

CHAPTER VI

OPEN SPACE AND RECREATION RESOURCES

Introduction

This element of the Master Plan reviews the town's open space and recreation resources, both protected and unprotected; examines Abington's related needs and opportunities; suggests open space and recreation goals; and recommends actions to protect and enhance the town's open space and recreation resources. The Recreation and Open Space element of the Master Plan includes information and proposals for open space, recreation and conservation that can be found in the most recently completed and certified Abington Open Space and Recreation Plan (OSRP) 2006. This chapter draws heavily upon the OSRP and that Plan should be referred to for more detailed information about the inventory of publicly owned or managed properties and about specific projects.

Town of Abington has significant open space and recreation resources. These include an array of publicly and privately owned land that are used both as active and passive recreational areas. Open space resources, including conservation land and recreational areas are important to the Town of Abington for they provide active and passive recreational opportunities for the public and offer visual relief from the built environment. In addition, considerable open space land resources are owned by the Abington Rockland Joint Water Works Board for to provide for regional water supply needs and to protect the Town's well system. The Town has approximately 1,886 acres of fully or partially protected open space. Of these, 1,640 are publicly-owned and 246 are privately-owned. Of the public holdings, 607.36 acres are at Ames Nowell State Park and another 178.75 acres are within the Abington part of the former South Weymouth Naval Air Station (SWNAS) property. The inventory serves to identify existing open space and recreation resources and offers a baseline against which to evaluate existing and future needs.

Environmental Characteristics

The geology of Abington was formed by glacial ice sheets that blanketed much of southeastern Massachusetts. As the glaciers began to melt and recede the landscape formed and a basin was created in the present Hockamock Swamp (known to geologists as the Leverett Sea). As the ice continued to retreat it revealed the region's characteristic north-south drumlins while the Hubbard Uplift eliminated much of the Leveret Sea and created the present north-south drainage pattern found in Abington.

Two major soil type associations are found in Abington, the "Scituate-Essex-Merrimac Association" and the "Hollis-Charton-Essex-Muck Association. These contain very different soils which when found together have different functional characteristics depending upon

mix and pattern. The Scituate-Essex-Merrimac Association covers the southern two-thirds of the town. It includes deep nearly level to moderately steep, well-drained and moderately drained soil formed in glacial till, and nearly level, somewhat excessively drained soils formed in sand and gravel. The Hollis-Charton-Essex-Muck Association covers the northern on-third of the town. It includes rolling, somewhat excessively drained and well-drained organic soils. This suggests that much of this area would accept water readily, and be suitable for septic systems, but because many of the soils have seasonally high water table they are not suited to on-site disposal systems.

