
APPENDIX C

Management Principles and Tools

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MANAGEMENT PRINCIPLES AND TOOLS

Appendix C discusses principles considered to be fundamental to groundwater management and tools available to achieve management goals.

Management Principles

Certain principles form the foundation for management of the groundwater resources by the Commission. Many are basic facts or axioms—propositions that are universally recognized as indisputable—and are reviewed below as background for the discussion of management. Others are concepts adopted from the successes of a variety of existing and ongoing efforts. Overall, the principles serve to guide the Commission in its policy development and its actions to implement management goals.

1. Water is a valuable asset and a finite natural resource; it is essential to all life.
2. Groundwater occurs almost everywhere beneath the land surface. However, earth materials differ widely in their ability to store and transmit water, which causes a disparate distribution of groundwater resources in watersheds and poses a challenge for equitable allocation and use. Furthermore, the volumes of water pumped from a groundwater system must come from somewhere and must cause a change in the groundwater flow system.
3. From the standpoint of water use and water management, all groundwater is not equal—the quality of the water may make it unsuitable for some uses without treatment. Groundwater quality is a key consideration in developing water management strategies.
4. Groundwater management needs to be consistent with the objectives of the 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.” 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 the Commission practice good stewardship and utilize the basin's water resources in a thoughtful and balanced fashion to serve all legitimate purposes.
5. The use of groundwater resources needs to be managed to promote sustainability in the face of short-term and long-term growth. Sustainable development requires the development and use of groundwater in a manner that yields can be maintained for an indefinite time without causing unacceptable environmental, economic, or social consequences. Sustainability requires a long-term perspective to groundwater management.

The Commission has defined the sustainable limit of water resource development as the average annual base flow (recharge) available in the “local” watershed during a 1-in-10-year average annual drought. That is, the total amount of water withdrawn by all users on an annual basis should only exceed the normal amount of water recharge on an average of once every 10 years. Users draw a higher percentage of water from groundwater storage during the drought years than they do during non-drought years, and the groundwater system is allowed to recover (that is, storage refills) during the intervening years. The selection of the 1-in-10-year drought recharge standard strikes a balance among resource conservation, environmental needs, regulatory restriction of growth and development, and the need for adequate and often expensive constructed water storage facilities.

6. Water resources management, and particularly groundwater resources management, requires an integrated approach, recognizing that the chemical, biological, and physical aspects of groundwater systems are interrelated; that many natural processes and human activities affect these interactions; that water supply and water quality cannot be managed separately; and that groundwater and surface water are inextricably linked parts of the same resource. Integrated management means that the Commission, in its decision-making, needs to consider all of the aspects of the water resource that are fundamentally interrelated.
7. Decision-making should be based on sound scientific principles, policies, and requirements in laws and regulations.
8. For proper management and protection, the Commission, as well as its member jurisdictions, should work to build long-term, local capability to foster critical “local stewardship” of water resources. Whenever possible, the Commission should be involved in establishing and nurturing watershed organizations, assisting in the development of local plans, and supporting enactment of appropriate local ordinances, especially those concerning land use.
9. Prudent groundwater management requires that the Commission and its member jurisdictions recognize the likelihood of continuing limitations in fiscal and staffing resources, and focus on key issues where they can make a positive and substantial impact. The Commission must strive for the most efficient use of its human and technical resources and prioritize its efforts accordingly. This should be done for all program areas, including when considering regulatory options such as general permits, as appropriate, and selecting priority items such as “Potentially Stressed Areas” (PSAs) as a focus for its management program. Implementation of actions related to the plan should be staged over time as resources are available.
10. Coordination among member state and federal agencies and the Commission results in efficient data collection, planning, monitoring, and management of the basin's groundwater resources.

Resource Evaluation

The Commission evaluates groundwater availability, utilization, and potential environmental impacts using a number of tools. During the mid- to late-80s, the Commission, in cooperation with the Pennsylvania Geological Survey (PGS) and the USGS, performed and published water resource evaluations of four major tributaries to the Susquehanna River (Taylor, 1984, 1997; Taylor and others, 1982, 1983, 1984). These studies provided information on the amount of surface water and groundwater received by the subject basins, and provided the basis for developing water budgets. For the most part, the Commission reviewed groundwater projects on a case-by-case basis.

