

Pennsylvania Chamber of Business & Industry

Comments on Proposed SRBC Groundwater Management Plan (June 2004)

On behalf of its over 10,000 members, representing the spectrum of Pennsylvania industry, business, and commercial enterprises, the Pennsylvania Chamber of Business & Industry appreciates the opportunity to provide comments to the Susquehanna River Basin Commission on the June 2004 draft of the Groundwater Management Plan for the Susquehanna River Basin.

The Chamber supports the SRBC's efforts to promote and pursue management of the Basin's ground and surface waters based upon sound science. That management needs to be consistent with the objectives of the Susquehanna River Basin Compact to promote the "orderly, integrated and comprehensive development, use and conservation" of the Basin's waters and to secure and maintain "a proper balance among industrial, commercial, agricultural, water supply, residential, recreational, and other legitimate uses of the water resources of the Basin." Such *balance*, in our view, must be the fundamental guidepost and foundation of the Groundwater Management Plan. As the Susquehanna River Basin continues to experience growth in population and economic enterprise, and as our communities continue to develop and mature, it is essential that we husband and utilize the Basin's water resources in a thoughtful and balanced fashion to serve all legitimate purposes.

Such a balancing requires that SRBC develop a plan and administer regulations that do not promote one type of use over another (such as rules that elevate fish over people, or vice versa). Rather, where shortages of water availability occur (as may arise during droughts), the plan needs to provide for a balancing of the shortfalls to minimize economic dislocation and avoid serious environmental harm. We need a plan that does more than avoid "problems" or adopt restrictions to "protect" particular resources, but rather seeks to provide government and private enterprise with the tools and information necessary to develop reliable water supplies that will continue to serve the people and environment of this region.

With this perspective, we would offer the following comments on the draft Plan.

Need to Focus Plan and Prioritize Action Items for SRBC

We appreciate the efforts of SRBC to lay out the broad range of issues and concerns regarding groundwater conditions across the Basin. That aspect of the plan provides Basin interests with a background concerning the array of potential areas of concern. At the same time, we recognize that the Commission and its member jurisdictions face continuing limitations in fiscal and staffing resources, and it would be impossible (and imprudent) to attempt to tackle all of these issues. In light of budgetary realities, it is essential that SRBC select and focus on a few key items where the Commission can make a positive and substantial impact.

Although there are many items to choose from, in our view, SRBC would be well served to focus on the following action areas:

1. Identify geographic “areas of concern” where existing or projected withdrawals and uses are anticipated to exceed long-term sustainability or cause prevalent conflicts among users.
2. Assist state jurisdictions in developing water budgets and other technical information in those “areas of concern.”
3. Convene major stakeholders in each “area of concern” to help identify potential solutions to water supply problems (including cooperative efforts by various users).
4. In areas of concern, focus SRBC’s project review procedures to help steer users toward effective solutions.
5. As a last resort, if other solutions are not forthcoming, consider invoking the Commission’s protected area program authority to adjust regulatory standards (such as project review triggers) and other focus other actions as necessary to assure a **balanced** sharing of water among all legitimate users (both withdrawal and instream uses).

Groundwater/Surface Water Relationships; Promoting Conjunctive Use

The Plan makes the assumption that groundwater withdrawals in a watershed equate on a 1-to-1 basis to loss of stream flows. We would respectfully challenge that assumption as too generalized and simplistic. While we recognize that, across most of Pennsylvania and the Basin, groundwater generally provides the baseflow contribution to streams, when one evaluates smaller watersheds and is considering deeper wells, the relationships require a much more sophisticated consideration of aquifer geologic formations and characteristics, recharge areas, and withdrawal timing. It is also critically important to evaluate where and how the water withdrawn is returned to either the groundwater (*e.g.*, through agricultural return or septic systems) or surface water (*e.g.*, via treatment plants). We are aware of some situations in the Basin where groundwater withdrawal sponsors are actually supplementing base flows during drought periods, through diversion of a portion of the groundwater to local streams that formerly went naturally dry.

