January 27, 2016

SNWA Weir Project

Brief History:

The SNWA agreed to put the construction of two (Sunrise Mountain and Historic Lateral) weirs on hold in June of 2015 until June of 2016 while the NDEP and the NERT conducted initial investigations and considered the feasibility of:

- The NERT funding the construction of these two weirs if the construction could be done in such a way that perchlorate could be remediated.
- The NERT treating the extracted groundwater during the construction of Sunrise Mt and Historic Lateral Weirs

The SNWA gave the NDEP, EPA and the NERT a presentation on the erosion control Weir construction project on January 11, 2016. Figure 1 below from this presentation shows the locations of Sunrise Mt and Historic Lateral Weirs. The presentation gave estimates of how much perchlorate loading was expected during the construction of the two weirs in the area of the NERT contaminant plume.

- Sunrise Mountain Weir: 500-1250 gpm, 0.6-1.0ppm ClO4 ~Loading 3.6-15lbs/day
- Historic Lateral Weir: 500-1250 gpm, 0.6-1.0ppm ClO4 ~Loading 3.6-15lbs/day

The loading in Historic Lateral is considered to be an under estimation by the NDEP due to high groundwater perchlorate samples in the vicinity of this weir.

Current Status:

The NDEP and the NERT have independently looked at the weir construction option and we do not see a way to use the NERT Funds for weir construction. The construction of the weir would not now or in the future be a method to remove or abate the perchlorate contamination, a requirement on the use of NERT funds. NDEP and NERT have not come up with a viable proposal to modify or enhance the weir construction to remove or abate perchlorate contamination and SNWA has not suggested a viable option.

The NDEP would like the assistance of the SNWA to help mitigate water quality impacts during weir construction. The NDEP understands that during the combined dewatering activities of Sunrise Mt and Historic Lateral weirs, as much as 30 lbs/day of perchlorate could be added to the Las Vegas Wash. Recent loading calculations for North Shore Road are between 50-60 lbs/day. With concentrations in the LVW between 30 and 40 ppb, already above the Nevada provisional MCL of 18ppb, this additional increase in perchlorate will cause Las Vegas Wash to further exceed the protective water quality concentration. Additionally, this increase in perchlorate will load Lake Mead and potentially cause additional future exceedances of the California public health goal of 1 ppb downstream. In the interest of human health and water resource protection, NDEP has determined that all feasible efforts should be made to prevent or reduce further exceedances of protective water quality concentrations.

What is different now :

The NDEP has expanded the investigation area in the last two years from the core plume to the Downgradient Study Area which includes the Las Vegas Wash. These two additional weirs are in the Downgradient Study Area.

Information gathered during the treatment of the extracted groundwater during weir construction would be used in the RI and the FS and ultimately would support the Final Remedy at the site.

Future Actions:

The NDEP has scheduled one additional call with the EPA and the NERT on January 27th to align our ideas and to discuss our response to SNWA.

The NDEP will inform SNWA of our position on a call or meeting with Dave Johnson to determine the SNWA's appetite to assist the NDEP with the groundwater treatment option during weir construction.

The NDEP would then order the NERT to produce a schedule and determine the feasibility to treat the groundwater during weir construction. (Estimate 1-2 months)

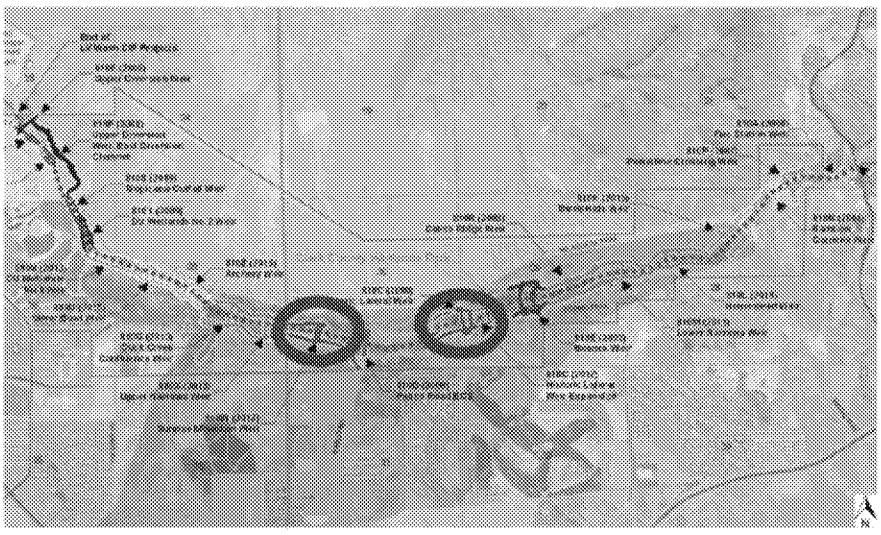
- Permit issues
- Access issues
- Cost
- Schedule to implement

BISC would discuss this with BWPC to come up with permit considerations (NERT vs SNWA).

NDEP would need SNWA's assistance. We should send a letter from NDEP or DCNR to SNWA documenting our position and requesting additional information, schedule of construction, and the inclusion of the treatment option in their construction bid package.

Possible Land Mines:

- Permit – SNWA vs NERT permit to treat the GW
- SNWA - Timelines/options may not work for SNWA
- Stakeholders – May not see the expense as a necessity

Figure 1 (Courtesy SNWA Jan 11, 2016 Presentation)

Las Vegas Wash
Erosion Control Program