In recent years, withdrawals in some areas are at, or approaching, a sufficient concentration and magnitude to create problems of well interference and local depletion of groundwater and/or surface water resources. To prevent local resource depletion, environmental impacts, and water supply failure, areas having intensive water resource utilization require additional analysis. There are a number of analytical methods and tools available to meet this goal.

Water Budget Analysis

A water budget analysis treats the water resources of an area as an account, with recharge serving as the income, withdrawals and instream flow needs as the expenses, and storage as savings. Recharge is the fraction of precipitation received by the groundwater flow system. The recharge received

during a one-year period is generally recalculated to an average daily amount. In a natural groundwater flow system, “expenses” generally include discharges to springs and streams, and the loss of water to plants, and evaporation (evapotranspiration) in areas where the water table approaches the ground surface. In most areas of the basin, expenses also include man-made uses, such as water supply wells and interbasin diversions (Figure C.1). The amount of groundwater in storage varies with the position of the water table. Storage is highest during high-water table periods and least during extreme low-water table periods (i.e., severe droughts).

If a water budget is used for the review of a project, it must include the area of the natural flow system that encompasses all the budget expenses (wells, springs, stream intakes, and instream flow needs, etc.) and their recharge areas. On a project-specific basis, this will generally correspond to a subsection of a local watershed. The water budget may be calculated for a year with an average amount of precipitation or for a drought year with a specified recurrence interval. The Commission currently utilizes the 1-in-10-year average annual drought as a “water income” design level. The design level sets an upper limit of the resource available for the Commission to approve for development (withdrawal). Water budgets are useful for evaluating the groundwater resources available for development, troubleshooting water supply and well interference issues, and planning for future water needs (expenses).