The Plan gives only brief mention to the concepts of conjunctive use. In our view, this concept merits greater consideration and promotion. As seen in highly-developed areas of the Delaware Basin, conjunctive use of ground and surface waters (using withdrawals from each during different periods) can be an effective tool for relieving stressed areas and preserving stream flows during drought periods. Conjunctive management considers two important aspects of groundwater aquifers that are rarely mentioned (including in the Plan): namely the **storage** potential of groundwater, and the differential effects of **withdrawal timing**. Groundwater aquifers provide a huge amount of water storage throughout the Basin, far more than found in surface reservoirs. Use of surface waters during periods of higher flows, and withdrawals from properly-sited groundwater well during periods of lower flows, can help ameliorate impacts on baseflows during extreme droughts by drawing off of groundwater storage. Conjunctive management considers water budgets not as a static exercise, but evaluates the impacts of

differing withdrawals at different times, and the ability to draw off and refill ground and surface water storage to balance overall water availability and demand.

SRBC could play a very positive role in helping to explain and promote the concepts of conjunctive management across the Basin. Many communities and industries, focused on their particular sources and situations, are unaware of the concept or the opportunities for conjunctive use management. This is one area where SRBC's expertise and role as a facilitator of knowledge and "technology-transfer" would be of real benefit.

Mining

As the Plan recognizes, coal and non-coal mineral extraction is a valued and legitimate enterprise in the Susquehanna Basin. One important aspect of that use, which should be obvious, is that the location of such mineral extraction operations, and hence the withdrawals associated with mining, are dictated by the location of the minerals in question. Our society needs those minerals, for power, highway and building construction, and other enterprises, and in most cases the water withdrawals associated with the mining operations are unavoidable.

Further, as recognized by the draft Plan, existing coal and non-coal mining laws at the state level (particularly in Pennsylvania) include a careful analyses of the hydrologic impacts of current and future mining activities, and requirements for mitigating the impacts of mining upon public and private water supplies. It is not necessary, at the SRBC level, to create a separate regulatory framework in order to address such issues, and SRBC would be well-served to work through state mining agencies in assuring that mining impacts are properly assessed and addressed.

Where SRBC can play a more positive role, however, is in helping to bring together the key stakeholders in areas affected by growing populations and mineral extraction operations, to help promote the development of reliable water supplies. Although the Plan seems to paint mining operations as a "negative" to watersheds, mining operations frequently intercept groundwater that might otherwise infiltrate a mine, and release that water to surface streams where it becomes available to downstream communities and other users. Indeed, for many years the Saucon Creek in the Delaware Basin was substantially supported by flows pumped from the New Jersey Zinc Mine, which flows were lost when the mine was closed. In some areas of the country and even this Commonwealth, both active and abandoned quarries have provided resources for community water systems, and similar cooperative efforts should be promoted in this Basin.

Water Preserves

The Chamber is extremely chary of the concept of creating "water preserves" or "water resource wilderness areas" across the Basin. Such a concept suggests that SRBC become involved in a broad land use management program, dictating to private landowners who hold property in those areas that such land be held in the equivalent of a public park for the benefit of other Basin residents. If the Commission or other governmental entities are interested in creating such "water parks," then they should purchase those lands (just as governments purchase and

preserve public forests and parklands). Creating such “parks” by regulatory fiat goes far beyond the contemplated purposes of the Compact’s §11.2 protected area program, and would embroil SRBC in a myriad of property taking claims.

Watershed Transfers

Although the Plan raises the concern about watershed transfers, we believe that its diagnosis and description as to the cause of such transfers is incomplete.¹ In considering where water is withdrawn and returned, a myriad of factors are at work – much more than considerations of “real estate and pipe-run economics.” On the one hand, many have advocated that we avoid sprawl, and concentrate development in and around existing communities rather than spread growing populations across open lands (and open watersheds). This means, in many cases, that the people are located in areas which may not have local water supplies to support that density, thus requiring that water supplies be brought to the people and related enterprises. The alternative policy option is to move the people to the water – which is precisely contrary to the policy goal of preserving open space and avoiding sprawl.

