

Lake Mendocino and Lake Sonoma Water Accounting Weekly Report (Term 11, May 2023 TUCO)

Report Date: 8/25/2023

Units are cfs unless noted otherwise

| | 8/18/2023 | 8/19/2023 | 8/20/2023 | 8/21/2023 | 8/22/2023 | 8/23/2023 | 8/24/2023 |
|-------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| I. Upper East Fork Reach | | | | | | | |
| Potter Valley Project | | | | | | | |
| Tunnel Diversion | 111.0 | 110.0 | 110.0 | 111.0 | 107.0 | 104.0 | 105.0 |
| PVID Requested Delivery | 30.0 | 30.0 | 30.0 | 30.0 | 26.7 | 25.0 | 25.0 |
| PVID Canals Actual Delivery | 25.7 | 25.7 | 25.8 | 25.8 | 25.0 | 24.7 | 24.8 |
| East Fork Release | 85.0 | 84.0 | 84.0 | 85.0 | 82.0 | 79.0 | 80.0 |
| PVID E Fork Diversions | 4.3 | 4.3 | 4.2 | 4.2 | 1.7 | 0.3 | 0.2 |
| PVID Water Use - PG&E Contract | 30.0 | 30.0 | 30.0 | 30.0 | 26.7 | 25.0 | 25.0 |
| PVID Water Use - License 5264 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| East Fork Downstream of PVID (Import) | 80.7 | 79.7 | 79.8 | 80.8 | 80.3 | 78.7 | 79.8 |
| PVID Canal Net Return Flow (assumed) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| East Fork / Potter Valley Reach Analysis | | | | | | | |
| USGS E Fork @ Calpella | 88.2 | 87.1 | 88.7 | 94.7 | 100.8 | 95.4 | 92.1 |
| Net Reach Loss(-)/Gain(+) | -22.8 | -22.9 | -21.3 | -16.3 | -6.2 | -8.6 | -12.9 |
| Unimpaired Natural Flow @ Calpella (est.) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Non-PVID East Fork Net Reach Losses (est.) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Natural Flow | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Import | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

II. Lake Mendocino

Reservoir Operations

| | | | | | | | |
|---------------------------------------------------------------|----------------|--------|--------|--------|--------|--------|--------|
| Calculated Inflow (ac-ft) | 188 | 169 | 198 | 180 | 155 | 188 | 209 |
| (cfs) | 95 | 85 | 100 | 91 | 78 | 95 | 105 |
| Natural Flow | 14 | 5 | 20 | 10 | 0 | 16 | 25 |
| Import | 81 | 80 | 80 | 81 | 78 | 79 | 80 |
| Storage Change (ac-ft) | -244.0 | -262.0 | -210.0 | -227.0 | -262.0 | -229.0 | -207.0 |
| (cfs) | -123 | -132 | -106 | -114 | -132 | -115 | -104 |
| Stored Natural Flow (cfs) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Stored Import Water (cfs) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Evaporation (ac-ft) | 33.3 | 32.1 | 11.9 | 16.6 | 26.1 | 29.7 | 33.3 |
| RVCWD Diversion (ac-ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CVD Release Gage | 201 | 201 | 200 | 197 | 197 | 195 | 193 |
| Storage (Project Water) | 106 | 116 | 100 | 106 | 119 | 100 | 88 |
| Natural Flow | 14 | 5 | 20 | 10 | 0 | 16 | 25 |
| Import Water | 81 | 80 | 80 | 81 | 78 | 79 | 80 |
| East Fork Min Instream Flow Requirement | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Compliance Gage | <i>Rvr mi.</i> | | | | | | |
| CVD Release | 99.9 | 201 | 201 | 200 | 197 | 197 | 195 |
| CVD Project Water Release to Meet Min Flow Requirement | | | | | | | |
| Total Pass-through Water | 95 | 85 | 100 | 91 | 78 | 95 | 105 |
| Project Water Release Required | No | No | No | No | No | No | No |