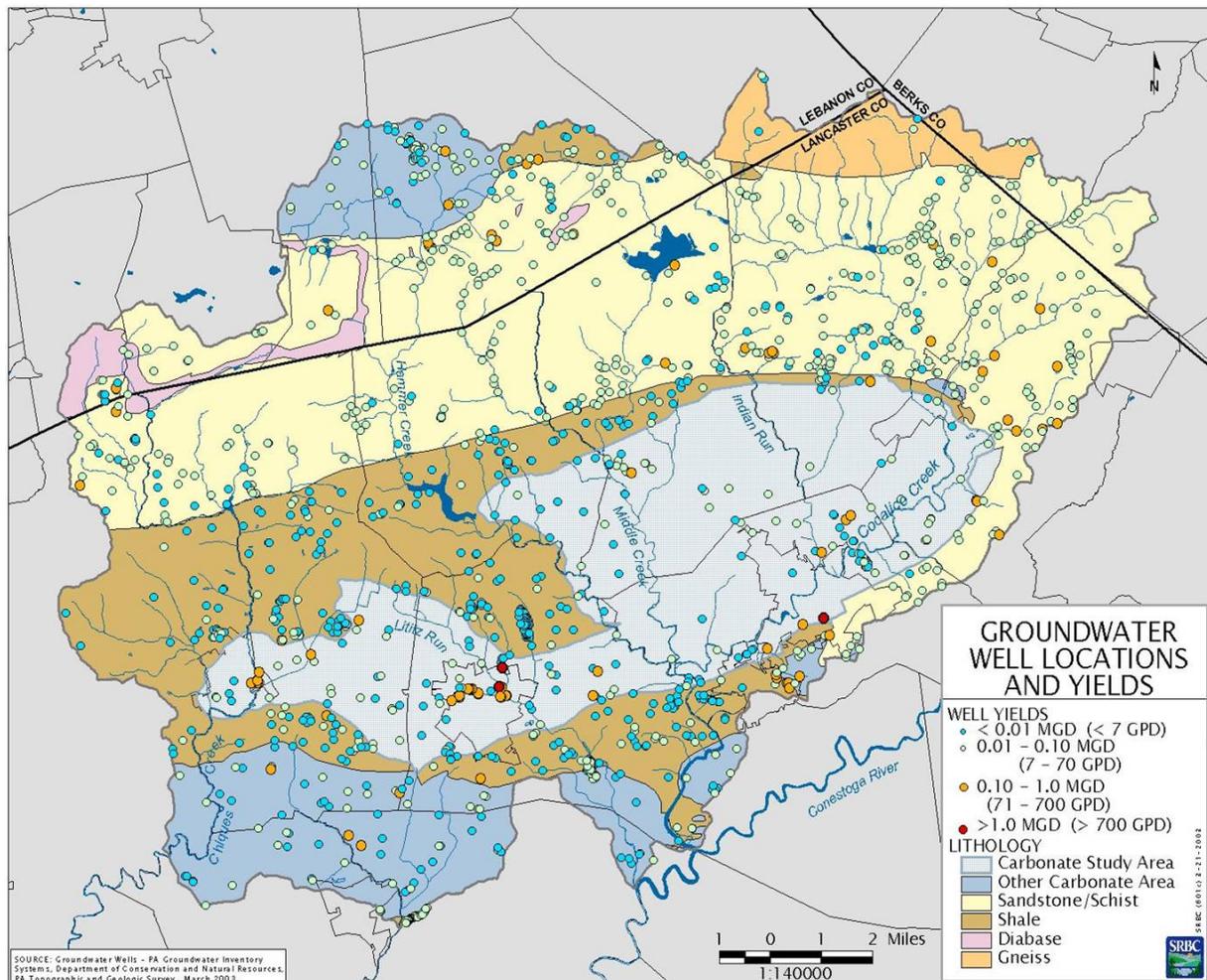


Figure C.1. Well Yields Used as One Component of a Water Budget Analysis

Critical Aquifer Recharge Areas

Critical aquifer recharge areas (CARAs) are areas having high recharge productivity. They are land surface areas that are responsible for a large fraction of the recharge to a well capture area and/or are closely hydraulically coupled to a withdrawal or area of discharge (spring, stream, or wetland). As such, a CARA is a relatively small area and linked to a groundwater source. An area may be classified as a CARA by virtue of its high aquifer permeability, soil characteristics, vegetative cover and location with respect to discharge areas and/or withdrawals, topographic setting, or a combination of these. The maintenance of the recharge received from these areas is best assured by land development and use that either: (1) minimizes impervious cover, destruction of soil structure, and changes to the vegetative cover and the topography; or (2) offsets any negative impacts to recharge resulting from such changes through engineered solutions.

Delineation and proper management of CARAs, on a project-by-project basis, will help to ensure that the amount of water allocated to a project in an approval will be available for the duration of the approval, and will help to preserve the local base flow in streams. Delineating CARAs will help preserve existing water supply well capacity and provide for planning and zoning to ensure that development and land use will be beneficial for water resources. The protection of CARAs can be coordinated with existing programs and regulatory processes, including wellhead protection areas, zoning ordinances, and land use planning (borough, township, or county).

Water Level Monitoring

The flow of groundwater from recharge areas to areas of discharge is driven by the difference in water levels (head) of these areas. As an aquifer approaches depletion, the head that drives the flow of water through the aquifer gradually decreases in magnitude and approaches the head in the stream or lake into which the groundwater is discharging. Aquifer depletion caused by the excessive withdrawal of groundwater may cause head levels to fall below local base level, resulting in losing or dry stream reaches. Monitoring water levels in an area of concentrated development can provide information on how that area's groundwater flow system functions and serve as an early warning of over-utilization.

Special Studies and Models

The Commission may perform, or require the performance of, special studies or models. Such studies are used to check the “health” and use level of the groundwater flow system in areas with concentrated water resource development or address other water resource management topics. The Commission has required several project sponsors to perform water resource evaluations as a condition of project approval. These projects were large and dominant water users in small groundwater and surface water basins, and so the special studies provided the necessary information for the Commission to review the projects. In each case, the study not only assisted the Commission in making its review, but also formed the basis for future water management planning and monitoring by the project sponsors.

Where a special study encompasses several municipalities, the Commission may provide organization or leadership. In 2005, the Commission completed a detailed water budget study of a carbonate/karst aquifer in northern Lancaster County, Pennsylvania. The study area was chosen because of intense urban development around three urban centers, and the fact that its natural groundwater basin covers seven watersheds. If the Commission had not taken the lead on this study, a similar result would require the cooperative and possibly fragmented effort of the three boroughs, seven townships, and three watershed groups and/or the integration of seven watershed-based studies.

At the time of developing this plan, the Commission was also performing a detailed study to develop methods or alternatives to compensate for agricultural consumptive use during times of low flow. The alternatives are intended to find options for agriculture to comply with the Commission's consumptive water use regulation. The study has identified, and explored, the use of a number of innovative solutions and technologies.

