to by teachers and partners in terms of student impact, environmental impact, teacher support, and partnership building.

#### Student Impact

All teachers and community partners who were interviewed expressed that PBE is beneficial and has significant positive impacts because “the best way for kids to learn is to be hands-on and meaningful, and it doesn’t get more meaningful than PBE.” The first benefit of PBE which all teachers and community partners mentioned was that “PBE helped have higher student engagement”—all teachers and partners agreed that PBE gets students engaged with the material, the community, and the environment unlike traditional teaching methods. PBE engages students by getting them outside, giving them hands-on and first-hand experiences, and exposing them to community partners. One teacher said, **“Being able to have outside speakers come in and talk to the students” has helped students “find real-life value to the stuff they learn in class.”** “[Groundswell] projects keep them engaged which is most important in getting them to learn it.” One teacher said that “it’s so unique to have this opportunity to get students really engaged with the material...you can watch the kids as the just ‘get it’.” Another teacher said, **“Groundswell has successfully created gardens and gotten students engaged in their environments.”** Community partners recognize this engagement: “local work [through Groundswell] is important because students actually get to do something real.” Another partner said that **Groundswell projects “make the kids not afraid of soil and water...you can’t really teach science inside.”** One partner said, “I wish I could be more engaged with students and do more educational programming.” Teachers and partners agreed that “PBE is helping [students] love the environment and want to be stewards” by “giv[ing] the students ownership and engagement.”

Teachers and partners said that an additional benefit of PBE has been increased student awareness. Students are more aware about the environment, how humans impact it, and what they can do to help it. One teacher said, “[PBE] gives students opportunities out of the classroom and show[s students] how small things help [the environment].” As students complete Groundswell projects, they apply their knowledge of the material to environmental issues in their areas and become aware of what they can do to improve it. Another teacher said, “[PBE] opens kids’ eyes to the relevance of what they’re learning in school.” **As a result of Groundswell PBE projects, the students are “more aware of their actions, their water use, their pollution...the little things they can do to help the environment.”** One partner said, “I see students being aware of their environment and their surroundings, and their human impacts.” One teacher explained that awareness is important because “a lot of these kids don’t get to experience the world much...their ideas of place don’t extend further than the route to the grocery store maybe, and that’s it...they haven’t seen Lake Michigan, or they’re immigrants from far away. The projects give them that sense of place.” One teacher even said, **“I think that awareness is the biggest component of Groundswell’s program.”**

Overall, Groundswell “gives students the understanding of how they impact the bigger picture.” Students take these lessons home and tell their parents, becoming stewards for the environment: **“PBE is helping them love the environment and want to be stewards.”** One teacher said, “PBE is important because they can go home, tell their parents, and see the impacts they make.” Another teacher said that “[students] are going home and talking to their families about what they’re learning about their neighborhoods in class.” Students are positively impacted by Groundswell’s support of PBE because PBE projects get them to engage more with the material, and as a result, they have increased awareness about how their local environment works and ways in which they impact it. Therefore, student awareness spreads beyond the students as students go home and tell their families about what they learn about the environment through PBE projects. This increased environmental awareness by students and their families leads to long-term impacts on the environment and the community.

Teachers and partners believe that these positive impacts like increased student engagement, awareness, and stewardship have long-term positive impacts as the students will carry the skills they learn through Groundswell projects through adulthood. One teacher said, “We are impacting a lot of students now...they’re going home with a new knowledge set and a new passion for the environment.” One partner said, “Students carry through [their knowledge from Groundswell] and become voters who become more engaged.” **“Students see where they’re making a difference and feel empowered.”** Teachers and partners believe that “Groundswell is creating future employees” for Groundswell community partners, and that **“PBE teaches the kids how to be a citizen of the world, how to care for the world.”**

