

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

Report Date: 9/8/2023

Units are cfs unless noted otherwise

| | 9/1/2023 | 9/2/2023 | 9/3/2023 | 9/4/2023 | 9/5/2023 | 9/6/2023 | 9/7/2023 |
|---|----------|----------|----------|----------|----------|----------|----------|
| I. Upper East Fork Reach | | | | | | | |
| Potter Valley Project | | | | | | | |
| Tunnel Diversion | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 93.0 | 103.0 |
| PVID Requested Delivery | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 12.6 | 21.8 |
| PVID Canals Actual Delivery | 9.7 | 9.6 | 9.6 | 9.7 | 9.7 | 12.3 | 20.3 |
| East Fork Release | 80.0 | 80.0 | 80.0 | 80.0 | 80.0 | 81.0 | 83.0 |
| PVID E Fork Diversions | 0.3 | 0.4 | 0.4 | 0.3 | 0.3 | 0.3 | 1.4 |
| PVID Water Use - PG&E Contract | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 12.6 | 21.8 |
| 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) | 79.7 | 79.6 | 79.6 | 79.7 | 79.7 | 80.7 | 81.6 |
| 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 | 80.7 | 74.6 | 76.2 | 77.6 | 74.4 | 73.0 | 74.3 |
| Net Reach Loss(-)/Gain(+) | -9.3 | -15.4 | -13.8 | -12.4 | -15.6 | -20.0 | -28.7 |
| 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 | -5.4 | -3.8 | -2.4 | -5.6 | -7.4 | -7.0 |
| Natural Flow | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Import | 0.0 | -5.4 | -3.8 | -2.4 | -5.6 | -7.4 | -7.0 |

II. Lake Mendocino

Reservoir Operations

| | | | | | | | |
|---|----------------|--------|--------|--------|--------|--------|--------|
| Calculated Inflow (ac-ft) | 148 | 152 | 177 | 171 | 173 | 219 | 146 |
| (cfs) | 75 | 77 | 89 | 86 | 87 | 111 | 74 |
| Natural Flow | 0 | 0 | 5 | 4 | 2 | 23 | 0 |
| Import | 75 | 77 | 84 | 82 | 86 | 88 | 74 |
| Storage Change (ac-ft) | -243.0 | -243.0 | -209.0 | -208.0 | -208.0 | -156.0 | -226.0 |
| (cfs) | -123 | -123 | -105 | -105 | -105 | -79 | -114 |
| 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) | 16.3 | 20.0 | 23.8 | 27.5 | 30.0 | 28.8 | 28.7 |
| RVCWD Diversion (ac-ft) | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CVD Release Gage | 189 | 189 | 182 | 177 | 177 | 175 | 173 |
| Storage (Project Water) | 114 | 112 | 93 | 91 | 90 | 64 | 99 |
| Natural Flow | 0 | 0 | 5 | 4 | 2 | 23 | 0 |
| Import Water | 75 | 77 | 84 | 82 | 86 | 88 | 74 |
| East Fork Min Instream Flow Requirement | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Compliance Gage | <i>Rvr mi.</i> | | | | | | |
| CVD Release | 99.9 | 189 | 189 | 182 | 177 | 177 | 175 |
| CVD Project Water Release to Meet Min Flow Requirement | | | | | | | |
| Total Pass-through Water | 75 | 77 | 89 | 86 | 87 | 111 | 74 |
| Project Water Release Required | No | No | No | No | No | No | No |

