

Vernon Fork Water District

Auditor's Office Decatur County

150 Courthouse Square

Greensburg, Indiana 47240

April 10, 2008

James P. McGoff
Indiana Finance Authority
State Revolving Fund Loan Program
100 North Senate Avenue, Room 1275
Indianapolis, Indiana 46204

Dear Mr. McGoff,

The Vernon Fork Water District board members appreciate the opportunity to make recommendations regarding disbursement of funds authorized by the Indiana state legislature for use within the three county region of Decatur, Jennings and Ripley.

Five recommendations are submitted for your consideration.

Deliberations while assembling these recommendations included the following assumptions:

The highest priority in the three county region is to ensure that Honda Manufacturing of Indiana, LLC has adequate water supply to meet their manufacturing requirements both in the beginning and in the long term as any expansion may occur.

Businesses and industries that may locate in the area immediately surrounding Honda and Greensburg, who support either Honda or resulting domestic growth, must also receive adequate water supply.

Other businesses and industries providing parts or service support for Honda may establish themselves in a location within the three county area distant from Honda and Greensburg that may need water supply greater than current capacities at their chosen site.

Greensburg has adequate capacity to supply Honda's needs in 2008 and in the near future. Current production capacity is 3.3 million gallons per day (mgd) while average usage is about 2.2 mgd leaving an excess of about 1.1 mgd. Current usage includes about 0.2 mgd provided to Decatur County Rural Water. Honda's initial usage will be between 0.33 mgd and 0.5 mgd, which is less than the 1.1 mgd excess. Improvements currently under construction and expected to be completed in 2008 will increase production to 4.6 mgd. Projected average day demand of 3.9 mgd at the end of 2008 leaves 0.7 mgd excess capacity to meet Honda's demand as it increases to final phase usage of 1.2 mgd to 2.0 mgd. If both Greensburg's and Honda's demand forecasts proceed as projected, additional supplies will then be needed. Greensburg is re-examining solutions that will provide the needed increase in capacity prior to its actual requirement.

Recommendation A

Construct the Decatur County Rural Water Corp./Eastern Bartholomew Water Corp. (DCRW/EBWC) proposal Option A.

Option A improvements include a booster/chlorination station northwest of Greensburg in an existing 8" line going to Adams, a 500,000 gallon elevated water storage tank in an industrial park area near Adams, about 2.3 miles of 16" pipe traversing the length of the industrial area, and about 5.7 miles of 12" pipe from the industrial area to an existing 8" line near the junction of S.R. 3 and S.R. 46 that is part of the south connection distribution system.

Justification

Greensburg is the sole source of water for DCRW. Water is supplied at two connections, one at the south of Greensburg and the other at the northwest. These two connections are authorized to receive a maximum of 584,000 gpd and 690,000 gpd respectively and are individual lines not connected to one another. These two lines together provide a maximum availability of 1,274,000 gpd.

The improvements would provide a bypass loop around Greensburg to the west by connecting the two individual lines together. This loop would provide flexibility, as well as, alternative sources of water to DCRW customers in both of its areas in case of emergency.

The industrial park area, comprised of three separate sites, adjoins Adams, which is supplied by the existing northwest 8" line. Two of these sites have had recent developer interest. The booster station would provide the necessary pressure to fill the elevated water storage tank. The storage tank and the 16" line traversing the industrial area would provide adequate fire water and fire flow while maintaining system pressure. Since actual water requirements are unknown, an estimate of up to 515,000 gpd is used. This usage is calculated as 343 acres in all the sites times 1,500 gpd/acre.

These improvements would permit the most functional and effective method of connecting to water sources outside the three county area to augment water supplies for either DCRW or Greensburg.

This recommendation has the highest priority.

Cost

\$3,827,000

Recommendation B

Construct the Decatur County Rural Water Corp./Eastern Bartholomew Water Corp. (DCRW/EBWC) supplemental proposal of January 2008.

The supplemental proposal improvements include increasing the capacity of the metering/booster station west of Hartsville between Columbus and EBWC, installing a booster/master meter/chlorination station and 500,000 gallon standpipe east of Hartsville near the Bartholomew/Decatur County line, increasing piping size to 16" for about 10.3 miles between the Columbus connection and Hartsville, and construction for about 7.1 miles of a 16" pipe along S.R. 46 from the booster/master meter/chlorination station to the Option A 12" bypass loop of Recommendation A near the junction of S.R. 3 and S.R. 46.

Justification

These improvements would provide up to a maximum 2.2 million gallons per day (mgd) of additional water to DCRW. This 2.2 mgd plus DCRW's 1.274 mgd totals approximately 3.5 mgd of water available for use in the three county region. However, this scenario would necessitate implementation of Recommendation A, too.

