

# Watershed Planning Policy Tools

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*Credit for these descriptions goes to Dr. Yan Song's Development and Management class (PLAN 744). Many of the descriptions have been transcribed verbatim from students' description papers of the associated planning tools.*

Below are descriptions of some of the policy tools, partner organizations, and development strategies available to you when crafting your Plan Policy Framework. While this list is a good start, there are many other tools available to you which you may use. We urge you to use this as an initial reference, but to continue to research further in crafting your framework. These tools can be combined in creative (but reasonable) ways to further watershed health in the Booker Creek watershed.

## **Policy Tools**

These tools can be appropriately crafted to best ensure watershed health.

### **Conservation Easements**

Ownership of land in the United States (referred to as “fee simple” ownership) gives the land owner a host of rights to their property. Among other things, they have the right to extract minerals (mineral rights), use water on the property (water rights), and develop the land (development rights). However, the owner can also choose to “unbundle” these rights by donating or selling them to another party. For example, many owners sell or lease their mineral rights to private companies for resource extraction. In this way, a landowner can give up certain rights while maintaining other rights to their land.

*Conservation easements* are a tool for landowners to donate their right to develop their land in order to have it protected in perpetuity. The key thing to understand is that conservation easements involve a voluntary donation of development rights as opposed to the sale of development rights. If an owner sells the rights to another party (usually a land conservation trust) then this transaction is known as a “**purchase of development rights**” (PDR). Conservation easements can be preferable to PDR because this arrangement allows a landowner to write-off their donation for tax purposes (thereby paying a lower tax bill).

## **Development Impact Assessment**

Development impact assessment is a methodology that seeks to provide a framework for comprehensively evaluating the full range of impacts of development projects. The impacts typically considered include physical (effects on land), social (effects on schools and community resources), environmental (effects on water supply), economic (employment), fiscal (tax base), and traffic. Often, these elements are prepared separately using complex analytical methods by consulting firms with expertise in the particular issue being studied. Development impact assessment is most often performed prior to the approval of a development project in order to appraise what its likely impacts on the community may be, but it can be done retrospectively.

Often, development impact assessments are presented before a public body in order to provide a public record on the proposed development and apprise key decision-makers of the project's likely impacts. By equipping decision-makers with thorough information about the likely impacts a development will have on a community or area, it is believed that better decisions on approvals can be made. Projects which are likely to impose costs to the community that exceed their benefits are likely to require modification or be rejected.

## **Impact Fees**

An impact fee is a charge levied on new development to pay for the construction or expansion of off-site capital improvements that are needed to accommodate the development. Impact fees are based on the premise that "growth should pay its own way." They reduce the economic burden on local jurisdictions by charging fees to assure adequate public facilities, instead of funding infrastructure improvements through taxes. Impact fees are used for the provision of additional parks, schools, roads, sewer, water treatment, utilities, libraries, and public safety buildings.

The exact mechanism of an impact fee varies by municipality and is typically outlined in enabling legislation or court precedence. Typically, impact fees are "up-front" fees imposed when the building is issued a permit or subdivision approval. The fees are dedicated to a specific public use and are typically based on land use type. Impact fee revenues have to be earmarked and deposited in special accounts and must be spent within a reasonable period of time (usually six to eight years from collection) or be refunded to the fee payer. New fees are usually phased in over a period of months or years to minimize the impact on the local real estate market, and fees are updated periodically to account for inflation and changes in demand.

Orange County is one of the few counties in NC that has been allowed to assess impact fees by the NC General Assembly. Among the fees they can assess are fees for school facilities and erosion control fees. Creative policymaking could potentially tie erosion control fees to infrastructure projects beneficial to watershed health.

## **Overlay Zones**

As one of the most widely used growth management tools in the country, Euclidean zoning is at the foundation of American planning. Traditional zoning regulates land use by focusing on uses of the land (including residential, industrial, agricultural, and commercial) and the structures on it. Euclidean zoning, however, has been criticized for being too rigid to address complicated growth and development issues. To address this problem, local governments are creating flexible tools that can supplement the traditional zoning process.

One example of these tools is the *overlay zone*. Overlay zones sit on top of preexisting zones and impose additional sets of standards to parcels already covered by the underlying zoning district. Therefore, overlay zones do not replace traditional Euclidian zones; rather, they work in coordination with them. In an area where overlay zoning is present, property is simultaneously under two zones, and the land may be developed “only under the conditions and requirements of both zones” (Meshenberg, 1976, 33). Stretching over sections of one or more districts, overlay zones often address specific issues, such as the preservation of historic buildings, the protection of environmentally sensitive areas, or the development of affordable housing.

## **Transfer of Development Rights (TDR)**

TDR refers to a policy tool which allows a landowner to transfer their right to develop on their property to another landowner to use. The area where the rights originate is called the “sending” area and the parcel of land to which the rights are moved into is called the “receiving area”. In return for the transfer, landowners in the sending area place a permanent conservation easement, which is generally recorded as a deed restriction. This restriction can be determined through explicit zoning provisions or can be negotiated as part of the permitting process, perhaps via a special permit.

Developers who buy development rights are acquiring the capacity to build higher density in a receiving area, which they can use to build higher densities (either increasing the number of units per acre or building higher intensity projects) in their developments. This market-based development approach is in effect a win-win because it enables planning agencies to encourage development in certain desired areas and discourage it in other less appropriate areas and everyone gets something from the deal.

## **Riparian Buffer Ordinance**

Riparian buffers are vegetated border areas along water bodies that stabilize stream bank, integrate and filter runoff, and provide important habitat to many species. As a result of these benefits, riparian buffers are useful in improving the health of watersheds and are protected in many areas. One of the ways that riparian buffers are protected is through ordinances that prohibit development within a certain buffer area around streams and other designated water bodies.

These ordinances often are crafted so that the area closest to the stream (oftentimes in the first 50' or so) cannot accommodate any development, the second tier (e.g. 50-100') can accommodate some light development, and the third tier (e.g. 100-150') can accommodate gradually heavier development (for example parking lots). Ordinances such as this don't just protect the stream, but they also protect human populations by ensuring that they live and work outside of areas that are likely to be flooded.

## **Partner Organizations**

These organizations can be partnered with (and promoted through various subsidies/grants) to promote watershed health.

## **Land Trusts**

A land trust is a private non-profit organization that, as all or most of its mission, actively conserves land. Most land conservation through such organizations occurs either through the purchase or donation of land and easements.

Land trusts have gained popularity in recent decades due to a variety of strengths. They are able to bring to the negotiating table many assets that public agencies cannot due to internally and externally imposed rules. These organizations offer:

- Flexibility and timing – They can make commitments quicker than government agencies and can take more risks in deals
- Leveraged funding – They are often familiar with a variety of funding streams, including potential public and private and local and regional funders
- Creativity & Lobbying – They are allowed to lobby landowners and funders in ways that are forbidden of public servants
- Expertise and Assistance – They offer a dynamic work environment capable of producing and retaining highly skilled staff

## **Development Strategies**

These development strategies can be mandated or promoted through various regulatory or tax policies to protect watershed health.

### **Low Impact Development (LID)**

LID is a development approach that seeks to manage nature in such a way as to best integrate storm water into its surroundings. LID tries to preserve natural water infiltration systems where possible by preserving or recreating natural features and it tries to minimize the use of impervious surfaces. When pre-existing natural systems cannot be utilized, LID seeks to recreate their functions through the use of green infrastructure (see course manual for examples).