

MEMORANDUM

TO: President Talbot, Lost Pines Groundwater Conservation District Board of Directors
Board of Directors, Lost Pines Groundwater Conservation District

FROM: Jim Totten, General Manager
Andy Donnelly, District Hydrogeologist
Natasha J. Martin and Matt Kutac, Legal Counsel

DATE: June 16, 2021

RE: Manville Water Supply Corporation Applications – Environmental Stewardship and Simsboro Aquifer Defense Fund Comments

I. Pending Manville Applications.

Manville Water Supply Corporation (“Applicant”) has applied to the Lost Pines Groundwater Conservation District (the “District”) for Operating Permits for two wells located in Lee County and proposes to complete the wells in the Hooper Aquifer to withdraw 564 acre-feet of water per year from each well, with a total production of 1,128 acre-feet of water per year combined from the two wells, to be used for municipal purposes in the Manville Water Supply Corporation Service Area in Lee County (the “Manville Applications”). Each well is proposed to pump at a maximum instantaneous rate of 350 gallons per minute. One contested case hearing request has been submitted on these applications from the City of Hutto. With a pending hearing request, the Board is prohibited from taking action to approve or deny the Manville Applications at the June 16, 2021 meeting.

II. DFC comments from Environmental Stewardship and Simsboro Aquifer Water Defense Fund are misinformed assumptions.

On June 15, 2021, Environmental Stewardship (ES) and Simsboro Aquifer Water Defense Fund (SAWDF) submitted a written comment alleging that the District has “not processed the Manville permit application in compliance with Chapter 36 of the Texas Water Code, and the District’s Rules.” Specifically, they claim, seemingly without a solid understanding of the process or all of the facts, that the District did not use the current and applicable desire future condition (DFC) to evaluate the Manville Applications in violation of District Rule 5.2.D and Tex. Water Code 36.113. These groups are misinformed and have incorrectly assumed and alleged that the proposed GMA-12 DFCs were used in the evaluation, without specifying where the proposed DFCs were used in the report. The Proposed DFCs were not used in the report. It only takes a close reading of Mr. Andy Donnelly’s October 28, 2020 report on the Manville Applications (the “Hydrological Report”) to prove these assumptions are false and show that the existing, current and applicable DFCs were used, as opposed to the currently *proposed* GMA-12 DFCs.

The applicable DFCs were adopted by GMA-12 on April 27, 2017 (the “2017 DFCs”), and subsequently adopted by the member districts, were used in the technical review the Manville Applications. Specifically, the General Manager relied on the current 2017 DFC for (1) the technical review; (2) preparation of the hydrological report; and (3) the General Manager’s recommendation of the Draft Permit to the Board. As such, ES and SAWDF’s allegations regarding use of the proposed GMA-12 DFC should be disregarded and their request to postpone the public hearing should be denied.

III. The current DFC was used in the Manville review process.

Contrary to any claims from ES and SAWDF, the current 2017 DFCs were used to evaluate the Manville Applications. ES and SAWDF incorrectly assume that the hydrological report compares drawdowns in the Manville Applications to GMA 12's proposed DFC. On page 5 of the Hydrological Report, it is clear that Mr. Donnelly used the current DFCs to evaluate drawdown in the Hooper. A copy of the currently adopted DFCs is below.¹

Table 1- Desired Future Conditions

Aquifer	County	District-wide DFC in 2070 (Average drawdown in feet)	DFC in 2070 (County-wide average drawdown in feet)
Sparta	Bastrop Lee	5	-9 10
Queen City	Bastrop Lee	15	16 16
Carrizo	Bastrop Lee	62	74 64
Calvert Bluff	Bastrop Lee	100	81 142
Simsboro	Bastrop Lee	240	174 350
Hooper	Bastrop Lee	165	153 225

In the Hydrological Report, Mr. Donnelly correctly references the 2017 district-wide DFC of 165 feet of average drawdown for the Hooper Aquifer, which is the aquifer from which the Applicant plans to produce. An excerpt from page 5 of the Hydrological Report comparing the drawdown expected from the Manville Applications to the Hooper drawdown for the current 2017 DFC is below.