Further, watershed transfers are in some cases virtually mandated by some of our water quality management policies which practically preclude or strongly discourage return of water to particular watersheds. Specifically, communities located in watersheds whose streams have been designated as special protection (high quality or exceptional value) find it extremely difficult to impossible to permit new or increased discharges in their host watersheds (even using state of the art tertiary treatment technology). The result is the siting of treatment plants elsewhere, including neighboring watersheds that do not bear such special protection classifications. Unfortunately, with the bifurcation of water quality and water quantity management, our governmental agencies rarely ask the critical policy question – are we better off to return the water to the basin of origin through highly reliable treatment processes and thereby preserve the flow, rather than erect barriers that force an inter-watershed transfer.

The irony is that improved water quality, resulting from concerted efforts to abate pollution and foster use of better treatment technologies, is increasing placing streams as off-limits to further discharges. As the water quality of more streams continue to improve, reaching levels that may qualify for special protection status under state water quality criteria, this challenge will grow. It is imperative that we tackle the public policy question discussed above so that we begin to think of the quality and quantity implications of regulatory measures much more holistically.

AMD Impacted Streams

The Plan identifies a concern regarding acid mine drainage (“AMD”) impacted streams, suggesting that restrictions be placed on upstream uses of water in order to preserve the dilutional contributions of cleaner water from AMD-free watersheds. We have serious concerns with this proposal, and its potential for impacting other legitimate uses.

¹ Draft Plan at pg. 80.

AMD is clearly a continuing problem in the Basin, and the Chamber has supported efforts to address that problem through funding of AMD abatement projects – including support for Pennsylvania’s efforts to gain a greater share of the funds collected under the Federal surface mining laws. AMD is not solved by dilution, it is addressed by efforts aimed at correcting the source of the problem.

Virtually every watershed and subbasin that suffers AMD also hosts a variety of other legitimate users who need to tap the fresh waters in those watersheds and subbasins. Those users include farmers, industries, commercial enterprises, and municipalities. While it is reasonable to consider whether particular withdrawals will significantly exacerbate AMD problems, and what alternatives may be available to avoid such exacerbation, we do not believe the Plan is reasonable in suggesting that other legitimate users be denied withdrawal approvals unless those users fund abatement of the AMD. AMD is a much larger societal responsibility; the huge costs of responding to AMD cannot be readily dumped on a few upstream farmers or commercial enterprises, nor should those landowners be denied the use of their land pending society’s efforts to clean up this long-standing challenge.

Improved Data Collection; Unknown and Unregulated Groundwater Use

The Plan indicates that a gap remains in terms of knowledge regarding various groundwater use around the Basin, and suggests a new or expanded registration and reporting program under the aegis of SRBC.

The Chamber supported the adoption of the Pennsylvania Water Resources Planning Act, including the very carefully drafted provisions for water use registration and reporting. At the same time, to avoid duplication and public confusion, we strongly favored the Pennsylvania Department of Environmental Protection pursuing a joint registration and reporting system with SRBC and DRBC.

To obtain the data required for sound water planning, we believe that the registration and reporting system needs to be kept as simple and straightforward a possible. Many elements of the Pennsylvania Act (including provisions requiring alternatives to metering for measurement and reporting of withdrawals from smaller users) are important to pursuit of a simple and straightforward process that can be understood by farmers, commercial enterprises, and other users. To foster the greatest degree of cooperation and compliance, it is important to stabilize the registration and reporting system – that is, establish a clear set of requirements and forms, and then avoid promulgation of new and changing rules and forms.

It should be recognized, however, that no registration and reporting scheme will ever be complete. Data gaps will always remain, and efforts need to be undertaken to evaluate those gaps through other methods (such as comparison of agricultural water use data on an aggregate basis amassed by the U.S. Department of Agriculture).