Water Resource Management Database

There are many sources for existing water resource management-related information in various formats. To efficiently and most effectively use this information, it can be organized under a common database and placed into a Geographic Information System (GIS) for enhanced utility. Using GIS, a variety of information types (topographic contours, land use, vegetation, wetlands, etc.) can be overlaid on maps of optimum scale. In this way, spatial relationships can be recognized and considered in management decisions. A GIS-based database will greatly facilitate cumulative impact analysis, water budgets, and the delineation of CARAs. A GIS database will take these, and many other water resource management tasks that are currently in the realm of research projects, and enable them to be used as practical management tools.

Regulatory Program

The primary groundwater management “tool” used by the Commission is its regulatory program.

Registration

The Commission adopted water withdrawal registration regulations to document water use throughout the basin and provide the necessary data to make informed water management decisions. Registration is important to the Commission's permitting activities because it provides basic water use data, thereby allowing the Commission to protect existing uses. Information on water use is important for other Commission water management activities, including preparation of water budgets.

Water withdrawal registration is codified in the Commission Regulations, Part 804, Subpart A, §804.1-5. The regulation requires that, subject to the consent of the affected member state to the requirement, all persons withdrawing or diverting in excess of an average of 10,000 gpd for any consecutive 30-day period, from groundwater or surface water sources, shall register the amount of the withdrawal with the Commission. Re-registration also is required.

Grandfathered withdrawals are not required to secure Commission approval. As a result, there is a deficit of information on this use. In developing areas, grandfathered sources may share the same groundwater basin with newer sources. To evaluate the sustainability of new withdrawals, and their impacts to existing sources and the environment (wetlands, springs, and streams), all major withdrawals (including grandfathered) must be considered. The registration of grandfathered withdrawals will allow these evaluations and protect the grandfathered withdrawals.

The Commission can arrange for states to carry out this registration requirement, as has been done in Maryland and, most recently, in the Commonwealth of Pennsylvania, under the Pennsylvania Water Resources Planning Act of 2002.

Regulation of Groundwater Withdrawals

The Commission adopted withdrawal regulations to avoid conflicts between water users and to ensure beneficial management of the water resources. By regulation, withdrawals are limited to the amount (quantity and rate) that is needed to meet the reasonably foreseeable needs of a project and that can be withdrawn without causing adverse impacts. Adverse impacts include: excessive lowering of water levels; rendering competing supplies unreliable; causing permanent loss of aquifer storage capacity; degradation of water quality that may be injurious to any existing or potential water use, adversely affecting fish, wildlife, or other living resources or their habitat; and substantially impacting the low flow of perennial streams.

The Commission's water withdrawal regulations are designed to manage large water users, that is, those users withdrawing groundwater or surface water in excess of 100,000 gpd. Potential water users meeting this requirement must first apply to the Commission.

The Commission recognizes “grandfathered” quantities withdrawn prior to the effective dates of the regulations, provided that the project sponsor can provide adequate documentation.

The Commission's application process has a number of standard requirements that are applied to all projects. Project sponsors requesting approval of a groundwater withdrawal are required to conduct a constant-rate pumping test (commonly 48 hours in duration), which is used to evaluate the production capability of the well, the aquifer, and the local groundwater basin, and to evaluate potential impacts to existing users and to the environment. These must be adequate to supply the needs of the project, and do so without causing significant adverse impact to neighboring water supplies, surface water bodies, and wetlands.

The Commission adopted pumping test guidelines in 2002 to assist in the development of acceptable plans for the constant-rate pumping test. The guidelines require a groundwater availability analysis that demonstrates sufficient recharge to support the desired withdrawal during a 1-in-10-year average annual drought and a hydrogeologic description of the test site in addition to the testing plan.

During technical review, the Commission's staff evaluates the impact (including cumulative impacts) of the proposed withdrawal or use on public concerns and interests, and reflects the Commission's concern for both protection and utilization of water resources within the basin.

