THE ROLES OF STAKEHOLDER INVOLVEMENT, SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL JUSTICE IN DEVELOPING AND IMPLEMENTING WATERSHED MANAGEMENT PLANS

Thomas R. Cuba

ABSTRACT

The fundamental concept behind the philosophy of holistic watershed management planning is the *principle of inclusion.* Simply stated, inclusion dictates that: *If an event occurs within a watershed and that event has an impact upon the overall functions of the watershed, the event, along with its causes, synergisms and suggested solutions, must be addressed in the plan.* Unfortunately, this principle is commonly either overlooked entirely or is compromised during the planning process. Of the factors commonly eliminated are the voice of the stakeholder, the sustainability of the plan, and the environmental justice of the implementation. Stakeholder involvement has been sought in some local efforts, the most notable of which is the National Estuary Program's plan for Tampa Bay. The Surface Water Improvement and Management department of the Southwest Florida Water Management District and Pinellas County have made similar attempts with a number of smaller projects. Even in these far-reaching and groundbreaking efforts, however, the principles of sustainable development and environmental justice have not surfaced, have been compromised, or have been sacrificed. In some cases, the issues of sustainable development have been raised and then, more often than not, have been buried, labeled as not being achievable. The issues of environmental justice have seldom been suggested and so could not be brought to bear in the problem solving process. Despite these omissions or deletions, these plans are still being erroneously presented as *holistic* watershed management plans. It is only through an ongoing and iterative process of analysis and inclusive problem solving that true holistic management can be achieved. Stakeholder involvement, environmental justice and sustainable development include processes and considerations that absolutely must commence in the data gathering and planning stages and continue uninterrupted and unabated through final plan implementation.

INTRODUCTION

In order to properly discuss this topic, it is important to review the concepts of some of the terms and philosophies. In particular, we will review holistic planning, stakeholder involvement, sustainable development and environmental justice.

Holistic Planning

The ability to plan for the future is a fundamental trait improving the chances for survival. At the level of squirrels packing away acorns, this planning for the future may be instinctive and self-serving. Elevating this trait one step, we can see that planning for the future of others is beneficial because it sustains the communal aspects of survival. But it is still instinct that drives the digger wasp to paralyze prey which it then buries with its eggs. The wasp is planning for the survival of its offspring by providing a living but captive food source.

Planning was once a fairly well defined and very local process. Planning boundaries were distinct and simple. Plans for local development, zoning and water use have roots in property rights. It was only when unrestricted use of property had an undesirable effect on the neighbor that government began to plan and restrict development. Early zoning rules were developed to keep livestock out of the city. As with other issues, the plan was simple and defined—livestock in one place and restaurants in the other.

Ripple effects of plan implementation projects within one boundary did not dramatically complicate plans in the neighboring area. Human planning processes became more complex as the population grew. Effective solutions to the problem of sewage disposal became unacceptable as the disposal sites became inhabited. The planning boundaries expanded to cover more than what was once considered offsite.

To combat the complex overlap of planning boundaries and planning agencies, the planning boundaries were redefined first through the creation of agencies like the Regional Planning Councils and the Department of Community Affairs with their comprehensive planning responsibilities. But the physical boundaries needed to change as well and watersheds rose to the top as the most manageable.

Watersheds are discrete in that there are real and surveyable boundaries. They are identifiable as ecological units. Municipal patterns generally tend to center around water features. And they are nested. The nesting of smaller watersheds within larger ones allows for broad regional planning to occur at higher levels of government and detailed local plans to be enacted in smaller watersheds. Like the comprehensive plan, the local plan should be consistent with the larger one. After the watershed basis was formed, the concept of holistic plans became obviously necessary.

The fundamental concept behind the philosophy of holistic watershed management planning is what I call the *principle of inclusion.* Simply stated, inclusion dictates that: If an event occurs within a watershed and that event has an impact upon the overall functions of the watershed, the event, along with its causes, synergisms and suggested solutions, must be addressed in the plan.

This principle is required by the very nature of the holistic process. To violate this principle leads to unpredicted or unaccounted-for processes which insert stochastic influences into the project implementation. It complicates the planning process because it is now unlikely that a single specialist can address the engineering, environmental, economic and social issues.

