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**To:** [Radke, Bill](#)  
**Subject:** San Bernardino NWR Periodic Hydrologic Monitoring Update 05/ 13 /2020  
**Date:** Wednesday, May 13, 2020 11:13:12 AM  
**Attachments:** [SBNWR Pond Well Update 02May-08May20.docx](#)

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**During the week of May 4, 2020:**

*\*Monitoring wells checked and data recorded, pressure logs pulled and sent to water resources, pond inlet flows recorded in new survey123, pond levels recorded in old and new survey123... working with with WR staff to set up WISKI/Survey123 interface.... Overall protocol still in development\**

**Week of 4 May 2020:**

- 04 May 20 – Bunting well transducer submerged
- 05 May 20 - Pond rehab plan for all applicable ponds complete
- 05 May 20 – Ben New pond level at 1.28 and trapped for shiner presence. A large breeding population was found.
- 05 May 20 – Hackberry outflow measured, average outflow = 35.64
- 05 May 20 – Bucket flow test for Hay Hollow well, Bunting well, Twin well, Mitigation well
- 07 May 20 – Middle well data logger box installed
- 07 May 20 – Bunting transducer removed and cap replaced and submerged
- 08 May 20 – Ben New pond level slightly recovered (1.48) after managing pond level inflow across all Hackberry ponds. However, still no outflow occurring.
- 08 May 20 – Brasher trapped to determine shiner presence, none were captured and top minnow were captured in very low frequencies.
- 08 May 20 – Middle well data logger downloaded, but data not recording properly

Notably, Ben New pond level up after managing inflow across the four Hackberry ponds, this is important as a stable breeding shiner population was found at this pond. Cobble and Magoffin continue to have strong outflow.

Middle well data logger did not function appropriately so no data was recovered- will fix with Darrell

Both Snail springs (E and W) are flowing. The west spring, fed by Snail Spring well, needs continual maintenance to keep water flowing to Snail Spring Box.

***Weekly Biology Report Attached - with hackberry pond level data from March to current to track summer levels/concerns***

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