The Commission's staff formulates specific recommendations so that the project can operate without causing any undesirable environmental effects. Water quantities and rates of withdrawal can be reduced from those requested, or otherwise limited, as necessary, to protect other uses or mitigate impacts. Many projects are conditioned with passby flow requirements. The intent of the passby flow requirement is to protect streams during low flow conditions by determining a prescribed quantity of water that must pass a specific point downstream from a water intake at any time a withdrawal occurs. Other projects require a minimum groundwater level that must be maintained on the production well. For all projects, the appropriate monitoring requirements are established during the technical review phase so that the Commission staff can track project operations over the term of an approval. There are some standard docket conditions contained in the Commission's approvals:

Metering—The Commission requires metering on both withdrawals and consumptive water uses to measure and track water use throughout the basin. In certain situations, there is an allowance for modeling and certain analytical methods to calculate use, particularly for projects with consumptive water uses.

Monitoring and Reporting—The Commission requires monitoring and reporting of withdrawal quantities (commonly daily) so the agency can undertake the broader management responsibilities and ensure that the project sponsors are in compliance with their requirements. Projects with groundwater withdrawals also report water levels and water quality in approved wells.

Mitigation—On occasions, when a project sponsor's use does cause an adverse impact either to the resources or to another user, the Commission requires the project sponsor to mitigate those impacts. The Commission could restrict their usage, require them to develop an alternative water supply, or provide other appropriate mitigating measures.

Water Conservation—The Commission requires, as a general rule, that project sponsors maintain certain minimum water conservation standards to minimize water usage. These standards include the use of applicable water conservation devices, recirculation and reuse strategies, properly designed irrigation systems, and metering for sources and customers.

Docket Reopener—A standard provision in all dockets gives the Commission the right to reopen any project docket to modify and issue such additional orders, as may be necessary, to mitigate or avoid adverse impacts either to the resources or other water users.

The Commission also regulates large withdrawals from surface water (consecutive 30-day average of more than 100,000 gpd), Commission Regulation §803.44 (effective date: November 11, 1995), and consumptive water use, Commission Regulation §803.42 (effective date: January 23, 1971). Consumptive use of water means the water will be used and not returned to the Susquehanna River system, usually because it evaporates, is diverted, or is incorporated into products such as concrete. Regulated consumptive water users are required to compensate for their consumptive use during times of critical low flows through one of several options. The three primary methods of compliance listed in the regulations and utilized by most project sponsors are use of storage to mitigate any adverse impact during low flow periods, discontinuance of the consumptive use of water during low flow conditions, or payments in-lieu-of providing actual compensation water. The Commission also can review and evaluate other alternatives proposed by project sponsors.

Consumptive uses generally peak during the summer months. Unfortunately, this also is the period when streamflows and groundwater levels are at their lowest. Maximum consumptive water use in the Susquehanna Basin has increased from about 270 mgd in 1970 to about 500 mgd in 2000, and is projected to continue increasing in the future, by as much as 55 percent by 2020. The Commission adopted the consumptive water use regulations to ensure adequate flows for the many competing water uses, including public water supplies, industries, agriculture, and recreation, and to protect aquatic life, habitat, and water quality during times of critical low flows.

Compliance Monitoring and Enforcement

The Commission's objective is to have all water users in the basin in compliance with the Commission's water management regulations. Universal compliance enhances the Commission's ability to properly plan for and manage the basin's water resources.

The Commission requires approved projects to submit monitoring data related to withdrawals and use and any special conditions contained in the approved docket. These data are used to evaluate whether additional water is available for use.

Protected Areas

Article 11, Section 11.2, of the Compact allows for the creation of protected areas in regions of water shortage within the basin. An area may be designated as a protected area with the consent of the member (or members) from the affected state or states. Designated areas are flexibly sized and may be watersheds, aquifers, groups of municipalities, or entire counties. William Voigt, in *The Susquehanna Compact, Guardian of the River's Future*, gives some insight into the intent of the drafters of the Compact by indicating that protected areas should be: (1) smaller, rather than larger; (2) implemented in advance of water shortage emergency conditions in order to have sufficient time to manage the water resources; and (3) balanced in terms of supplies and demands.

Water budgets, comparing available supply with projected demand for varying magnitudes of drought, as previously described in Section 3.1.1, are the most effective tool available for identifying water shortage areas requiring protected area status.

