



# SACRAMENTO SPLASH

## ANNUAL REPORT FY 2020-21



# Sacramento Splash Annual Report for FY 2020-21

## Introduction

This annual report summarizes work performed during FY 2020-21 by Sacramento Splash (Splash) for the purposes of meeting the Watershed and Stormwater Pollution Prevention Education and Outreach requirements for several local municipalities across Sacramento and El Dorado Counties and the Sacramento Stormwater Quality Partnership (SSQP). Sacramento Splash provided the: *Life in Our Watershed: Investigating Vernal Pools Program* ("Elementary Program") to 101 classes at schools within the County of Sacramento and 262 in-class presentations of: *Splash in the Class* ("SITC") within Sacramento and El Dorado Counties.

## Elementary Program Description

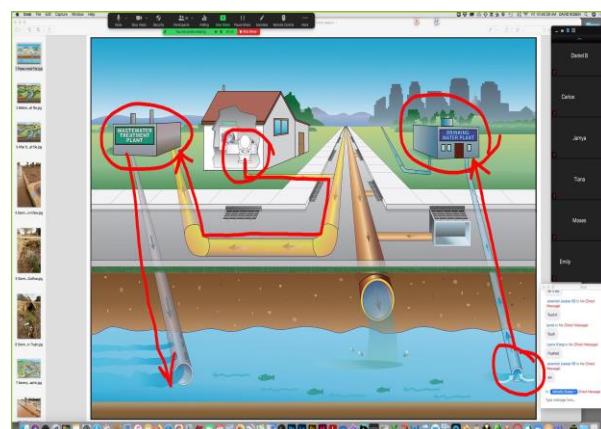
The Elementary Program integrates a 13-lesson science curriculum with a culminating field trip to the Splash Science and Education Center and vernal pools at Mather Field. It is a shining example of place-based education which brings the lessons taught in the classroom to life, becoming an experience the students remember forever. Splash focuses on the biological diversity that flourishes in clean water and how to protect aquatic organisms by preventing stormwater pollution. The region's water quality messages come wrapped in an easy-to-teach and fun-to-learn science curriculum, which opens hearts and minds. The high-quality curriculum and field trip are valued by teachers and students because they are educational, interactive, and engaging.

Splash developed a guide that outlines how our latest version (4.1) curriculum applies and fulfills Next Generation Science Standards (NGSS). We have also aligned each lesson to ELA (English), History-Social Science and Common Core Math standards.

<https://sacsplash.org/wp-content/uploads/Splash-Curriculum-Standards-Alignment-2020.pdf>

## Splash in the Class Program Description

A 60-minute interactive presentation is a fun way to teach students how to take care of their local environment. Splash presenters cover the aquatic food web and pollution prevention using colorful graphics, videos, and a fun experiment. Students discover the importance of our local creeks and rivers in supporting a whole ecosystem of species that, like us, need clean water to live, how some of their everyday activities can cause water pollution, and what they each can do to become the solution! Having learned about the diversity of life in our local streams, the concepts they learn become more personal for the students, and they frequently share their excitement and learnings at home.



## Program Delivery & Funding Sources

In FY 2020-21, a portion of the cost to deliver the Elementary and SITC Programs throughout Sacramento and El Dorado Counties was funded by each participating municipality for a specific number of classes. Those municipalities are listed below, and all other classes were supplemented by Splash's private fundraising efforts and sourced by private donors and corporate sponsorships.

Jurisdiction	FY 2020-21 # Classes Delivered		FY 2021-22 # Classes Projected	
	Elementary Program	Splash in the Class	Elementary Program	Splash in the Class
City of Sacramento	29	111	27	111
Sacramento County	19	44	21	45
City of Citrus Heights		5		7
City of Elk Grove	31	7	30	13
City of Folsom	6	6	6	6
City of Rancho Cordova	16	6	16	5
City of Galt		2		2
El Dorado County		23		25
Private Support		58		0
<b>TOTAL</b>	<b>101</b>	<b>262</b>	<b>100</b>	<b>214</b>

Costs for administration of the programs, curriculum development/enhancement, and organizational overhead are split proportionally across funders, lowering the cost to each municipality. Furthermore, as a nonprofit, Splash leverages volunteers, partnerships, and relationships with public and private entities to achieve greater impact. The in-kind goods and services that flow from these relationships further reduce the expense of Splash programs to funders.