III. Upper Russian River Reach

Minimum Instream Flow Requirement

| | | | | | | | |
|------------------------------------------------------------------------------------|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Minimum Instream Flow Requirement | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| Controlling Compliance Gage | | | | | | | |
| Min Gage Flow | 133 | 134 | 138 | 146 | 147 | 142 | 140 |
| Controlling Gage | Digger Bend | Digger Bend | Digger Bend | Digger Bend | Digger Bend | Digger Bend | Digger Bend |
| All Compliance Gages | | | | | | | |
| | <i>Rvr mi.</i> | | | | | | |
| Forks (CVD + USGS 11461000) | 99.0 | 201 | 201 | 200 | 197 | 197 | 195 |
| Talmage (USGS 11462080) | 96.1 | 169 | 170 | 172 | 166 | 166 | 164 |
| Hopland (USGS 11462500) | 84.8 | 159 | 162 | 169 | 164 | 161 | 160 |
| Cloverdale (USGS 11463000) | 70.9 | 150 | 153 | 163 | 164 | 153 | 152 |
| Geyserville (USGS 11463500) | 54.4 | 144 | 145 | 152 | 158 | 155 | 149 |
| Jimtown (USGS 11463682) | 48.5 | 150 | 148 | 149 | 154 | 153 | 150 |
| Digger Bend (USGS 11463980) | 38.2 | 133 | 134 | 138 | 146 | 147 | 142 |
| Healdsburg (USGS 11464000) | 35.6 | 147 | 150 | 159 | 179 | 187 | 172 |
| Net Reach Loss(-)/Gain(+) | | | | | | | |
| Forks - Talmage | -32 | -31 | -29 | -31 | -31 | -32 | -27 |
| Talmage - Hopland | -11 | -7 | -4 | -2 | -5 | -4 | -5 |
| Hopland - Cloverdale | -9 | -7 | -3 | -3 | -9 | -8 | -10 |
| Cloverdale - Jimtown | -4 | -1 | -6 | -10 | -8 | -2 | -4 |
| Jimtown - Digger Bend | -17 | -15 | -10 | -8 | -7 | -9 | -8 |
| Digger Bend - Healdsburg *when Digger Bend > 400 cfs, next u/s gage (Jimtown) used | +14 | +17 | +23 | +35 | +39 | +29 | +24 |
| Upper Russian Net Reach Loss/Gain | -58 | -45 | -29 | -19 | -21 | -25 | -29 |
| CVD Project Water Release to Meet Min Flow Requirement | | | | | | | |
| Net Reach Loss(-)/Gain(+) to Controlling Gage | -72 | -62 | -52 | -55 | -60 | -54 | -53 |
| Storage (Project Water) | -72 | -62 | -52 | -55 | -60 | -54 | -53 |
| Pass-through Water (Nat. + Imp.) + Natural | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Pass-through Water | 95 | 85 | 100 | 91 | 78 | 95 | 105 |
| Project Water Release Required | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

Notes:

- Water Accounting for the Upper Russian River is an analysis that approximates the current conditions based on methodology in Term 11 (2/11/21 Order) report and modified by Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

IV. Lake Sonoma

Lake Sonoma

| | | | | | | | |
|-------------------------|--------|--------|--------|--------|--------|--------|--------|
| Storage Change (ac-ft) | -236.0 | -262.0 | -209.0 | -314.0 | -235.0 | -272.0 | -276.0 |
| (cfs) | -119 | -132 | -105 | -158 | -118 | -137 | -139 |
| Evaporation (ac-ft) | 32.1 | 35.6 | 14.2 | 17.8 | 30.2 | 32.0 | 35.5 |
| Inflow (Natural Flow) | 5 | 0 | 10 | 0 | 4 | 0 | 0 |
| WSD Release Gage | 108 | 108 | 108 | 108 | 108 | 108 | 108 |
| Storage (Project Water) | 103 | 108 | 98 | 108 | 103 | 108 | 108 |
| Natural Flow | 5 | 0 | 10 | 0 | 4 | 0 | 0 |

V. Lower Dry Creek Reach

| | | | | | | | |
|---------------------------------------------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Minimum Instream Flow Requirement | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Controlling Compliance Gage | | | | | | | |
| Min Gage Flow | 94 | 95 | 96 | 95 | 95 | 92 | 90 |
| Controlling Gage | Dry Crk Mouth | Dry Crk Mouth | Dry Crk Mouth | Dry Crk Mouth | Dry Crk Mouth | Dry Crk Mouth | Dry Crk Mouth |
| All Compliance Gages | <i>Crk mi.</i> | | | | | | |
| WSD Release | 14.3 | 108 | 108 | 108 | 108 | 108 | 108 |
| Yoakim (USGS 11465200) | 11.1 | 107 | 108 | 109 | 108 | 107 | 107 |
| Lambert (USGS 11465240) | 6.8 | 111 | 112 | 112 | 112 | 111 | 110 |
| Dry Crk Mouth (USGS 11465350) | 0.1 | 94 | 95 | 96 | 95 | 95 | 92 |
| WSD to Russian River Confluence Reach Analysis | | | | | | | |
| Total Pass-through Water | 5 | 0 | 10 | 0 | 4 | 0 | 0 |
| Net Reach Loss(-)/Gain(+) | | | | | | | |
| WSD - Yoakim | -0 | +0 | +1 | -0 | -1 | -1 | -1 |
| Yoakim - Lambert | +3 | +4 | +3 | +4 | +4 | +4 | +3 |
| Lambert - Dry Crk Mouth | -17 | -17 | -16 | -17 | -17 | -18 | -20 |
| WSD - Dry Crk Mouth | -14 | -13 | -12 | -13 | -14 | -15 | -17 |
| WSD Project Water Release to Meet Min Flow Requirement | | | | | | | |
| Net Reach Loss/Gain to Controlling Gage | -14 | -13 | -12 | -13 | -14 | -15 | -17 |
| Project Water Release Required | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

