

**From:** [Harden, Tasha](#)  
**To:** [Radke, Bill](#)  
**Subject:** San Bernardino NWR Periodic Hydrologic Monitoring Update 01/15/2020  
**Date:** Wednesday, January 15, 2020 9:14:19 AM

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**During the week of January 10, 2020:**

*\*Monitoring wells checked and data recorded, pressure logs pulled and sent to water resources, pond inlet flows recorded in survey123 and sent to water resources, pond levels recorded in survey123.\**

- 06 Jan: Request for a detailed spent budget report on associated costs sent to refuge admin; documents at refuge needed for her to complete; volunteer asked to deliver documents to her that week.
- 06 Jan 20 – Transducer replaced at Bunting well, pressure monitored, water still off
- 06 Jan 20 – Transducer replaced at Twin well, pressure monitored
- 06 Jan 20 – Hay Hollow water turned off to ponds- pressure monitoring maintained
- 06 Jan 20 – Four previous water umbel locations checked for presence – none detected
- 06 Jan 20 – 11 Shiner salvaged from Magoffin pond
- 07 Jan 20 – Water off at Twin well, pressure monitoring maintained
- 08 Jan: Refuge biologist still not able to easily utilize water resources wiski database; decision made- all refuge collected data will be sent directly to water resources.
- 09 Jan: T.Harden call with AZGFD and Phoenix zoo regarding San Bernardino spring snails. Refuge is pursuing options to establish an off-site population at the zoo, initial survey set for April 8-9, with hopes of second visit and collection during May 2020.

***Biology weekly report not attached due to bison email issues***

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