According to the Compact, protected areas clearly are intended to correct, mitigate, and manage local area water supply shortfalls or threatened shortfalls on a quantitative basis. However, the Compact is silent with respect to whether the shortages might be derived from groundwater or surface water withdrawals or consumptive water uses. Consequently, protected areas may be managed to limit groundwater withdrawals, surface water withdrawals, both groundwater and surface water withdrawals, or cumulative consumptive water uses.

For protected areas involving only groundwater supplies, aquifers may be the appropriate unit for protected area designation. However, since most groundwater divides within the Susquehanna River Basin roughly coincide with surface water divides, the watershed may be an appropriate unit for designation.

How large should the units for designation of protected areas be? A reasonable size for watershed assessments within protected areas is believed to be about 25 square miles in area. Watersheds of significantly greater size than 25 square miles could possibly result in management and implementation problems because of difficulties in coordination and consensus among multiple municipalities. Coordination and consensus among municipalities are essential for effective water resources planning and management. Conversely, watersheds less than 10 square miles are thought to be too small for meaningful management at the Commission level.

For groundwater-protected areas, cumulative groundwater withdrawals generally are limited to some acceptable aquifer recharge or base flow frequency level, such as the 25-year frequency base flow. Cumulative consumptive water use limits have never been established or implemented by a water resource management agency. However, this approach may prove to be the most effective tool of all for managing future protected areas.

As a final note, the original Compact drafters, in Section 11.2, acknowledged that they could not foresee all possible future uses for protected area designation when they added the caveat “or conflict with the requirements or effectuation of the comprehensive plan” in their definition of protected area. Thus, the Compact leaves some discretion for the Commission to determine other beneficial uses and applications for the designation. Naturally, the Commission would have to exercise this power very judiciously. Conceivably, the goals of protection through special water management practices can be

accomplished through adding an objective to the Commission's Comprehensive Plan that would allow for a new designation. The Comprehensive Plan has legal standing in the Compact, and the Commission can assume jurisdiction in virtually any water resource matter to fulfill the requirements of the Comprehensive Plan.

Development of Standards and Guidance

Commission staff has developed both internal and external guidance documents, as necessary, to promote consistency and efficiency in the Project Review Program. The most important of these, from a groundwater perspective, is the Pumping Test Guidance (2002), written for project sponsors and specifying the necessary procedures, proper monitoring, and evaluation and data analyses for conducting the required constant-rate pumping test for submission with a groundwater withdrawal application. Other guidance includes passby flow guidance (Susquehanna River Basin Commission, 2003), out-of-basin diversion protocol (Susquehanna River Basin Commission, 1998), criteria for waiving pumping tests, internal guidance for evaluating cumulative impacts (draft), establishing “grandfathered” quantities, and reviewing consumptive water uses.

Commission staff also prepares fact sheets about a variety of topics, including the project review process, the regulations, and individual projects, as needed, to inform and help educate the public.

The development of standards and guidance is an ongoing process, and will continue as important issues arise and time permits.

Water Conservation

Water conservation requirements are specified in the Commission Regulations, Part 804, Subpart B, §804.20-22. The regulation requires that any project that is subject to Commission approval under Part 803 or 804 proposing to withdraw water either directly or indirectly (through another user) shall institute appropriate water conservation measures. The regulations specify a number of requirements for public water suppliers (source and customer metering, unaccounted-for water to be less than 20 percent, an appropriate rate structure, etc.). However, for other types of projects, the regulation is silent on important conservation measures. Commission staff has recognized that these regulations should be strengthened at the time of the next revision of the regulations, and may consider incentives for promoting conservation measures and implementing technical solutions.

Water Reuse

Groundwater used by municipalities and industries is typically treated and discharged to a stream. AMD from many flooded underground coal mines is treated and discharged to streams. The quality of treated water from municipal, industrial, and mine treatment plants, while generally not meeting safe drinking water standards, is generally quite good before it is discharged to streams. It is potentially usable for many non-potable uses such as irrigation and non-contact cooling. The reuse of treated wastewater would decrease the amount of groundwater withdrawn by the amount of water that is reused. Reuse will allow the water budget to be “stretched” in areas of rapid growth and limited water resources such as the PSAs (see Section 2.1). The Commission should develop incentives for reuse.

