

MEMORANDUM

To: Water Right File No 63-32423
From: Ashley Ritter
Date: March 12, 2021
Re: Permit 63-32423- Dry Creek Mitigation Planning, 2021 Memo Review

Intro

On February 12, 2021, SPF Water Engineering (SPF) submitted (via email) Dry Creek Mitigation Planning, 2021 memorandum (2021 Mitigation Plan) for the Dry Creek Ranch Aquifer Mitigation Plan for Permit 63-32423.

Permit 63-32423, condition fourteen (14) requires the following steps to be taken in preparing the annual mitigation plan:

1. Identify and estimate a diversion rate and volume for all uses under the right that will exceed the individual domestic use limits as defined by Idaho Code § 42-111(1)(a) and (b) during the year. Uses under this right that exceed the individual use limits of Idaho Code § 42-111(1) (a) and (b) are considered to be 100% consumptive. Such uses shall be mitigated through reduction of one acre of irrigation use under water rights 63-2535, 63-4023B, 63-4086B, 63-7123, 63-17454, and 63-32266 for each 2.7 acre feet of water diverted under this right.
2. Identify all uses under the right that will meet the individual domestic use limits as defined by Idaho Code § 42-111(1)(a) and (b) during the year and estimate an annual diversion volume for these uses. Such uses shall be mitigated through reduction of one acre of irrigation use under water rights 63-2535, 63-4023B, 63-4086B, 63-7123, 63-17454, and 63-32266 for each 4.5 acre feet of water diverted under this right.
3. Reduce the number of acres to be irrigated under Rights 63-2535, 63-4023B, 63-4086B, 63-7123, 63-17454, and 63-32266, sufficiently to provide the required mitigation for items "a" and "b" above.
4. Report to the Department the volume of water to be used for municipal purposes in connection with this permit during the year.
5. Report the number of acres required to mitigate for the municipal use, along with the water right numbers, diversion rates, and annual diversion volumes associated with those acres.
6. Report the location of the lands that will be irrigated during the forthcoming irrigation season with water diverted under Rights 63-2535, 63-4023B, 63-4086B, 63-7123, 63-17454, and 63-32266. The location shall be reported in map, GIS shapefile, and PLS tabular forms."

2021 Mitigation Plan Review

1. The estimated and projected annual diversion volume for domestic municipal use in 2021 is 339.9 acre-feet (AF). This volume is based on the fact that 165 homes were occupied as of the end of November 2020, and an additional 9 homes are expected to be occupied each month, with 282 homes expected to be occupied by December 2021.

The domestic water usage per home in the non irrigation season (January to May and October to December) is estimated to be 150 gallons per day (this number has been decreased from the 200 gallon-per-day estimated use in the 2020 mitigation plan due to the consistent overestimation of domestic water use) and approximately 4.25 AF per acre of lawn and landscape irrigation from April to October.

2. Municipal non-domestic use diversion rate and volume are calculated based on the 2020 water use records and anticipated irrigation demands for 2021. Estimated non-domestic municipal use for 2021 is 277.9 AF (see 2021 Mitigation Plan for calculation explanation).

SPF noted that the non-domestic municipal diversion estimates are higher than what would typically be expected for a subdivision of this size. The high diversion rate is due to the supply wells also being used to supply 50 acres of surrounding cropland with irrigation water.

3. To mitigate for the estimated 2021 non-domestic municipal diversion volume of approximately 278 AF, the irrigated area must be reduced by 102.9 acres (278 AF/2.7 AF). An additional 75.5 acres (339.9AF /4.5 AF) must be removed from the irrigated area to mitigate for the estimated domestic municipal diversion volume of 339.9 AF. The total mitigation acreage for 2021 is 178.5 acres. The 178.5 acres utilized for mitigation are identified in an attached map accompanying the 2021 Mitigation Plan.
4. Dry Creek's irrigation rights currently authorize a total of 404 acres in a single irrigation season within a 739-acre permissible place of use. Accounting for the 178.5 acres of mitigation, the allowable irrigation area for 2021 is 225.5 acres (404-178.5 acres). The actual irrigated acres per the 2021 Mitigation Plan is approximately 83.5 acres (map provided in 2021 Mitigation Plan).
5. The combined diversion rate for Dry Creek's irrigation rights is 7.48 cubic feet per second (cfs) with a combined annual diversion volume of 1,764 AF on a maximum of 404 irrigated acres. The combined diversion rate per irrigated acre is 0.019 cfs and the combined diversion volume per irrigated acre is 4.37 AF. The 178.5 acres taken out of irrigation from the combined water rights offers a reduction of 3.39 cfs and a volume reduction of 780 AF.

Conclusions

The mitigation requirements for 2021 have been satisfied.

Ritter, Ashley

From: Ritter, Ashley
Sent: Friday, March 12, 2021 10:35 AM
To: 'Sean Albertson'
Cc: Landon Northey; Terry Scanlan
Subject: RE: Permit 63-32423 Mitigation Plan

Sean,

The 2021 Mitigation Plan for Permit 63-32423 has been reviewed. Based on the review, the mitigation requirements for Permit 63-32423 are currently being met and the Department has no additional comments. Thank you.

Ashley M. Ritter, E.I.T., G.I.T. | Associate Engineer
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From: Sean Albertson [mailto:Salbertson@spfwater.com]
Sent: Friday, February 12, 2021 2:51 PM
To: Ritter, Ashley <Ashley.Ritter@idwr.idaho.gov>
Cc: Landon Northey <LNorthey@boisehunterhomes.com>; Terry Scanlan <TScanlan@spfwater.com>
Subject: Permit 63-32423 Mitigation Plan

Ashley,

Pursuant to the conditions of permit 63-32423, attached is the 2021 mitigation plan submitted on behalf of Dry Creek Water Company. Please let me know if there are any questions.

Thanks,
Sean

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