Income	% of Income
Government	62%
Other Contracts	7%
Corporate Sponsors	10%
Individual Donors	21%
Program Fees	0%

Expenses	% of Expenses
Program: Elementary	46%
Program: SITC	8%
General & Administrative	46%

## Challenges Overcome

**COVID-19:** Due to the pandemic, Splash committed to adapting its existing curriculum to meet the needs of the region's teachers and students by accommodating Distance Learning (DL). Virtual platforms and applications like Google Classrooms, Microsoft Teams, Zoom, Google Drive, EdPuzzle, Nearpod, YouTube, and more were being used by teachers, some with very little experience. With Splash's STEM knowledge we were able to guide them through their virtual resources and find ways to make every material or virtual presentation accessible to them.

**Elementary Program:** Splash digitized its 13-lesson curriculum so it could be accessed online working symbiotically with our 100+ teachers' virtual classrooms. We provided an online teacher toolbox, virtual field trips, interactive videos correlated to the lessons, EdPuzzle activity videos, fillable student worksheets and collaborative whiteboards in Google Workspace/Jamboard, Flipgrid, digital copies of curriculum binders, updated NGSS curriculum alignment information, digital critter and plant resources for students, and step-by-step instructions with links to make it simple for teachers to deliver the curriculum. We also provided "Live from Criterville" sessions introducing students to our rescued wildlife ambassadors. We livestreamed a "Fairy Shrimp Webcam," enabling students to watch these delicate critters hatch and grow in real-time, since they couldn't have them in-class. Splash hosted five one-hour Teacher Training Workshops on Zoom for new and returning teachers, ensuring teachers knew we were here to support them. We enrolled 32 schools and 101 classes, providing access to all our virtual resources. Due to the time and effort committed to transforming to the DL environment, we were unable to conduct teacher

evaluations, but we received a tremendous amount of feedback from teachers and students (a few sample testimonials can be found on the last page).

We closed the season out with a wrap-up Zoom call with available teachers to listen to their feedback and better understand what worked well and what didn't in this very different and challenging year.

The screenshot shows a Google Drive folder named 'Splash Teacher Toolbox'. Inside, there are several sub-folders and files:

- Folders:**
  - Critter Photo Cards (JPEG)
  - CURRICULUM BINDERS
  - FAIRY SHRIMP CAM (Lesson...)
  - LESSON 1
  - LESSONS 6-8
  - MICROLIFE OF VERNAL POO...
  - PHOTO RELEASES & STAND...
  - Splash Flower Facts (jpeg im...)
  - Splash Virtual Field Trip!
  - START HERE
  - STUDENT PAGES IN PDF
  - STUDENT PAGES IN SLIDES
  - STUDENT THANK YOU NOTES
- Files:**
  - Life in Our Watershed** (Investigating Vernal Pools): A PDF manual with a cover image showing a landscape with a pond and trees. It includes sections like 'WHAT IS A VERNAL POOL?' and 'INVESTIGATING VERNAL POOLS'.
  - Splash Teachers Manual.pdf**: A PDF file.
  - WELCOME! READ ME!**: A PDF file.

**Splash in the Class:** Splash transformed the in-person presentations to accommodate DL, while maintaining their interactive approach and applying DL best practices to ensure clarity and student engagement. The first challenge was that each school district selected its own DL platform, so Splash presenters had to become comfortable with Zoom, MS Teams, and Google Meet to deliver the program effectively and smoothly to all classes. Many of the presentations that were scheduled for later in the school year faced the added challenge of students attending under a hybrid model, with some students in the classroom and others at home. Splash ensured everyone could see and participate. With online delivery, we did not need to schedule 2-3 sessions per day at a given school, so we implemented an online scheduling tool, improving efficiency. We also accommodated more classes than in a typical year, without the need to drive to schools.