VI. Russian River - Dry Creek Confluence

| | | | | | | | |
|---------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|
| Upper Russian River Flow (Healdsburg Gage) | | | | | | | |
| L. Mendocino Project Water + Import Water | 147 | 150 | 159 | 179 | 187 | 172 | 165 |
| Natural Flow | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dry Creek Flow (Mouth Gage) | | | | | | | |
| L. Sonoma Project Water | 103 | 108 | 98 | 108 | 103 | 108 | 108 |
| Natural Flow | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Russian River d/s of Confluence Flow | 241 | 245 | 255 | 275 | 282 | 265 | 255 |
| L. Mendocino Project Water + Import Water | 147 | 150 | 159 | 179 | 187 | 172 | 165 |
| L. Sonoma Project Water | 103 | 108 | 98 | 108 | 103 | 108 | 108 |
| Natural Flow | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

VII. Lower Russian River Reach

| | | | | | | | |
|---------------------------------------------------------------------|----------------|----------|----------|----------|----------|----------|----------|
| Minimum Instream Flow Requirement | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| Controlling Compliance Gage | | | | | | | |
| Min Gage Flow | 147 | 151 | 156 | 164 | 166 | 159 | 152 |
| Controlling Gage | Hacienda | Hacienda | Hacienda | Hacienda | Hacienda | Hacienda | Hacienda |
| All Compliance Gages | <i>Rvr mi.</i> | | | | | | |
| Windsor (USGS 11465390) | 26.6 | 273 | 275 | 277 | 283 | 279 | 276 |
| Hacienda (USGS 11467000) | 21.8 | 147 | 151 | 156 | 164 | 166 | 152 |
| Confluence to Windsor Reach Analysis | | | | | | | |
| Net Reach Loss/Gain to Windsor Gage | +33 | +30 | +28 | +13 | +2 | +9 | +18 |
| L. Mendocino Project Water + Import Water | 147 | 150 | 159 | 179 | 187 | 172 | 165 |
| L. Sonoma Project Water | 98 | 103 | 93 | 103 | 98 | 103 | 103 |
| Natural Flow | 33 | 30 | 28 | 13 | 2 | 9 | 18 |
| Confluence to SCWA Wohler Production Facility Reach Analysis | | | | | | | |
| Approx. Flow u/s of Wohler | 234 | 236 | 240 | 245 | 265 | 244 | 246 |
| Net Reach Loss(-)/Gain(+) | -7 | -9 | -15 | -30 | -16 | -21 | -9 |
| L. Mendocino Project Water + Import Water | 147 | 150 | 159 | 179 | 187 | 172 | 165 |
| L. Sonoma Project Water | 98 | 103 | 93 | 103 | 98 | 103 | 103 |
| Natural Flow | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Confluence to Hacienda (Guerneville) Reach Analysis | | | | | | | |
| Net Reach Loss(-)/Gain(+) | -93 | -94 | -99 | -111 | -116 | -106 | -103 |
| L. Mendocino Project Water + Import Water | 147 | 150 | 159 | 179 | 186 | 172 | 165 |
| L. Sonoma Project Water | 12 | 19 | 10 | 22 | 0 | 18 | 8 |
| Natural Flow | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

VIII. Water Production under Sonoma Water Water Rights (ac-ft)

| | | | | | | | |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lower Russian River | | | | | | | |
| Sonoma Water Total | 171.1 | 167.3 | 166.1 | 160.9 | 197.5 | 168.1 | 186.9 |
| Wohler | 76.8 | 58.1 | 74.9 | 78.5 | 76.3 | 78.5 | 74.9 |
| Mirabel | 94.3 | 109.2 | 91.2 | 82.4 | 121.2 | 89.6 | 112.0 |
| Town of Windsor River Wellfield | 9.7 | 9.7 | 9.3 | 9.6 | 9.8 | 10.2 | 10.3 |
| Camp Meeker & Occidental | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Upper Russian River | | | | | | | |
| City of Healdsburg | | | | | | | |
| Gauntlett & Fitch Mtn | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dry Creek | | | | | | | |
| City of Healdsburg | | | | | | | |
| Dry Creek Wellfield | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Notes:

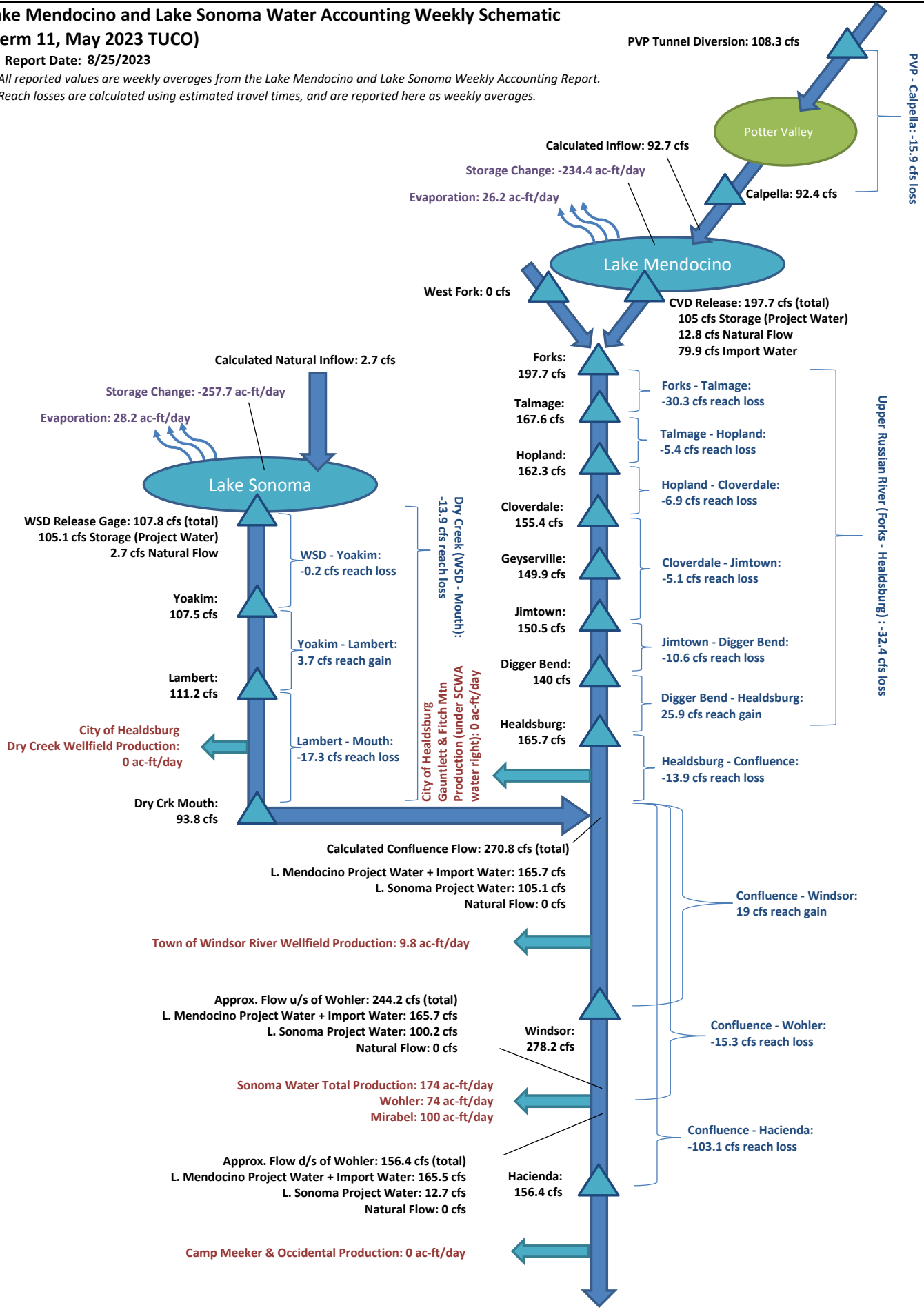
- Water Accounting for the Lower Russian River and Dry Creek is an analysis that approximates the current conditions based on the methodology in Term 12 (6/14/21 Order) report. Values listed include estimated values where measurements are not currently available (red italics).

Lake Mendocino and Lake Sonoma Water Accounting Weekly Schematic

(Term 11, May 2023 TUCO)

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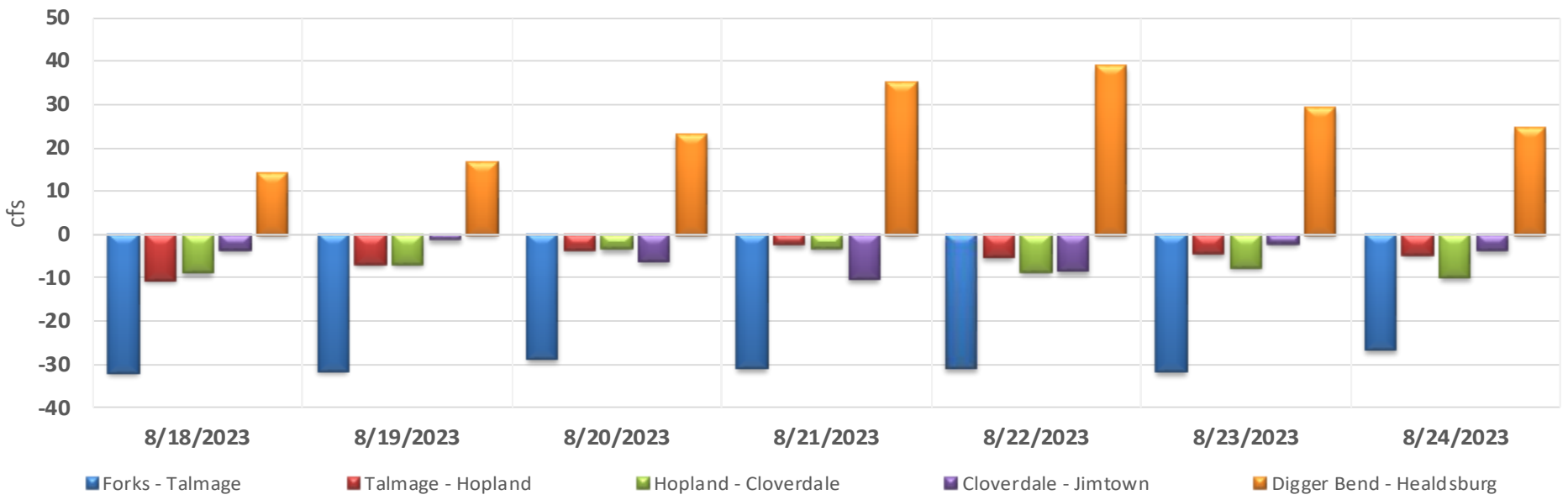
All reported values are weekly averages from the Lake Mendocino and Lake Sonoma Weekly Accounting Report.
Reach losses are calculated using estimated travel times, and are reported here as weekly averages.



