

## **GETTING WATERSHED MANAGEMENT TO WORK: A FRAMEWORK FOR UNDERSTANDING INTERORGANIZATIONAL RELATIONSHIPS**

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**ABSTRACT:** *While studies have examined several factors that contribute to a watershed management group's success, little attention has been paid to the relationships between a watershed management group and existing organizations. Many watershed management groups are based on a cooperative approach; lacking regulatory authority they must rely on the influence and support of other groups to meet their goals. As a result, interorganizational relationships can greatly impact whether the watershed management group succeeds. This paper presents a framework to identify organizations relevant to a watershed management group and the types of relationships between these groups. The relevant organizations identified fall into five categories: (1) the watershed management group, (2) land use regulators, (3) water resources regulators, (4) non-profit organizations, and (5) public land managers and private land owners. There are four possible interorganizational relationships: (1) enabling, (2) constraining, (3) influencing, and (4) supporting. The Barnegat Bay Watershed, in New Jersey, is presented as a case study illustrating how the framework can be used to determine other organizations with aligned or competing goals, identify partnerships, and highlight pathways for action.*

### **INTRODUCTION**

The number of watershed management groups established by federal, state, and local governments has drastically increased since the late 1980s. While there have been many studies focusing on the benefits of a watershed management framework (Goldfarb, 1994; Davenport et al., 1996), the role of public participation (Duram and Brown, 1999; Griffin, 1999), and internal organizational characteristics that lead to successful watershed planning and management (Leach and Pelkey, 2001; Smith and Gilden, 2002), few examine the relationship between a watershed management group and existing regulatory and non-regulatory organizations in the watershed. Understanding other organizations' missions and interorganizational relationships is critical to a watershed group's success (Nelson and Weschler, 1998), particularly as many programs are based on a cooperative model where the local watershed group coordinates efforts among existing organizations but lacks regulatory power of its own (Ruhl, 1999).

While a cooperative approach gives the watershed management group a coordinating role, the planning process associated with watershed management usually creates a new set of goals. These goals often support the missions of existing organizations, but may also include goals competing with or contradictory to other groups' goals. How the watershed management group can work alongside existing groups should be explicitly examined to ensure the best approach is being taken to meet the watershed management group's own goals. In cases where goals are unclear or not yet defined, identifying existing organizations and interorganizational relationships can highlight unaddressed problems and potential roles for the watershed management group.

This paper presents a framework for defining organizations and connections between organizations in a watershed to help understand the relationships between a watershed management group and other relevant organizations. A case study of the Barnegat Bay Watershed, which has a cooperative watershed management group, is presented to illustrate how the framework can be

applied to determine other organizations' aligned or competing goals, identify partnerships, and highlight pathways for action.

## **THE FRAMEWORK DESCRIBING ORGANIZATIONS AND RELATIONSHIPS**

Figure 1 depicts a generalized framework of organizations and relationships that are relevant to the watershed management group. Relationships are defined by four types of connections: enabling, constraining, influencing, and supporting. An enabling connection is when one organization legally gives another organization the authority and necessary resources to exist, and in certain situations also conveys regulatory power. The primary enabling connection in this framework is the one creating the watershed management group, with the enabler being a federal agency, state agency, or a group of local governments. A constraining connection is defined as one organization legally limiting the power of another, typical of the relationship between a municipal planning department and private landowners. An influencing connection is defined as a non-legal relationship where one organization tries to guide or change another organization's actions. In watershed management programs using a cooperative approach, influence is the primary type of relationship the group has with existing organizations. Finally, a supporting connection is defined as one organization providing resources and/or working towards the same goals as another organization. This is often the kind of relationship that exists between a watershed management group and a non-profit foundation created to financially support the program. The combination of legal and non-legal connections highlights the nature of a cooperative watershed model and the need for a watershed to consider a combination of regulatory and non-regulatory actions.

