

STATE OF MAINE
PUBLIC UTILITIES COMMISSION
BELFAST WATER DISTRICT
Notice of Proposed Sale of Water Resource Land Pursuant to
35-A M.R.S. § 6109 and Chapter 691 of the Commission's Rules

Docket No. 2018-00043
April 27, 2018
EXAMINERS' REPORT

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Excerpt:

Water Supply and Purchase Agreement

The Water Supply and Purchase Agreement was executed by the District and NAF on January 30, 2018. The District summarizes the major provisions of the Water Supply and Purchase Agreement as follows:

Under the Water Supply and Purchase Agreement, NAF will pay the District for its ground water at the rate equal to the annual water rates charged by the District to its customers in the same rate classification as would apply to NAF pursuant to the applicable tariffs approved by the Commission. The Water Supply Agreement requires NAF to purchase a minimum of 100,000,000 gallons of water annually at the current District water rates, which will result in approximately \$287,579 a year to the District in additional revenue. In the event that NAF were to use less than 100,000,000 gallons of water in a year, it is still required to pay the District for 100,000,000 gallons of water annually. The Water Supply Agreement allows NAF to purchase up to 262,800,000 gallons of water annually from the District at a maximum rate of 500 gallons per minute. Moreover, NAF will make an advanced payment for the 100,000,000-gallon minimum for the first year of supply, providing the District significant upfront revenues.

Capacity Evaluation

A central issue presented by the District's request in this case is whether the District's water resource capacity is sufficient to meet NAF's current and future needs. To address this issue, the District retained Rick Pershken, P.E., of A.E. Hodsdon Engineers to evaluate and summarize the District's operational ground water resource capabilities. Mr. Pershken's analysis, titled Capacity Evaluation for the Belfast Water District Belfast, Maine (Capacity Evaluation) is included as Attachment F to the District's March 1st Supplemental Filing. In the Capacity Evaluation, Mr. Pershken specifically considers the District's resource capabilities relative to the potential sale of water to NAF of a minimum of 100,000,000 gallons annually and up to a maximum of 262,800,000 gallons annually, with a maximum rate delivered of 500 gallons per minute. Mr. Pershken

concludes that the District "has sufficient capacity to operate the Belfast Water District, supply water to Northport Village Corporation by contractual obligation,

provide Nordic Aquafarms with up to [262,800,000 gallons per year], and maintain a reserve capacity for future needs." Capacity Evaluation at 1. In its March 1st Supplemental Filing, the District summarizes the "key findings" of the Capacity Evaluation as follows:

- Following the closure of the Maplewood Poultry facilities in 1980, the District has not used the Little River water source to supply any water to its customers or for any other purpose in 38 years. Capacity Evaluation at 3.

- Instead, the District has used ground water from the Goose River Esker Aquifer to serve its customers - partially since 1955 and fully since 1980- via the Smart Road Well and the Jackson Pit Well. Id. at 4.

- There is ample reserve capacity in the Goose River Esker Aquifer and the Smart Road Well and the Jackson Pit Well to serve the District's current customers and the anticipated NAF land based aquaculture facility.

Specifically: 1. Since 1980, there has been a significant decrease in water use by District customers as part of poultry and fish processing and canning facility closures.

2. The Jackson Pit Well and Smart Road Well have a history and capacity to safely serve large water consumers at approximately 1,330 gallons per minute ("GPM") of water production.

3. The Smart Road Well alone has the capacity to meet the District's current average demand of 543,582 gallons (378 GPM) and the maximum day demand of 719,300 gallons (500 GPM).

4. Likewise, the Jackson Pit Well, by itself, can also meet current District demands, but not with much reserve.

5. Together, the Smart Road and Jackson Pit Wells can provide approximately three times the current water requirements of the District.

With the proposed sale of up to 262,800,000 gallons of water annually, the District will still be left with an annual operating reserve of approximately 221,500,000 gallons.

- The Talbot Well, installed in 2015, has already been tested and modeled by Jacques Whitford (1999) and tested by Caswell (2015).³ The Talbot Well capacity is set out in Table No. 2 of the Capacity Report and includes a standalone capacity of 1200 GPM. Id.

- Even with an interference effect (as to Smart Road from the Talbot Well), the Capacity Report concludes that both the Smart Road Well and the Talbot Well, when brought fully on line, together could produce 1,600 GPM. When the 530 GPM capacity of the Jackson Pit Well is included, this capacity is more than twice the demand of both (1) the current District demand and (2) the maximum requirements of NAF for the land based aquaculture facility.

Based on its summary of the key findings of the Capacity Evaluation and discussion of the anticipated demands of NAF, the District concludes:

³ In EXM 002-001, the Staff requested the District to explain how a well installed in 2015 could be tested and modeled in 1999. The District responded: The site of the Talbot Well was originally located in 1989 and had a small diameter test well drilled. In 1999, Jacques Whitford constructed a computer model of the aquifer which assumed a well located at

the Talbot Well Site. The model was used to determine the feasibility of locating a production well at this site and determining the safe yield of the Talbot Well and the Smart Road Well pumping under different scenarios. The Talbot Well was actually installed in 2005 and tested by Caswell at that time.

After reviewing potential interference between the Smart Road Well and Talbot Well, several recharge considerations, and all appropriate drought considerations, the Capacity Report concludes that, with the Goose River Esker Aquifer and the associated Smart Road, Jackson Pit, and Talbot Wells, the District has ample capacity to supply up to the maximum contract limit of 262,800,000 gallons annually to NAF, plus all existing customer demand while providing an "adequate reserve quantity of water for future growth, contractual obligations and emergency situations."