III. Upper Russian River Reach

| | | | | | | | |
|--|----------------|-------------|-------------|-------------|-------------|-------------|------------|
| Minimum Instream Flow Requirement | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| Controlling Compliance Gage | | | | | | | |
| Min Gage Flow | 135 | 144 | 147 | 147 | 140 | 135 | 131 |
| Controlling Gage | Healdsburg | Digger Bend | Digger Bend | Digger Bend | Geyserville | Geyserville | Healdsburg |
| All Compliance Gages | | | | | | | |
| | <i>Rvr mi.</i> | | | | | | |
| Forks (CVD + USGS 11461000) | 99.0 | 189 | 189 | 182 | 177 | 175 | 173 |
| Talmage (USGS 11462080) | 96.1 | 161 | 161 | 155 | 150 | 149 | 142 |
| Hopland (USGS 11462500) | 84.8 | 172 | 173 | 171 | 162 | 160 | 154 |
| Cloverdale (USGS 11463000) | 70.9 | 157 | 154 | 156 | 148 | 142 | 137 |
| Geyserville (USGS 11463500) | 54.4 | 144 | 149 | 150 | 148 | 140 | 133 |
| Jimtown (USGS 11463682) | 48.5 | 147 | 150 | 151 | 150 | 146 | 140 |
| Digger Bend (USGS 11463980) | 38.2 | 139 | 144 | 147 | 147 | 142 | 135 |
| Healdsburg (USGS 11464000) | 35.6 | 135 | 148 | 157 | 158 | 160 | 131 |
| Net Reach Loss(-)/Gain(+) | | | | | | | |
| Forks - Talmage | -28 | -28 | -29 | -27 | -28 | -30 | -31 |
| Talmage - Hopland | +11 | +11 | +13 | +12 | +11 | +8 | +11 |
| Hopland - Cloverdale | -14 | -18 | -17 | -19 | -19 | -20 | -16 |
| Cloverdale - Jimtown | -6 | -6 | -3 | -5 | +0 | +2 | +1 |
| Jimtown - Digger Bend | -7 | -6 | -4 | -4 | -5 | -7 | -6 |
| Digger Bend - Healdsburg *when Digger Bend > 400 cfs, next u/s gage (Jimtown) used | -3 | +5 | +10 | +10 | +16 | +1 | -4 |
| Upper Russian Net Reach Loss/Gain | -48 | -41 | -31 | -31 | -25 | -46 | -44 |
| CVD Project Water Release to Meet Min Flow Requirement | | | | | | | |
| Net Reach Loss(-)/Gain(+) to Controlling Gage | -48 | -46 | -40 | -41 | -36 | -40 | -44 |
| Storage (Project Water) | -48 | -46 | -40 | -41 | -36 | -40 | -44 |
| Pass-through Water (Nat. + Imp.) + Natural | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Pass-through Water | 75 | 77 | 89 | 86 | 87 | 111 | 74 |
| Project Water Release Required | Yes | Yes | Yes | Yes | Yes | No | 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).

| | 9/1/2023 | 9/2/2023 | 9/3/2023 | 9/4/2023 | 9/5/2023 | 9/6/2023 | 9/7/2023 |
|-------------------------|----------|----------|----------|----------|----------|----------|----------|
| IV. Lake Sonoma | | | | | | | |
| Lake Sonoma | | | | | | | |
| Storage Change (ac-ft) | -338.0 | -233.0 | -233.0 | -233.0 | -258.0 | -285.0 | -232.0 |
| (cfs) | -170 | -117 | -117 | -117 | -130 | -144 | -117 |
| Evaporation (ac-ft) | 22.4 | 18.7 | 28.0 | 29.8 | 27.9 | 24.2 | 26.0 |
| Inflow (Natural Flow) | 0 | 1 | 6 | 7 | 0 | 0 | 5 |
| WSD Release Gage | 109 | 109 | 109 | 109 | 110 | 110 | 109 |
| Storage (Project Water) | 109 | 108 | 103 | 102 | 110 | 110 | 104 |
| Natural Flow | 0 | 1 | 6 | 7 | 0 | 0 | 5 |