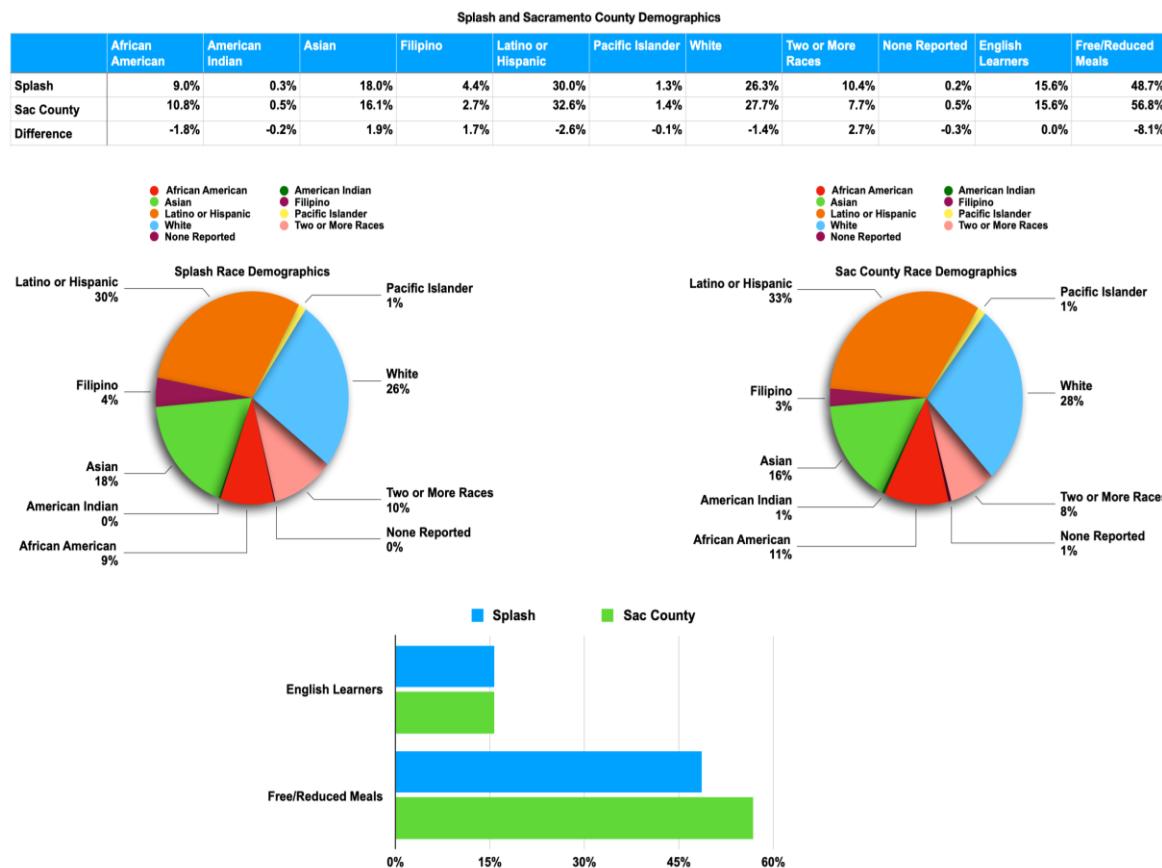
We were happy to receive a great deal of feedback directly from students and teachers, which was overwhelmingly positive (see results of teacher evaluations below and sample testimonials on the last page).

SITC Presentation Ratings by Teachers	1 (Strongly Disagree)	2 (Disagree)	3 (Neutral)	4 (Agree)	5 (Strongly Agree)
The scheduling process was easy and efficient.			less than 1%	6%	93%
Overall content of the presentation was fantastic.				8%	92%
Overall delivery of the presentation was fantastic.				6%	94%
The presentation was fun and engaging for my students.		less than 1%	less than 1%	18%	80%
The presentation was educational and grade-level appropriate.			less than 1%	14%	85%
The presentation helped me meet certain standards for instruction.			4%	16%	80%
The presentation helped my students understand the stream ecosystem.				14%	86%
The presentation motivated my students to use what they learned to prevent water pollution.				13%	87%
The presentation empowered my students to teach others how to protect water quality.			2%	16%	82%
I would recommend this program to other teachers.			less than 1%	7%	92%

**Outreach Events:** Splash hosted a booth at Effie Yeaw's Owl-O-Ween event and the City of Rancho Cordova's Kid's Day. These events provide a wonderful opportunity for extra outreach to some of the communities we serve. We share information about protection of watersheds and natural habitats nearby and children of all ages get to meet a few of our animal ambassadors.

