Santa Clara Valley IPSSA Newsletter



Next General Membership Meeting Thursday, June 16, 2016

santaclaraipssa@gmail.com

Board of Directors

Joe McVeigh - President (408) 249-9731

 David Allen JR – Vice President
 (408) 515-3057

 Nancy Currier - Treasurer
 (408) 893-9481

 Dave Allen SR – Secretary
 (408) 249-9731

Newsletter Email- news@scvipssa.org

PRESIDENT'S MESSAGE

It's SUMMER! What happened to spring?

Now it's 100 degrees the phone is ringing off the hook.

The days are 14 hours long.

This is the pool business.

Tomorrow: Mark Dunlap of Fiber Clear Inc. will be our Guest speaker

This next two months;

July will be Hayward and Ben (field Tech)

Guest Speaking on Hayward Pumps with 3rd party controls and new product promotions

and in August we will have Pentair with a field Tech .

We invited their field techs to answer YOUR Questions about repairs, third party pump installations and any other questions you might have.

Please make the time to be there.

Joe McVeigh

IPSSA Santa Clara

(largest chapter in Bay Area) July meeting Thursday, 7/21 Napredak Hall, 770 Montague Expway Dinner at 6:30pm, Meeting at 7:00pm Volume #25, Issue 8

IPSSA Contact Information

Corporate Office: Vicky Lester www.ipssa.com 10842 Noel Street #107, Los Alamitos CA 90720 Phone 888-360-9505

IPSSA Financial Offices

Cramer and Associates clint@cramercpa.com Phones 916-863-3107 or 888-391-6012

Drought versus El Niño: The Effects of Water in Dry and Wet Times

By Terry Arko

The capabilities of our water

Water is an amazing, mysterious and powerful element. To understand the capabilities of water and its effect on our environment, it is vital to understand how water travels throughout our world. The water <u>cycle</u> is a continuous loop of various methods of which water continuously transforms and renews itself. Water leaves plants and enters the atmosphere through a process known as<u>transpiration</u>. From bodies of water and the ocean, water travels back to the air through <u>evaporation</u>. Even humans give water back to the atmosphere, through perspiration and <u>condensation</u> from our breath. Water then falls back to the earth in the form of rain, hail, sleet or snow.

Water is fascinating in that it is the only <u>liquid</u> on earth that can exist in three forms: vapor, solid or <u>liquid</u>. When you see <u>fog</u> while driving to work, you are seeing water in one form, traveling into the atmosphere. As water transforms and travels, it is subject to the environment through which it passes. <u>Fog</u>, for example, rises up from the ground and passes through the surrounding air. As it does so it picks up whatever is in the air, whether it be smoke, <u>dust</u> or car exhaust.

Snow on the ground can pick up contaminants and <u>bacteria</u>. When the snow melts and turns into <u>liquid</u>, those contaminants and <u>bacteria</u> can be transported into nearby streams and rivers and possibly end up in <u>source water</u>. In Milwaukee, WI in 1993, one of the largest outbreaks of <u>Cryptosporidium</u> in drinking water was found to be the result of contaminated snow melt feeding into <u>Lake</u> Michigan.

Water moves about this world in lakes, rivers and even underground. It is the great absorber and transporter of whatever comes in contact with it. In today's world, we are faced with extreme droughts and unusually heavy rainstorms. Both create many challenges to <u>source water</u> that can also have detrimental effects on the surrounding environment. (Continued on page 2)