It is of interest to note that the philosophies of holistic watershed management included the elemental portions of sustainability and maintainability before "sustainable development" achieved buzzword status.[1]

Unfortunately, the Principle of Inclusion is commonly either overlooked entirely or is compromised during the planning process. If this principle is ignored, the result is an endless process of replanning to include the issues left out previously. This occurs when the omitted issue becomes significantly irritating to the public that they demand it be addressed.

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[1]As watershed management failed and became more similar to ecosystem management in its redefined state, others recognized that the philosophy remained sound and renamed it as sustainable development.

Stakeholder Involvement

The underlying concept of this relatively new buzzword has been around for years. It is public participation. It is why government advertises the issuance of permits and proposed ordinances. And still, it carries a nuance of change that is critical to the future successes. In its simplest form, it is a simple and basic reminder to governments and government contractors that they work for the people. Too often, a development order or construction permit has been an agreement reached between a developer and a bureaucrat. Stakeholder involvement, as a policy initiative, should remind us that the bureaucrat is a hired representative of the people and, since the permit or order is actually an agreement between the developer and the people, the people (stakeholder) have a right and need to be involved.

Stakeholder involvement policy is in fact an admonition to the bureaucrat to proactively get people involved. It is an admonition to seek public opinion at a level above the minimums required by Florida Statute. It reminds government that serving the people includes more than the responsibility to simply make information available—it is a responsibility to actively *seek* the opinion of the public.

If this responsibility is ignored, it can often result in public revolt against proposed plans developed under the "meet the minimums" policy of public involvement. This is embarrassing to the elected and appointed officials and can lead to overreactions. Reactions such as these can elevate the impact of the opinion such that other issues are overshadowed. The plan can then be imbalanced in favor of uninformed public opinion over other issues such as environmental justice, ecosystems' needs, economics, or sustainability. Ultimately the same replanning will be required.

Sustainable Development

As noted previously, this is not a new concept. Thomas Jefferson in 1789 opined that "...no generation can contract debts greater than may be paid during the course of its existence." This note applies equally to economic and ecological debts. Also noted previously, there are a great many similarities, if not a total equivalence, between sustainable development and holistic watershed management, the major difference being the identifiable physical boundaries of the latter.

Sustainable development is philosophically simple. It asks the question at each step in development, *is this proposal sustainable?* It is only the answer that becomes complex and difficult to implement. But it is in developing the answers that other issues can also unduly complicate the question. The key to keeping the implementation as manageable as possible is to not lose sight of the question—hold on to the philosophy. Is this proposal sustainable or isn't it?

A few key factors need to be added before firm concepts form around this simple cornerstone. The first is the recognition that sustainability is not limited to ecological or economic terms but includes social and political sustainability as well. The second is that in virtually each case, the project will fail this test. There are, in short, no self-sustaining projects. Sustainability can only be achieved through the inclusion of ongoing activities such as maintenance or expansion. By including the latter considerations, seemingly inexpensive construction projects will be eliminated if they

create an unmanageably large drain in manpower or finances in order to maintain it throughout its lifetime. Social or political sustainability can be examined within the same general criteria of ecology and economy, but asks instead if the people and government of the future will be disposed to keeping the maintenance commitments necessary to develop the project. It asks the nature of the political will to manage the future that today's development will bring.

It asks that each development be examined within the context of the community and not simply the context of the rule. It asks for a so far extremely evasive definition of cumulative impacts and requires development to be conducted within the context of relationships among development, community economics, parks, preserves, and municipal services. It is the cumulative philosophies of holistic management, ecosystem management and sustainable development that have really fostered such programs as the excellence in leadership (XL) development process promoted by the EPA.

What sustainable development has not addressed formally, yet, but will in the very near future, is how to apply the precepts of sustainability to existing developments.

When these precepts are ignored or not employed, we often end up with extraordinarily large maintenance costs, replanning and redevelopment. New York City essentially went bankrupt when the managers realized that their entire fundraising capacity was totally consumed by maintenance costs for existing facilities. They could make no improvements. Detroit could well present us with the most extensive example of brownfields. Many people moved to Miami because they liked the beach. To accommodate them the city allowed the construction observed there today. The problem was that the people did not move in next to the beach, but moved in on top of it. The attraction that stimulated development was destroyed by the development and it was not sustainable. These cities are solving these problems and have made a great deal of progress in their replanning and reconstruction. It could have been avoided.