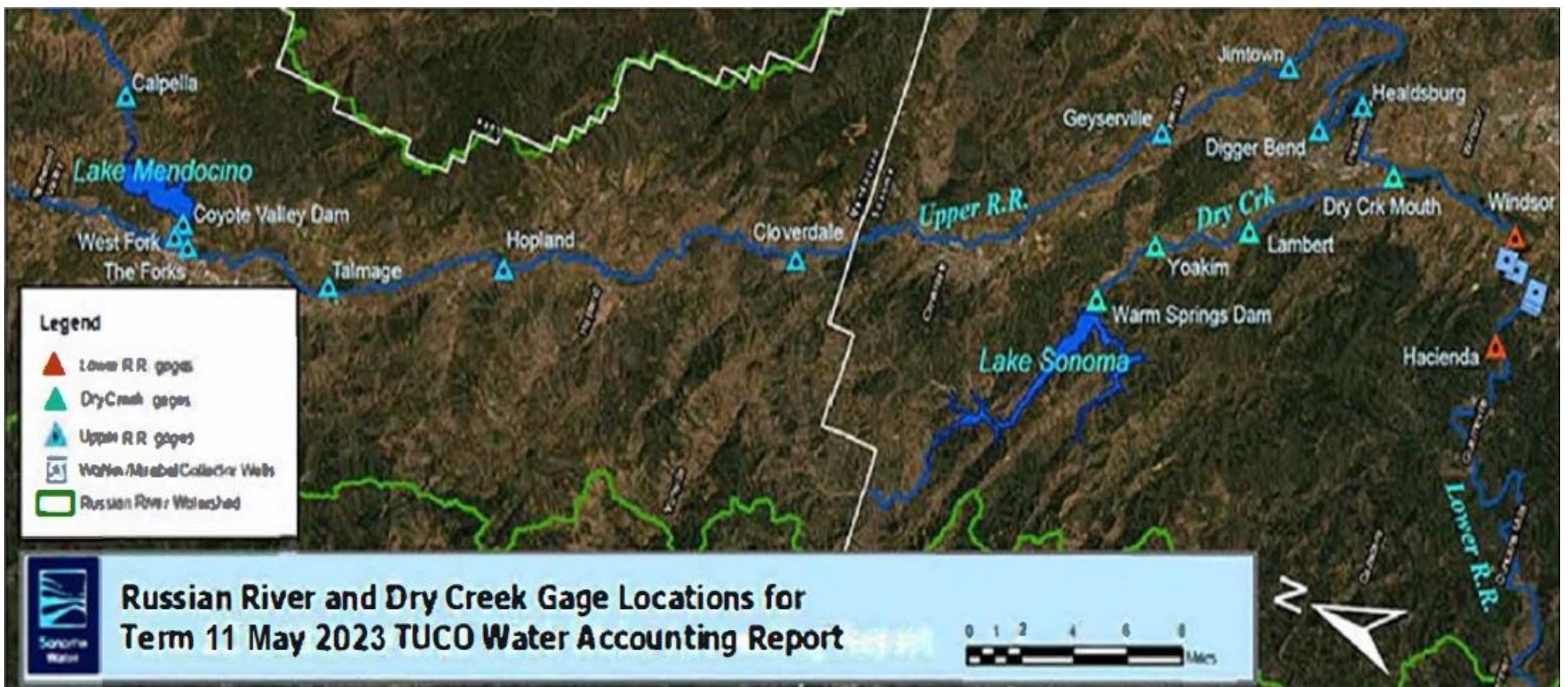
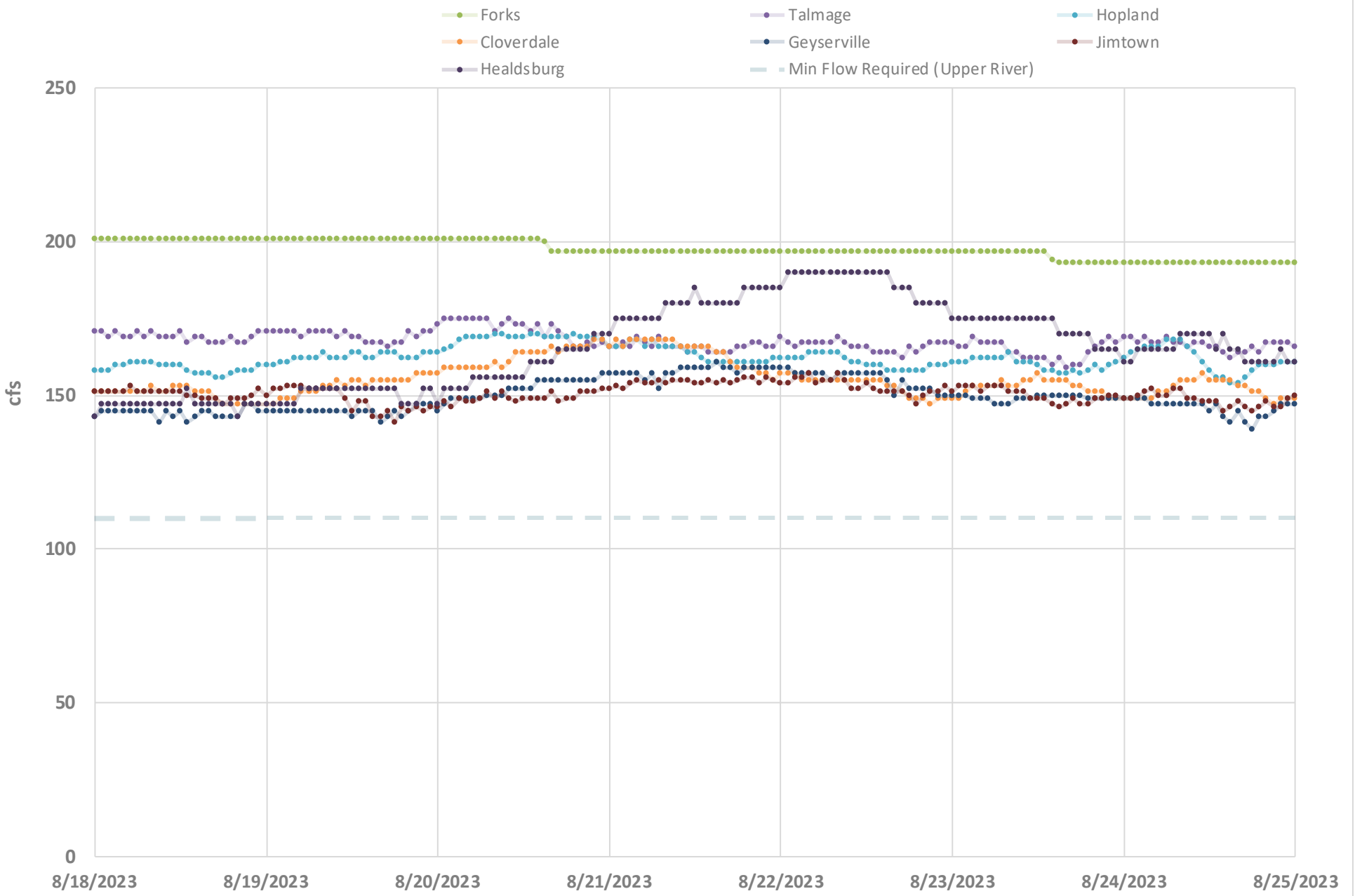
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UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