## Environmental Impact

As partners and teachers team up to complete Groundswell projects with students, and students consequently become more engaged with and aware of their environmental impacts, the environment is directly positively impacted as a result. Students become more environmentally active as a result of the impact that they see they make through PBE: “[students] can see the long-term impact they’re making...through project longevity...students see it,” and as a result, “it’s helping students invest in their environments.” One teacher said, **“After a project, they’re going to be more observant, they’re gonna notice the drains in their neighborhoods and driving down the highway...the gunk in the road...it’s not just the drains outside of the school.”** Therefore, “students see where they’re making a difference and feel empowered” to be environmental stewards. Groundswell projects are being noticed and welcomed in local communities. A partner noted, “The showcase is an awesome event to get exposure in the community.” As a result of such exposure, communities are becoming involved in PBE projects: “our community has completely embraced these [PBE] projects.” One partner explained that, as a result of Groundswell, the community is taking students’ PBE work and incorporating it into city planning: “Groundswell is clearly making a difference if the city council is even considering the projects in their planning” and **“the Groundswell project is getting noticed by the township, and I think that just speaks volumes to the power Groundswell projects can have in the community.”** Therefore, the work that students are doing are having significant impacts on their local environments.

Not only do students themselves become more environmentally conscious, but they inform their parents and families to be, too. One teacher said, **“One student told me ‘I told my family we can’t wash our car on the pavement anymore, and we need to wash it on the grass instead,’”** and, **“One student said that they asked their grandpa to make a compost pile in the backyard.”** Another teacher said that “PBE boosts family and community involvement, and [students] notice articles in the news and spread the word about runoff and pollution.” Another teacher said, “I guarantee that the effect we have on upstream and downstream neighbors is positive.” Partners agree that Groundswell PBE projects are making positive environmental impacts by “help[ing] make contacts for the community and spread[ing] information about environmental issues] to parents and families.” In spreading awareness about environmental issues, partners say that “Groundswell is important because it’s having people think in terms of watersheds” and that “Groundswell helps us spread awareness about our connections to the [Grand River].” Partners said that “anything we can do to education the public...students or otherwise...helps with preservation of water systems” because **“if you learn to appreciate the area you live in, you’ll probably take better care of it.”**

## Teacher Support

Groundswell is providing teachers the support they need in order to complete Groundswell projects. Groundswell is doing this by providing teachers with the education, community support, financial support, and direction to get PBE projects going.

Educating teachers is important in Groundswell's support of teachers because it gives them the tools and the knowledge to begin Groundswell PBE projects. Without Groundswell, teachers would not necessarily know how to do a PBE project. One teacher said, "PBE is all new to us [teachers]...we couldn't envision a problem [for a project] because we didn't know what could be problems." Another teacher said, **"Groundswell helps open our eyes to projects out there that we can bring to our students."** One teacher said, "You get [information about invasive species] for projects if you go to the PD and are able to talk to other teachers who're involved." Another teacher explained her educational Groundswell PD experience: she said she attended a "full day PD where you got to pick where to go and choose a focus area...it was specific to PBE and the teacher...he took us on a field trip...he mapped it all out and modelled [PBE] for us which was really helpful and it gave teachers the chance to be the students." Another teacher explained that **"without Groundswell, we wouldn't look at using our curriculum this way."** Another teacher said that PBE has "made me think, 'how can I do things like this in other aspects of my teaching?'" Even community partners agree that "the opportunities Groundswell offers for teachers to grow are great." Therefore, providing teachers with the knowledge they need to complete PBE projects is a positive impact on teachers' teaching styles.

Groundswell also provides teachers with the connections and the community support that they need in order to incorporate PBE in their classrooms. One teacher said that Groundswell "gives us the chance to make face-to-face contact by bringing in connections" and that "Groundswell offered a lot of face-to-face support my first year." Another teacher said, **"I felt really encouraged to do PBE because Groundswell and our community partners were so supportive,"** and, "I love that we're getting involved in the community." Another teacher said, "Groundswell gives me something to bounce ideas off of...it's a team collaboration that gives me confidence [in PBE]." The same teacher appreciates Groundswell's support because "Groundswell gives me a chance to teach the kids how to give back to their communities that doesn't take money." Therefore, Groundswell provides teachers the community support they need in order to teach students to give back to their communities.

Groundswell provides teachers with the financial support they need in order to complete Groundswell projects: "the support, funding, and structure [Groundswell] provides drives the PBE in my classroom." One teacher said, "I see being part of Groundswell as an opportunity...having seed money to start a project." Another said, "I don't have the money to buy dirt or rocks or native plants on my own" and "I've spent almost all the

money from Groundswell on native plants.” Therefore, PBE projects happen because of the financial support that Groundswell provides teachers.