H/	Consumers: rebate when of the follow variable spee	receive a \$100 or \$50 you purchase one ing Hayward ed pumps and have it	
Valid on purchases	STALLATION REBATE	m April 4, 2016 to September 4, 2	
April 4, 2016 to See Envelope must be To receive your reb a. This completed for b. COPY of sales reco c. ORIGINAL warrant separately, check b	eptember 4, 2016 postmarked no later than 9/25/16. poate, YOU MUST MAIL: rm eipt for product AND installation. ty card. If warranty card has been mailed pox on right to ensure delivery of rebate.	 Please check pump purchased. EcoStar[*] SP3400VSP SP3400VSPVR Serial Number (17 characters) 	
Mail to: Ha Vis P.C Lo	ayward Pool Products sa° Prepaid Installation Rebate D. Box 1 ing Valley, NJ 07853-0403	TriStar' VS 900	
Please print clearly to	ensure prompt reply. (All * fields are required)	Serial Number (17 characters)	
*Name: *Address: *City:	*State: *Zip:	TriStar VS SP3200VSP SP3200VSPND SP3202VSP SP3202VSPND SP3202VSPND	
*Phone:	Model#:	Serial Number (17 characters)	
*Email:	e completed in order to receive rebate.	Super Pump' VS SP2600VSP SP2602VSP Sp2603VSP Sp2615VSP Serial Number (17 characters)	
Purchased From:	On-line Registration	MaxFlo VS"	
Installed By:	Store Phone #:	SP2300VSP SP2302VSP SP2302VSPND SP2303VSP SP2303VSP	
Installation Date:	On-line Registration Confirmation #:	Serial Number (17 characters)	
Please keep a copy of all materials subt Pool Products, Inc. This offer is availabl a business. Theft, diversion, reproduction, sale or p includes (a) this completed preduction address on the front of this form. All ref	mitted for your records. All requests and documents submitted will become the prope le to retail customers only. Dealers, builders, service professionals and distributors are surchase of this form is prohibited. This offer is good only in the USA. Pump must be n (b) copy of subse receipts, and (c) original warnardy cord. Weld where tasked, restricts bare impulsion must be made within one year of the purchase date.	sty of Hayward Pool Products Inc. Duplicate requests will not be honored and will become the property of not eligible for this promotion. A valid consumer address must be provided. Vias' Prepaid Card will not be parchased from a Hayward authorized dealer. Bebatas will not be honored without required documentation as or prohibited. Limit one request per household. Hayward not responsible for mail that is late, lost or not sa	



SP3400VSP and SP3400VSPVR Instant coupon

SP3400VSP and SP3400VSPVR instant coupon Preserver a cory of interiors submitted for your records. All maxels and documentations submitted will become property of layout of horizols, this //or request for relation sub target and the original related form. (DPES OF THIS FORM VILL (BE RECEIPLD. Database reported will not be original related form) and and workdars, this THIS devias, reportation relations of any original relation of the original relation of the spreamy of Hayward Pool Products, this THIS devias, reportation of the original relations of the original relation of the original relations of the original relation of the original re

Service: Coupon MUST be redeemed from your distributor at the time of purchase.
 Distributor: Coupon MUST be redeemed from your distributor at the time of purchase.
 Distributor: Coupon MUST be returned to Hayward with copy of distributor's invoice showing the disco please circle purchase on receipt.

Coupon must be submitted to Hayword Ploal Products within 45 days of receipt.
 Other cannot be combined with Todaly Hayward Ploagam or any other promotion.
 Coupon restricted to On Sile Ploal Servicer Providers and Distributors located
 n=A, AZ, CA, CO, H, D, LA, MA, WO, NC, PLX, LUT and Four servicer.

in AR, AZ, CA, CO, HI, ID, LA, MM, NV, OK, OR, TX, UT & WA. Limit of 6 per service Offer good May 16, 2016 - July 29, 2016. Please allow 6 to 8 weeks for processing. Rebitb requests must be postmarked no later than August 31, 2016.



termanther of EcuRear and individual individuals of Physicard Industrias, Inc. 10 50:56 Hayward Industrias, Inc.