Conjunctive Use

The availability of groundwater and surface water resources frequently varies in a complementary manner during the year, such that one of them is relatively abundant while the other is relatively scarce. Water users can develop both groundwater and surface water sources and rely on each

as it is “in season.” A community, recreational facility, or industry may rely on surface water during periods of high flow, then switch over to groundwater when surface flows diminish during the late summer and early fall. Where only groundwater is available naturally, a surface water impoundment may be constructed to capture snowmelt, spring precipitation, and stormwater runoff. This stored water may be used when groundwater resources are stressed, or may be used to provide a passby flow during low flow periods. Conjunctive use should be generally encouraged and, perhaps, incentivised in areas where groundwater resources are nearing exhaustion, such as the PSAs.

Public Outreach and Education

Public outreach and education on groundwater concepts are important for managing the resource. With increasing water demands in some portions of the basin, coupled with several recent drought years, there exists a need to balance availability with use. Since most issues concerning availability and use hinge on land use planning and development decisions, local government and citizens are a critical audience for focusing efforts on outreach and education. Topics such as recharge, conservation, and water reuse/recycling are an important component of groundwater resource education as well. Additionally, other groups concerned with water resource issues are important to the process both as an audience and as partners, in efforts to improve the management of groundwater resources. These groups may include professional organizations, watershed organizations, and schools.

Outreach and education can be conducted effectively using a variety of methods. The following paragraphs detail some of the methods employed by the Commission.

Presentations

The Commission regularly gives presentations or participates in panel discussions on various water resource issues before audiences of wide-ranging background and experiences. Presentations of groundwater resource issues may be requested by the public, or initiated by the Commission, if a need is identified. Additionally, the Commission can give oral presentations or display exhibits at various constituents' workshops and conferences. The Commission currently maintains a speakers' bureau, which provides the public an opportunity to request presentations by the appropriate staff member, or volunteer experts, on numerous water resource issues. The Commission's presentations concerning groundwater concepts/resources can be updated, and new material created, based on the information presented in this Groundwater Management Plan.

Publications

The Commission publishes a quarterly newsletter, brochures, and technical reports, and produces many information sheets and issue-specific information pieces, as needed, on various water resources issues within the Susquehanna Basin. The Commission also issues press releases, editorials, and letters to the editor. Using these forms of printed media, the Commission can focus periodically on specific groundwater issues in the basin, as well as feature educational articles explaining important groundwater concepts. In addition, the Commission drafts and submits articles for other agency and organization publications. Publications produced by the Commission that are related to the issues and recommendations outlined in this plan can be found in Appendix D.

Multimedia Products

The Commission currently operates and maintains a website. The Groundwater Management Plan has been posted to the website, making it available for a large audience. A section of the website also can be dedicated to groundwater information developed under this plan. In addition, the

same type of materials can be made available on a compact disk for distribution at meetings and conferences, or upon request from the public. Educational videos also have been a successful method for conveying information on water resource issues. The Commission could partner with other organizations to produce videos highlighting important groundwater resource issues. Similar to compact disks, videos are easy to duplicate and distribute to the public, and are an excellent outreach tool for school groups.

Seminars

The Commission has held seminars in the past covering a variety of topics related to water and the environment. With respect to groundwater, Commission staff has held several educational seminars on the occurrence and movement of groundwater in the Susquehanna Basin at the request of the public. These seminars were held in communities within the basin that experienced a significant strain on their groundwater supplies during the recent droughts. The seminars provided a needed forum for the public to voice concerns about their own private wells and public supply and to ask questions, while, at the same time, expanding their understanding of various concepts such as the affect of recharge and withdrawals on groundwater availability. Seminars also provide the opportunity to provide technical guidance on the proper use and management of groundwater resources.

Interagency Coordination of Workgroups and Task Forces

As an interstate agency, the Commission is in a unique position to assist state/federal/local agencies in water resource management issues that cross jurisdictional boundaries. The Commission actively maintains relations with water resource partners at all levels, from the federal level to citizen groups and local municipalities. The Commission can facilitate efforts to address groundwater resource problems on a basinwide approach, bringing to bear a wide range of both the technical and financial resources needed to solve complex problems. Interagency coordination efforts, led by the Commission in the past, have included the Sediment Task Force, Agricultural Advisory Committee, Water Quality Advisory Committee, and Flood Forecast and Warning System. These coordination efforts have focused on pertinent water resource issues, and assisted with moving toward solutions using interagency/interstate cooperation. The use of websites and bulletin boards provide a convenient means for accessing and exchanging information.

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