The Shrinking Salt Speedway

By “LandSpeed” Louise Ann Noeth

A century ago, there was plenty of brilliant white, thick, hard salt as far as the eye could see at the Bonneville Salt Flats. That meant seeing in double digit miles. As the years unwound, the damming game of give and take – the salt giving and man taking – knocked the natural balance out of whack causing the salt surface to not only thin, but the perimeter to slowly shrink.

Factor in encroaching development and poor government oversight and today, what took thousands of years to create, is in a precarious state after mere decades.

The land speed racing community is facing a daunting ecological emergency. If left unchallenged it will signal the end of safe time trials on the flats in the very near future.

The absolute world record left 30 years ago for the Black Rock Desert. With wheel-driven speeds approaching 500MPH the outlook is worrisome that car and driver can throttle up safely. This is no sensationalistic hype. This is sobering reality.

“Who cares?” you might be asking yourself. “Why should I care if a bunch of speed freaks loose their playground?”

Because the Bonneville Salt Flats have hosted thousands upon thousands of average “nobodys” who became “somebodys” by setting record with their hand-built speed machine. They had a dream, built it into reality and proved in front of God and the watching world their idea had merit.

The Summers Brothers – Bob and Bill -- were nobodys who showed Chrysler what their little HEMI’s were capable of with their car built in fruit shack roaring into the history books with Goldenrod at 409MPH in 1965.

A quarter century later another nobody built his streamliner in his mom’s garage shipping parts via Greyhound Bus Lines because it was cheaper than UPS. Al Teague had one supercharged HEMI and docked 409MPH world record.

That’s just two of thousands who did something super duper because they thought they could and then proved they could.

And all of them got a chance to live large, live free and savor a personal success unavailable anywhere else in the nation because of the Bonneville Salt Flats.

This family-based sport continues to welcome not only Americans with a "can do" attitude, but encourages innovations in science, technology, engineering and transportation safety. Land speed racing can be described as "the last vestige of the Wild West" where today all the ponies are under the hood.
College kids have come to Bonneville with their school project and shown us that used french fry oil can safely power a truck and that 300MPH is possible with batteries. Grandmothers and grand dads have eschewed rocking chairs for race cars driving safely, repeatedly and gloriously in excess of 250MPH. Families thrive here. This place is fun and it is sorrowful that business pummels the flats to death simply because the BLM stewards have been outrageously lackadaisical in their duties for decades. The BLM actions suckle upon the teat of revenue and ignore the cries of the recreation user of what amounts to geological rape.

Is that enough? No? Well, if you abandon your land speed brethren in their time of need, there may not be anyone come to the aid of your hobby should government intervention lock it into a stranglehold.

Like my dad constantly reminded us kids, “You better hang together, or they will hang you one-by-one.”

From the first race in 1914, racers understood the tremendous motorsports value of the salt beds, they recognized its matchless natural surface as a place where speed would only be restricted by the pace of technological breakthroughs and the courage drivers found when applying the throttle.

The mining industry understood the great mineral value of the Bonneville Salt Flats and it had been extracting halite (table salt) since the late 1800s, years before Teddy Tetzlaff ever roared into history driving the Blitzen Benz to world record speeds. When German potash supply sources were disrupted by World War I the sodium wonderland was tapped for the potash hiding in the brine below the salt crust. Potash extraction hasn't stopped since. Weather patterns contributed to fiddling about with the salty playa, but historically wherever man monkeys about in nature, nature often gets screwed.

In the 1930s the ancient salt bed easily supported the heaving weight of 10-ton twin engine monster streamliners as they roared with conviction across 13.5 mile straightaways. Other giant cars attacked 10-mile and 12-mile circles for 24-hours and more setting hundreds of endurance records that burnished car makers’ power and stamina reputations with the motoring public boosting showroom sales.

Additionally, the weight of the cars combined with the hard, abrasive salt inspired advances in tire design. Tire manufactures studied the salt surface to enhance not only safety, but traction properties.

Collective reports often indicated the salt thickness to be 18 inches and as hard as cement. The Utah History Encyclopedia notes the salt depth ranges from “less than one-inch to more than six feet.”

By the 1940’s Britain’s Malcolm Campbell, George Eyston and John Cobb had set so many endurance records and repeatedly bumped up the Absolute World Land Speed Record that Daytona Beach was well and truly finished as a world record site.
Eyston and Cobb were particularly concerned about the preservation of the saline speedway, making numerous references in their books and widely published articles.

Concurrently, Ab Jenkins and his son Marvin, through the decades ranging from 1927 through 1956, set more records on the flats than any 10 racing teams combined, needed a ½ inch, two-handed drill to pierce the salt in order to affix tent stakes.