| | | | | | | | |
|---|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| V. Lower Dry Creek Reach | | | | | | | |
| Minimum Instream Flow Requirement | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Controlling Compliance Gage | | | | | | | |
| Min Gage Flow | 91 | 94 | 94 | 94 | 92 | 91 | 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 | 109 | 109 | 109 | 110 | 110 | 109 |
| Yoakim (USGS 11465200) | 11.1 | 106 | 108 | 108 | 107 | 106 | 105 |
| Lambert (USGS 11465240) | 6.8 | 110 | 112 | 113 | 112 | 110 | 110 |
| Dry Crk Mouth (USGS 11465350) | 0.1 | 91 | 94 | 94 | 94 | 92 | 90 |
| WSD to Russian River Confluence Reach Analysis | | | | | | | |
| Total Pass-through Water | 0 | 1 | 6 | 7 | 0 | 0 | 5 |
| Net Reach Loss(-)/Gain(+) | | | | | | | |
| WSD - Yoakim | -3 | -1 | -1 | -2 | -3 | -4 | -4 |
| Yoakim - Lambert | +5 | +4 | +5 | +5 | +4 | +4 | +4 |
| Lambert - Dry Crk Mouth | -19 | -17 | -19 | -19 | -19 | -19 | -20 |
| WSD - Dry Crk Mouth | -17 | -15 | -15 | -16 | -18 | -19 | -19 |
| WSD Project Water Release to Meet Min Flow Requirement | | | | | | | |
| Net Reach Loss/Gain to Controlling Gage | -17 | -15 | -15 | -16 | -18 | -19 | -19 |
| 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 | 135 | 148 | 157 | 158 | 160 | 138 | 131 |
| Natural Flow | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dry Creek Flow (Mouth Gage) | | | | | | | |
| L. Sonoma Project Water | 109 | 108 | 103 | 102 | 110 | 110 | 104 |
| Natural Flow | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Russian River d/s of Confluence Flow | | | | | | | |
| L. Mendocino Project Water + Import Water | 135 | 148 | 157 | 158 | 160 | 138 | 131 |
| L. Sonoma Project Water | 109 | 108 | 103 | 102 | 110 | 110 | 104 |
| 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 | 157 | 167 | 178 | 182 | 201 | 221 | 179 |
| Controlling Gage | Hacienda | Hacienda | Hacienda | Hacienda | Hacienda | Hacienda | Hacienda |
| All Compliance Gages | | | | | | | |
| | <i>Rvr mi.</i> | | | | | | |
| Windsor (USGS 11465390) | 26.6 | 245 | 250 | 255 | 256 | 279 | 253 |
| Hacienda (USGS 11467000) | 21.8 | 157 | 167 | 178 | 182 | 201 | 179 |
| Confluence to Windsor Reach Analysis | | | | | | | |
| Net Reach Loss/Gain to Windsor Gage | +18 | +9 | +5 | +4 | +24 | +48 | +28 |
| L. Mendocino Project Water + Import Water | 135 | 148 | 157 | 158 | 160 | 138 | 131 |
| L. Sonoma Project Water | 103 | 103 | 98 | 97 | 105 | 105 | 99 |
| Natural Flow | 18 | 9 | 5 | 4 | 24 | 48 | 28 |
| Confluence to SCWA Wohler Production Facility Reach Analysis | | | | | | | |
| Approx. Flow u/s of Wohler | 242 | 247 | 251 | 276 | 300 | 296 | 258 |
| Net Reach Loss(-)/Gain(+) | +15 | +5 | +0 | +24 | +48 | +67 | +36 |
| L. Mendocino Project Water + Import Water | 135 | 148 | 157 | 158 | 160 | 138 | 131 |
| L. Sonoma Project Water | 103 | 103 | 98 | 97 | 105 | 105 | 99 |
| Natural Flow | 15 | 5 | 0 | 24 | 48 | 67 | 36 |
| Confluence to Hacienda (Guerneville) Reach Analysis | | | | | | | |
| Net Reach Loss(-)/Gain(+) | -69 | -74 | -73 | -70 | -51 | -8 | -43 |
| L. Mendocino Project Water + Import Water | 135 | 148 | 157 | 158 | 160 | 138 | 131 |
| L. Sonoma Project Water | 19 | 23 | 25 | 3 | 6 | 30 | 20 |
| Natural Flow | 15 | 5 | 0 | 24 | 48 | 67 | 36 |

| | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|
| VIII. Water Production under Sonoma Water Rights (ac-ft) | | | | | | | |
| Lower Russian River | | | | | | | |
| Sonoma Water Total | 167.1 | 157.9 | 145.2 | 186.1 | 196.8 | 149.4 | 157.0 |
| Wohler | 52.0 | 69.7 | 49.2 | 67.8 | 70.4 | 57.7 | 69.9 |
| Mirabel | 115.1 | 88.2 | 96.0 | 118.3 | 126.4 | 91.6 | 87.1 |
| Town of Windsor River Wellfield | 11.0 | 10.8 | 10.6 | 11.0 | 9.0 | 9.8 | 9.1 |
| 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 |