Finally, teachers said that Groundswell provides them direction to complete PBE projects in their classrooms. A teacher said, “Groundswell...it’s been a catalyst. Without their support I’d have no [PBE] direction.” Groundswell helps teachers weave projects into the state curriculum and makes the material more fun to teach. One teacher explained that “PBE gives me the chance to give students activities in all subjects”: **“[PBE] fits well with standards...with science and social studies and math...I can have them measure data from the storm drain...like, I’m able to incorporate all domains into our projects...technology...they get their arts through making posters and videos...there’s a lot of pieces that make it a well-rounded program.”** Teachers also said that “sometimes the regular curriculum gets boring, but PBE is fun...it’s flexible, it’s creative” and “it gets boring being cooped up inside, so I’m pretty excited for the project.”

Teachers see Groundswell projects as making positive impacts on their teaching. One teacher said, “I don’t think people would continue doing it if [projects] weren’t improving their classrooms, or else they could be spending their time working on other things like preparing for tests.” Another teacher said, “Groundswell helps us know we can make an impact while making sure we do what we said we would.” One teacher said, “Groundswell being involved holds me accountable to make sure I’m doing my part [in the community].” Therefore, teachers see the support they get from Groundswell as impactful. A few teachers expressed that Groundswell support is the reason they can bring PBE into their classrooms, and without it, PBE projects would not be part of their curriculum. One teacher said, “If I didn’t have Groundswell, I wouldn’t be making the effort for PBE in my classroom.” Another said, “We wouldn’t have gone outside for biology without Groundswell.” Therefore, Groundswell’s support of teachers is instrumental in implementing PBE in teachers’ classrooms.

Even partners see the impacts of Groundswell teacher support: “if the teachers can say what they need, Groundswell will provide it to them.” One partner summed up the impact Groundswell has on teachers as follows: “overall, I really think Groundswell plays an important role in encouraging teachers to do projects that involve water systems...giving them that little bit of support is enough to make it worthwhile.”

### Partnership Building

Groundswell has a strong community presence: **“I bet all conservation organizations know about Groundswell by now.”** Therefore, Groundswell is using its presence to build partnerships between teachers and community partners: “Groundswell originally linked us up with our teacher.” Community partners said that “Groundswell builds relationships with the community to better care for it,” “Groundswell is great for getting agencies directly involved in schools,” and “Groundswell develops stronger relationships” between schools and partners. One partner said, “As the teachers were



able to get engaged [with Groundswell] we'd meet to see if we'd be a good partner." Teachers and community partners see the partnerships which Groundswell creates as being positive impacts. Groundswell connects teachers to community partners: "Groundswell's role has been bringing [community partners] all in and identifying what they can do, like with Dinner and Dialogues," **"Groundswell provides a great place to do all this [PBE] work, it's a great space to connect teachers doing this work,"** and "Groundswell gives me the opportunity to get at more teachers."

Because of Groundswell, community partners feel that their access to and relationships with teachers have improved: "I really thought the Social Media Dinner was great because we got to talk to teachers at the same tables" and "we met with teachers and aligned our program with their curriculum, and from that things grew." As a result of Groundswell building these partnerships, teachers can get students involved in better PBE projects. One teacher said, "Our community partner had a list of things we could work on [for our project]." A partner said that "joining government programs and schools results in some cool projects" and that "Groundswell grants provided funding to pay our staff to help with projects." Community partners get significantly involved in classrooms through PBE projects. One partner explained their PBE experience: "as partners we probably spend a couple hours a year engaging in planning and preparations, I'd say we're highly involved," "we visit the students two to three times per year, a couple more with just the teachers," "we're able to bring expertise into the classrooms that teachers may not," and "we supplement the lessons to enhance [students'] experiences." Partners said that they value their involvement with PBE projects through Groundswell: **"Groundswell is that bridge that allows us to feel that we have something substantial for the students to benefit from"** and "I really value being a Groundswell community partner."