By the 1950s, Ricky Vesco, as a young boy tagging along with his father who competed at Speedweek, witnessed a variety of then minor items that many years later inspired him to become a salt advocate. He recalled a water truck sitting in the pits with a leaky water valve dripping onto the salt flats that carved a deep, 12” funnel shaped hole into the salt.

The water in the hole was crystal blue and the salt was sparkling, shimmering white down to the bottom. He watched as the adults struggled to erect shades and tents because to penetrate the hard salt required two people, one swinging a big sledgehammer and the other holding an old Ford axle or railroad stakes.

These days, dripping water is prohibited because it quickly eats through the thin crust and erodes the mud layer below creating pot-holes. As for driving in tent stakes, a couple taps on a 16-penny nail with a carpenter hammer now penetrates the surface anywhere within the historical Bonneville Salt flat boundaries.

The most visually striking thing young Vesco remembered was how the black rubber streaks at the starting line at his hometown drag strip looked just like those laid down by spinning tires of Bonneville race cars that faded into the distance as he looked down the course towards Floating Island.

This writer, with only 21 years of aerial observations shooting photographs, is shocked anew each year by how much the wonderful whiteness withers, contracts away from the Silver Mountains and desert vegetation rapidly moves in.

What was once 90,000 acres is a mere 30,000. Today, salt conditions have so radically deteriorated that race officials are lucky if a 7-mile course can be located. The 2014 Speedweek was a wash-out and the 2015 event has already been cancelled due to miserable salt conditions where SCTA racing officials were hard pressed to find five miles to race upon. Forget high-speed runs, only those running 175MPH and blow would have been allowed to run.

Motorcycles need their own event because cars making high speed passes easily rut the soft salt -- precarious for the two-wheeled race machines if their small, thinner tires get trapped in a depression, or its suspension is abruptly upset.

The hot rodders who had been racing on the salt annually since 1949, began to complain about salt changes in early 1960s. Getting the brunt of the blame was
nearby Kaiser Chemical Company’s 50 square mile facility with collection ditches ran next to the raceway gathering brine salts to produce potash, magnesium and other products. Hard to ignore when you understand that in 1963 Kaiser expanded its potash production after being issued leases for 25,000 additional acres of Federal land.

Pre-occupied with setting records, the unorganized racing voice found no one listening for years; the land speed com-munity had no champion, no political or economic clout. However, they knew that surface conditions were eroding and saw other dramatic changes year after year.

Until the early 1970s, pleas by the racers to the Bureau of Land Management (BLM), tasked with protecting the salt, were ignored. Despite the BLM’s man-date to protect and manage the nation’s treasures, when it came to the desolate salt flats business interests trumped recreation needs nearly every time. Profit pummeled pleasure with impunity.

In 1973, Vesco, now a Utah motorcycle business owner, joined the BLM’s Recreation Advisory Board. Recognizing his membership on the board was an ideal, hopefully effective method to help salt racers gain a needed voice in government Vesco succeeded in drawing the BLM’s attention to the nearby mining operations’ negative impact on the salt flats.

When the State of Utah turned over maintenance of the flats to the BLM in 1976, it was abruptly decided that one race event a year (Speedweek) was not enough public interest to continue to groom the race track (read: no budget).

The racers responded by forming a second sanctioning body to host additional racing events. Wayne Atkinson, Hugh Coltharp, Dave Skidmore, Rick Vesco, Larry Volk, and Gary Wilkinson organized the Utah Salt Flats Racing Association (USFRA).

Its focus was to counter the BLM’s ultimatum that racers needed to: “use it or lose it.” Long-time permit holder Southern California Timing Association/ Bonneville Nationals, Inc. (SCTA/BNI) was geographically hindered: it simply could not keep an eye on things from 750 miles away.

The USFRA formation ideally provided what the salt desperately needed: local stewardship and an effective BLM retort.

When the BLM stopped funding all track preparation funds it sparked the decision that jumpstarted “Save the Salt” (STS). The goal was to preserve the BSF for future racers and the USFRA scheduled 7 one-day events with the BLM.

The fledgling USFRA performed all track grading helped by the City of Wen-dover that loaned its equipment for the task during that first year.

The USFRA and SCTA/BNI mounted a combined effort to earnestly discuss the future of the raceway. This cooperative alliance resulted in a press conference in
Salt Lake City, a petition drive to bring “Save the Salt” concerns to the public officials and communicated effectively by the Fastest Man on Earth Gary Gabelich (622MPH).

I recently got a message form Gary’s widow, Rae Gabelich, who reminded me that Gary was very upset with how the BLM was treating the salt back in the 1970s. And 40 years later the racers (who are also US citizens who own these federal lands) are still getting the short shift.