(. * ·

 This coupon with all information completed Please send coupon and invoice to: 	2. Copy of dis	tributor invoice showing discount applied.
CUSTOMER SERVICE DEPARTMENT, \$200 EcoStar Trade P	Promotion, Hayward P	tool Products, 2875 Pornona Boulevard, Pornona, CA 97
Please print clearly to ensure prompt reply: (limit :	six rebates per con	npany per year.)
Name		
Company Name		
Address		
City	State	Zip Code
Phone	Model#	
E-mail		
All information must be complete in order to receive	communications from Hayward	
Serial Number (17 characters)		
Distributor Durchased From		Burnham Date

Tri More SAVE MORE BUY A TRIVAC™ 500 PRESSURE CLEANER

AND RECEIVE A FREE BOOSTER PUMP*

(*LIMIT UP TO 2 FREE BOOSTER PUMPS PER COMPANY.)

Introducing the New TriVac 500 pressure pool cleaner from Hayward⁹ - the effortless way to get more powerful results. Featuring patented AquaDrive⁹ technology, its powerful triple-jet action propels the cleaner gently around the pool floor, walls and coves as its wide vacuum inlet scoops up more dirt and debris leaving sparkling clean water in your customers' wake. TriVac 500 is available for purchase from all channels.

The evaporation problem

Some studies suggest that the annual <u>evaporation</u> rate in southern California ranges from six to eight feet (1.82 to 2.43 meters). That means the entire contents of an average backyard swimming pool can be removed by<u>evaporation</u> in a year. Only pure water vaporizes in the process of <u>evaporation</u>. So, as pure water evaporates, it also leaves behind more <u>dissolved solids</u> that contribute to an increase in <u>TDS</u> in swimming pools, lakes, ponds and other source waters.

There are two environmental factors that will increase the acceleration ofevaporation: temperature and humidity. If you place a pot of water on a table in a cool and humid environment, it can take weeks to months for the water to evaporate. If you place that same pot on the stove and turn on the heat, however, it will evaporate in a matter of minutes. The more heat, the fasterevaporation occurs. Also, when you combine heat with dry air, water willvaporize more quickly. This is why evaporation is a big problem during times ofdrought, when the air is warmer and drier. It's also why people get thirstier faster in Phoenix, AZ than in Portland, OR.

The accelerated evaporation during times of drought means that the build up of solids in water sources will also increase, leading to higher TDS, calciumhardness and pH in water. The increase of pH in lakes results whereevaporation is the main water outlet. As these lakes dry up from evaporation, the saturation of contaminants and nutrients becomes greater due to the lack of fresh water dilution. (Continued next page)



June 2016 Santa Clara Valley IPSSA Newsletter - Page 3

One example of this is Soap Lake in Washington State. A high nutrient content in lakes can lead to accelerated growth of algae. The increase of photosynthesis for algae growth can also cause a rise in the pH of the water. As lakes become shallower, surface algae blocks the light to the algaebelow. The algae below the surface dies off and in the process, dissolved oxygen levels are reduced. This then leads to aquatic life dying off. The lakethen could end up as a lifeless dry bed. During these stages, the quality of water obviously suffers and becomes more difficult to treat for human consumption. One solution for lakes with heavy nutrient levels is to pump oxygen into them. This helps in two ways, by increasing dissolved oxygen levels and causing the phosphates to remain in the sediment. The State of Washington Department ofEcology recommends the pumping of oxygen or using aeration because whensediments lack oxygen in nutrientrich waters, conditions can exist to release more phosphorous into the water. In swimming pools, chemical oxidation can be applied or water falls or fountains can be utilized. Also, chemical-based phosphate removers are practical in backyard swimming pools.

Lower water levels

Another challenge during drought times is

that <u>groundwater</u> gets used up more quickly. <u>Groundwater</u> is what comes from rain that permeates through the soil and then makes its way below ground through cracks and fissures.<u>Groundwater</u> collects in areas underground known as aquifers. With a lack of rain and no snow pack to replenish the aquifers, <u>groundwater</u> can become consumed very quickly. This can be critical in agricultural areas. The contaminants in the deep <u>source water</u> can lead to higher <u>total hardness</u>, minerals and metals. According to the Na-

tional <u>Groundwater</u> Association (NGWA), about 44 percent of the US population gets its drinking water from <u>groundwater</u>.