Overall, teachers and community partners agree that being part of Groundswell is beneficial to them, the students, and the environment because "Groundswell is very supportive of PBE" and "Groundswell is a great resource." "[Before Groundswell] students weren't getting what they needed to grow in their learning." Teachers and partners appreciate Groundswell support and are proud to be part of Groundswell: "[Groundswell is] pretty well organized and they do so much already...they really help in a variety of ways," "they are doing a lot to support us financially and everything...I just really appreciate all of their hard work," and "[being a Groundswell teacher] has been really cool and it's a great process to go through." Teachers and partners applaud Groundswell for the work it is doing in their communities. **"I applaud [Groundswell] because, for the little bit of money they have, it's resulted in really great projects that get students involved in their communities."** They said that "for its limited resources, [Groundswell] does a good job with getting a lot of projects going and encouraging teachers." One teacher even said, **"I'm really honored to be part of what [Groundswell's] doing for kids and schools."** Therefore, Groundswell has undoubtedly made a large positive impact on the community in which it works.

### *Challenges of Place-Based Education*

Though teachers and community partners value PBE and clearly understand its positive impacts, they still recognize that PBE implementation can be challenging. Specifically, teachers and partners said that time, weather, support, and paperwork are often barriers.

#### Timing

Timing can be challenging as teachers have to weave PBE projects into the Michigan curriculum standards while accounting for the weather. “PBE takes a lot of coordination and communication...it’s hard to convince people it’s worth the time.” One teacher said, “Getting the initial project idea took a lot of time and help,” and, “It’s mostly difficult being able to fit it into the curriculum we already have to follow.” Another said, “It’s hard to have time to do [PBE] when we have to meet curriculum and state standards and teach for state tests, and a lot of us have other school commitments.” Another teacher said, “It can be tough because I still have to meet Michigan standards and get the project done.” Other teachers said that “it’s challenging timing the curriculum with the weather for the project,” and that “it’s hard to have the time to weave PBE into curriculum,” because “the weather can be a challenge... it’s hard to get outside in Michigan during most of the year.” Teachers struggle, then because it is difficult to plan ahead: “it’s difficult because I couldn’t plan to be outside until the end of March or early April” and “Groundswell wants us to invest in the project but we’re not always able to take all those steps ahead of time.” Additionally, teachers said that they are not always finished with their projects by the time the Groundswell Showcase happens: “the Showcase is in May, but, the projects sometimes aren’t done yet...so sometimes the perfectionists panic because they feel they have to have videos in before they’re finished with the project.” Therefore, timing projects and aligning them with the curriculum can be a barrier to PBE implementation.

Partners concur, saying that “it’s a challenge to plan for projects long term” because “budget processing schedule doesn’t align with the school schedule” and “topics on the curriculum schedule aren’t always on the Groundswell schedule.” As a result, partners have trouble finding the right time to participate in Groundswell projects. One partner said, “There was an issue with communication and timing which prevented me from being able to come into the class and talk to the kids.” Another partner said, “Teachers get busy so it’s hard to schedule times to meet up...they have the regular curriculum they have to teach so it’s sometimes hard unless we can schedule way in advance.” As a result, “projects are often one day things instead of being integrated into the curriculum.” One partner said, “Sometimes I think that it’s hard for teachers to have time to plan and think beyond the walls of the classroom.” Overall, teachers said that “the problems we have with Groundswell are pretty much inherent to the education calendar.”

### Difficulty Finding Projects

Teachers and community partners expressed that they had difficulty finding projects to complete for Groundswell. Teachers said, “Groundswell provides us the resources but leaves it to us to choose a project,” and “it can be a struggle to find a good project to do on the school campus.” One teacher said that “getting the initial project idea took a lot of time and help.” Partners agree, saying that teachers often turn to them for project ideas and that it is unclear whose responsibility it is to come up with projects. One partner said, “Is that our job to come up with a project? It shouldn’t be our job as community partners to come up with projects.” Another partner said that “money from the grant limits project topics and other funding sources” He said, “I think the mission of Groundswell can get skewed by the grants that fund them...projects have to be on grant topics instead of being mission-based.” Therefore, teachers and partners often have trouble finding projects.

### Paperwork

Teachers and partners agree that the paperwork for PBE projects can be a barrier. Teachers said that “there’s a lot of paperwork around [PBE]” and “some teachers don’t feel like the extra time [doing paperwork] is worth it.” One teacher said, “Groundswell heard teachers’ voices about project proposals...but it doesn’t feel like we’re spending less time doing it, it’s just split up into chunks like, initial, detailed, then final [proposals].” A partner said that “teachers say that the paperwork’s not worth it since it’s just an extra burden,” and that “the paperwork was rough but Groundswell listens constantly to make the program better.” Therefore, with teachers struggling with time constraints, paperwork becomes a barrier to implementing PBE.