Through the efforts of the State of Utah in 1975 Bonneville was listed on the National Register of Historic Places.

The cooperative efforts made a big impact; the BLM reinstated track prep funding and STS began investigation into salt loss. One study showed that the nearly million-tons-per-year loss was due to the mining efforts. Kaiser Chemical paid for its own study that countered the claim.

The BLM did nothing; it was a standoff.

Pause and consider: is there any other segment of motorsport where the competitors are obliged to protect Federal Lands from destructive outside forces? Did any other racing organization spring into existence primarily as a citizen watchdog group?

Nope.

Land speed racers are willing environmentalists. Much as it might grate upon the hard line environmentalist, land speed racers have been the unflinching stewards of the salt for more than 60 years. Keeping it pure and unmolested has been their goal as evidenced by their conduct.

Soon racers had three events a year: SCTA added World Finals in October, USFRA’s World of Speed percolated into existence shifting dates until the September date took root.

Today there are five speed trails with the BUB Motorcycle Speed Trials added in 2004 and Mike Cook’s Shootout began offering FIA world record sanctions in 2006. Private speed events pop up in between the scheduled speed meets.

However, back in 1981 and 1982 when the great floods hit the salt flats, upwards of 24-inches of water covered the raceway. Once dry, the raceway was pure white, it had restored itself.

Kaiser shut down most of their operations by 1983 but quietly continued to work with the BLM and renewed its 20 year mining lease.

The racers fell asleep at the wheel waking up to their huge mistake in 1988 when heavy equipment showed up and reopened 23 miles of collection ditches adjacent to the raceway before selling its double decade interest to Reilly Industries.

Bonneville racers became alarmed by the gradual thinning and deterioration of the salt crust that was now not only drastically reducing the quality of the racing surface
but also the length. The available courses began to have inconsistent surface structure.

Rick Vesco, now at the helm of STS, wrote a letter to Reilly asking they help restore the raceway by returning the salt being held as a by-product in their ponds. He got no reply.

“Save the Salt, Inc.” was reorganized with help from NHRA, Hurst, Mr. Gasket and SEMA and the salt battles began. In 1985 the BLM established criteria for managing the lands as the “Bonneville Salt Flats Special Recreation Management Area” (SRMA) and as the “Area of Critical Environmental Concern” (ACEC). Sounds great, but little actually happened.

Public pressure was applied to elected officials at State and Federal levels promoting racing activities: meetings with the BLM, another press conference, a small demonstration. Racers began measuring the salt crust and monitoring mining operations. Then USFRA organizers noticed some areas at Bonneville were weak and mushy while other parts were rock hard samples of both areas were taken to a lab.

It was revealed that high magnesium chloride levels translated into weak, granular salt that would not support the weight of a normal racecar. Worse, when heavier vehicles would go across the softer salt it would leave behind long-lasting ruts that can spell destabilizing disaster for high speed runs.

“The most difficult task in forming STS was to get all racers to stick together, sing the same song, and speak the same dialog, recalled Vesco, “In the early days there was intense rivalry (jealousy) between the California racers and the fledgling USFRA. Some USFRA’s efforts were undermined on several occasions, which made it very difficult to present a “united” front when dealing with the government and mining interests.”

Then came a meeting Reilly’s corporate headquarters in Indiana. The BLM finally asked the US Geological Survey to perform a salt loss study, which revealed that human-induced processes contributed to salt losses. Reilly, shortly before the study was released publically, suddenly announces a plan to restore the salt flats. Did they have insider, advance knowledge?

A five-year salt “laydown” project was accepted by the racing community in 1997 and the BLM quickly drafted a voluntary compliance contract that was signed by all parties. Politicians embraced the “win-win” idea - a shining example of commercial, government and private interests working.

Surface integrity was constantly questioned putting safe national and international events in jeopardy. The declining salt compromised safety to such a point that led the USFRA and BNI to make rule changes in 1993.
These drastic measures permitted racing to continue but also made it easier to set class records diluting the efforts of previous racers who established speed marks under more challenging, traditional conditions.

One example: Where once it took three runs to set a record (one to qualify followed by two more runs averaged together) now only two runs averaging in excess of the current mark would do the trick.

International records became much more hazardous due to short track length and sometimes a mud dike at both ends of the course. This left only two miles to stop after exiting the mile/kilo timing traps. With speeds approaching 450 mph (a mile in 8 seconds) it meant a driver had 16 seconds to stop before hitting a dike.

Factoring in the number of parachute failures encountered at these speeds it became irresponsible to promote an event under such conditions. And we haven’t mentioned wind gusts yet.

During the 6-year salt lay-down period nearly 6.5 million tons were put back on the raceway making a significant improvement to the salt surface by the project’s end in 2002. A token amount when you consider that it is estimated that some more than 50 million tons have been spirited away since 1963.