(8) Whether granting the application is consistent with the District's duty to manage total groundwater production on a long-term basis to achieve the applicable Desired Future Condition

The average estimated drawdown due to production from the proposed Manville wells is approximately 2 feet when averaged across the District. The production from the proposed wells combined with existing sources of groundwater production (including recently approved permits in the District and groundwater production outside the District as included in the final Groundwater Management Area 12 GAM run) is about 185 feet of drawdown in the Hooper Aquifer across the District. This value is 20 feet greater than the desired future condition (DFC) for the Hooper Aquifer of 165 feet.

¹ Lost Pines Groundwater Conservation District Management Plan, at p. 7.
<https://www.lostpineswater.org/DocumentCenter/View/101/LPGCD-Management-Plan-2017-10-09-PDF>

We are unable to explain with any degree of certainty the reasons that ES and SAWDEF made the mistaken assumption that the District did not utilize the current applicable DFCs to evaluate these permits, but one possibility is that ES and SAWDEF may have been confused in their interpretation of a June 14, 2021 email exchange between the General Manager and Steve Box with ES. ES and SAWDEF rely on this email in their comment and it is attached as **Exhibit A**.

In the email exchange, Steve Box asks Jim Totten which GAM run was used to develop the Manville Hydrological Report. Note that the “GAM run” or model used for the report does not have a bearing on the currently adopted DFCs used to compare drawdowns. Jim Totten replied that the run used “included all currently issued permits and used anticipated production ramp ups equivalent to the those used in PS12 for the wells in Lost Pines GCD.” The pumpage file for the model run used was actually PS7 (also referred to as S7 or S-7), which is identical to PS12 for pumpage in the Lost Pines district, and contains only minor changes in the pumpage in Brazos Valley Groundwater Conservation District. PS7 contains up to date and representative data of current and anticipated groundwater production in the District, as required by Tex. Water Code Sec. 36.1132² to manage total groundwater production to achieve the long-term DFC. Although these pumpage files are being used to help develop the proposed DFCs, that does not mean that the District compared the model outputs to the *proposed* DFCs. In reality, the District used the PS7 model run as a baseline for modeling the proposed Manville pumpage to most accurately reflect existing and anticipated pumping conditions,³ and then compared outputs to the *existing, applicable* DFCs. In summary, the GAM run used does not invalidate the District’s use of the 2017 DFC as shown in the Hydrological Report.

IV. The DFC Comparison Process used for Manville.

It is important for the Board to understand the DFC review process for permit applications. As part of the standard permit application review process, the proposed new permits are added to an existing baseline pumping file. This existing baseline pumping file contains all the currently issued permits within the District and includes estimated and anticipated production ramping over time for each permit – consistent with Tex. Water Code Sec. 36.1132. The estimated production increases over time based on the nature of the permit and the anticipated growth in demand for

² Sec. 36.1132. PERMITS BASED ON MODELED AVAILABLE GROUNDWATER. (a) A district, to the extent possible, shall issue permits up to the point that the total volume of exempt and permitted groundwater production will achieve an applicable desired future condition under Section [36.108](#).

(b) In issuing permits, the district shall manage total groundwater production on a long-term basis to achieve an applicable desired future condition and consider:

- (1) the modeled available groundwater determined by the executive administrator;
- (2) the executive administrator's estimate of the current and projected amount of groundwater produced under exemptions granted by district rules and Section [36.117](#);
- (3) the amount of groundwater authorized under permits previously issued by the district;
- (4) a reasonable estimate of the amount of groundwater that is actually produced under permits issued by the district; and
- (5) yearly precipitation and production patterns.

³ Most would argue that this is the most prudent approach in that it is more conservative than relying on model runs from 2017 that would not account for pumping conditions not anticipated at that time.

each permit holder. For example, the utilization of the existing Aqua permits is increased over time based on the current utilization of these permits and the projected population and water demand growth within the Aqua service area, which was taken from the Region K regional water plan. For operating permits with phased production conditions, the production is increased based on the shortest possible timeline for progressing through the stages in the permit. The combination of the two growth assumptions for the permit creates a highest impact estimate for how the existing permits will be utilized.