### Administrative Support

Teachers expressed that they sometimes have difficulty gaining administrative support to do projects. One teacher said, “District-wide, there’s not a lot of district support [for PBE]... it’s different for them because [Groundswell] is a program around getting kids out there, and that’s not necessarily what we do, so there isn’t a push.” This difficulty is sometimes due to concerns for student safety as “safety can be a barrier.” One teacher said, “We should be exploring outside but we couldn’t get administration to buy in...the principal doesn’t want us taking the kids through paths in the woods and seeing what we shouldn’t see.” Another teacher said, “I don’t want to be on a field trip and have a kid get hit by a car.” Teachers need administrative support to do Groundswell projects: “we need more staff to watch the kids when we take them outside” because “it’s easier to have a low student-to-adult ratio to keep them corralled.”

### Other Barriers

Teachers and partners specifically mentioned a few other barriers. These barriers are things like shortage of resources, lack of communication, lack of transparency, unclear expectations, and language barriers.

- “We got denied for funding for some gardening equipment [to start a rain garden] when we have nothing...we need to build a supply [of tools].”
- “What we’re looking for in a partner doesn’t really exist near our school.”
- “Groundswell staff are often working too many hours, not getting paid enough, but they’ve grown a lot but we still don’t know exactly what the relationships should be.”
- “I haven’t been in a classroom doing something while a Groundswell person is there...it seems kind of disconnected...I don’t know how much Groundswell people go out to the schools, are they out there recruiting volunteers?”
- “I don’t feel like there’s a feeling of membership being part of Groundswell...it’s unclear who’s involved and who isn’t.”
- “Sometimes, ELS students are a challenge for PBE...there aren’t many language materials to support a project like this.”

Therefore, many barriers can prevent teachers and partners from implementing PBE for students.

### *Opportunities for Improvement*

Both teachers and community partners had suggests for ways in which Groundswell can better support them. These suggestions include continuing the making improvements from what they hear about teacher and partner needs, making information and resources more available, making it easier to match teachers to community partners, updating PD topics, adjusting the Groundswell timeline, finding more funding sources, and being clearer about expectations and roles.

Teachers and partners agree that Groundswell is doing a good job listening to their needs and making improvements accordingly. A teacher said, “I’m glad Groundswell is taking the time to listen, I appreciate that they’re trying to be better.” They all mentioned that adding the Groundswell consultant was an example of this. “Groundswell listened to our needs when they hired [the consultant],” and “[Groundswell] saw a gap and they jumped right in to fill it.” One teacher said, “I think the addition of consultants is fantastic...they are a great layer of support.” A partner said, “I think the liaison they hired is great because she helps with extra communication.” Therefore, Groundswell should keep the consultants and continue listening and responding to teacher and partner needs.

Teachers and partners need more clarity of and access to the information and resources available to them. Teachers suggested that Groundswell create one large, easily-accessible database for this information. One teacher said, “It would be really helpful if we had a list of resources willing to come on school grounds to give presentations, and have experts on topics [on the list] who are able to come in to talk to the kids about runoff and erosion and lead us on walks.” Another teacher said, “Maybe if

there was an area for resources...like a Google Drive...where all the information is here and it's, like, a working list of community partners, so it's not just an email that gets lost and it's an easily-accessible database," and "There could probably be a Google Doc with cost [of invasive species] and like, providers to help with projects." Additionally, "maybe they could have like a bank of project ideas to look at when trying to come up with a project." One partner said, "[Groundswell needs] to have a clear definition of who's a Groundswell teacher and who's a community partner." He continued, "Who are all of the Groundswell teachers? Maybe Groundswell could give us a list so we [as community partners] know who we're working with."