Environmental Justice

Environmental justice is a very old issue with a fairly new name. The issue has its roots in the same place as other injustices. Those in power make the choices. Undesirable things are visited on those not in power. In past years government erred in more often favoring the opinion of one economic or ethnic group over that of another. This is an injustice when tested against such precepts as *all men are created equal* and *one man, one vote*. The cumulative result of this commonly practiced error of public service is that landfills, chemical plants and superhighways were and still are located in areas of the disenfranchised citizen. In some instances this discrimination was a result of an economic logic that looked for inexpensive property upon which to place these facilities. Because those who were ignored by governments because of their economic and ethnic status often were the residents of the least expensive land, the discrimination that occurred was incidental to the economic decision. In a significant number of examples, however, the decisions made were, and perhaps still are, made purely on the prejudices of the individuals involved. Environmental justice

as a federal and state policy initiative seeks to rectify the process and remedy the injustice.

Like stakeholder involvement, these remedies are founded in an empowerment process. In the previous discussion, economic class and ethnicity are highlighted. The injustices, however, have been based on a wide variety of factors including economic class, median age of the community, commercial or residential development patterns, and even the type of business currently occupying the properties.

Like the other issues, the philosophical solution is simply stated and very difficult to implement. In this instance, the solution is the same as with other injustices—do not let these issues and biases exert undue influence on the decision to be made—make decisions based on the relevant issues and become blind to special interests.

Applying this principle to the resolution of environmental justice issues properly relegates these to the status of being a special subset of stakeholder involvement issues.

CONFLICTS

In considering the issues of sustainable development, stakeholder involvement and environmental justice in the watershed management planning process, there are conflicts which are forced to arise. And, even though these issues are fairly new on the policy scene, they are already being interpreted to meet special interest needs. Stakeholders previously disenfranchised are seeking an elevated status over the previously favored groups. To do so would create as large an imbalance as did the making of the first set of errors. It is important to first realize that each person represented by the collective governments of this country has an equal voice. Empowerment meted out based on past wrongs is no more equitable nor sustainable than it was when it was based on past favoritism.

Because the stakeholders include all peoples of all economic classes, ages, ethnic backgrounds, business interests, and all of their residual prejudices, there will be conflict in the decision making process.[2] It becomes the responsibility of the government to resolve the conflicts and balance the interests. The criteria for balance can be found in the sustainability and holistic nature of the decisions being made.

Resolving these conflicts lies in the ability to educate the stakeholders with respect to the sustainability issues. The premise is that stakeholders who are aware of the projects overall impacts to economics, ecology, and society will make an informed decision that, if not technically the best decision, carries with it the public commitment to sustain the decision being made. A city, therefore, that decides to grow beyond its water supply capacity with the full knowledge that it may need to import water or desalinate it or reuse the wastewater stream has made a valid choice. Similarly a city that decides to discharge wastes to a water body or landfill without dealing with pollution issues must accept the degraded nature of their environment.

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[2]Even the bureaucrat and the elected official are, in fact, stakeholders.

Knowledge of the future conditions and acceptance of the responsibilities associated with the choices makes the choice valid.

The key factors to the resolution of the conflicts are adherence to the principle of inclusion, and the education and empowerment of the stakeholder through active involvement.

Current Weaknesses in the Application of Holistic Planning Techniques

One of the most common errors observed in holistic planning is the violation of the recognition of requisite physical planning boundaries. In one example a national laboratory facility determined that it would conduct holistic watershed planning as an example of the implementation of the process. This effort was exemplary in many ways and should be used as an educational tool. In other ways, it avoided two elemental problems that the others of us must face. First, the planning boundary was the property boundary, not the ridge line of the watershed. The plan qualifies as a watershed plan in that it extended water management planning into the watershed, but it is not a plan for the entire watershed of the receiving water. The second was that it was applied to a single property under a single owner by the staff of that owner. Stakeholders were reduced to one major entity, the owner. An effort was made to involve the surrounding community in the process and many ideas from outside the facility were incorporated into the plans, but the extended stakeholders population no longer matched the planning boundaries. The weakness highlighted here is the ability to redefine the processes based on the current situation and still use it as an example of the entire process.

