

# 2017Annual Report

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www.envirolution.org



In addition to empowering students with the knowledge and skills that enable them to provide recommendations for energy savings in our buildings, Our students are learning real world skills that can be applied to many careers and during their lifetimes as environmentally-aware adults.

—Kindra Fox, Director of Curriculum and Instruction for the Washoe County School District.



Project ReCharge is a valuable program in teaching our students about the new energy future by allowing them a hands-on education to understand how energy works and inspiring them to take control. 77

—Jason Geddes, Washoe County School District Sustainability and Energy Efficiency Program Manager







# Who We Are

Envirolution is a sustainability education, leadership and career development 501(c)(3) nonprofit organization. Our mission is to inspire and empower the next generation of leaders and workers who will drive the growth of a sustainable economy.

# What We Do

Envirolution is dedicated to developing and scaling dynamic K-12 education, youth leadership development, and community outreach programs centered around energy efficiency, sustainability, and Science, Technology, Engineering and Math (STEM) career development. With a focus on hands-on service learning, our programs not only provide career development for students, but also enable our participants to give back to their communities.

## **Envirolution Community,**

On behalf of the Envirolution staff, and our Board of Directors, we are excited to present our accomplishments in this 2017 Annual Report.

First and foremost, we are pleased to acknowledge the continuing success of our flagship program, Project ReCharge. Building off of initiatives first realized in 2015, PRC was able to reach new and commendable levels of student engagement, teacher support, and community impact. Funded by the National Science Foundation and Nevada Department of Education's Math, Science Partnership grant and in partnership with the University of Nevada-Reno's College of Education and Washoe County School District, PRC 's STEM energy efficiency education program has enabled Envirolution to partner in total with 22 middle and high schools in 5 school districts, train 75 teachers, engage 6,000 students who are helping to save the school district over \$48,000 every year.

Growth, though, is always accompanied by change. STEM has never been a more important initiative, as evidenced by studies published by the Smithsonian Science Education Center, among others, where it is said that as many as 78% of high school graduates are not prepared for college level science courses. With a workforce very much in need of educated, dedicated professionals, Envirolution sees a way to address the gap. As we conclude the funding provided by the State of Nevada Math and Science Partnership grant and we seek long term partnerships with the business/NGO community, we invite you to reach out to learn more about PRC and how to get involved. The effort to find long-term funding has been significant, and we look forward to announcing new partnerships with Tesla, NV Energy, and others. The future promises other developments as well, including an upgrade to our popular Sustainability Tour.

In my second year as Executive Director, I have been humbled by both the success of Envirolution and the support provided by our partners, staff and especially the teachers we strive to help. Keeping in mind the impact we have already had on northern Nevada's youth - and the even greater impact we will have as we continue to expand - we ask that you help us grow our community support by sharing our efforts with friends and family. Thank you!

Vanessa Robertson, M.A.

**Executive Director** 

# 2017 PROGRAMS



This was truly

amazing professional learning--thank you so much for this invaluable opportunity!!

Looking forward to teaching these units this year,

-Teachers after 2017 PD

#### PROJECT RECHARGE

An interactive STEM energy efficiency education and training program that engages students, and teachers while having measurable impacts on the environment and community.

Valuable professional development, curriculum and classroom resources are provided to teachers who then empower middle and high school students, through inquiry based STEM lessons, to become energy detectives focused on saving their school money through energy saving recommendations.

#### 4 New Partner Schools, 1 New School District

- Cold Springs MS, Vaughn MS, Douglas HS, Pau wa lu MS and Douglas County School District
- **20 New Teachers** together received over 1,000 hours of Professional Development Training.
- **2,023** New Students engaged with hands on STEM-based lessons and activities

33% increase in student content knowledge \$53,000 Worth of Classroom Materials and resources were provided to teachers!

One new student driven proposal from North Valleys High School will reduce the school's energy use by **7,772 kWh** every year, helping to save over **\$1,000 dollars** while also reducing their carbon emissions by **6,551 lbs**.

Launched an interactive teacher website to facilitate the growing number of teachers adopting Project ReCharge and provide them easy access to curriculum, materials and updates.













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I really

appreciated the time to confer with co-workers to begin developing an action plan for implementation of the project at our school.

— Teacher after 2017 PD

# 2017 PROGRAMS (continued)



# SUSTAINABILITY TOUR

An exciting - five day tour for Northern Nevada youth to visit Reno organizations to explore green careers, environmentally friendly practices, and the local sustainability movement. Conducted during the Washoe County School District breaks, students are given an experiential learning opportunity that builds on topics learned in school.

# **Program Refinement:**

Evaluation and feedback from the 2016 Sustainability Tour provided our team with valuable information that led us to move our tour from fall break of 2017 to spring break of 2018. This shift will give us four months to begin the tour planning process and at least two months for recruitment.