Alternatively, Greensburg could benefit by about 1.1 mgd. This is possible because DCRW is contractually required to purchase only 120,000 gpd from Greensburg, leaving about 1.1 mgd available from the maximum contracted amount of 1.274 mgd. This additional availability would reduce Greensburg's projected 2012 average day demand from 6.1 mgd to 5 mgd, which is near the 4.6 mgd water production capability to be available at the end of 2008. Such reduction in demand would provide additional time for Greensburg to evaluate and adjust to increasing future demands. DCRW would still have about 2.3 mgd available for the three county region.

A second alternative is that Greensburg could purchase some of the 2.2 mgd made available by this proposal if it chose to.

Potentially, Westport could purchase its daily water needs of 170,000 gpd, or so, from DCRW. Napoleon may desire to augment the supply they get from Osgood with water from DCRW. Each of these towns are within about two miles of 8" and 6" lines respectively that could connect to supply water to more than just Decatur County.

Cost

Total cost of this project is estimated to be \$6,373,000. It is recommended that a \$4,000,000 grant be allocated toward this proposal. The resulting wholesale rate is projected to be \$3.90 per 1,000 gallons for usage of 200,000 gpd, decreasing to \$1.80 per 1,000 gallons for usage of 1,000,000 gpd. All costs would be borne by EBWC and includes O&M costs.

Recommendation C

Provide a grant of \$2,000,000 to the Vernon Fork Water District (VFWD).

Justification

The Commissioner of the Indiana Department of Environmental Management ordered that the Vernon Fork Water District be organized as an independent municipal corporation pursuant to IC 13-26 et seq and 327 IAC 8-3.6-3.

The purpose of the District is to provide water within the District boundaries including all unincorporated areas of Decatur, Ripley and Jennings Counties, excluding the areas that are currently being served via existing pipes by an existing utility. The District will communicate and coordinate among all existing water utilities within the three county area; within twenty-four months of District formation, meet with all utilities to assess the needs of each facility, then draft a needs assessment to prioritize the needs of all existing water utilities within the District; hold a public hearing in each county; revise the assessments; and hold another round of public meetings in each county. The District will develop an implementation strategy that identifies the process for meeting short term and long term potable water needs for both the District and the entire three county area, including seeking solutions for expected growth, bringing water to areas not currently served, and making available cost effective water service with an overall goal of providing a water supply for industrial and public use inside the District and further providing wholesale water to existing water retailers in the three county area.

IC 13-26 et seq requires a District Plan for operation of the district water supply system including engineering reports, plans and specifications, and a feasibility study in a form that the Department requires. 327 IAC 8-3.6-3 requires submission to the Commissioner of a water system management plan that requires an assessment of the technical capacity of the District by a professional engineer or a licensed professional geologist registered in Indiana, the financial capacity by a certified public accountant registered in Indiana and the managerial capacity by a professional engineer registered in Indiana.

No specific estimates of costs for these services are available because bids for such services have not been requested. However, informal estimates for engineering services alone are \$500,000 to \$700,000. An accounting firm has indicated that their costs are \$250 to \$65 per hour depending upon the work involved and the experience required. Although these hourly rates have been solicited informally, without knowing how many hours would be required for the twenty or so communities to be evaluated, no actual cost is available.

No funds were provided to obtain these services needed to establish the District Plan or to provide start up funds to begin to provide additional water resources within the Vernon Fork Water District. The only funds available to the District is an advance from the three counties in an amount of \$3,300 from each, for a total of \$9,900, for administrative uses until more formal funding may be obtained.

While deliberating what recommendations to make for allocation of funds, the VFWD board became aware of other potential, near term needs. A few examples are that near St. Paul a truck stop is being established between Interstate 74 and St. Paul. The St. Paul water company currently has capacity to serve the truck stop, but the owner has adjoining land that he wants to develop into other commercial property and housing. In that case, St. Paul would likely need to drill another well and build a booster station to provide the needed service. Another example is that Versailles has an established shovel ready industrial site, but needs additional water supply to fully exploit site marketability. Versailles water source, the Versailles State Park Lake, continues to become more silted in, which increases the difficulty of eliminating disinfection byproducts, reduces stored water reservoir capacity, and thus reduces water production volume and quality. Westport could potentially be connected to be served by Decatur County Rural Water or Jennings Water, Inc. Decatur County Rural Water has a line in eastern Decatur County near a similar sized Napoleon Water Co. line. A two mile connecting line would, at the least, provide backup water to Napoleon, but could further provide additional water to Osgood, Holton and Versailles since they are all currently connected.

Not only are funds needed to organize and establish the District, but funds to aid in ensuring that water supplies are available for such economic development activities like St. Paul and Versailles are also needed.

In addition to any grant money awarded the Vernon Fork Water District, it is recommended that VFWD be made a party to any contracts signed between the state and grantees providing water to the VFWD area and that the contract include service fees for units of water, e.g., per 1,000 gallons, entering the county, payable to VFWD to aid in generating long term funding for VFWD with which to aid other agencies experiencing emergent water needs in the future.