As a result of being unsure who exactly in the community is involved with Groundswell, teachers and partners have trouble finding partnerships for Groundswell projects. One teacher said, "We did the proposal ourselves, and it was on us to figure out where to go to find a community partner...I didn't know who to get involved." Another teacher said, "Groundswell could do a better job of selling us as teachers to the community." Another teacher explained her difficulty with finding a partner: "we connected with our community partner a little late in the process...it was kinda weird to ask the community to get involved when we had already figured stuff out...it's like, "we've decided everything and are doing this, wanna help? It just didn't feel very collaborative." Teachers and partners said that it is important to link teachers to community partners sooner than later: "it's helpful to have a community partner involved early on, like as the first steps instead of after a project is almost done." One teacher said, "They have great community partners available but it's frustrating that they can't help [match us up] more," however, another teacher said that "it would be hard to be forced into a community partnership that wasn't right." Therefore, teachers suggested that "Groundswell could offer more specific suggestions on who to partner with that does what." A partner suggested that "it would be helpful if Groundswell held an event...a speed dating kind of thing at the very beginning of the year." Overall, "Groundswell shouldn't do all the ground work, but they can help get [the project or the partnership] off the ground."

Teachers and partners suggested that Groundswell incorporate more PBE project help in the PD it offers. One partner said, "The PDs are great, they're nice but they often lack depth...the PDs seem to give teachers the fish instead of teaching them to fish themselves." Another partner said, "I really thought the Social Media Dinner was great because we got to talk to teachers at the same tables." Therefore, while some PD is useful, it would be helpful if other PD incorporated more PBE: "We're getting a lot of content right now [in PDs], and newer teachers haven't really gotten the chance to see people teaching outdoors." Teachers and partners suggested the following in updating PD topics:

- "Maybe offer some PDs about potential project ideas and look at what can be done to improve those"

- “It would be helpful to have an actual PBE lesson experience in our PD helping teachers”
- “[The PDs] were great when we’d spend an hour learning how to use the outdoors as our classrooms”
- “Maybe they could have a PBE 101 session for new teachers to PBE, having more people who’ve done it as a panel to talk to”
- “Maybe they could run like a grad course, in Groundswell 101, where the teachers run the PD”

Teachers and partners agree that the current Groundswell timeline can be a challenge. Therefore, teachers and partners suggested that some adjustments be made. “I think they need to make the Groundswell schedule more flexible to better fit the school schedule.” First, teachers and partners want Groundswell’s schedule to start sooner: “if we would have had an earlier deadline or approval date and maybe a clearer picture of what we’re doing ahead of time, it would be easier,” “if [community partners] and Groundswell collaborate to set up times and ideas as early as September or October, it would be easier to plan a project sooner,” and “the teachers need to apply and get streamlined information much earlier in the year, like at the beginning.” Then, teachers and partners suggested that the Showcase be pushed back to allow the projects to be completed in time: “Groundswell always holds the Showcase in May when the teachers aren’t even done with their projects yet, maybe it could be two weeks later or something.”

Teachers and partners need more clarity and flexibility when it comes to funding sources. One partner said, “I think it would be better for Groundswell to have clearer grant expectations and information...we need to know specific grant requirements because that limits the projects we can do.” One teacher said, “Maybe Groundswell could find less-specific grants to allow schools more freedom in their projects.” A partner explained, “It would be helpful if Groundswell could apply for broader grants with broader guidelines” because as “the grant funding allows us to operate...[the grants] are too specific, they need diversity.” Therefore, one partner said, “I don’t know how Groundswell can lobby for more funding but I think they could try.” Groundswell should be clearer about its grant expectations, then, and provide more information on alternative funding sources.

Finally, teachers and partners expressed difficulty in understanding what their roles and expectations are as being involved with Groundswell, particularly partners. One partner said, “Is that our job to come up with a project? It shouldn’t be our job as community partners to come up with projects.” Therefore, “[Groundswell] should be real clear what [they] want people to do and what’s expected of them [as community partners]” and as teachers. Groundswell needs “better clarity of where [it’s] going, what our goals as community partners are and how to reach them,” and as a result, partners “think we need some improved communication...let’s all get in the conversation.”

Overall, Groundswell teachers and partners agree that Groundswell is already doing a great job in supporting them, but Groundswell could use these suggestions to provide even better support to its teachers and partners.

### *Key Findings*

From the teacher interviews, it was found that Groundswell teachers have a strong understanding of PBE. While teachers find it difficult to implement PBE in their classrooms, they know that PBE has a large positive impact on students including increased student engagement and awareness. Teachers struggle with finding projects and identifying community partners with whom projects align well—they are unsure of who needs to be responsible in coming up with projects, making the connections with partners, and building those relationships. Teachers think Groundswell PDs are useful, however, they are hard to attend due to a sub-shortage. Teachers need to be better communicated with as many are unaware of where to find information which is available to them. Without Groundswell support, teachers would be unable to incorporate PBE in their classes due to a lack of time, funding, and community support.

