

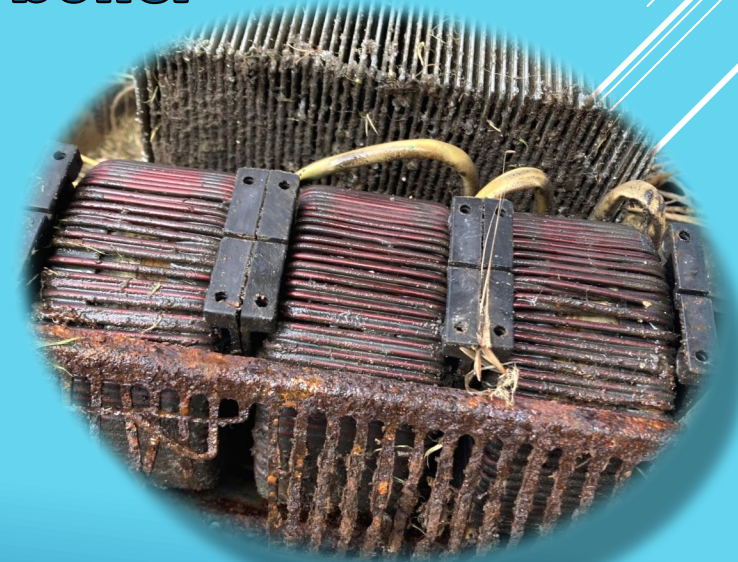
# Pacific Grove High School Swimming Pool

**Past, Present & Future**

Several thin, white, parallel diagonal lines extending from the top right corner towards the bottom left, adding a dynamic element to the blue background.

# WHAT'S GONE WRONG

- Carbon Dioxide Shortage
- Factory Defective Boiler
- Failed Acid Pump
- Failed Variable Frequency Drive
- PG&E Power failure – Single Phasing caused boiler damages
  - Control Board
  - Inducer Fans
  - Boiler ID Chip