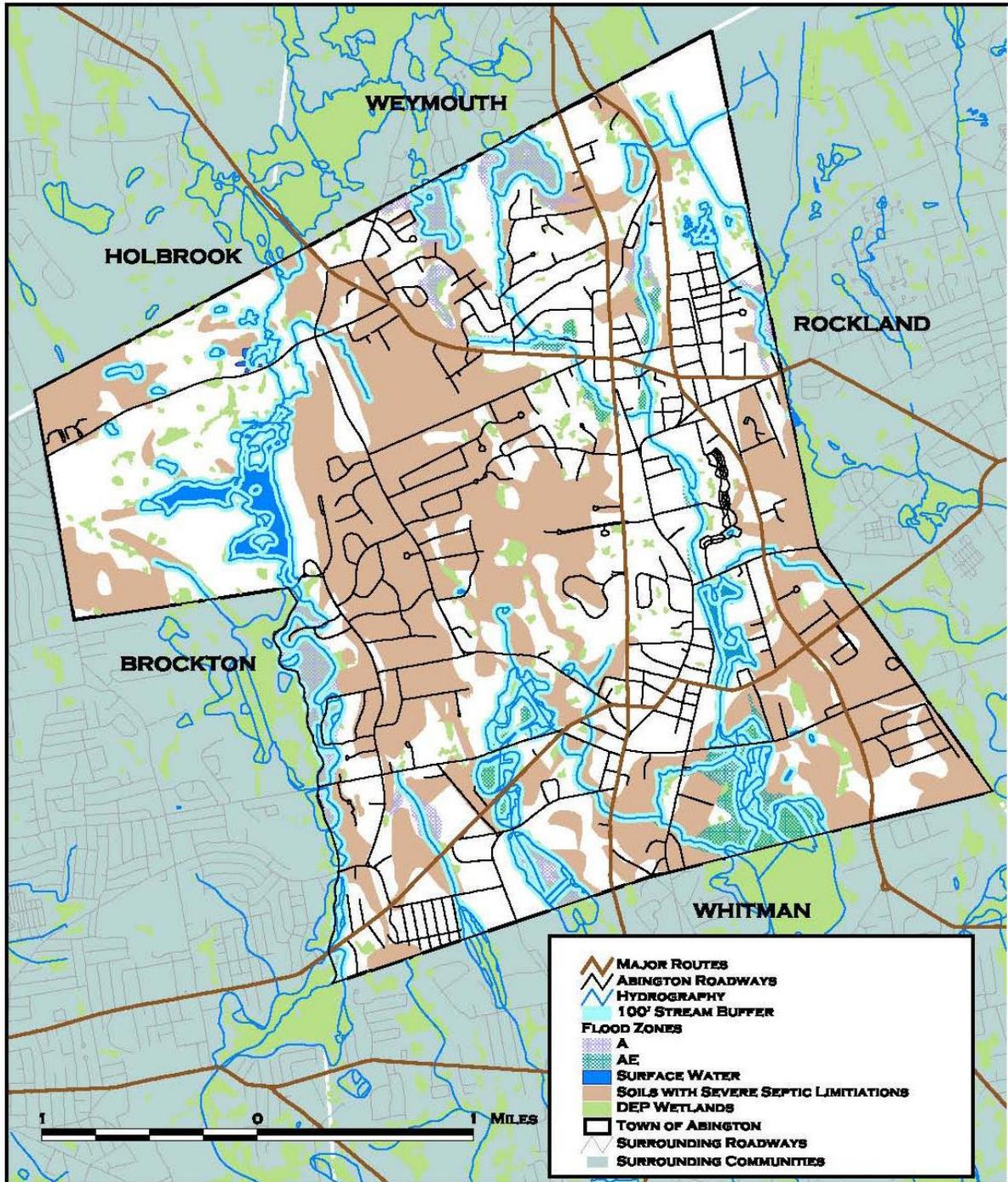
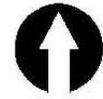
The accompanying Map VI-1, Abington Soils and Geologic Features shows that a good portion of the town has severe limitations for on-site waste water disposal systems. In the past it was thought that these areas mapped with severe septic limitations would be difficult to develop or were areas where development was very unlikely. However, actual development patterns that emerged indicate that with large lots (3/4 acre or more); many areas mapped as having septic limitations were able to be developed with approvable on-site systems. Development experience in the town has also demonstrated that those areas with the most severe soil limitations had constrained development, led to disposal problems and required relatively large lots to accommodate on-site disposal systems. However, with the introduction and availability of a town-wide public sewerage, the poor soil conditions that previously influenced the development pattern are no longer relevant.

Abington's landscape character is best described as rolling and wooded with some remaining open fields. Many of the natural areas are blocked from view by roadside business and housing developments. A major exception is the woodland on the north side of Chestnut Street across from Ames Nowell State Park. Another landscape asset is the town's system of streams and ponds that traverse the town. Abington is at the head of three river basins and though limited by small water catchments, the streams and ponds have scenic, recreation and wildlife value and are potentially important for flood control.

The town is divided into three drainage basins as shown on Map VI-2: the Taunton River, Coastal and Boston Harbor Basins. However, most of the Abington (87%) is within the Taunton River Basin and the Meadow Brook, Beaver Brook, Stream River and Shumatuscacant River flow southerly to the Taunton River and then empty out to Mt. Hope Bay. The Shumatuscacant River serves the Central Watershed area of the town and flows through the recharge area for the Abington-Rockland Joint Water Works Myers Avenue wells. The recharge the Shumatuscacant River offers to this ground water supply can be affected by upstream development and activities.

Approximately 87% of the town drains into the Taunton River Basin via the Shumatuscacant River, Beaver Brook, Meadow Brook, and the Stream River. The Shumatuscacant River is the largest stream in Abington and is formed from several small tributaries in North Abington. The river winds its way down the east side of town behind the Frolio School and Early Childhood Center to Island Grove Pond where the water is impounded by a 13-foot earth-filled dam. The Shumatuscacant continues below Centre Avenue and then through a large wetlands area in the vicinity of the town's wells and into the town of Whitman.

MAP VI-1 SOILS AND GEOGRAPHIC FEATURES



OLD COLONY PLANNING COUNCIL, 70 SCHOOL STREET, BROCKTON, MA 02301
 GIS DATA SOURCES: MASSGIS, EOTPW

NOVEMBER, 2008

Joining the Shumatuscacant River in Whitman is the Stream River which begins in Abington just east of High Street in a wetlands area owned by the Conservation Commission. The Stream River flows in a northerly direction (the only stream that does so in Abington) for several hundred feet crossing Ashland and Groveland Streets where it is joined by several other small tributaries at the edge of the former town landfill.