From the partner interviews, it was found that Groundswell has a strong community presence which it uses to build partnerships between teachers and students. These partnerships are valued by community partners and they help community partners fulfill their missions and educate more students and families about issues in their local environments. Partners see Groundswell as a great resource for making more community connections providing funding and support for PBE projects, but sometimes the specificity of the grants by which Groundswell is funded can be limiting in completing PBE projects. Additionally, partners say that they are often unsure of what their roles are as Groundswell partners and unsure about who else in the community is a Groundswell partner. See Figure 3 for a visualization of these key findings from the teacher and partner interviews.

## Key Findings from Teacher and Partner Interviews

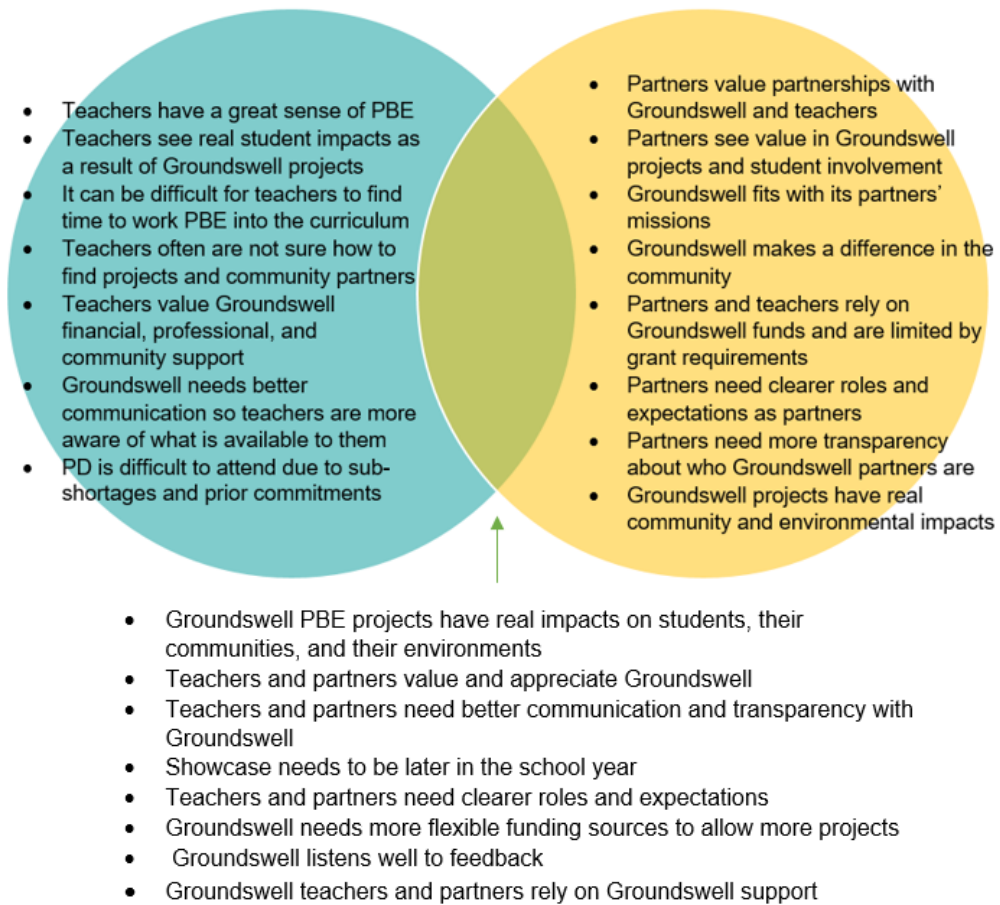


Figure 3: A Venn diagram of key findings from teacher and partner interviews



## Recommendations

From this evaluation, data were gathered on how Groundswell is doing and how it can improve. The resulting recommendations for improvement are as follows.