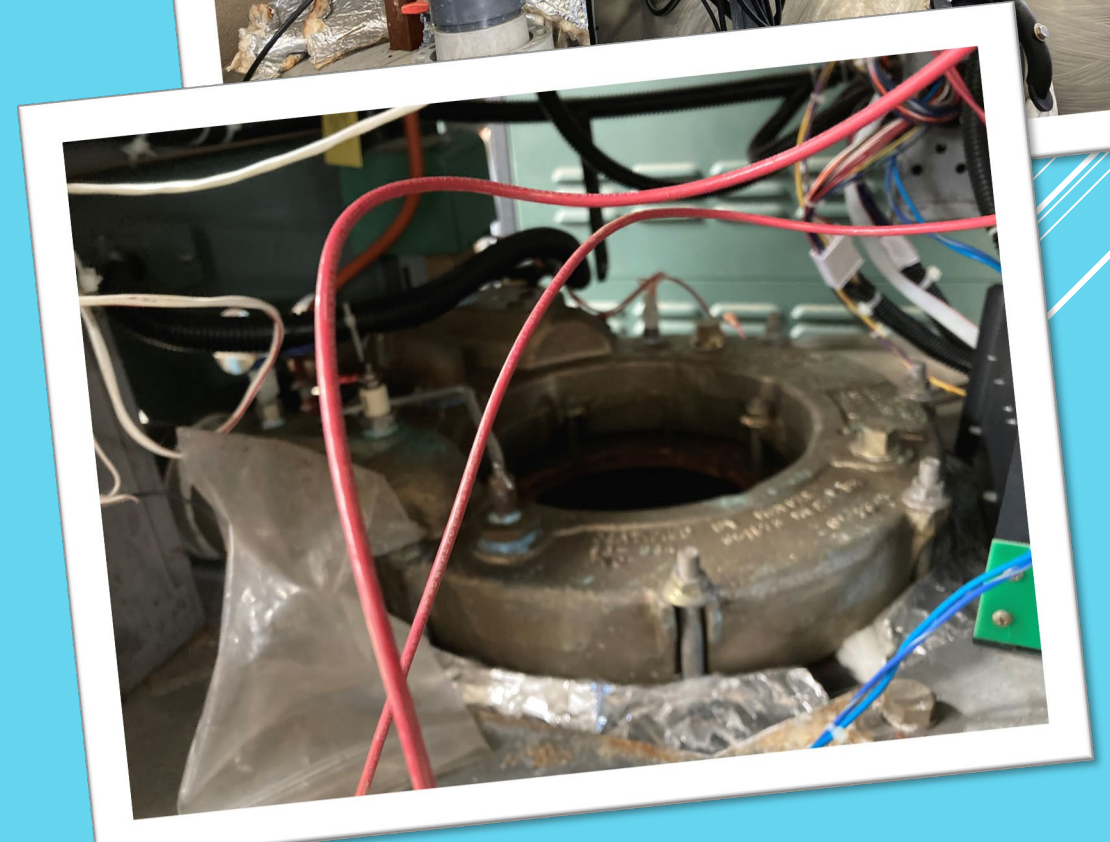
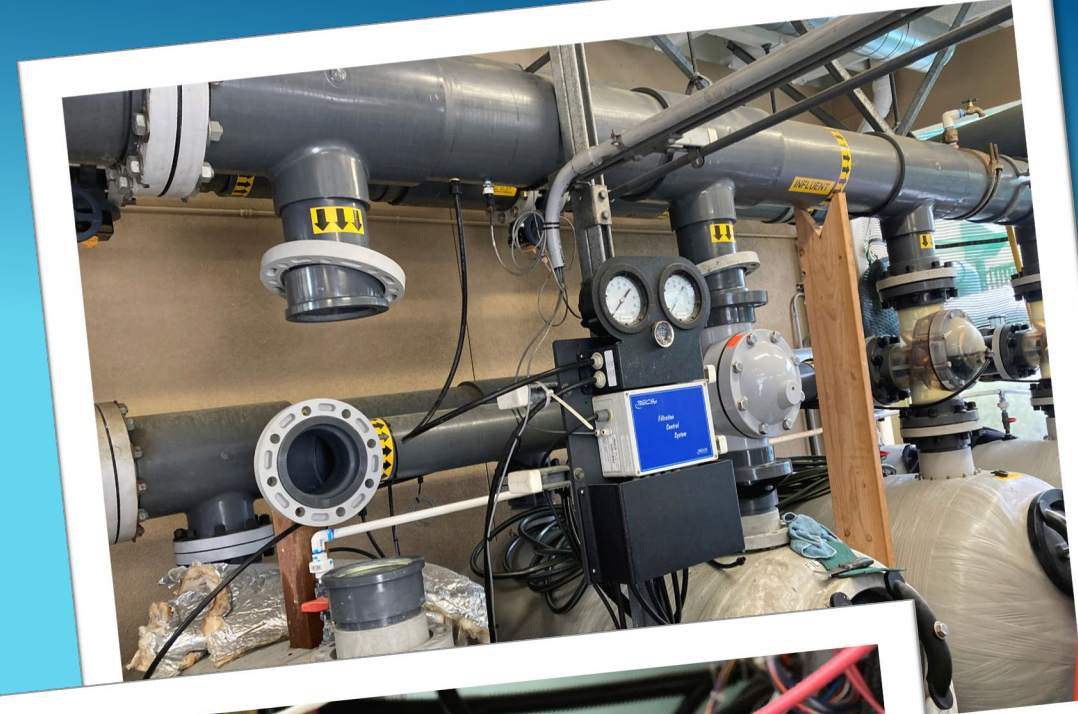




# WHAT WE HAVE DONE

Taking Advantage of a bad situation

- **Replaced Leaky Backflow Valves**
- **Exchanged 137,000 Gallons of Water**
- **Patched Hole & Replaced Broken Tiles**
- **Replaced Failed Acid Pump**
- **Replaced Failed Variable Frequency Drive**
- **Replaced Factory Defective Parts**
- **Replaced Parts Damaged During PG&E Outage**
- **Two Employees Trained as Certified Pool Operators**





# RESULTS

pH Level  
ORP Level  
Free Chlorine  
Temperature

7.55  
785 mV  
3.3 PPM  
80 °F

August 30, 2022 11:30 AM





# A PLAN FOR RESILIENCE

- **Maintenance**
  - **Increased Frequency**
  - **Schedule Maintenance Closures**
- **Modifications**
  - **Structural**
  - **Equipment**
  - **Reduce Overuse**
- **Spares**
  - **On Shelf Parts**

**resilience:**

“an ability to recover from or adjust easily to misfortune or change.”