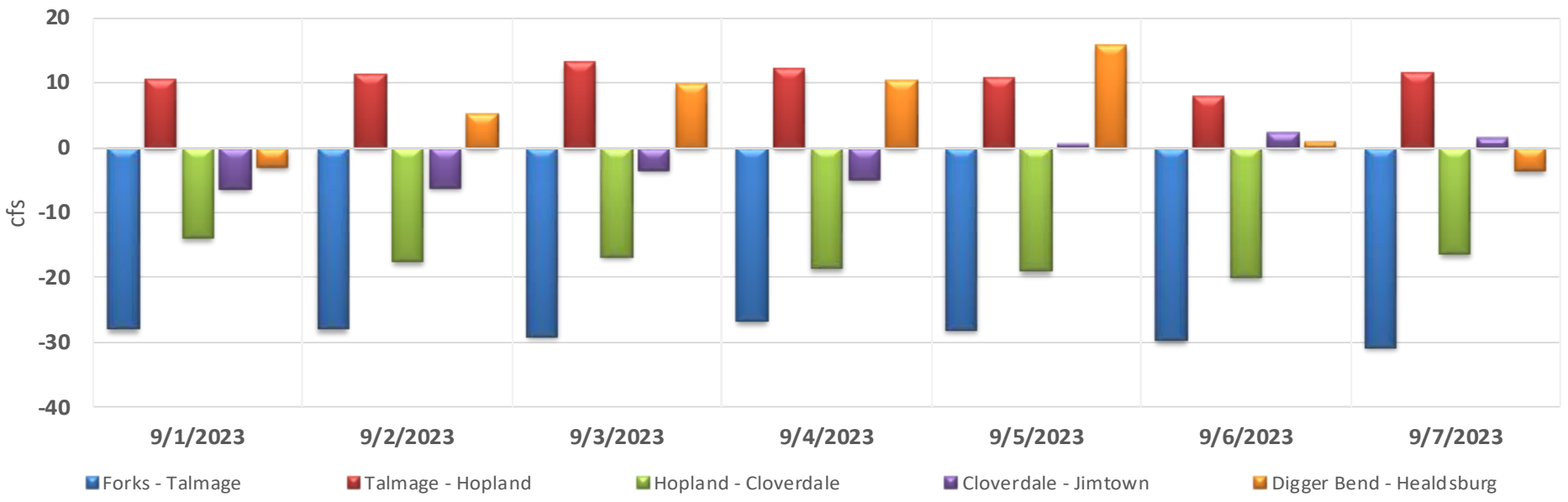
Notes:

- 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).