Relationships are shown as directional in Figure 1, so it is not uncommon for an organization to be giving and receiving different types of connections with another organization. The relationship between two organizations is rarely

exclusively characterized by one type of connection, rather a flexible hierarchy exists. A connection defined as either enabling or constraining allows for an influencing or supporting relationship to also exist, but a connection defined as influencing or supporting will not include enabling or constraining activities. The types of organizations present in the framework are described below.

### **Watershed Management Group**

The central position of the watershed management group in the framework highlights its coordinating role. Watershed management groups often include local, regional, and state officials, watershed residents, and scientific advisors. The watershed management group uses influence to change the policies of land and water resource regulators and the behavior of private land owners and public land managers. A supportive relationship with non-profit groups can also help, as existing non-profits may have more established ties to the community. While the watershed management group primarily works through other organizations, during a planning phase its own set of goals are established. It is the achievement of these goals that drives the influencing connections with the other organizations.

### **Land Use Regulators**

Land use regulators include municipal and county planners, regional regulators, special planning commissions, and state planning offices. While the federal government is not directly involved in land use regulation, it does play a role in protecting terrestrial resources and limiting land uses in wetlands and floodplains. While these federal programs may be aligned with a watershed management group's goals, the nationwide coverage means a local watershed management group has only limited influence over them.

Popper (1992) estimates that 90% of all land use decisions are made at the municipal level in the United States, making municipalities the most active land use regulator in this framework. While municipal land use regulators can constrain private land owners' actions, the strong history of private property rights in the United States and the ability to provide variances and amendments to zoning rules means that municipal land use regulators may have