The <u>concentration</u> of metals such as copper and <u>iron</u> increase in deepgroundwater. Also as <u>groundwater</u> levels drop, chloride levels go up from an influx of <u>brackish water</u>. This leads to more <u>particulate</u>, higher <u>dissolved solids</u> and taste issues with drinking water. Nitrates can be a big problem ingroundwater as <u>well</u>, particularly in agricultural areas. In-

creased nitrates can have a direct effect on water <u>disinfection</u>. Additionally, nitrates at levels above 10 <u>ppm</u> in drinking water can cause a blood disorder in children under the age of six months. There are filters available for removal of nitrates from drinking water as <u>well</u> as RO, <u>ion ex-</u>

change and distillation systems.

Nitrates in swimming pool water can create <u>chlorine de-</u> <u>mand</u> that devours free <u>available chlorine</u> (FAC) levels and can lead to a build up of <u>bacteria</u> and <u>algae</u>. The most effective way to remove nitrates in a swimming pool is draining and diluting out a portion of the water. Draining pools in a time of <u>drought</u> could be forbidden, so an alternative would be to use a chemical oxidizer repeatedly until a drop in nitrates is seen. There are also portable RO trailers available to clean up <u>dissolved solids</u> such as nitrates.

Changing make-up water

In today's world, where water is being imported and exported all over, it is possible to have the <u>source water</u> make-up change within hours. In some areas water is trucked or transported through pipes and canals from hundreds of miles away where the pH, <u>total alkalinity</u> and calcium <u>hardness</u> can be drastically different from the local water supply.

Recently in the East Bay area of northern California, customers began to notice a different odor and taste to their tap water. Complaints began to mount and so the water municipality responded by letting customers know that due to the severe <u>drought</u>, they needed to bring additional water in from the Sierra Nevada mountains to supplement their <u>current</u> supply. Because the water was warmer and subject to more sunlight, it contained more <u>algae</u> that gave it a musty taste and odor.

How fires affect water

Ash from forest fires can be high in nutrients such as nitrates and phosphates. One of the main firefighting chemicals dropped from planes containscompounds of phosphate and so will increase phosphates in waterways over time. Wildfires are a serious danger during times of drought when grasses, plants and foliage are dried out. Increased evaporation leads to less soil moisture, which leads to greater ground erosion, an influx of invasive plant species and the spread of pathogens in the soil. These dry drought conditions create a perfect environment in forests for insects (like bark beetles) to invade and decimate trees-dead and drying, these trees become the perfect tinder for fires. This was one of the major conditions that caused wild fires in the mountains of California. In 2015. northern California experienced one the worst wildfire seasons in history. Three major fires were raging simultaneously and a total of 283.000 acres were burned. After one of the largest wildfires in San Diego. California in 2008. pool service professionals in the area whoroutinely test water for phosphates saw a large spike in levels in the swimming pools.

What's in rain?

Unlike what we may think, rainwater is not pure. In fact, water is incapable of condensing into droplets without the presence of <u>dust</u>, smoke or other<u>impurities</u> in the atmosphere. A cloud of water droplets can only form in the presence of <u>impurities</u>. Water is a natural <u>filter</u> for anything that is in the air. In the city of Seattle, they say there is no problem with air <u>pollution</u> because they take the air <u>pollution</u> and turn it into <u>water pollution</u>. Those raindrops splashing on the roof of a car are bringing with them <u>organic</u> and inorganic substances,<u>bacteria</u> and nitroge-