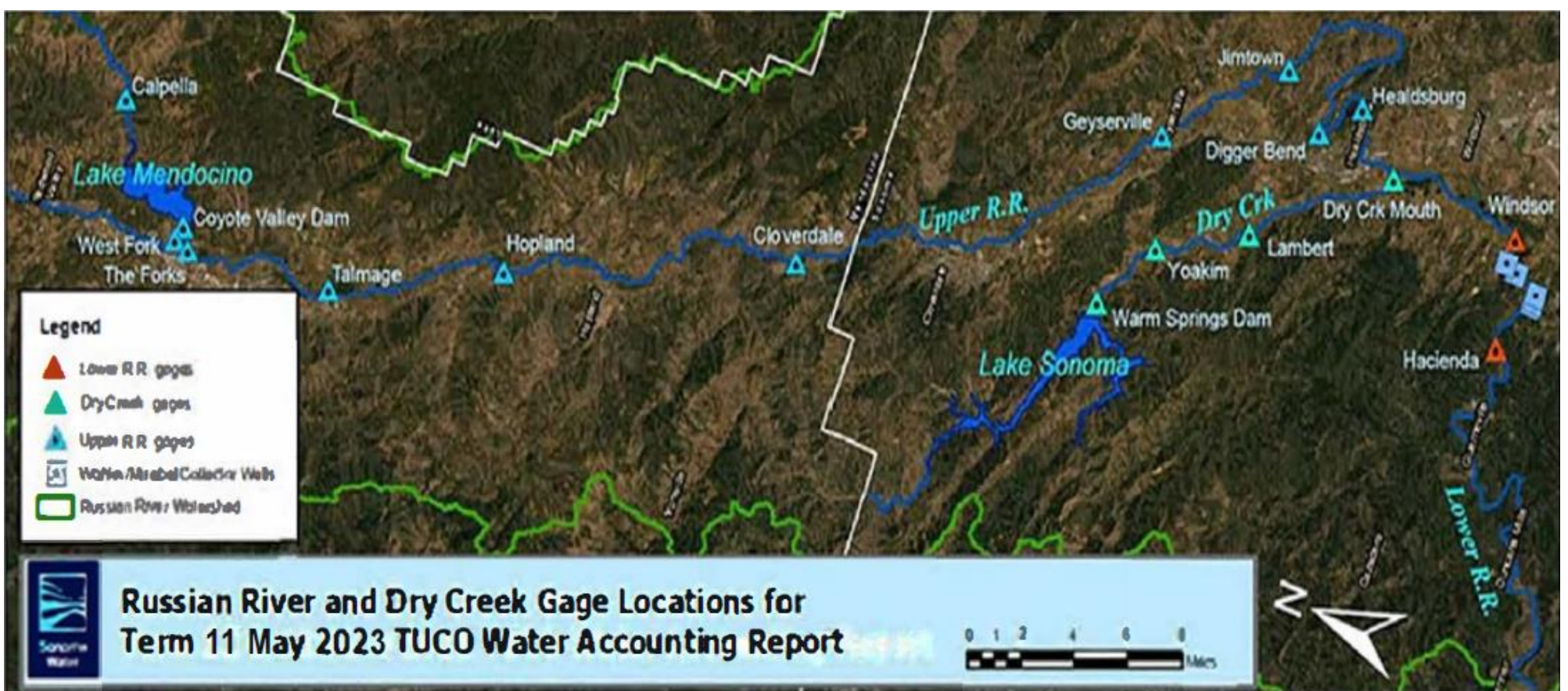
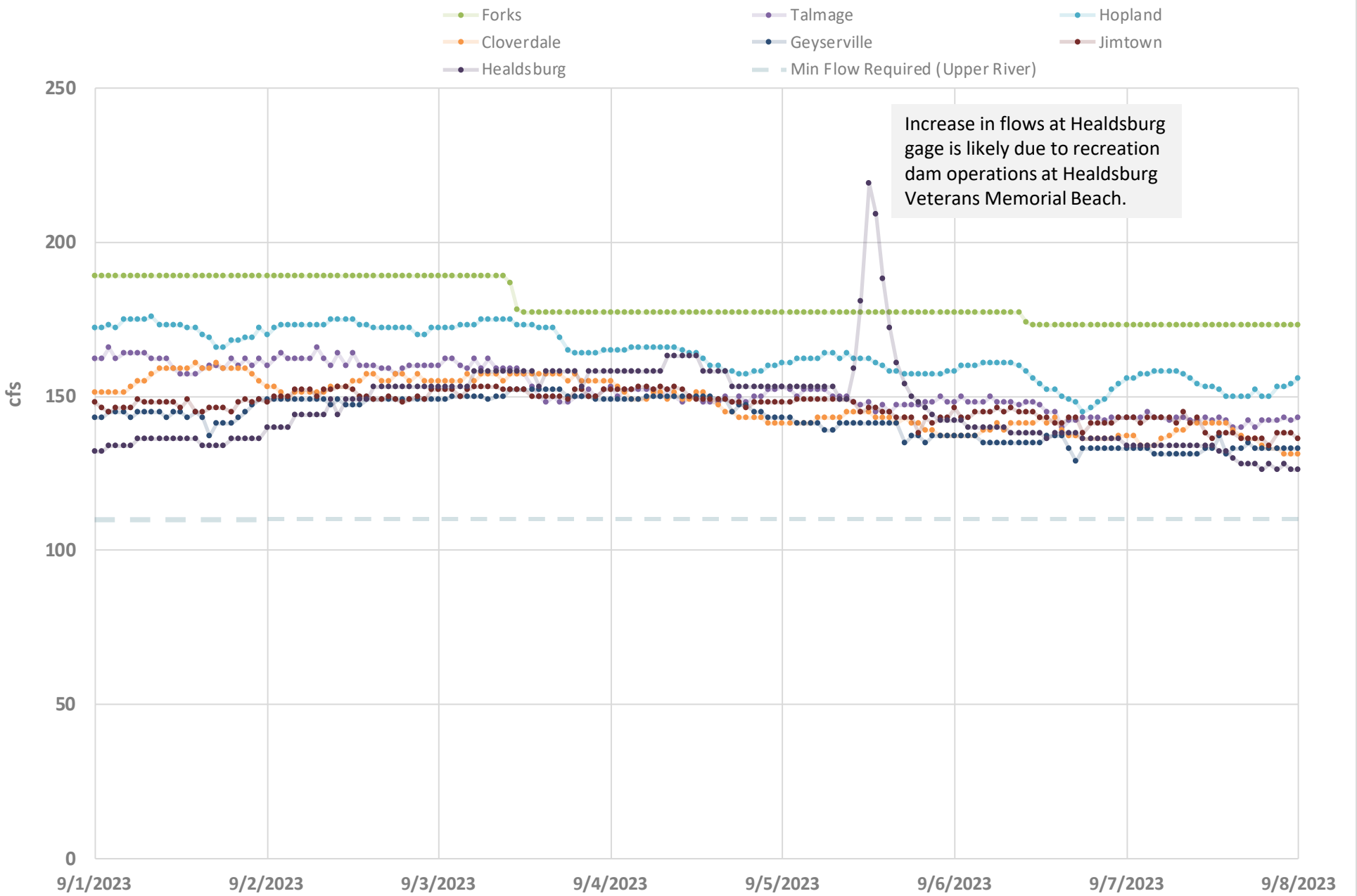
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UPPER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