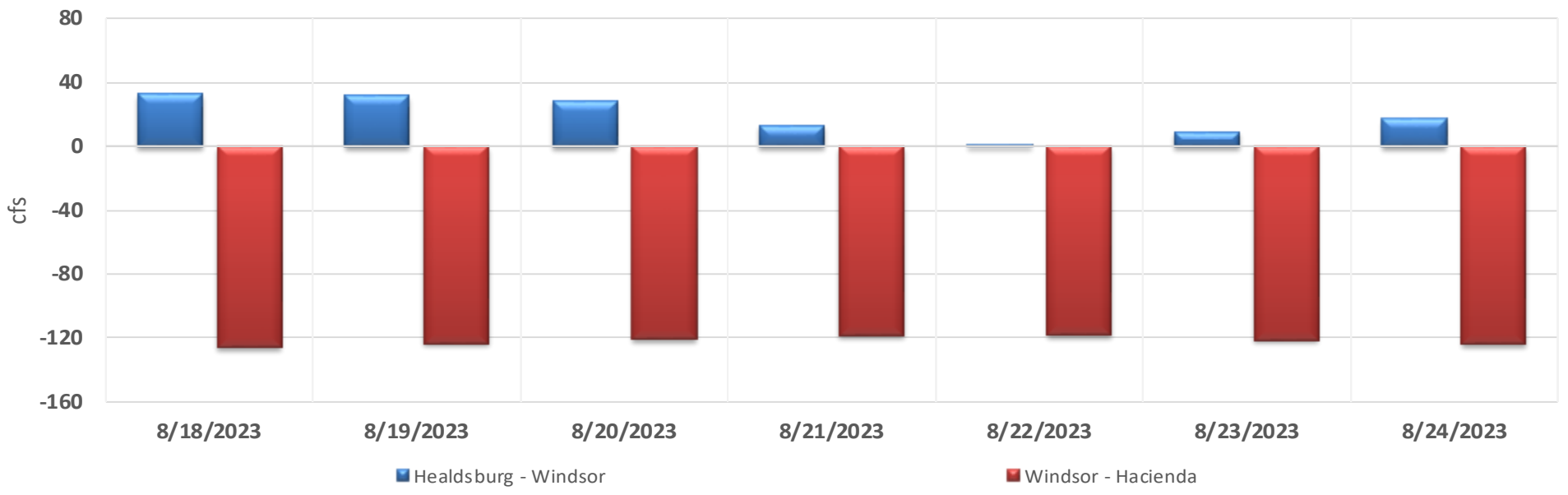
UPPER RUSSIAN RIVER STREAM FLOWS



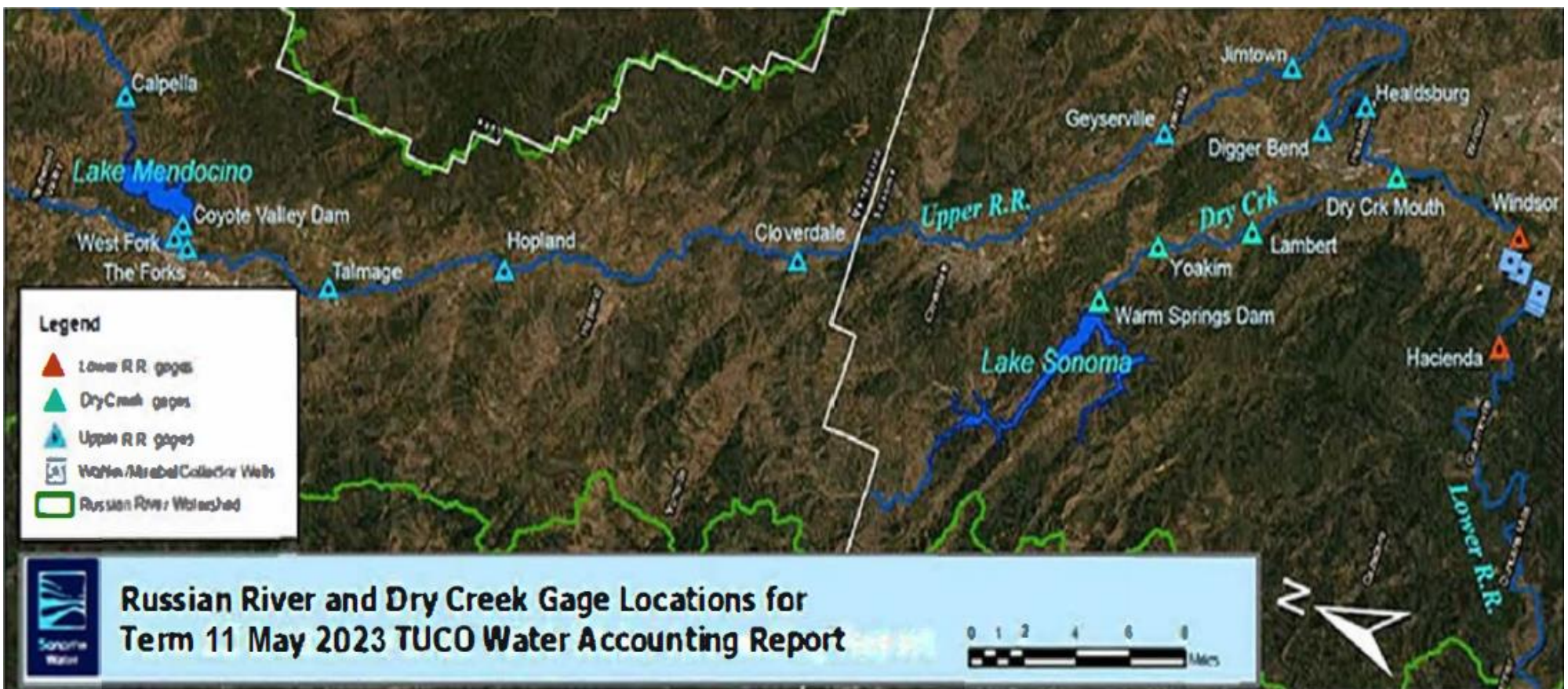
