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## FIELD REPORT

Project: Baxter WTP Backwash Trough Sealing Improvements

Field Report No.: 1  
Project No.: 189400

Date: 5-19-2026

Time: 07:30-11:30

Weather: N/A

Est. % of completion: N/A

Conformance with schedule (+,-) Unknown: N/A

Present at site: Kory Jorgensen (SEH), James Lueck (City), Casey VanVleet (Rice Lake)

### Work in Progress:

Installation of Lock Washers at Baxter WTP for the backwash trough sealing improvements.

5 epoxy anchor studs installed to seal the rubber gasket to the wall backed out when RLCG removed the nuts.

### Observations:

Filters #1 and #4 received a standard washer and lock washer.

Filters #2 and #3 received fender washers and lock washer.

All nuts were torqued to 15 psi per Hilti recommendations. Filter 4 was torqued a little more on the bottom brackets due to the wall being so uneven.

Filters #1 and #2 appear to be sealed. This is consistent with what James Lueck reported to SEH via email on 5/12/2026.

Filter #3 still has minor leak, but leakage is reduced by approximately 70%. Contributors to the continued leakage are the concave concrete wall at the bottom of the trough and a small gap where two gaskets butt up to each other. There is also a 1" crack in a weld on the lower lefthand side of the trough (looking towards the wall pipe). The cracked weld leaks water, but likely does not contribute to media loss. On 5/12/2026 City staff also observed media being lost through the gap between the stainless collar on the lower right side.

Filter #4 is still leaking, but approximately reduced by about 30%. Uneven wall is causing the continued leakage. There is also leakage occurring at a cracked weld where Brian's Welding added stainless steel collars inside the wall pipe during the filter reconstruct project.

### Items to Verify:

N/A

### Information or Action Required:

Filter #4 needs repairs on the bottom bracket. The void under the bracket should be filled with a more compressible gasket or other material to fill the void. The cracked weld on the stainless steel collar in the wall pipe should be re-welded.

A more flexible gasket could be better than the currently employed materials. SEH recommends using neoprene or another more compressible material in the fall, using the existing anchors before re-drilling.

All filters should have a bead of sealant installed on outside edge. Will need about 7 days of cure time before filters can be put back in service.

Engineers | Architects | Planners | Scientists

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Some anchors came out due to the nut not able to loosen and epoxy bond broke free.

- Two anchors in Filter 2 came loose, but were able to be tightened.
- One (anchor in Filter 3 came loose and did not tighten.
- Two anchors in Filter 4 came loose and did not retighten.

These anchors should be removed, re-drilled, and re-epoxied in the fall.

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Future work should require a food grade anti-seize on stainless steel studs and nuts to prevent galling.

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The cracked weld on the backwash trough for Filter 3 should be repaired.

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**Attachments:**

Photos

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**Payment Recommendations:**

SEH recommends payment of Rice Lake's full proposal amount.

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**Report By:** Kory Jorgensen

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1. Example of angle bracket installation.



2. Example of angle bracket installation.



3. Reinstalling washers, lock washers, and nuts on studs.



4. Example of Waterweld application.



5. Gap in gasket at Filter 3.



6. Gap in gasket at Filter 3.

7.

8.

9.

10.

11.

12.