nous <u>compounds</u> of minerals and metals. It is very typical after a heavy rain for <u>algae</u> to become a problem in lakes, ponds and backyard pools. This is because the rain itself can bring an increase in the levels of nitrates, which are a known food source for <u>algae</u>. Acid rain is a phenomenon created as a result of <u>pollution</u> in our atmosphere. In the dry season, there can be a build-up of nitrogen and <u>sulfur compounds</u> in the air from automobile and industrial emissions. When the moisture from rain or<u>fog</u> combines with these <u>compounds</u> in the atmosphere, the result is nitric and sulfuric acids. When <u>acid</u> rain enters water, it will have an immediate effect on lowering the pH that can lead to a harmful result on the <u>aquatic</u> life in the water. If backyard swimming pools are not properly balanced with a good buffering<u>capacity</u> of <u>total alkalinity</u>, then <u>acid</u> rain can cause pH levels to plummet.

The hidden dangers of flood water

There are several types of flooding that can occur. Flash floods are the result of a break in a levee or dam or heavy rains in mountain areas above a flood plain. This can be very destructive and cause contaminated water to rush in quickly, overwhelming low-lying areas. In coastal regions, storm surges and high tides can cause flooding. (When Hurricane Sandy hit the coast of New Jersey, there were many pool service pros <u>who</u> reported finding live shrimp in their pools after the flood waters receded.)

Flood waters will contain mud, <u>silt</u>, <u>organic</u> materials and very possibly, <u>raw sewage</u> that is loaded with <u>bacteria</u>. If flood water overwhelms the infrastructure of a community drinking <u>water system</u>, tap water may be unfit to drink. Flood water can also carry chemical <u>contamination</u> from local industries. One may also expect an influx of nitrates and phosphates from flood waters, particularly in agricultural areas or in areas of phosphate mining, such as parts of Florida. Flood water can also contaminate gardens. Vegetables from a garden that has been under flood water should not be consumed, as they may contain pathogenic <u>bacteria</u> that can cause gastrointestinal illness.

The damaging effects of flood waters can carry on long after the waters have receded. One of the biggest problems in homes or businesses can be controlling the growth of mold on surfaces or areas that were once under water. Many professional agencies exist that have experience in cleaning up homes or industrial buildings after flooding; it is advisable to contact them, especially if dealing with problems of mold growth.

Contaminants from construction sites

Large-<u>scale</u> construction sites can be a major contributor of <u>pollution</u> to surrounding waterways during times of heavy rains or flooding. This can include an influx of <u>silt</u>, adhesives, cements and solvents. In 2007, the Port of Seattle completed a third runway at the very busy SeaTac International Airport. During construction, there was concern that when the rains came, much of the debris from the project would end up in nearby streams and have an adverse effect on the <u>aquatic</u> life. Besides building retaining walls around the site, the port also incorporated a sophisticated system of

filters. Prior to <u>filtration</u>, the project water was treated with a marine biopolymer that caused small <u>micron</u> particles to form filterable flocs that could be removed by <u>sand filters</u>. The result upon testing was that the water going back into the environment was cleaner than the stream water.

Be ready

There is no denving that weather patterns are changing and in certain areas water itself has become a big challenge. Being aware of our environmental water during extreme times can help. Much of the southwestern US has seen adrought unlike anything in over 500 years. Groundwater levels have sunk to catastrophic levels and regulators have imposed strict conservation laws in reaction to this. In California, recent El Niño storms and the snow pack in the Sierra Nevada mountains are bringing some hope. But experts warn it will take years to replenish what the drought has taken. Conserving water use by reducing yard watering, planting drought-tolerant plants, as well as installing low-flow toilets and water-saving shower heads can be a household solution. Also, if there is a backvard pool, keep it covered with a solid cover or the use aliquid chemical cover.

When the rains of El Niño begin to move in, it is important to make sure we are prepared with emergency generators, first aid supplies, food and lots of fresh drinking water. Have sandbags ready to protect the home, yard and swimming pool from floodwater. We can't always predict the weather but we can be prepared to deal with the effects of a changing climate on our greatest resource: water.