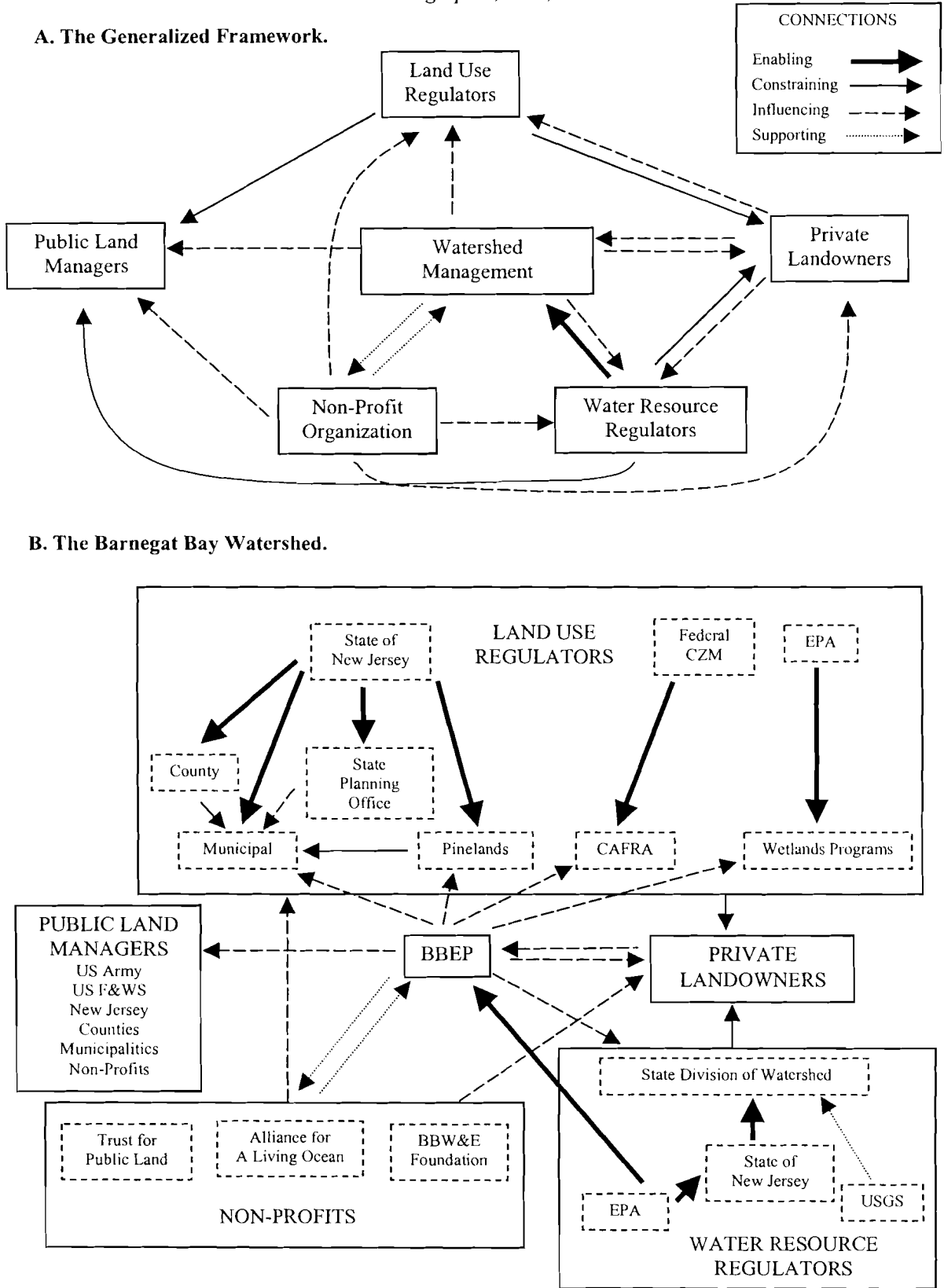


Figure 1. Connections between organizations in a watershed.

little impact on the activities of private landowners. Land use planning and regulation above the local level is often perceived as an unnecessary activity due to the historical power of municipal governments (Kanarek and Baldassare, 1996). However, many areas are now turning to regional governments to help control urban growth. These entities come in several forms, including regional planning commissions, councils of existing government bodies, regional advisory committees, regional allocation agencies, and special purpose regional agencies (American Planning Association, 1999; Sybert, 1999). Along with the growing number of regional land use regulators is the increased involvement of states through state plans, permitting processes, and economic incentives.

### **Water Resource Regulators**

Water resource regulators include the EPA, state agencies, water conservation districts, local water utility districts, and similar groups. Often one of these organizations has an enabling connection with the watershed management group. These organizations have traditionally centered on technological solutions to storm water issues and point source pollution (Werngert, 1980). More recent efforts have focused on non-point source pollution and protection of surface and ground water resources, partly by creating watershed management groups. While water resources and land use are closely related (Schueler, 1994; Wear et al., 1998), there tend to be few interactions between water resource regulators and land use regulators (Wang, 2001). One of the strengths central to a cooperative approach to watershed management is the influencing and supportive relationship the watershed management group can have with both types of organizations, ensuring an awareness of each others goals and development of supportive plans and management actions.

### **Non-Profit Organizations**

Non-profit organizations can play a large role in the success of a watershed management group. Non-profits are very similar to watershed management groups in that they influence and support other organizations but do not have any

regulatory power of their own. In this framework, non-profits organizations can be divided into one of three categories: (1) directly supportive of the watershed program, (2) supportive of similar goals, or (3) supportive of alternative goals. The first type of organizations, a non-profit supporting the watershed program, is often a precursor to the watershed management group, representing concerned citizens and other stakeholders in the watershed. Having established influential connections with existing organizations, supporting non-profits can be instrumental in obtaining resources and disseminating information.

The second non-profit type includes organizations that have similar goals to the watershed management group but does not exist to support the group. The connections between these organizations and the watershed management group can still be beneficial, as each may be able to employ different actions and resources to present a broader overall effort. The third type of non-profit organization represents a group that may have different or even competing goals. They may be focused on protecting another set of resource or operate at a different scale. While not necessarily at odds with the watershed management group, these non-profits may draw from the same set of resources, while promoting a different agenda with other organizations. It is important for the watershed management group to work with these organizations to ensure that the third type of non-profits' actions are not detrimental to their own mission.

### **Public Land Managers and Private Landowners**

The final organization in the framework, public land managers and private land owners, is actually a collection of individuals rather than a cohesive organization. Considered the primary group making decisions that directly affect land and water resources, they are the primary receivers in the framework. Their role as receivers of constraints and influences is based on the assumption that landowners have rights associated with private property, which can be limited by government entities. Membership in this set is not mutually exclusive of other sets, with public land managers and private land owners representing members of government and non-profit organizations. Shared

membership means individuals may have additional connections that may change their individual role in the framework.