—Merriam-Webster Dictionary

# MAINTENANCE

- **Increased Backwash Frequency**
  - **Better water quality**
  - **Decreased Total Dissolved Solids (TDS)**
- **Scheduled Maintenance Closures**
  - **Regular Monthly Service**
  - **Twice Annual Closures**
- **Volunteer Assistance**
  - **Pool Brushing**
  - **Deck Cleaning**
  - **Spot Vacuuming**

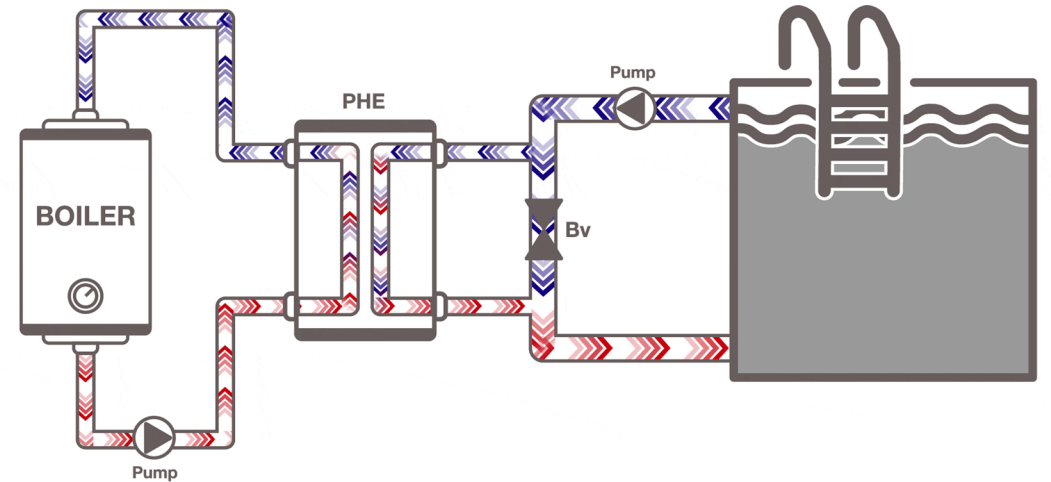


**POOL CLOSED  
FOR  
MAINTENANCE**

# MODIFICATIONS

- Separation of Chemical Storage from Pool Equipment \$5,500
- Improve Pool Equipment Enclosure to Keep Out Elements \$7,500
- Interim Avian Mitigation Measures \$2,500
- Replace Gravel Ballast Roofs with Encapsulation Roofs \$500,000+
- Heat Exchangers \$40,000
- **Total \$555,500+**

All amounts are  
estimations



# SPARES

- Acid Pump \$2,500
- Chlorine Pump \$450
- Variable Frequency Drive \$6,500 (Up to 40 weeks delivery)
- Control Board \$1,250
- Inducer Fan \$3,500
- Pool Pump & Motor \$20,000 to \$25,000
- **Total Cost \$39,200+**



All amounts are  
estimations



# HOW DO WE FUND?

- **Measure D Available Funds**
  - **\$100,000 already spent \$0.00 remaining for pool**
- **Grant Funds \$ TBD**
- **Regular Maintenance Funds**
  - **\$50,000 spent so far**
- **Breaker Club**
  - **Fundraising**
- **Future Projects (Replastering in 2 years)**
  - **Fundraising**
- **A Question of Equity?**
  - **PGMS PAC waiting 15 years for improvements**
  - **Should outside users of our pool be paying more?**