## Population Served

By supporting Splash, the Sacramento region's municipalities are reaching thousands of families through their children at local public schools. Many of these families represent hard-to-reach populations who would otherwise likely not receive such education and outreach. The table below shows how well the participating classes closely mirror the ethnic and socio-economic diversity of Sacramento County public schools as a whole. This is one of the greatest advantages of working through local schools.

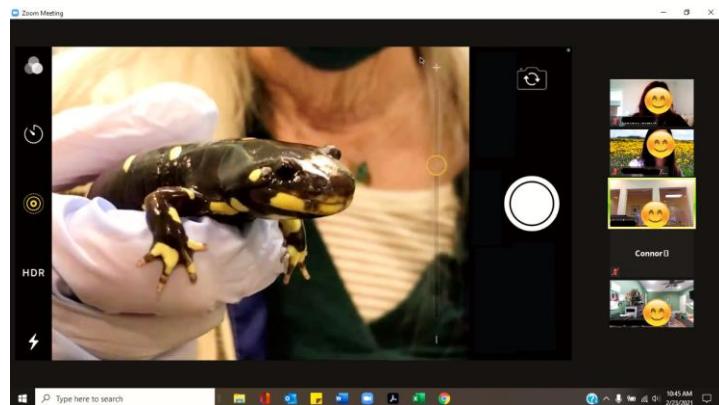


## **The Splash Science and Education Center - A Regional Resource for Watershed Education**

Facility Operations & Maintenance (O&M): In 2020-21, Splash staff worked with the owner of the Splash Education Center property, Sacramento County Office of Economic Development (Economic Development), to repair and maintain the property. In all cases, Splash solicited quotes from contractors, submitted them to Economic Devt for approval, and then oversaw completion of the work. In addition to coordinating professional maintenance and repair work on the Splash Education Center, Splash ensured year-round maintenance of the building's educational resources, storage areas, offices, critter room, and water-wise landscape, with volunteers.

Live Animal Care & Feeding: Since many of the critters that the students study are only occasionally seen in the wild, Critterville is an essential feature of the Elementary Program and the highlight for many students. All our animals have been rescued and/or rehabilitated and are not releasable into the wild. In Critterville many students bond with local wildlife and connect with animals that would otherwise be hard to observe in the field. They are very much a part of the food web and the students who have studied them are thrilled to meet them in Critterville.

This year Critterville was a highlight of our Splash DL program. We held 60-90 minute "Live from Critterville" presentations with our classes. With the help of technology, we were able to share animals up close and in great detail for every student to see, in contrast to past in-person visits to Critterville which had some students seeing the animals better than others, depending on where they sat. Many teachers said they would love to continue this format in the future.



Permitting: This past year the Splash Critter Keeper continued to coordinate and deliver care for the resident animals in Critterville. She also oversaw the extensive permitting required to house native wildlife for educational purposes. Splash successfully passed both the annual and "surprise" inspections by the USDA and the California Department of Fish & Wildlife.

### **New Programs Coming in FY 2021-22**

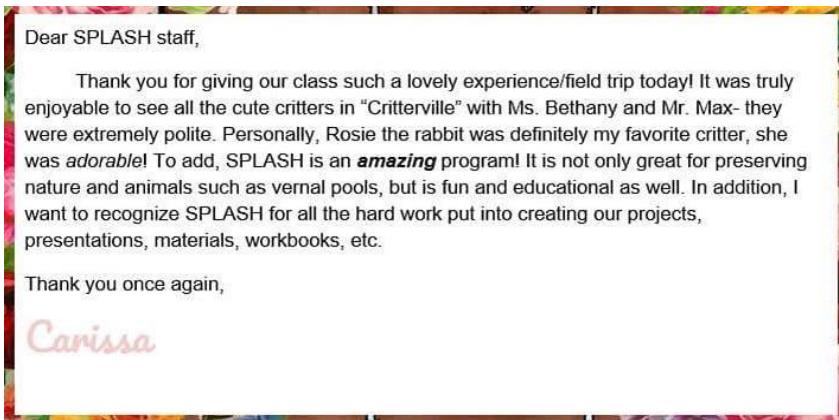
In the coming year, Splash will be launching two new programs. The first, in partnership with Sacramento County Regional Sanitation District, is "Project AWE," focusing on Agriculture, Water, Energy, and the Environment and combining curriculum that covers science, history, and writing. This program's field trips will be held at the historic Nicolaus Dairy Farm in Elk Grove. The second program is an immersive summer camp called, "Youth Environmental Leadership Camp." Campers will become change agents who design and implement climate-smart solutions aimed at improving air/water quality and/or natural habitats where they live, while also learning about project management, budgeting, and implementation through the support of mentors and staff.