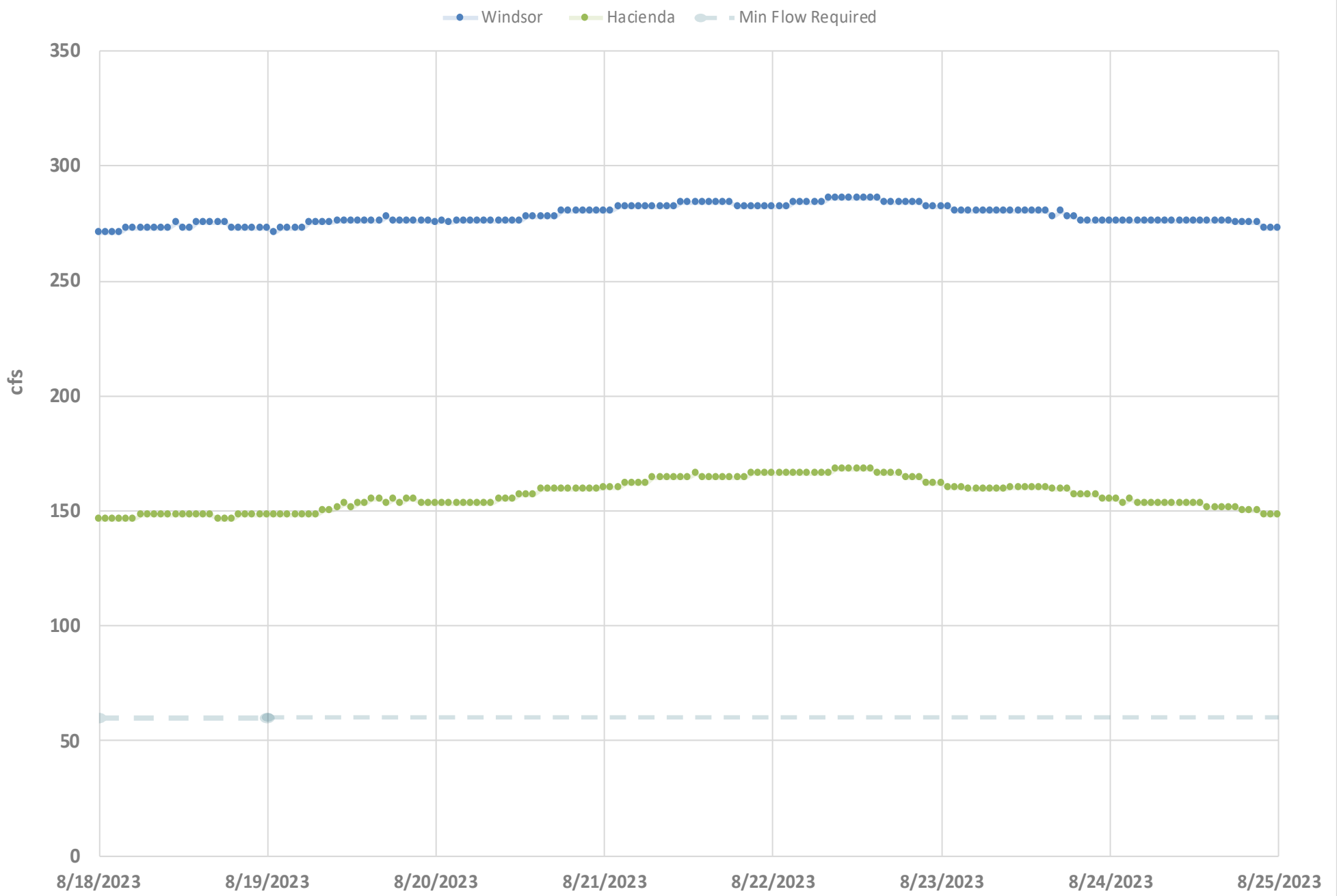
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LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



