

From: Kent, Curt <ckent@pmidwest.com>
Subject: RE: [--New Sender--] - Lake Level Control In LaPorte - Message is from an unknown sender
Date: Thu, 29 Sep 2005 14:32:15 -0500
To: Jerry P. Jackson <jjackson@cityoflaporte.com>
CC:
BCC:

Jerry:

Thanks for the inquiring about lake augmentation Wells. We are in this business and have the Hydrogeological staff to investigate and design an augmentation scenario that will serve our clients needs, while minimizing impact on the environment and neighbors.

We have done a "thumbnail" investigation of your inquiry and believe that what you are trying to do is not going to be feasible. There isn't two, separate and distinct aquifers in the area described. If an augmentation Well system were to be installed, recycling of water would likely occur which would render the system ineffective. Even if you were to go cross-gradient, multiple Wells (8-12) would be required to get to the 6,000 gpm requirement because most Wells in this area are between 600 and 1000 gpm. This seems too cost prohibitive to implement based on the limited information you've provided. IF you wish to discuss this in further detail, we would welcome the opportunity. Maybe a more in-depth feasibility study may be in order. Hope this helps.....Curt

-----Original Message-----

From: Jerry P. Jackson [mailto:jjackson@cityoflaporte.com]
Sent: Wednesday, September 21, 2005 8:35 AM
To: Kent, Curt
Cc: Todd Taylor
Subject: [--New Sender--] - Lake Level Control In LaPorte - Message is from an unknown sender

Curt,

Todd Taylor at the Water Works here in LaPorte gave me your number. LaPorte is considering a project to pump water into the 800 acre lake system to restore its level. the City would propose to pump water from a lower area in the aquifer "upstream" through the lake drain siphon into the lake system. Two areas are being considered for water supply. The first is Beechwood Golf course, which is low, wet, and at the end of the siphon. The second is adjacent to a wetland and Travis Ditch near the discharge of the wastewater treatment plant on Boyd Blvd. The City is only just beginning to evaluate the feasibility of this project. Some questions the City would like to answer:

- 1) Are there problems with removing water from lower in the aquifer and transferring it up gradient?
- 2) Is this methodology reasonably friendly to the environment? Will the project negatively effect the local groundwater and wells?
- 3) Will the appropriate control authorities permit such an operation?
- 4) How important are the effects of infiltration and exfiltration to lake level control?

5) An 800 acre system corresponds to 22 million gallons per inch. A well system would have to have a discharge rate of 6000 gpm to raise the lake level 1 foot in one month, neglecting the effects of ground infiltration / exfiltration. What are the capital and operating costs for a 6000 gpm system?

Not easy questions to answer, I understand. If you have some time to discuss determining feasibility of the project that would be great. My phone number is 219.362.2354. Thanks.

Jerry P. Jackson
Wastewater Superintendent