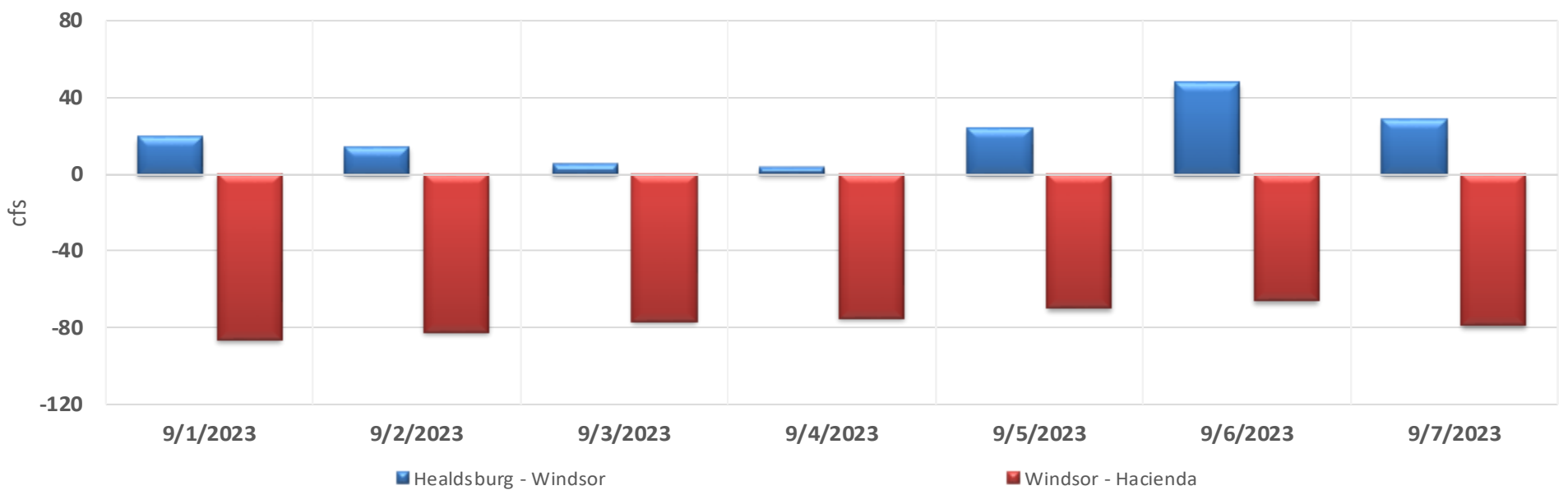
UPPER RUSSIAN RIVER STREAM FLOWS



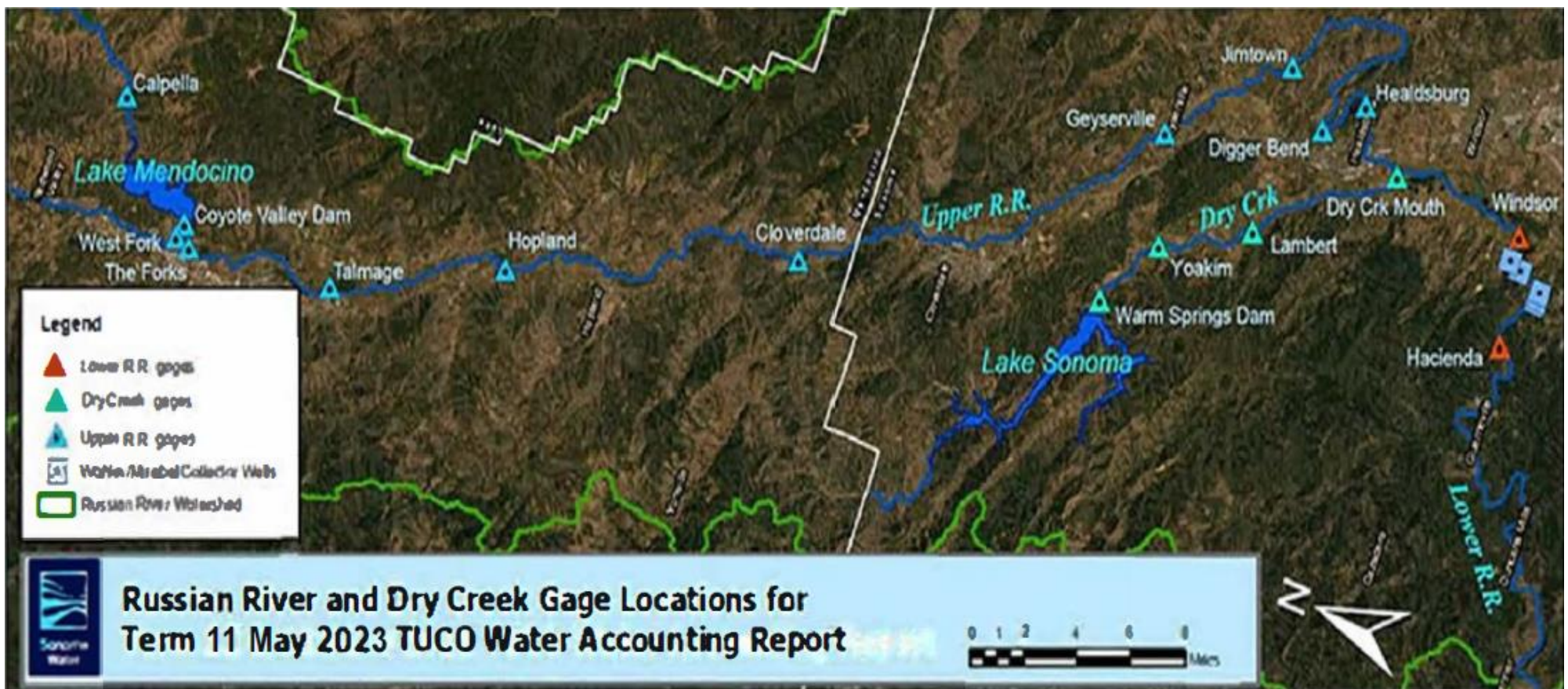