## Sample Testimonials

"These resources and directions, etc., are FANTASTIC! Thank you ever so much for this. Talk about thinking outside the box!!! You and the other SPLASH folks have outdone yourselves. Thank you, thank you." -Beth Conklin, 4th grade teacher, Golden Empire Elem., SCUSD

"The presentation was informative and fun. I could tell our presenter was passionate about what she was teaching. Love this program and so do the students. We are so appreciative that you brought the program to us online. So many of the fun parts of school have been cancelled this year, so having this was really special! Do not miss out on this opportunity to bring Splash to your classroom. Your students will welcome the break from the routines of DL and the Covid protocols classroom." -Christine Yukimoto, 5th grade teacher, Peter J. Shields Elem., FCUSD

"I have been attending Splash as a teacher for 9 years and I love visiting Critterville in person, but this presentation was incredible. It was intimate, even though it was virtual. We were able to have more time and see more details than we would be able to do live. The students were completely engaged. I even learned something new about the California Tiger Salamander. I think that this presentation could even be a good option for when we return to in person learning and are able to attend field trips at Splash." -Janine Johnson, 4th grade teacher, Golden Empire Elem., SCUSD

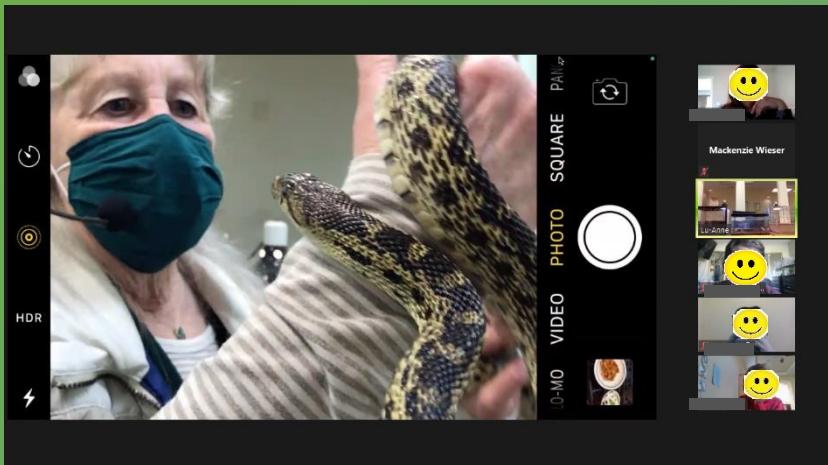


Carissa, 5th grade student, Arlene Hein Elem., EGUSD

"This program tied in beautifully with 5th grade science standards...web of life, water, and even our regional environmental studies. Splash was the perfect way to tie in my 5th grade science standards with real life applications. My students enjoyed seeing yet another example of how our world is so interconnected. Pat was incredibly positive, engaging, and knowledgeable. She did an awesome job!" -Cheryl Romig, 5th grade teacher, Gold Trail Union Elem., GTUSD

"I have participated in this program for many years. I was afraid it wouldn't be as good with an online Zoom presentation instead of a classroom visit (as in previous years), but it was fantastic! I hope funding continues and I get to have you visit my class for years to come. Thank you for all the work you do to provide these fun educational lessons. This presentation kept my most defiant students engaged and got them excited to learn about science! I think your program Rocks! Thanks for coming to New Joseph Bonnheim again!" -Becky Van Nest, 4th grade teacher, New Joseph Bonnheim Elem., SCUSD

"The presentation aligned with our 5th grade NGSS science related to matter in ecosystems. One area of the NGSS standards that we strive to engage with is the human impact on our world. The Splash in the Class presentation gave my students a chance to apply what they had learned about a healthy ecosystem to our very own local streams and waterways. Students were inspired by the presentation, coming away with not only a deeper understanding of their connection to the environment, but an interest in finding creative solutions to keep our watershed healthy and clean." -Kellie Hoover, 5th grade teacher, Blue Oak Elem., BUESD



SPLASH IS  
TREMENDOUSLY  
GRATEFUL FOR  
THE CONTINUED  
SUPPORT.