### CASE STUDY: THE BARNEGAT BAY WATERSHED

The Barnegat Bay Watershed created a cooperative watershed management group in 1995, as part of the National Estuary Program, to address the impacts of continuing suburbanization on regional resources (BBEP, 2000). A broad range of goals have been established focusing on non-point source pollution and ground water protection, as well as protecting the economic, social, and aesthetic value of the watershed. The complex relationship between organizations in the watershed highlights the need to specifically define organizations' goals, the connections between supporting groups, and conflicting goals to identify appropriate pathways for actions. Figure 2 depicts how the organizations in the Barnegat Bay Watershed can be displayed in the framework. Like the generalized framework, there

are five sets of organizations whose connections can be characterized as enabling, constraining, influencing, and supporting. Each set of organizations and their connections are described below.

#### Watershed Management Group: The Barnegat Bay Estuary Program (BBEP)

In 1987, a citizens' advisory group was formed to address concerns about human impacts on the Barnegat Bay (BBEP, 2000). The actions of the advisory group prompted the Governor of New Jersey to apply to the EPA's National Estuary Program (NEP) and the Barnegat Bay Watershed was accepted into the program into 1995. The NEP provides a watershed planning framework to address natural resource issues in nationally significant degraded or threatened estuaries (Poole, 1996). The primary focus of the NEP is to protect water quality, but like many other watershed programs the NEP's broader goal is to maintain the integrity of the whole system, including protecting economic and social aspects. The Barnegat Bay Estuary Program (BBEP) lacks the authority to create regulations or force other organizations to do so, relying on a cooperation

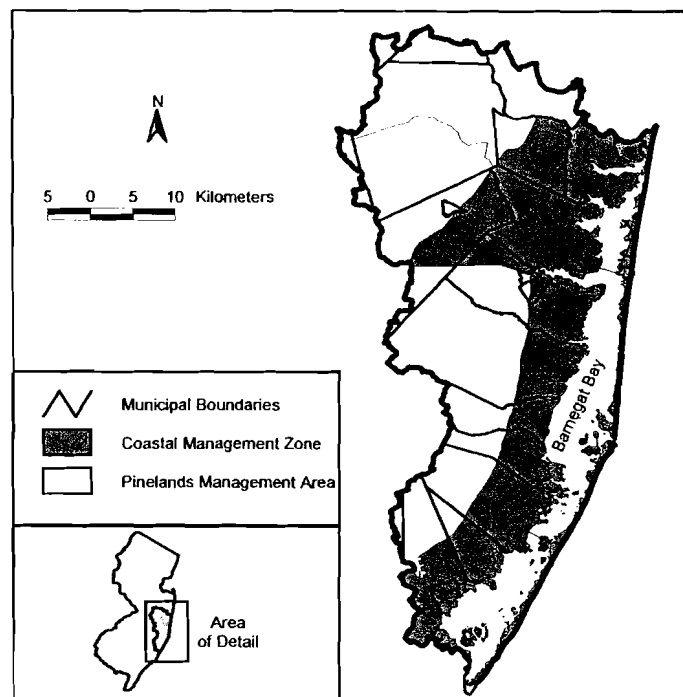


Figure 2. Areas managed by the Pinelands Commission and Coastal Zone Management (CAFRA) in the Barnegat Bay Watershed.

approach for plan implementation. The BBEP consists of a management committee comprised of public and private stakeholders, as well as several advisory committees. Great emphasis has been placed on developing a scientifically sound management plan (BBEP, 2001). As a result, scientific researchers associated with the USGS, New Jersey Department of Environmental Protection (NJDEP), and local universities (Rutgers University, Stockton College) are identifying and carrying out related research, leading the effort to characterize the state of the watershed (BBEP, 2000), and participating in the development of the management plan (BBEP, 2001). While the BBEP identifies needed actions, management activities are primarily carried out through existing federal, state, and local agencies, spearheaded by the Ocean County Government. As a result, the ability to identify positive relationships with the other organizations in the watershed will greatly impact the BBEP.

