Save the Salt Foundation Meeting

Tuesday, August 23, 2022

Items Discussed:

- I. Speed Week, Bonneville Motorcycle Speed Trials, and World of Speed cancelled due to rain. Discussion of the current salt conditions and whether World Finals may still occur (Sept. 27-30).
 - a. A visit prior to the meeting indicates that the salt is in serious trouble and may not be able to be groomed properly prior to the World Finals. The racecourse is still under water and appears to be very thin and rough. Some salt appears to be floating like salt ice bergs.
 - b. People have been driving on the salt through the water and the vehicles have broken through the thin salt into the clay below.
 - c. The web cam video seems to miss all the water that is still on the course.
 - d. McGavin went to the salt Wednesday 8/24/2022 and concurs. Photos and descriptions are attached.
- II. Discuss status of BSF restoration program:
 - a. Berm Installation: need engineering firm to make recommendation and for BLM to conduct NEPA.
 - b. Is an EIR necessary? I s NEPA necessary?
 - c. We have numerous historical studies that all say roughly the same thing. Salt needs to be put back onto the course. In 1999 & 2000 almost 4 million tons of salt were put on the course area and the salt grew in extent and thickness. Since then, the annual amount of salt going onto the course has been getting less and less.
 - d. Two holes in the Salduro Loop were patched in 2022 which should prevent salt brine from escaping to the east and south.
 - e. Intrepid says that they need at least \$5 million to pump 1 million tons per vear for new infrastructure.
 - f. BLM is apparently not doing its fair share. SCTA cleaned up fire pits, etc. which cost roughly \$9,000 and BLM only offered \$1,000 as reimbursement for SCTA's work.
 - g. The BLM appears to be opposed to saving the salt. We need a "new course of action" which was discussed. I'll say it but not put it in writing at this time.
 - h. It may take a couple of years to get the salt back to racing condition based on it's current condition ... see attached photos.
- IV. Challenge: there has been little tangible progress in last 20 years in terms of increasing salt thickness and expanding the racing venue. Discuss need to reactivate the Save the

Salt Coalition and increase PR and fundraising to focus on the need to restore Bonneville.

- a. Other groups: trade associations, race sanctioning organizations, companies, race teams and land speed racing enthusiasts, National Trust for Historic Preservation, other?
- b. Set fundraising goal: ex: \$750,000. Funds could be used for consulting/lobbying fees along with increasing salt laydown.
- c. Ways to encourage fundraising? Example: receive Speed Week calendar in exchange for minimum contribution. See: <u>Fundraising Calendars John Overbaugh Photography</u>

Annotated photos at the Salt Flats 24 August 2022 by Gary L. McGavin

How deep was the water on the day I visited?

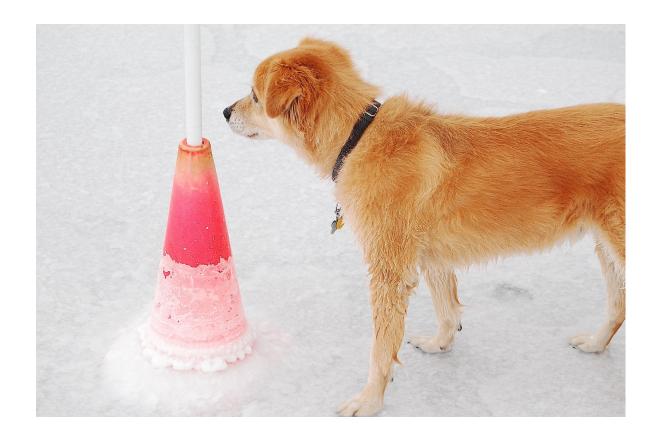
Generally, about 4" to 6"



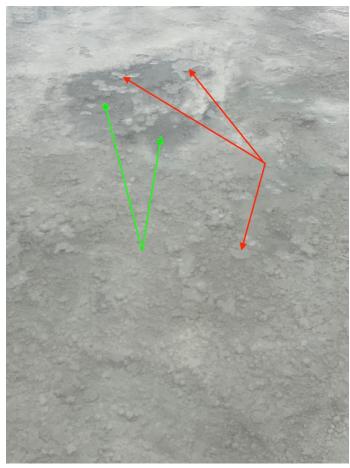
At the Start Line about 1/4" to 1/2"



How deep was the water since the cancellation of Speed Week? It was about half the cone height although, the cone may have settled some do to dissolving salt.



- 1. What are all the bumps below the water that can be seen in the above and below Photos?
- 2. What are the Red Arrows pointing to?
- 3. What are the Green Arrows pointing to?
- 4. How thick is the salt?
- 1. The bumps are a result of the fresh water from rain attacking the salt surface by the salt going into solution with the water. This results in the salt no longer being in its crystalline form but rather being in the water turning it into salt water. As the sun heats the water during the day, it can force more of the salt to dissolve. This is repeated every day until the brine is 'super saturated'. Super saturation just means that no more salt can be dissolved into the water unless the water gets MUCH hotter. The salt doesn't dissolve evenly leaving the bumpy surface that can be seen below the water. When the water becomes super saturated, it wants to crystallize some salt out of solution making a new salt layer. The salt crystals need a 'seed' such as a speck of dust or a leaf to begin the saturation process.
- 2. The Red Arrows are pointing to salt crystals that are floating on the surface of the water. These can be seen everywhere. These floating crystals are the clue indicating that the brine was super saturated.
- 3. The Green Arrows are pointing to areas where the salt surface has dissolved all the way down to the underlying clay strata.
- 4. The salt ranges from 0" is a few areas to typically between $\frac{1}{4}$ " to < 1"



What are the floating 'salt bergs' described in the meeting?