Let the Planning Begin! During 2017, we received a commitment from the following organizations for our Spring 2018 tour: Tesla Gigafactory, Lockwood Landfill, Ormat, Desert Research Institute, Oxbow Nature Park, Patagonia, the River School Farm, KTMB and Great Basin Community Food Co-op. This is a great lineup for our next tour!









# PARTNERSHIPS AND COLLABORATIONS

We want to give a special THANK YOU to our community partners for 2017!

# KTMB Adopt-a-Spot

In 2017, Envirolution continued its community partnership with KTMB and conducted 3 cleanups at its adopted Pickett Park. In all, there were approx. 40 volunteers donating 80 volunteer hours!



# **University of Nevada Reno**

In 2017, Envirolution engaged four (4) UNR students. Caitlyn Lynch was our social media intern for the better part of a year, posting nearly 100 Facebook, Twitter and Pinterest posts. Olivia Fox contributed time assisting with special events and computing energy bills. In the fall, we sponsored two UNR honors students: Michelle Werdann and Connor Bates who contributed 15 volunteer hours each.



#### **GREENevada**

Envirolution contributes to a local collaborative of more than 20 sustainability organizations, who now host the annual Golden Pinecone Sustainability Awards: a community recognition event for individuals and organizations making significant contributions towards sustainability in Truckee Meadows.



# **FUNDERS**

# The National Science Foundation

Nevada Dept of Education

**GRANT REVENUE:** Government: \$228,493 | Public: \$83,067 | ndividuals/Business: \$2,291 **EXPENDITURES:** 93% to Programmatic Expenses | 7% to Admin/Other

# IN THE MEDIA



May 31 teacher appreciation event covered in the Northern Nevada Business Weekly on June 12, 2017



Media coverage from KTVN Channel 2 news segment on May 31 event (students)



Media coverage from KTVN Channel 2 news segment on May 31 event (Vanessa) Robertson)

# **NEVADA**Today

Project ReCharge celebrates energy proposals from students and teachers (The program shows positive results in its third year of bringing energy conservation knowledge into schools)

# 2017 OUTLOOK AND GOALS

**Sustainable expansion is our motto for 2018:** financial sustainability as well as programmatic and organizational sustainability. Efforts will be focused on securing the necessary partners and funders that will allow us to bring our educational programs and the impacts they have to more northern Nevada youth.

## PROJECT RECHARGE

Completion of the Nevada Math Science Partnership (MSP) Grant

- Secure a major new funding partner to further STEM education in Nevada
- Partner with 4 new schools and 1 new school district
- Provide 20 new teachers with valuable curriculum, classroom resources and over 1,000 hours of professional development of energy saving proposals.
- Engage 1,500+ students with hands-on interactive STEM energy lessons
- Assist students with the development and implementation of energy saving proposal.

# SUSTAINABILITY TOUR

We moved our tour from fall break to spring break 2018, which will give us more time to promote the event and to allow us to better leverage Project ReCharge teachers and students.

Our 2018 Tour Goals:

- Enroll 25-30 new students
- Partner with 5 new organizations including Tesla Gigafactory
- Increase interest in sustainability topics and STEM careers by 50% with program participants
- Broaden the number of participating schools including those in Carson City

# IN THE COMMUNITY AND BEYOND

- Host 4 community cleanups at Pickett Park with the goal of recruiting at least 50 new volunteers
- Partner with other GREENevada organizations to host the annual Golden Pinecone Sustainability Awards in 2018
- Attend Green Schools Conference and Expo May 3-4 in Denver and present: Interactive STEM Energy Curriculum for Real World Applications
- Conduct Community-Based Research survey in Nevada to collect primary data on how to broaden and expand Project ReCharge curriculum in other regions in Nevada.
- Participate in three-to-five community outreach events, including school STEM nights and the Annual Earth Day Event.







# **BOARD OF DIRECTORS AND ADVISORS**

Vanessa Robertson M.A.

**Executive Director** 

Alex Gamboa

Co-Founder of Envirolution

Sylvia Scoggin

WCSD K-12 Science Program

Coordinator

Susan Clark Ph.D

COO, Don J Clark Group-Board Chair

Mel Zeldin

**Board Appointed Treasurer** 

Todd Markey M.A.

AP Enviro. Science Teacher,

North Valleys HS

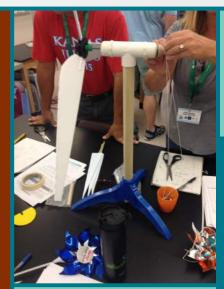
Vicki Bischoff

Vice president, Suncrest Builders



I think it is
important to learn
the fundamentals of
electricity and energy in
order to pave the way to
developing new renewable
energy sources

— Project ReCharge high school student



These lessons
were very helpful.
I have already applied the knowledge to outside problems. I plan to take on engineering as a career

— Project ReCharge high school student