The other major stream in Abington is Beaver Brook which begins in Holbrook and flows south through Cushing, Cleveland, and Hunt's Ponds into Brockton and Whitman. Protected lands along the brook include Brockton conservation land and the Ames Nowell State Park in Abington. Like all of Abington's streams, the Beaver Brook has limited flows.

The town is fortunate in having a number of ponds as part of its water resources. The largest is Cleveland Pond, (88 acres) located in Ames Nowell State Park. While swimming is prohibited because of shallow depths, boating and fishing are allowed. The Pond borders woods, park and swamp.

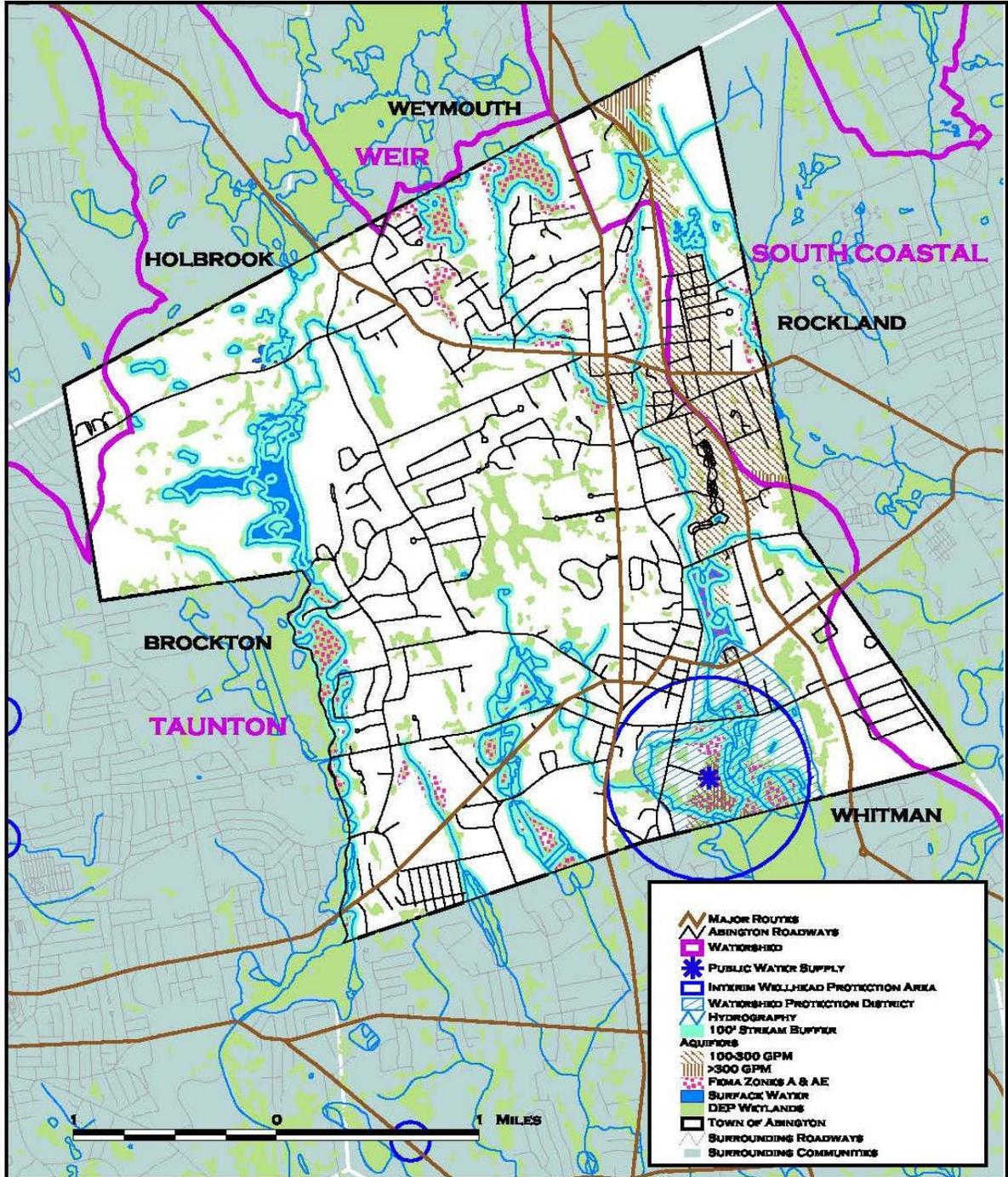
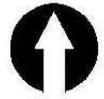
Just north of Cleveland Pond on Chestnut Street is the very beautiful and scenic 10 acre Cushing Pond, part of which is within the Pohorecky Farm property. The Abington Town Meeting voted to acquire the property, but it is in litigation. Hunt's Pond (6 acres) off of Mills Street is the smallest of the three Beaver Brook ponds. It is bordered on its eastern edge by protected agricultural land. The most popular pond in Abington is the town-owned Island Grove Pond (35 acres) located between Washington and Plymouth Streets in the center of Abington. Island Grove Pond has an enclosed swimming area fed by well water that flows through the swimming basin into the pond itself. While access to the western side of the pond is limited by residential development, the town owns much of the abutting land on the eastern shore which is Island Grove Park.