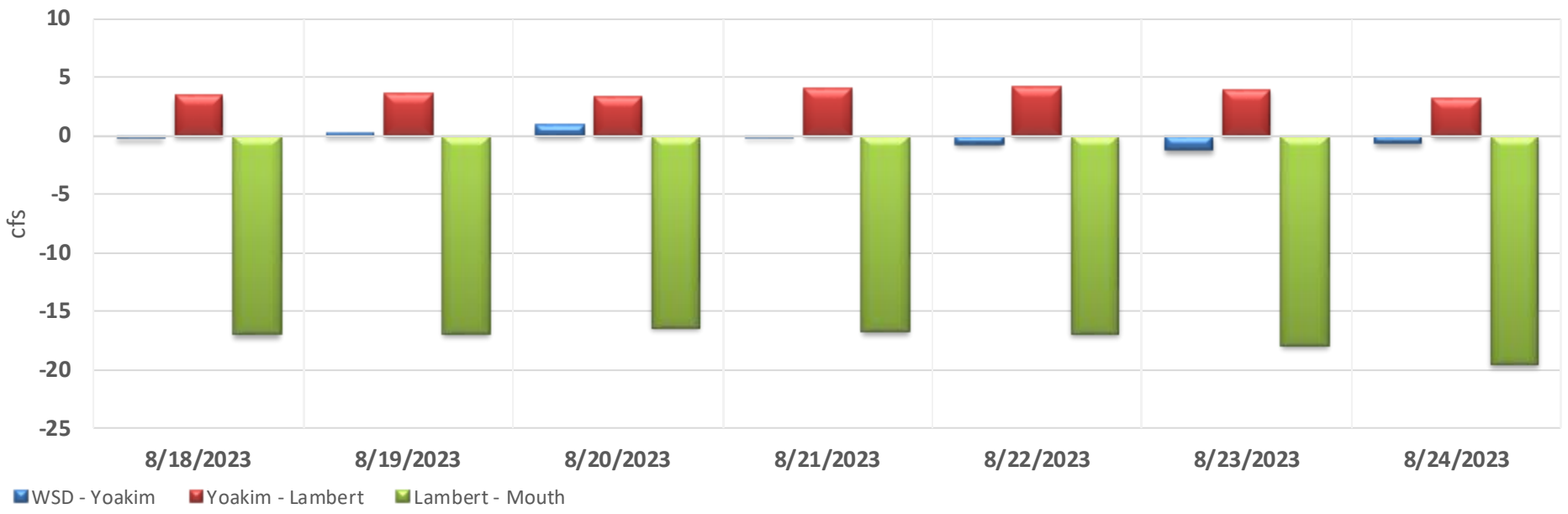
LOWER RUSSIAN RIVER STREAM FLOWS



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DRY CREEK NET REACH GAINS (+) / LOSSES (-)



DRY CREEK STREAM FLOWS