### **Land Use Regulators**

There are three main sets of organizations that regulate land use in the watershed. All of the municipalities in the watershed have land use zoning, while portions of the watershed fall under the State regulated Coastal Zone or the Pinelands Commission (Figure 2). These three regulators interact with federal, state, and county governments to constrain what land owners do with their land.

### **Municipalities**

New Jersey has a strong home rule tradition where the municipality holds the primary power in land use planning. The 1977 revisions to the New Jersey Municipal Land Use Law required all municipalities to create a master plan and to reassess that plan every six years. The law also encourages each municipality's plan to be consistent with other municipalities, but this is not enforced (DeGrove, 1992). In the Barnegat Bay Watershed, there are 36 municipalities ranging in size from one sq. km to over 260 sq. km. Municipal population density varies from 17 to 2,000 people per sq. km (US Census Bureau, 2000). The differences in size and population lead to variations in land use planning issues and resources between municipalities.

Fourteen of the municipalities in the Barnegat Bay Watershed include land regulated by the Pinelands Commission (BBEP, 2000). The Pinelands Commission supercedes municipal government authority, so the land that falls within the Pinelands Management Area is zoned according to the Pinelands' regulations (Pinelands Planning Commission, 1982; see below).

Even with the strong home rule tradition, Fishman (2000) identifies New Jersey as a leader in State Planning, with finalization of the first State Development and Redevelopment Plan occurring in 1992. The State planning process tried to minimize the conflict between home rule and regional control and has been described as a conversation between different levels of government that encourages common goals through municipal planning (Fishman, 2000). The State Development and Redevelopment Plan provides a vision of land use in New Jersey. Every piece of land is given a planning designation ranging from environmentally sensitive, where critical resources should be protected, to areas where growth should be encouraged. The State Plan did not create a set of regulations nor are municipalities required to comply with the planning area designations, although they are required to describe how the municipalities' goals fit into the State's Plan (NJSPC, 2001). Thus, the primary connection between the Office of State Planning and municipalities is defined as influence. While the State Planning Office can not force municipalities or counties to comply with the State Plan, if the municipal's plan is officially recognized as supporting the State Plan, the municipality will have priority in state funding, additional assistance in planning, and can participate in a streamlined permit granting process (NJSPC, 2001). Within the state-municipal framework, counties currently play a small role in land use planning decisions. They are often involved in creating master plans and act as a depository for municipal master plans and zoning regulations.

Municipal planning is generally criticized for the lack of coordination between municipalities and limited effectiveness of zoning as a long-term planning tool (Daniels, 1999). Additionally, most municipalities do not consider the watershed-wide implications of their regulations because of their small jurisdictional size. The limitations of isolated, small scale planning may make even the most

conscientious municipal planning efforts unable to fully meet the BBEP's goals. Furthermore, the planning goals of the municipalities in the Barnegat Bay Watershed are not clearly defined.

### **Regional Regulators**

There are two organizations imposing regional regulations in the Barnegat Bay Watershed: the NJDEP through Coastal Zone Management (CZM) and the Pinelands Commission in the Pinelands Management Area (PLMA). While portions of the Barnegat Bay fall in each zone, the boundaries of the Coastal Zone and the PLMA are not aligned with the Barnegat Bay or any other watershed's boundaries.