Abington's streams and ponds with their extensive wetlands and floodplain areas form a complex pattern that constitutes the town's drainage system. This natural drainage system not only channels water and storm water runoff but provides holding areas for excess water. The wetlands in the vicinity of the Abington wells also serve as groundwater recharge areas. These three functions, drainage, flood protection and groundwater replenishment - are three critical roles for the town's floodplain/wetlands system.

Areas within the Floodplain and Wetlands Protection Zoning District make up almost one half of the land area of the town. Areas included in the district are subject to seasonal or periodic flooding or have severe limitations for residential use. The flood hazard area of Abington is somewhat limited because Abington lies at the headwaters of the Taunton River Basin. Thus, there is no extensive development upstream in a floodplain area that could contribute to extensive downstream flooding in Abington.

The town's aquifer recharge areas are shown by the "Zones of Contribution" on the Water Resources Map, and by any delineated Zone II areas. The Abington Zoning By-Law has a Watershed Protection District the purpose of which is to protect these aquifer recharge areas. The Watershed Protection District is mapped around the Myer's Avenue

MAP VI-2 ABINGTON WATER RESOURCES



OLD COLONY PLANNING COUNCIL, 70 SCHOOL STREET, BROCKTON, MA 02301
GIS DATA SOURCES: MASSGIS, EOTPW

NOVEMBER, 2008

town water wells and is bounded by Routes 18 and 58, Centre Avenue and the Whitman town line.

Inventory of Public Lands

The complete inventory of public land holdings in Abington along with significant private and non-profit land parcels and related maps can be found in Appendix A. The present town-owned and publicly-owned land holdings are extensive and indicate that the Town of Abington has wisely determined to acquire land for open space in the past to provide for future needs. As recent as 2006, the Town of Abington acquired the 60.5 acre Carista property that was formerly a private land holding protected under MGL Chapter 61A. With this significant land acquisition the Town now has 1,886 acres of fully or partially protected open space; which represents 29.56 percent of the land area of Abington. Publicly owned land amounts to 1,640 acres and 246 are privately-owned. Of the 1,640 acres of publicly owned land 104 acres are in park or recreation land and managed by the Park and Recreation Commission. Another 102 acres of publicly owned land is managed by the School Department and includes playground facilities and playfields that are also used for recreation. Conservation and open space land accounts for 250 acres and land owned by the Sewer and Water Departments accounts for 166 acres.

Abington also owns a number of parcels that have been acquired over time as tax title properties. Many of these were marginal lands for development but have significant value for wetlands protection, conservation or natural resource protection. It is important that these town-owned parcels be carefully evaluated to assess their importance in being maintained as part of the Town's inventory of recreation and open space properties and in meeting the Town's Goals and Objectives for natural resource protection.

Summary of Community Needs

An Analysis of Abington's needs for recreation sites, facilities, and open space land is a key element in evaluating the community's goals and objectives, and implementing a 5-year plan. These are the collective desires of the citizens to set aside areas for recreational use, to preserve natural resources, and to protect open space. Different local interest groups place different emphasis on the types and locations of perceived needs; not all residents place the same value or importance on any particular site or facility. The analysis of community needs has therefore relied heavily on discussions with many community groups and benefited from their input during the preparation of the Master Plan and the Community Development Plan.

A number of different methods can be used to determine a community's needs for recreation and open space land. As noted above, these methods all use the basic relationship between need being equal to demand minus supply. Need is equal to the difference between the demand for a resource and the available supply of it. The supply aspect of this relationship is established from an inventory of the available facilities and land within the Town. The difficulty has always been in establishing a community's

demand for such resources and facilities in measurable terms that can be compared with supply, especially where little or no demand exists for certain activities because of the lack of available facilities or experience with them.