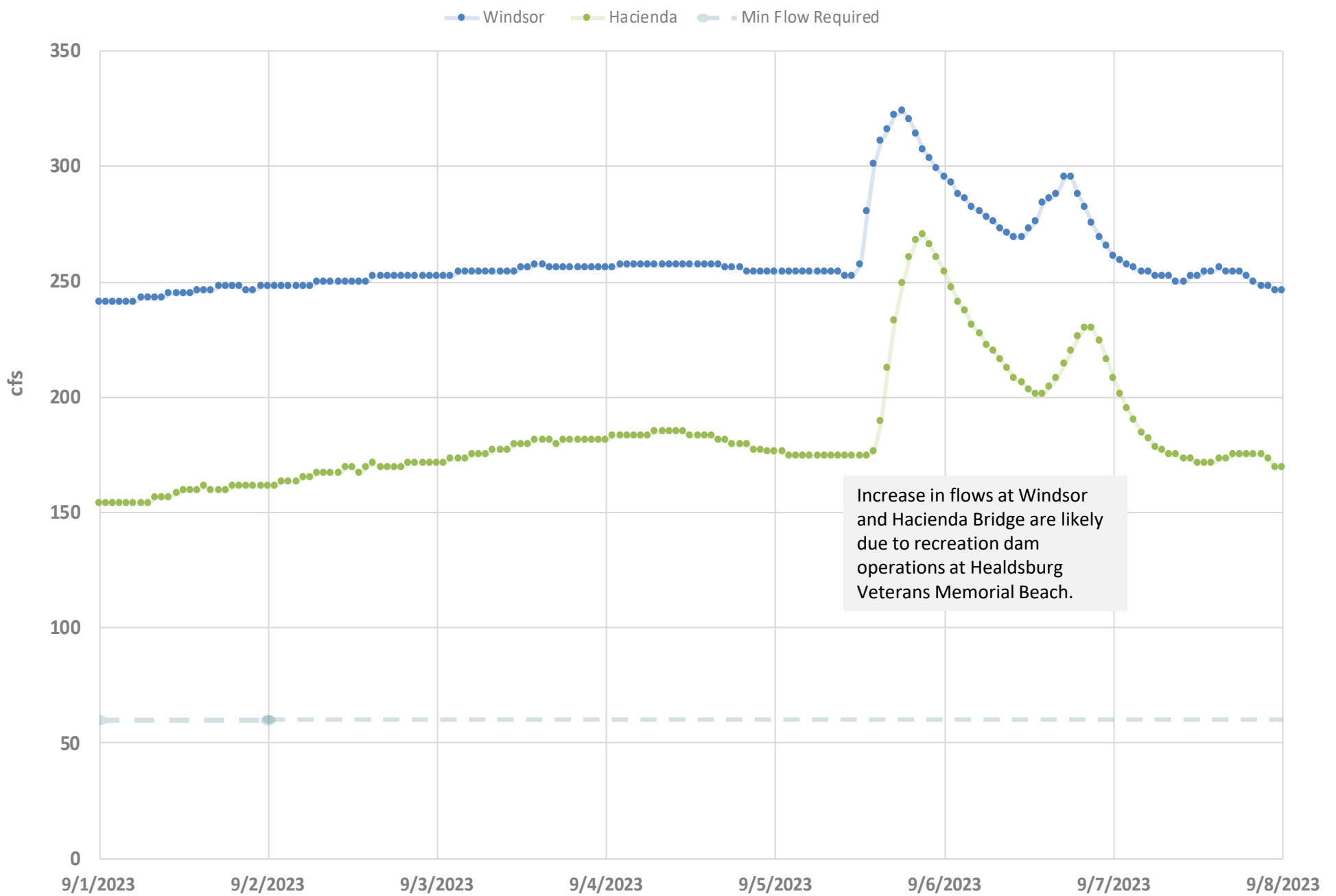
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LOWER RUSSIAN RIVER NET REACH GAINS (+) / LOSSES (-)