Adding the proposed permit to the existing baseline file allows for evaluation of the total impacts of the proposed permit, which is done by subtracting the results from the baseline pumping file from the results of the simulation that includes the project specific impacts. The model results are also compared with the existing current DFCs as approved in 2017. We think this is where the ES/SAWDF confusion lies. The fact that the current DFCs were developed using an older version of the GAM is not relevant to the comparison or evaluation process once the DFCs are approved by the Districts and the GMA. Once the final DFCs are adopted, the DFCs become stand alone criterion. Using the new GAM may have an impact with regard to how a proposed permit relates to the existing Modeled Available Groundwater (MAG) estimates derived from the DFC because the previous versions of the GAM model the groundwater system somewhat differently than the updated version and produce different results. However, since MAGs are guidelines derived from the DFCs to assist in water planning and do not represent hard caps on permit issuance, the variations between the MAG predicted by each model does not necessarily change the interpretation of the results.⁴

V. Moving Forward.

The District has not compared the Manville Applications against the proposed GMA DFCs – Manville’s production was only compared against the current 2017 DFCs as required by law. The District properly used the most up to date existing and anticipated production data in the model run as required by state law to determine impacts to existing users and whether Manville’s production would be consistent with achieving the applicable DFC.

As stated above, ES and SAWDF grossly misstated the DFC review process in their comments and they falsely claimed that the District used the wrong DFC. This kind of misinformation is extremely problematic and if relied upon could result in the Board not adhering to the relevant or correct criteria in approving or denying a permit under the District’s Rules or the Water Code. As such, their comments and request to table the public hearing should be denied.

The Board is required to hold the public hearing but cannot take action on the Manville Applications because they are now contested.

⁴ See Sec. 36.1132(a) (MAGs are guidelines and a district should follow to them to the “extent possible” when issuing permits.)

----- Forwarded Message -----

Subject:Re: Manville application materials request

Date:Mon, 14 Jun 2021 15:26:00 -0500

From:James Totten <jtotten@lostpineswater.org>

Reply-To:jtotten@lostpineswater.org

Organization:Lost Pines Groundwater Conservation District

To:Steve Box <steve.box@att.net>

Good afternoon,

The run included all currently issued permits and used anticipated production ramp ups equivalent to the those used in PS12 for wells within Lost Pines GCD.

Jim

On 6/14/21 12:03 PM, Steve Box wrote:

Jim,

Andy's report did not make clear what GAM run was used in the Items 2 & 8 review. Can you provide the specifics of which run was used please.

In Table 1 he references: Manville pumping + anticipated production from existing LPGCD pumpage and other permits. This raises the question of what run was used as "anticipated production from existing LPGCD" and what "other permits" were included.

In paragraph 1, page 5, Item 8, he states "as included in the final Groundwater Management Area 12 GMA run". This raises the question of what run was used for this review.

Can you clarify these questions please.

Thank you,

Steve Box

Board President & Executive Director

Environmental Stewardship,

a WATERKEEPER® ALLIANCE Affiliate

512-300-6609 cell

<http://www.environmental-stewardship.org>

PROTECTING THE NATURAL RESOURCES OF THE LOST PINES AND TEXAS GULF COAST

On Jun 14, 2021, at 9:24 AM, James Totten <jtotten@lostpineswater.org> wrote:

Good Morning,

All the documents related to the application should be visible on the District website under the pending permits heading on the permits page including the review by Andy Donnelly. I'm including the link to the [page](#) and the [review](#) for you. Please let me know if you have any other questions.

Thanks,

Jim

On 6/14/21 9:07 AM, Steve Box wrote:

Jim,

Would you please provide me with the support materials associated with the Manville application (other than what is on the website). I am particularly interested in Donnelly's review of the permit.

Thank you,

Steve Box
Board President & Executive Director
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