To fulfill the Federal Coastal Zone Management Act of 1972, New Jersey enacted the 1973 Coastal Areas Facilities Review Act (CAFRA). A division in the NJDEP implements the Coastal Zone regulations. The NJDEP felt that the entire New Jersey coast represented an area of particular concern (Frizzera, 1998), so a regulatory zone was created that includes barrier islands and up to 25 km inland on the mainland. Forty-six percent of the Barnegat Bay Watershed falls in the CAFRA zone (Lathrop and Bognar, 2001). CAFRA's goal is to provide "adequate environmental safeguards" while encouraging "the development of compatible land uses in order to improve the overall economic position of the inhabitants of that area" (NJDEP, 1998). Coastal zone management initially focused on large-scale residential (more than 25 units), commercial, and industrial development. In 1993, CAFRA was amended to include all residential development within the existing zone. In 2000, new Coastal Zone Management Rules were approved. The amendments recognize the planning areas identified in the State Plan. The percent of impervious surface allowed and the amount of natural vegetation cover required on a parcel of new development is determined based on the planning designation. While there are no formal ties with county or municipal governments, CAFRA regulations supersede local laws. However, municipal regulations do not have to conform to CAFRA regulations. This has been a point of criticism as local zoning is often not in agreement with CAFRA.

There is little evidence suggesting that CAFRA significantly affected the amount of

development in the zone prior to the 1993 amendments (Campbell, 1981). Collins and Russell (1988) looked at a portion of the Coastal Zone and found that between 1973 and 1988, 37% of the development that occurred was residential development with less than 25 units. Thus, a sizable portion of the region's growth was not regulated by CAFRA. In particular, there were also a large number of developments consisting of 23 or 24 dwelling units, just under the reviewable size. It is too early to fully evaluate the impacts of the 1993 amendments or the more recent 2000 amendments. While the 1993 and 2000 amendments strengthen coastal zone management, unless there is stronger enforcement of the rules or municipal alliance it is unlikely that the new rules will have a significant impact on land development. However, since the CAFRA impervious surface and natural vegetation cover rules are aimed at reducing urban run-off, the BBEP should act as proponents of CAFRA to help meet water quality goals.

The second regulatory body, the Pinelands Commission represents an independent regional organization with its own set of regulations. These regulations were created in response to a rapid increase in development the Pinelands experienced during the 1950s and 60s. The Pinelands Environmental Council formed in 1972 to create a comprehensive plan to protect the unique resources of the area, but they lacked authority and created a weak and unenforceable plan (Collins and Russell, 1988). In response to the failed council and almost a decade of debate, one million acres of the Pinelands received the first National Reserve designation in 1978. The New Jersey Pinelands Protection Act was passed immediately after the reserve designation was given, requiring strict land use regulations for all but 212,000 acres of the National Reserve. Thirty-eight percent of the Barnegat Bay Watershed lies within the Pineland's management area (Lathrop and Bognar, 2001).

In 1981, the Pinelands Planning Commission produced their Comprehensive Management Plan. This plan includes some of the strictest land use regulations in the United States. Unlike CAFRA, which primarily created a system that reviews development plans as they arise, the Pinelands management plan is a detailed document identifying appropriate land use and densities for all zones in the management area (Pinelands Planning

Commission, 1982); the plan is essentially a capacity analysis, where the total amount of development ever allowed to occur was determining based on the level of potential impact of that development. All municipalities inside the PLMA must have master plans that are consistent with the management plan.

Unlike CAFRA, the Pinelands Commission appears to be effectively working towards their goals. Studies have shown that since plan adoption population growth and habitat fragmentation are significantly lower in the Pinelands than the surrounding region (Walker and Solecki, 1999). While this indicates that the regulations are effective, the areas just outside the Pinelands may have developed faster, as they absorbed some of the development that would have otherwise occurred in the reserve. It follows that the development pressure in the surrounding areas will only continue to increase due to a growing regional population. As a result of the strict Pinelands regulations, new development may be pushed into the non-Pinelands Management Area of the watershed, potentially adding additionally development pressure that the BBEP must address.

While the Pinelands Comprehensive Management Plan appears to be effective, creation and implementation of the Pinelands regulations was not a smooth process, taking many years, several failed plans, and significant compromises (Collins and Russell, 1988). Robichaud (1984) assessed the effectiveness of CAFRA regulating the coastal portion of the Pinelands National Reserve. Based on that experience, she warned of problems using an existing regulatory body, which has its own set of goals, to enforce a new set of goals and/or regulations. The relationship between the PLMA and CAFRA should be a lesson to the BBEP; the BBEP should be wary of assuming existing organizations will fully implement BBEP's goals particularly since they are not required to do so.