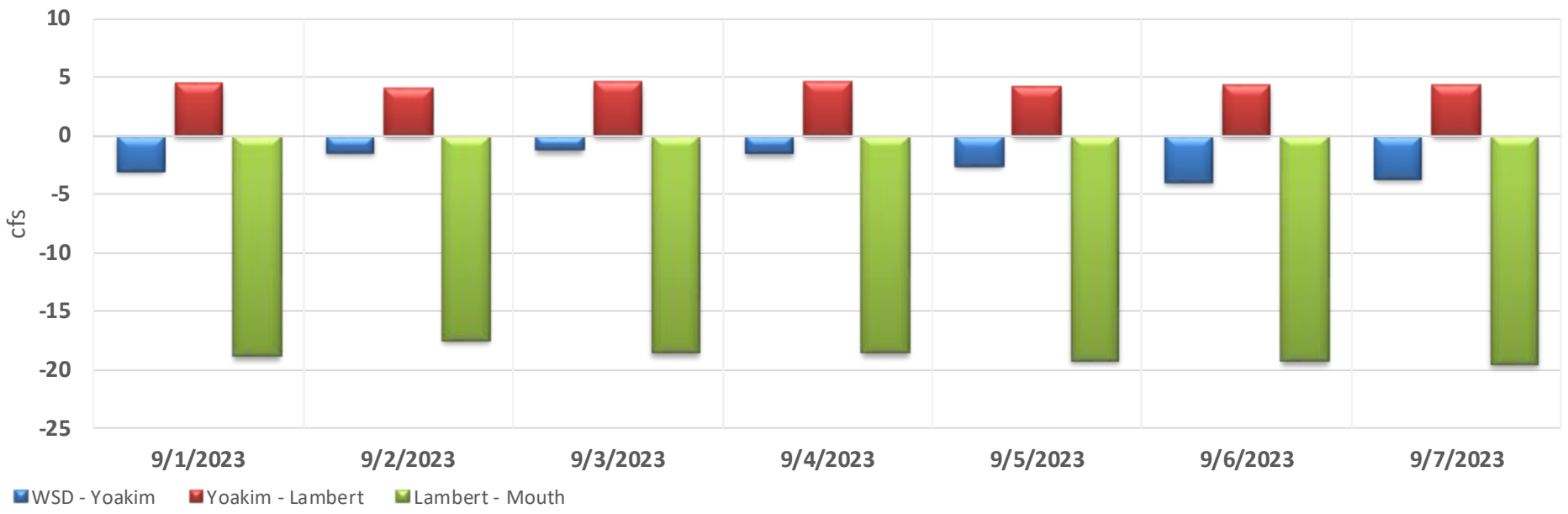
LOWER RUSSIAN RIVER STREAM FLOWS



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



DRY CREEK STREAM FLOWS