Near the start line for Course 3 the water was shallow enough that wind is suspected of breaking the surface tension of the water exposing the salt surface below the water level allowing the super saturated salt water to crystallize very rapidly in a few spots. These things are rare at this point. As more water evaporates, more of these should be seen on the next field trip. The top photo shows half a dozen or so of these structures. They are not floating but are attached to the salt surface below the water level. They are creating a small 'salt island 'rather than a 'salt berg.' Once the initial crystallization starts, these items can row relatively rapidly in size.



Detail of the center of the above photo showing the detail of the little salt island.



The three little round holes are suspected to be natural water piping akin to an artesian well where water under pressure in the clay layer below the salt flows out onto the salt. I didn't find any flow.

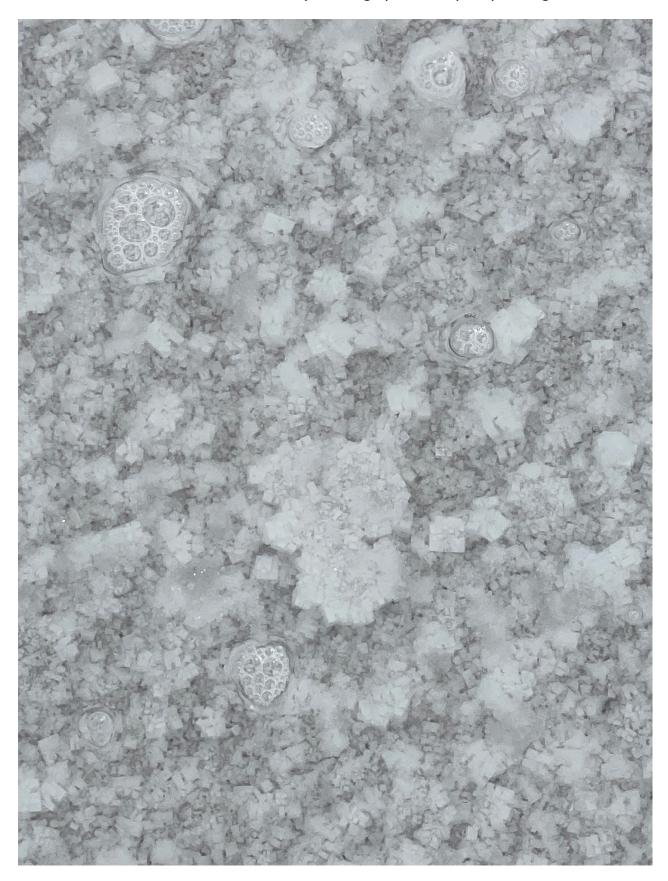
What does the bumpy salt look like in detail?



Salt has a cubic crystal habit. You can see very tiny cubes and some much larger cubes in this photo.

My toes give a sense of scale to the salt crystals. The following photo is a detail of the center of this photo.

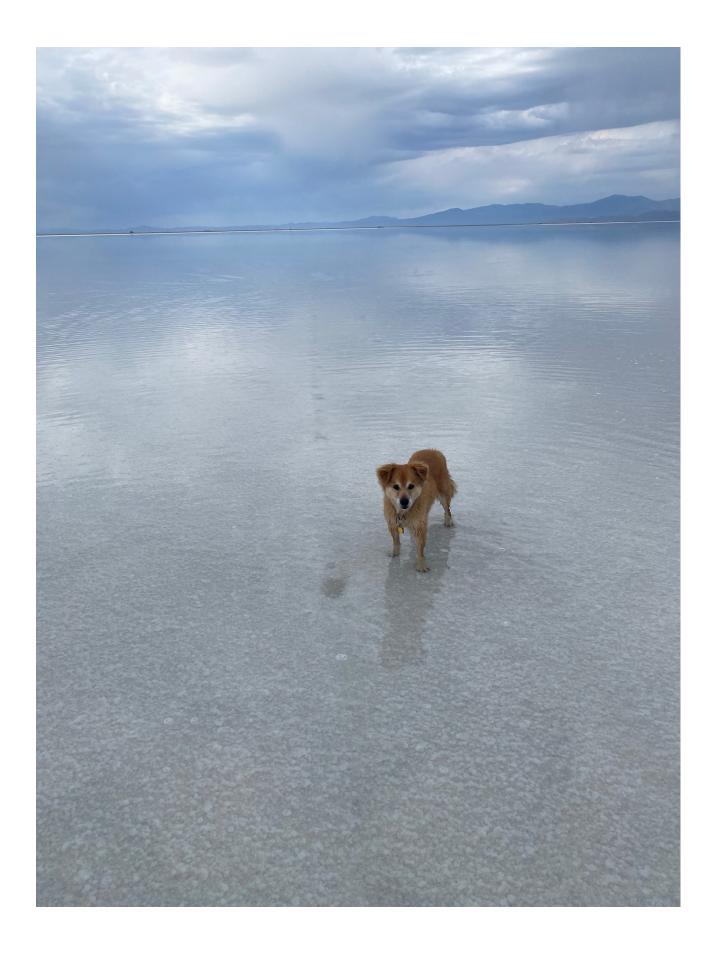
The previous photo blown up showing the larger cluster of salt crystals. The bubbles are on the surface of the water and are due to my walking up to this spot splashing a little too much.



My geology dog (Willie) sitting in the water to illustrate the depth as shown by his front paws. This photo was taken about half way from the end of the road to the long course start line.



A set of tire tracks just to the left and behind of Willie that has dissolved all the way down to the clay layer. Looking south with I-80 in the background.



The view from the end of the road out toward the start line and the pits.