This evaluation found that teachers and partners often were unsure of exactly what information and resources were available to them, including lists of previous projects, lists of Groundswell community partners, and more. Therefore, Groundswell should provide teachers and partners with better communication and transparency as to clarify what is available to them, who else is part of Groundswell, and information on previous Groundswell projects.

Groundswell teachers and partners were often unsure of their roles and responsibilities being involved with Groundswell. Whose responsibility is it to come up with projects? How engaged are community partners expected to be with teachers and other partners? To answer these questions, Groundswell should create a guide for teachers and partners which specifically lays out the expected responsibilities of teachers and partners as being part of Groundswell.

Teachers said that they often struggled to find projects to do. Therefore, Groundswell should provide teachers with support in finding PBE projects.

Teachers and partners expressed that timing can be a barrier for PBE implementation and suggested that the Groundswell timeline be adjusted accordingly. Therefore, Groundswell should better align its deadlines for teachers and partners with the school year schedule, including the date of the Showcase which should be later in the year.

Groundswell teachers and partners expressed that grant requirements often limit project topics and community partner involvement. Therefore, Groundswell should seek out additional funding sources as to remove the limitations which the current funding sources have on project possibilities.

Groundswell received a large amount of positive feedback from adding the “consultant,” or “liaison” to provide extra support for teachers. Teachers and partners agreed that this was a result of Groundswell’s willingness to listen to the needs of its teachers and partners and act accordingly. Therefore, Groundswell should continue listening to these needs and making improvements accordingly.

## Conclusion

The purpose of this evaluation was to explore how well Groundswell is fulfilling its mission to “support educators, engage students, and build partnerships.” In this, it was important to explore how Groundswell is encouraging PBE in its classrooms and how well it is supporting its teachers and community partners in doing so. This evaluation found that Groundswell supports teachers in completing PBE projects through funding, education, and community support. It was found that without Groundswell support, PBE likely would not take place in these classrooms. PBE projects were found to engage students and increase their awareness of environmental issues, encouraging them to be stewards for the environment while making real impacts. Groundswell community partners value their involvement with Groundswell, saying that Groundswell gives them the access to teachers and students that they need to help make connections and fulfil their missions. Therefore, while teachers and partners have made suggestions for how Groundswell can improve, ultimately, they are thankful for Groundswell’s support as it has proved to have real, place-based environmental and community impacts.

For future research, Groundswell might consider finding a way to better gauge PD participation and its effects on Groundswell classrooms. It could begin doing so by defining indication factors of PD participation, including school, race, the number of Groundswell teachers at each school, times PDs are offered, etc. Additionally, Groundswell might want to better measure student impacts from the students themselves.

## Appendix

### Teacher Interview Questions

Name of teacher\_\_\_\_

School\_\_\_\_

Grade level\_\_\_\_

Subject\_\_

Years of experience\_\_\_\_

What is your definition of PBE ?

How did you come to know about it? How did you get involved?

How do you implement PBE into your classroom? Specific examples/stories

What are some of the benefits that you have noticed to PBE ?

For you

For students

For the community

What are some of the challenges of PBE in your classroom/grade level/school?

\*\* Probe for Administrator, parent, community, other teachers in the school, resources – time, money, focus on standardized tests, Competing initiatives? And so on

Which community organization are you partnered with? What is the nature of your community partnership relationship?

Could you tell me a little about the nature of the involvement of the community partner in your PBE project?

Benefits

Challenges

What is GW's role in PBE and community partnerships[M9] ?

What does it do well in supporting you?

What can it do better?

Overall perceptions of GW

## Partner Interview Questions

Name of organization

Position/Role of the person with whom you are speaking

How long has (a) person and (b) the organization been involved in Groundswell?

How did your organization become a GW partner?

Schools/teachers with whom they partner

What is your role as a GW partner?

Could you talk about the nature of the support you provide to schools? Teachers?

\*\*Role in project, etc.

How engaged are you with GW teachers and students? How much time? Type of resources you provide?

Benefits of engagement

For you

Teachers?

For students

For community

Challenges of engagement

For you

Teachers?

For students

For community

What are the benefits of being a GW partner?

What are some of the Challenges you have encountered in your role as a Groundswell partner?

What has GW's role been in creating, building, and sustaining these partnerships with teachers?

What are some ways in which Groundswell has been supportive in meeting your organization's mission and objectives?

Overall perceptions of GW