### **Other Land Use Regulations**

The final organization regulating land use in the watershed is the Wetlands Program, which is administered by the DEP. New Jersey has four statewide acts that are administered by the Wetlands Program: the Freshwater Protection Act, the Wetlands Act of 1970, the Flood Hazard Area Control Act, and the Waterfront Development Act.

These acts regulate development that is allowed to occur in freshwater and coastal wetlands, as well as a variable buffer zone around all wetlands and water bodies. Regulations are statewide, but affect a large portion of the watershed as 26% of the watershed is covered by freshwater wetlands or salt marsh. These regulations are closely aligned with the Estuary Programs goals' of protecting recharge areas, vegetated riparian corridors, and coastal wetlands, representing the potential for a strong supportive relationship.

### **Water Resource Regulators**

The primary water resource regulator in the Barnegat Bay Watershed is the Division of Watershed Management located within the DEP. Water supply and water quality is regulated throughout New Jersey under three broad acts: the Water Supply Management Act, the Water Quality Planning Act, and the Water Pollution Control Act. The first two acts deal with management units that follow watershed boundaries. Thus, the Barnegat Bay Watershed is one of 20 watershed management units in the state. The alignment of the watershed with the state's management units suggests a strong positive connection is possible between the two organizations, who are striving for similar goals. The connection is further strengthened through the organization of the Water Quality Planning Act (WQPA), structured so that there is a coordinator for each watershed working at the NJDEP and another agency is contracted to act as the lead group in the local watershed. In the Barnegat Bay Watershed the coordinator is the Ocean County Planning Department, the same group taking the lead for the Estuary Program.

While the linkage between the Barnegat Bay Estuary Program and the WQPA through Ocean County Planning suggests that a strong supportive relationship could exist between the organizations, the Water Quality Planning Rules have been in flux since their creation, leading to confusion and a regularly changing regulatory landscape. The WQPA rules were first created in January of 2000 through an Executive Order. The Order required that the NJDEP review all projects that will amend existing water quality plans until permanent rules could be drafted. In July of 2000, new rules were proposed to replace



the temporary order. Most of these rules were not adopted, although a major change to project review in non-sewered areas was adopted. This amendment requires review of all proposed development of six residents or more or a single entity generating 2,000 gallons per day or more of waste water in a non-sewer area (NJDEP, 2000), affecting much of the watershed.

Prior to final approval, there were already cries that the 2000 amendments would unfairly exclude many acres from development (Mansnerus, 2000). Immediately after passage, the New Jersey Builder Association sued the NJDEP. In March of 2002, the appellate Court of New Jersey revoked the amendments due to procedural problems in the adoption process. At this point it is unclear what new proposals will be made, and the temporary Executive Order is still guiding permit review under the WQPA.

The constantly changing WQPA presents an uncertain future for the BBEP. While there is the potential for a close relationship, the statewide coverage of the WQPA and the vocal opposition to previously proposed rules indicate that the Barnegat Bay Watershed does not have much influence over the creation of the new set of rules. However, as urban non-point source pollution is a major focus of the BBEP, the specifics of any rules permanently adopted will have a large impact on the ease with which the BBEP is able to meet their goals. Alternatively, activities under the Water Supply Management Act and the Water Pollution Control Act are aligned with and supportive of the BBEP's goals.

### **Non-profit Organizations**

Within the Barnegat Bay Watershed the three types of non-profit organizations defined above are present. The Barnegat Bay Watershed and Estuary Foundation represent the first type of non-profit, working to promote the message of the BBEP and to raise money for watershed related activities. This group represents the most direct link to the broadest group of citizens for the BBEP. Additionally, the Foundation can coordinate with the other non-profit groups in the watershed to pool resources. The connection between the Barnegat Bay Watershed and Estuary Foundation and BBEP is one of strong support, with both sides working for a common purpose.