A second weakness lies in the political areas encompassed. In the example of the Tampa Bay National Estuary Program (TBNEP), stakeholder involvement has been central to the development of the plans.[3] The watershed boundaries have been honored. The plan is general and suitable for a large regional watershed where the expectation is that in the nested watersheds, government will develop very specific implementation plans. Politically, however, not all of the governments having responsibility within the watershed have been included in the planning process.[4] This is not the fault of the NEP program, it is the fault of the invited local government not responding. But it still impacts the process and potentially the validity of the plan.

Also in the TBNEP, principles of inclusion and sustainable development may have been violated. Under inclusion, there has been a good effort aimed at educating the adult population, but the effort to provide a commitment to educate the future adults has been overlooked. The sustainability is brought into question by the exclusion of the School Board. Educators as individuals, however, have been involved and may represent an alternative support of the project.

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[3]The TBNEP program actively sought the input of large citizen and technical groups and avoided the tokenism exhibited by other agencies.

[4]As a designated committed entity. Representatives have been involved in most, if not all the committee work.

Perhaps the most widespread weakness is the practice of tokenism. There are numerous examples where a government has elected to form an advisory board for projects or plans and selection of the individual is done based on his or her known predispositions on issues rather than his or her ability to represent neighborhood issues or concerns. This is often the case where new regulations are proposed and the advisory board is made up entirely of members of the regulated community. In one case, new development regulations were developed through a board made up of consultants, lawyers and landowners but excluded homeowner associations, civic, and environmental groups. This represents a manipulation of the stakeholder process and ignores the fact that people living in developments have an interest in the development as much as do the developers in the first place. The reverse is often true as well. In many instances preserve and parkland advisors have been composed of individuals selected under similar preconceptions of opinions.

In today's sensitive climate with its overtones of political correctness, environmental justice errors within the implementation of projects are seldom ethnically directed. And yet these errors are still made on a routine basis. As previously noted, these are more often made under the disguise of being an economic decision. To use a common example, when a watershed plan calls for the construction of a stormwater treatment pond, the agency typically goes through a process of examining costs and benefits. Because the process fails to include issues of sustainability, it most often results in the selection of an alternative that includes high engineering, construction and maintenance costs, and low property acquisition costs. In many cases the property that is in the correct place for intercepting runoff is so highly priced that increases in construction costs on remote sites can appear minimal. Waterfront property and outfall pipes are commonly co-located. Rather than pay the high land costs, the agency often chooses to select both a site and an alternative that require extra effort in the development and maintenance costs. This choice violates sustainability precepts because it fails to recognize (as opposed to consciously accept) the permanent commitment to ongoing costs. It violates environmental justice precepts because it automatically selects for the displacement of the less well-off resident in favor of the waterfront land owner. Even when vacant land is available in well-off neighborhoods, it is often selected against because of the economic status of the neighborhood.

The balance of these impacts can often be most clearly seen when one recognizes that roads and treatment ponds will likely be located in the same place for hundreds of years. Neighborhoods change in character and status. Landowners move. Selecting sensible locations for public facilities have a greater benefit in the longer term than could ever be offset by short term special interests.

SOME NOTABLE SUCCESSES

Even though I previously mentioned the TBNEP as an example where a weakness has been observed, it is also an excellent example of some groundbreaking successes. The TBNEP network of stakeholders includes the technical community, the interested citizen, local, regional, state and federal governments, the business community, and the elected community. This was not accomplished by accident. The NEP staff proactively seeks out opinion and has held open forums on a very routine and widely publicized basis.

Also of note are the efforts of the SWIM Department at the Southwest Florida Water Management District where environmental restoration efforts often involve the community. The Bayworks program being conducted by Hillsborough County under their NPDES stormwater management initiative is a model of a program that uses proactive outreach and voluntary compliance and improvement to meet community-wide goals. In Pinellas County, the Brooker Creek Preserve was purchased through a local option tax and is being managed in close cooperation with the community through an advisory group.[5] Some Pinellas County watershed management initiatives have made progress in including these tenets as well.

SOME NOTABLE FAILURES

Failure is difficult to recognize publicly but integral to the learning process. The largest failure apparently is our inability to recognize and admit that a failure has occurred. Until this happens, there can be no lessons learned. In most of the failures that are noted, the source can be traced back to what I will call the principle *de minimus*. It is the process whereby the responsible party makes a choice of alternatives or makes any decision based on meeting the minimum requirements of the law or policy. In the successes noted above, the *de minimus* principle has been violated, and the chances for success have been improved.