The racing community implored the BLM to make the replenishment program a permanent part of any mining lease or renewal on or near the historic raceway. Despite Vesco’s repeated warnings that the racers needed to stay focused and be ready to reapply public pressure when the lay-down project ended so newly negotiated leases contained protection plans, a follow-up charge failed to materialize.

Relationships withered, faces changed, BLM officials talked a lot, but few did anything to champion the racers’ cause. By its actions (or inaction) alone, the BLM’s position appears to be little more than one of tolerating the racers while catering to those enterprises that generate hefty filming permit fees and lucrative lease agreements.

STS has also asked for help from many environmental groups, but always rebuffed because no one gave two swats of a dung beetle’s fine behind about a sodium chloride wasteland.

The local Wendover community, once dependent on the employment from industry, could be a strong ally if properly approached to help. In 2011 the umbrella group STS Coalition was formed that was to have a strong legal voice – but after four years the coalition has little to show for its existence despite claims of collecting in excess of $40,000.

Also “on the team” is SEMA – the leading trade association brought to life by the same pioneers that land speed racing calls its own and is populated by
manufacturers, distributors, retailers, publishing companies, auto restorers, street-rod builders, restylers, car clubs and race teams.

Paul “Scooter” Brothers who is an active SEMA member and also the Chief Operating Officer for COMP Performance Group, told me why the organization wants to help the racers.

“Land speed racing is where everything started, where our founding members made their mark and we, SEMA, feel it’s a way to give back to the whole high performance industry by supporting efforts to protect the Bonneville Salt Flats.

How many times in our lives can we look back and see something we should have acted upon instead just sitting back and watching? SEMA doesn’t want to sit back, this time we are standing up and doing something to help. We are here for the betterment of the industry and Bonneville certainly plays a part.”


Writing a letter to the BLM and elected officials at the Congressional level goes a long way in letting the Feds know that the fate of the salt flats should mean more than giving lucrative leases to industry.

Your heartfelt words can make the nation’s leadership realize how many folks actually care passionately about the salt’s racing heritage, its future. Politicians hate it when the public is after them and love to be patted on the back when they've done a good deed. Protecting our salt flat wonder would truly be a “good deed.”

The Bonneville Salt Flats is the largest expanse of serene nothingness with which a person might ever bond. One visit stays with you for a lifetime; it’s cerebral magnetism on overdrive.

Many are drawn back annually and protecting the flats is a medical necessity for those with “salt fever,” because there is no substitute for visiting the Utah's sodium pancake to medicate their suffering.

Once you’ve had the supreme pleasure of rolling with conviction over the pristine saline – never mind setting a speed record – a spark of divinity is exposed and I don’t mean inside a cylinder.

The BLM has failed the land speed racer, we who have annually used the federal land for more than 60 years.

Nowhere else in the nation have users been so abused. It now falls to us now to protect, defend and keep Bonneville safe if for no other reason than to permit future generations to get suited up and go real fast.
The salt is in serious trouble. I have researched the science, the mining, the history, the mania and mundane trying to figure out a way to make the BLM do its job. Nothing special, no favors, no extra work, just be stewards Americans expect them to be.

Just like they have been to the Grand Canyon, the exalted California redwoods, the glorious Steese National Conservation Area and the sweltering Jupiter Inlet Lighthouse Everglades.

I have failed.

For decades the mining companies have, with BLM permission, under permit, systematically and geologically raped the Bonneville Salt Flats. Industry is not to blame, they do what they are told in the language of their permits. It is the BLM that has failed the American public on so many counts by not requiring the mining concerns to replace what they remove.

The problem percolated into dire circumstances because the BLM has not required (in the off season) the mining companies return the salt to the south side of Interstate 80 where they had originally collected it in a brine solution.

But you don’t need a science degree to see the damage. Take a peek at Google Maps and you’ll get the visual message if you focus on the western edge of Floating Mountain where things aren’t quite white enough. Or, simply look at what has happened in past few years alone by looking at the satellite pictures below...

There is no concerted, coalescing effort to stave off the inevitable in my opinion. The State of Utah, its citizens - racers or not -- need to understand the Bonneville Salt Flats need attention and need it NOW.

**Note:** Photojournalist Louise Ann Noeth is the authoress of the bestseller, *Bonneville: The Fastest Place on Earth,* a complete historical review from 1896 to 1997. She also appears in the Ab Jenkins documentary *Boys of Bonneville.* For more details go to: [www.landspeedproductions.biz](http://www.landspeedproductions.biz)
Bonneville Salt Flats – Satellite Images – 2006 to 2013

7/12/2006

6/22/2009

10/27/2009

9/8/2011

10/5/2013