Cost

\$2,000,000

Recommendation D

Construct the Decatur County Rural Water Corp./Eastern Bartholomew Water Corp. (DCRW/EBWC) Long-Term Solution (Northern Loop) instead of the DCRW/EBWC supplemental proposal of January 2008.

Long-Term Solution improvements include installation of 6 new 1,000 gpm (8.64 mgd) supply ground wells at the existing EBWC well field, a 7,500 gpm (10.8 mgd) iron removal water treatment plant, a 24" transmission main eastward from the EBWC well field/treatment plant to the 12" bypass loop in Option A of Recommendation A, a 1,000,000 gallon elevated water storage tank, and a booster station in the 24" transmission main midway between EBWC and DCRW. This Solution would necessitate implementation of Recommendation A, too.

Justification

These improvements could provide up to 8 mgd, but would not be economically feasible unless at least 2-3 mgd were used. Usage of 2 mgd could only be attained if Greensburg determined to use such a minimum quantity of water from this DCRW/EBWC connection while adjusting the volume of water produced by their own system to provide the balance of their needs.

This Solution could meet both the short term and long term needs of both DCRW and Greensburg. If DCRW used an estimated 2.0 mgd that would leave 6.0 mgd for Greensburg. This 6.0 mgd plus the 5.6 mgd capability that will be in place at the end of 2008 would provide about 11.6 mgd for Greensburg, which would more than meet the maximum day demand of 9.2 mgd projected for 2016 and the average day demand of 9.5 mgd of 2026.

Selection of this Recommendation would be totally dependent upon a decision by Greensburg to purchase the minimum daily amount of 2 mgd. Greensburg is currently re-evaluating all their options and, it is believed, is not ready to make an option selection.

Cost

Total cost of this Solution is estimated to be \$21,559,000. It is recommended that a \$4,000,000 grant be allocated toward this proposal if it is chosen instead of Recommendation B. The resulting wholesale rate is projected to be \$2.12 per 1,000 gallons for usage of 2.0 mgd, \$1.47 per 1,000 gallons for usage of 3.0 mgd or \$.97 per 1,000 gallons for usage of 5.0 mgd. All costs would be borne by EBWC and includes O& M costs.

Recommendation E

Do not consider any of the Jennings Water, Inc. (JWI) proposals.

Justification

The cost of JWI Alternative "A" – Phase one, which would provide water to the junction of S.R. 3 & 46 from the south, at \$6,352,000 compares favorably with the cost of DCRW/EBWC supplemental proposal of January 2008 of \$6,373,000, which provides water to the same junction from the west. JWI would provide 1.5 mgd, while DCRW/EBWC would provide 2.2 mgd, about 700,000 gpd more. An adequate cost comparison cannot be made because JWI declined, or refused, to provide a wholesale rate for any level of delivery. The included Wholesale and Retail Rate Chart allows some comparison on at least a retail rate level. At 5,000 gallons per month usage, JWI would charge \$31.40 and EBWC would charge \$21.67. DCRW's cost of \$71.70 is based upon cost from Greensburg, but if additional water is purchased from EBWC, the rate would be significantly lower. At 3,000,000 gallons per month, or 100,000 gpd, JWI's charge would be \$12,503.25 and EBWC's charge would be \$4,804.85 using the retail rate structure with EBWC cost \$7,698.40 less than JWI.

JWI's Alternative "A" – Phase two would increase water availability from 1.5 mgd to 3.0 mgd to the junction of S.R. 3 & 46 at an additional cost of \$2,042,000. Total cost for Phase one and Phase two is \$8,394,000.

JWI's Alternative "B" – Long Term Waterworks Improvements Alternative has merit in proposing that additional water be made available to Versailles, perhaps the second or third priority in the three county district water improvements. However, the cost of this proposal through phase two is \$9,586,225 to provide 1.5 mgd and a phase three total cost of \$14,232,625 for 3 mgd. Grant funds are not available for both Honda associated support concerns and Versailles.

JWI's Alternative "C" to provide water to the Muscatatuck Urban Training Center also has merit. MUTC is perhaps the second or third priority within the three county district, too. It is indeterminate whether this Alternative should take precedence over additional water supply for Versailles. The problem of the huge surge for MUTC weekend activity water requirements as compared to normal weekly usage creates an almost impossible surface water treatment scenario, particularly in light of disinfection byproduct rules.

Overall, with the absence of wholesale rate information, none of JWI's Alternatives can be evaluated fairly or objectively. It cannot even be determined whether its proposal to supply additional water to Versailles is the most cost effective method. Other sources of water for Versailles should be explored, such as Hoosier Hills or back feeding from EBWC/DCRW through Napoleon, Osgood and Holton to Versailles.