What do you do with this?

American Leak Detection	Bill Webb	408-729-5325	ald114@garlic.com	Leak Detection
Baby Barrier	Ben Fiscalini	408-806-2223	kpkicking@yahoo.com	Removeable Pool Safety Fence
Blake Sales	Ron Eger	360-970-3233	ron.eger@blakesales.net	Manufacturers Rep
Blueray xL	Chris Galvan	714-497-8822	chrisg@bluerayxl.com	CEO
Burkett's Pool Plastering	Jason Steenburgh	209-595-6016	burkettsjaason@gmail.com	Pool Remodeling
ChemQuip Inc.	Chris Sanders	510-887-7946	csanders@chemquip.com	Distributor
Elm Distribution	John Kies	916-853-2600	john@elmdistribution.com	Solar Panel Distributor
Gull Industries	Mike Kennedy	408-293-3523	mike@gullsolar.com	Solar Panel Maunfacturer
HalosourceSeaKlear	Jerry Jenkins	831-334-2830	jjenkins@seaklear.com	SeaKlear Chemicals
HASA, Inc.	Gabe Talese	650-243-1962	gabetalese@hasapool.com	Pool & Spa Chemical Manufacturer
Hayward Industries, Inc.	Jade Nicole	925-239-9748	inicol@haywardnet.com	Pool Equipment Manufacturer
Leisure Supply	Matt Anderson	408-727-8100	maanders@kellersupply.com	Distributor
Life Saver Pool Fence	Mark Hinkle	408-779-7922	mark@garlic.com	Removeable Pool Safety Fence
Natural Chemistry	Pat Smith	916-899-0915	psmith@naturalchemistry.com	Chemical Manufacturer
Oreg	Travis Hetzner	951-760-3149	travis@oreqcorp.com	Pool Equipment Manufacturer
Paramount Pool & Spa	John Andersen	925-595-7516	JAnderson@1paramount.com	Pool Equipment Manufacturer
Pentair Pool Products	David Lagrimas	209-627-6356	Dave.Lagrimas@pentair.com	Pool Equipment Manufacturer
Pool Covers, Inc.	Cheryl Maclennan	707-386-9106	cmaclennan@poolcoversinc.com	Swimming Pool Safety Covers
Precision Leak Detection	Kevin Brady	925-776-7588	pldinc@comcast.net	Leak Detection
Purity Pool Products	Rich Gross	530-472-3298	rich@puritypool.com	Pool Equipment Manufacturer
RayPak Inc.	Rick Witt	916-715-3470	rwitt@raypak.com	Pool Heater Manufacturer
Sales Link, Inc.	Jeff Moscoe	707-533-5136	Jeff@saleslinkinc.com	Manufacturers Rep
SCP Distributors	Steve Strauss	408-327-4900	Steve.Strauss@poolcorp.com	Distributor
Scuba Pool Repair	Drew Andersen	408-866-1945	drew@scubapoolrepair.com	Underwater Pool Repair
SunTrek Indudtries, Inc.	Elliot Fisher	831-297-0280	elliot@suntreksolar.com	Solar Pool Heating, Electicity, Hot Water
Superior Pool Products	Brian Rivera	650-257-8207	brianrivera@sppdistributors.com	Distributor
Swimco	Bob Raymond	408-378-2607	swimcobob@yahoo.com	Motor Repair
Wissbaum & Associates, LLC	Kirk Wissbaum	503-804-9303	Kirk_w@bcsreps.com	Sales Rep / Manufacturers Rep
W R Meadows	Patrick Raney	916-806-8924	praney@wrmeadows.com	Deck-O-Seal Manufacturer
Zodiac Pool Systems, Inc.	Nick Woodsen	925-357-7731	Nick.Woodson@zodiac.com	Pool Equipment Manufacturer