The second type of non-profit is illustrated by the Alliance for a Living Ocean, which focuses on maintaining clean water and a healthy coastal environment, goals similar to the BBEP. They recognize that activity in the entire watershed needs to be considered to successfully protect the bay and ocean. Groups like this should have supportive connections with the BBEP because they have similar goals. Additionally, the established membership base and information dispersal modes of the Alliance may be very helpful to the BBEP.

The Trust for Public Land supports alternative goals, focusing on open space protection. The TPL has not only purchased land in the watershed, but created a plan for future land acquisition. The targeted pieces of land were identified because they were deemed environmentally sensitive or include unique resources (Blanchard, 1996). While the plan represents an ambitious proposition, a build-out analysis of the watershed indicates that the land chosen is not optimal for water quality protection (Lathrop and Conway, 2001), highlighting that the slightly different goals of the Trust for Public Land and the BBEP can lead to alternative and competing actions.

### **Public Land Managers and Private Land Owners**

In the Barnegat Bay there are multiple agencies managing public land and over 500,000 private property owners (BBEP, 2000). These organizations are the primary receivers of the constraints and influences of the other organizations in the watershed. Although not shown in Figure 2, these organizations also try to influence and/or support the other organizations in the watershed as shown in the generalized framework (Figure 1). There are two complications particular to the Barnegat Bay Watershed associated with this group. First, there are several organizations managing public land, including municipalities, counties, the State of New Jersey, the US Fish and Wildlife Service, and the US Army. Additionally, several non-profits own land for the purposes of preserving open space for public benefit. Each of the government agencies managing land is doing so with a different purpose, under a different set of rights and constraints. While the non-profit organizations owning land have a more clearly defined set of rights and constraints, similar to a private landholder, the combination of different

organizations and the fairly large portion of the watershed held by them makes their actions important, but influencing them potentially difficult.

The second complication is that the watershed is a summer tourist destination with an additional 500,000 visitors and part-time residents present in the summer (BBEP, 2000). The actions of the large temporary population impact water quality yet represent a difficult population for any of the organizations to either influence or constrain because of their temporary status. Additionally, this group may not be as invested in the region (socially as well as economically) and so may be less interested in participating in activities protecting local resources. It should be noted, however, that private land owners and tourists in the watershed often belong to non-profit organizations or are officials at the local, state, or federal level. Thus, some people may have very strong connections with the BBEP. Recognizing the diversity of this group is necessary for the BBEP to have a good working relationship with all residents and visitors in the watershed.

## CONCLUSIONS

The case study of the Barnegat Bay Watershed highlights the often complicated organizational framework surrounding a watershed management group. However, through an understanding of existing organizations the BBEP has been able to tailor their management plan to the situation specific to the watershed. First, the BBEP management plan highlights the importance of supporting the water regulators in the area (BBEP 2001), as they represent organizations with closely aligned goals, focusing on the same geographic area. Second, while the coastal zone management program appears to be aligned with the BBEP's goals to protect the downstream estuary, its poor track record and weak relationships with other organizations indicate that it would not be a strong partner. As a result, the BBEP has decided to work directly with municipalities rather than trying to work through the regional coastal zone program (BBEP 2001). Finally, the BBEP acknowledged that its goals could not be reached through regulation alone, so it must form a relationship with the land owners and tourists in the

watershed. However, the BBEP quickly realized that private landowners can not be placed into one category, as shown in the framework, but due to their diversity should be treated as several different groups. Thus, the BBEP identified separate groups ranging from "People who use the bay (or its water bodies) for work or recreation" to "People who don't think about the bay (or its water bodies) at all, but by virtue of living in the watershed, have an impact on it (BBEP 2001)." Through the recognition of several different groups the BBEP was then able to create actions targeted to each group (BBEP, 2001).

What can be learned from the case study presented here? First, developing strong partnerships with relevant organizations is important in a cooperative management approach. The framework discussed here can easily be applied to other watersheds to help identify relevant organizations and determine ways to create effective pathways for action. Second, when assessing the success of a watershed management group, in addition to existing criteria like public participation and intraorganizational characteristics, the strength of a watershed management group's relationships to existing organizations should be considered as these connections are essential for a cooperative management approach to work.

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