The classic example is in road design. It is required by law that various roads meet certain standards related to how long a wait is experienced at intersections and other criteria. These levels of service are referred to as A for best through F for worst. In some areas, new development cannot occur where the local roads are at a level of service of F. What is surprising is that most road projects designed to upgrade roads are only calculated to result in roads of level of service D, the minimum acceptable by law.[6] In some cases roads have actually been constructed and then nearly immediately upgraded because during the time from design to construction of the first upgrade, ancillary private development increased traffic enough to require more lanes.

Treatment ponds have been subjected to the same criteria. Ponds are often over-engineered and squeezed into parcels that satisfy the absolute minimum size requirements to meet the functional performance standards required by law. To the *de minimus* principle we can attribute the concrete block, weed choked, chain link fenced pits that, under other criteria, could more resemble the lakes seen in subdivisions and apartment complexes.[7]

What makes this principle so attractive is that it is defensible. The argument is made that the public dollar is served by keeping costs low. It is incomplete because the analysis does not include all the costs of the project. While it is a defensible position, the emergence of the issues of stakeholder involvement, environmental justice and

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[5]This advisory group also includes volunteer workers, trail guides and clerical personnel.

[6] There is no level of service E.

[7]While both are retention ponds created under the same rule, the landowner has recognized the value of aesthetics while the agency has applied the principle of *de minimus*.

sustainable development as national policy initiatives testifies to the fact that it is not a responsible position.

Other examples include governments that advertise public hearings in newspapers with poor or selective circulation or on cable channels that are not available to their entire constituency.

There are several cases where initiatives have arisen relative to environmental issues that are analogous to the popular Crime Watch programs of police departments. The proposals centered around educating the public about the specifics regarding environmental crimes, misdemeanors and code violations in order to gain their assistance in meeting the missions of compliance and enforcement. In every single case of which I am aware, the agency management has declined to implement the program. The reasons were that the agency did not have the manpower or funds to respond to the environmental reports that the program would generate. The choice was made to avoid discovery in order to avoid the need to deal with violations.

CONCLUSION

In examining the combination of the issues of sustainable development, environmental justice, and stakeholder involvement in contrast to the *de minimus* principle, one can speculate that we have uncovered the answer to the question most often asked about government, "Why'd they do that?"

When we, or our constituents, ask this question, it is because they have not been involved or educated during the development of alternatives or the making of decisions. It further points out that they can readily see the futility of the common practice of providing public service that only meets minimum standards. If the stakeholders had been involved and educated, they wouldn't be asking why government made the choices made, although as individuals they still may disagree. It is precisely this *de minimus* policy that has given government the image of being uncaring and unresponsive as well as being incompetent. The shift in policy to a more open and participatory process is a prerequisite to restoring people's faith in the management of the country at any level.

But, in fairness to the government bureaucrat, there are many times that he or she is not able to select any other than the *de minimus* choice. Each agency has a set of authorizing statutes and regulations and these regulate the actions of the agent as well as the citizen. If the agent is not authorized to think in terms of what is best, but is limited to a precise set of choices and criteria enacted by law, he is not to be held at fault for the failure. New laws are needed and actually are in the experimental stage (Project XL and Florida Sustainable Communities, for example).

While these new initiatives should be tailored to each individual situation, they must not be interpreted to advance a personal agenda. Government should not choose the no-build option for a new potable water supply simply because local surface waters will be depleted or drawn down through infiltration and lowering of the water table. That would be too narrow an interpretation and based only on ecological impacts.

It should be applied such that the decision to develop the new wellfield is made with the full knowledge that the surface waters and their ecological functions will be impacted. The elected officials and the constituency are aware of the fact and have accepted the responsibility to restore the imbalance and sustain it. It represents an up front commitment to provide sustainability through economic, ecological, and political mechanisms.

All together, these policy initiatives represent a shift from defensible management to responsible management. They are a recognition of the fact that it is only through an ongoing and iterative process of analysis and inclusive problem solving that true holistic management can be achieved. Stakeholder involvement, environmental justice and sustainable development include processes and considerations that absolutely must commence in the data gathering and planning stages and continue uninterrupted and unabated through final plan implementation.

More often than not, it fundamentally means that we need to throw out the old set of guidelines that direct us to find the easiest solution that meets mandated minimums and actually begin to manage our cities as if we mean for them to be around for a while.

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