One approach used to measure the adequacy of Abington’s recreation facilities and open spaces is to compare the present inventory with standards suggested by the Massachusetts Statewide Comprehensive Outdoor Recreation Plan (SCORP). These comparisons are shown in Table VI-1. At the time of this Master Plan Update, Abington’s recreational facilities meet the standard for everything excepting tot lots and playfields. The development of the John Reilly Memorial Field has helped to overcome the deficiency in playfields, but more are needed. As the table indicates, the Town is deficient in playfields by 4 acres using the SCORP standard. However, the Town of Abington will be entitled to use the recreational facilities that are developed as part of “Southfield” and this should be sufficient to meet the demand for more soccer fields for this increasingly popular team sports activity. The SCORP standards also indicate that Abington is deficient in acreage devoted to Tot Lots. However, the SCORP are suggested standards and given the town’s suburban character, low overall density and the availability of land available for informal play; the need for Tot-Lots is not as evident as the standards suggest.

**Table VI-1
Abington Recreation Needs by Suggested State Recreation Standards**

Facility Type	Supply	Population (1)	Total Calculated Need/pop
Playfields	44 Acres	16,264	48 Acres @ 3 acres/1000 pop
Playgrounds	7.5 Acres	1,207 (5-11yrs. Old)	4.8 Acres@ 1 acre/250 pop.
Tot Lots	1 Acre	16,264	8 Acres@ .5acres/1000 pop.
Tennis Courts	7 Courts	16,264	8 Courts@ 1/ 2000 pop

(1) Metropolitan Area Planning Council (MAPC), Population Projection 2010-2030. Estimates of the 5-11 year age group arrived at by using data from the MAPC report.

An alternative means of determining local need is to poll the park and/or recreation supervisor who is in the best position to assess two important indicators of demand: 1) which activities are the most popular and 2) which facilities are overused. In this regard, Abington’s Park and Recreation Superintendent have identified several items of need that include: two baseball fields, two softball fields, and two soccer/football/lacrosse fields. This would be consistent with the need identified by the SCORP standard for additional playfields.

Most of Abington’s open space and recreation facilities are maintained by the Park and Recreation Department which maintains fields and operates the facilities at Island Grove Park and Pond. The Department is staffed by the Superintendent and two full time maintenance personnel as well as a part-time secretary. In the summer months, the

Department employs three part-time maintenance workers and twenty-six seasonal program personnel for the expanded summer recreational programs. The Department needs additional staffing to meet the needs of an expanding recreational program and continues to cooperate with other town departments in addressing the recreational and open space needs of the town.

Open Space and Recreation Goals and Objectives

The Town of Abington Goals and Objectives for Open Space and Recreation presented here draw upon the recently completed Open Space and Recreation Plan. The OSRP articulated the following goals and objectives that reflect the needs and concerns of the community now and in the future. Although local communities including Abington currently may find it difficult to provide for all of the needs and demands for services and facilities because of strained financial resources; the Planning Board would be remiss if it did not point out that significant state aid would be available to the Town if it adopted the provisions of the Community Preservation Act. Adoption of the Community Preservation Act would make the Town eligible for state matching funds and should be considered at a future date when conditions change.

Preserve, protect and increase the amount of the Town's Open Space and Green' Areas and improve access to these holdings.

The Town should move, at the appropriate time, to acquire the Porhecky Property previously authorized through Town Meeting action as an open space land acquisition.

Efforts should be made to increase conservation land through acquisition, conversion and conservation restrictions

Accommodate special needs; improve the accessibility of Abington's open space; achieve compliance with the Americans with Disabilities Act goals

Plan and implement achievable open space preservation and recreation projects.

Plan and layout a nature trail within the Beaver Brook conservation land

Plan and layout bicycle routes in Town to tie into and tie together the recreational assets in Town

Increase number and quality of Active Recreational Areas and Facilities

Move to restore and maintain the Wilson Memorial Bridge and Arch in Island Grove Park.

Identify properties within the town suitable for creating new active recreational areas and facilities and increase the quality of existing facilities

Accommodate special needs; improve the accessibility of Abington's open space and recreational facilities; achieve compliance with the Americans with Disabilities Act goals

Increase quality of active recreational areas and facilities

Protect Abington's watershed and water resources

Improve the water quality in Island Grove Pond

Involve the Public in issues of Watershed and Resource Protection

Strengthen existing by-laws to further protect watersheds and water resources