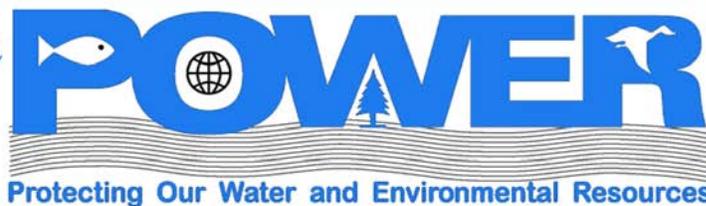




Planning with



IISG-04-18

Land Use

Open Space Planning

Authors: Linda Prokopy, Assistant Professor of Natural Resource Planning, Department of Forestry and Natural Resources; Robert McCormick, Coordinator, Planning with POWER Project, Illinois-Indiana Sea Grant; Adam Reimer, Undergraduate Student, Department of Forestry and Natural Resources



Chip Morrison

The Basis for Open Space Planning

All too often land use decisions are not made by communities, but rather by developers. The piecemeal, mostly unplanned, development of our landscape has led to a steady decline in the amount of open space. The farmland and natural areas that contribute to Indiana's traditional character are being lost. When communities lack definitive plans for preserving these lands, they are often at a loss when developers come with plans for new commercial areas or residential neighborhoods.

Comprehensive open space planning puts communities in the driver's seat when it comes to growth. Open space planning, or land use planning, centers around the concept of communities directing their own development. When communities develop their own strategy for development, they get to decide what is important in their particular situation. Through open space planning, stakeholders can identify areas that they feel are important to protect from development and direct growth to areas that can sustain it. Open space planning can be used to develop ordinances that incorporate conservation features, or areas, into subdivisions. Farms, woodlands, and streams can be protected, and development projects can be fully supported by the community.

Fact vs. Fiction

There are many misconceptions about what open space is and what it does for a community. Open space planning is a relatively new concept, and there is confusion about what it entails.

Fiction: If farmland is designated as open space, it will be open to anyone.

Fact: Land designated as open space retains all the properties of private ownership. All open space means is that the land is not developed. If zoning regulations prohibit development, or if the landowner sells or donates development rights to the land, then the land will remain as open space in perpetuity. The owner of the land can restrict access to property he or she owns, such as agricultural fields, grasslands, and woodlots.

Fiction: Open space is just wasted space that is not generating anything.

Fact: Residential areas have actually been shown to be an economic drain on a community. Suburban areas receive more in services and maintenance than they generate in taxes. Open space on the other hand costs very little to maintain. Property values adjacent to open space increase, and open space can generate economic growth and attract visitors. Open space is a positive asset for communities that seek to protect it.

Fiction: Runoff from both agricultural and residential areas is relatively clean.

Fact: Non-point source pollution comes from a variety of places, including residential areas and agriculture fields. Although much remains to be accomplished, farmers have done a lot of work in the last 30 years to reduce the amount of runoff from their fields by implementing best management practices. There is more work to do in the agricultural area with respect to soil erosion and some nutrients, but reduced tillage practices, filter strips, and riparian buffers have all helped curb agricultural runoff. Runoff from residential areas,

however, goes largely untreated, with lawn chemicals, cleaning agents, and automobile fluids going straight down storm drains and directly into our rivers, lakes, and streams. Planned open space can reduce the amount of impervious surface on the landscape and therefore the amount of direct runoff. Contaminated storm water can even be filtered through planned open space, such as in retention ponds or wetlands. In this way, open space can help our communities grow while still maintaining clean water.

Fiction: Most people cannot use open space.

Fact: Private property, like agricultural lands, woodlots, and riparian corridors, is not the only kind of land that is designated as open space. The public may use areas that qualify as open space. Parks, trails, backyards, ball fields, and golf courses are all open space. While most communities try to maintain areas like these, open space planning seeks to make them the center points of development. Instead of placing a park in an empty lot surrounded by existing development, open space planning seeks to start with these open spaces and plan development around them.

What is open space?

Open space has many different definitions. At its most basic level, open space is land that is not developed into industrial, residential, or commercial land uses. Many kinds of land uses qualify as open space. Here are a few examples of open space:

- Agricultural fields
- Forests and woodlots
- Grasslands/grazing lands
- Riparian corridors
- Golf courses
- Bicycle/pedestrian trails
- Greenways
- Wetlands
- Wildlife habitat
- Environmentally critical areas (high slope areas, areas with high water table)
- Parks, playgrounds, and ballparks

Open space provides many important benefits for our communities. In Indiana, it contributes to our distinctly rural lifestyle, as well as to the character of

our towns and neighborhoods. It adds to the quality of life in the places we live and work. Agricultural lands provide the food we eat. Open space provides vital habitat for wildlife and fish, providing the basis for a healthy, balanced ecosystem. Healthy ecosystems are important for pest control and cycling of natural resources, such as air and water. Streams, riparian corridors (the habitat around rivers and streams), and wetlands serve as filters for our drinking water, keeping pollutants out. Planned open space can provide entertainment and relaxation opportunities. When studies assign monetary values to these important natural benefits of open space, it is shown that millions of dollars in ecosystem benefits can accrue to the local community.

It is important that open space be defined wherever it is planned. Conflicts over open space planning usually arise from differences in perceptions of different stakeholders. This can be avoided by being specific about what kind of open space is being discussed. When groups are clear about the kind of land uses being discussed, the forms of action and planning taking place, and the maintenance and cost requirements, lasting sustainable decisions can be made that benefit the entire community.

Categorizing Open Space

To help with this process of defining the kinds of open space being discussed, it can be useful to place land in different categories. While there is overlap in these groups, they can help everyone in the planning discussion understand what is being discussed.

Working Lands

Lands that are used in a productive way and contribute harvestable resources, including farmland, forests, grazing lands, and fisheries, are in this category.

Natural Resource Protection Areas

These are areas that protect water, air, or wildlife resources. Riparian areas, buffer strips, and important wildlife habitat are examples of this type.

Community Features

These can be both planned and created open spaces, such as parks, greenways, or urban plazas, or areas that

communities feel are important to the local character, like farms or riverfronts.

Outdoor Recreation

Golf courses, ballparks, and trails are all important forms of open space in this category.

Protection of Public Health and Safety

Areas that have limited development potential, or pose a possible risk if development occurs fall into this category. Floodplains, wetlands, areas with steep slope, areas with high water tables are all in this category.

Open Space Planning

Many communities in New England and other parts of the country that have traditionally experienced high growth intensity have already been using open space planning to improve the places they live and work. In the Midwest, a growing number of communities are beginning to think about open space planning. Here is a hypothetical example of one such community that details how this type of planning can help achieve high quality of life.

St. Joseph is a town of about 50,000 people in a rural Midwestern state. St. Joseph is like many Midwestern towns in that it is growing rapidly. People are moving from rural areas to the town to offer their children a better education and closeness to jobs. St. Joseph recently saw an expansion of the truck-building factory in town, as well as the opening of a regional headquarters for a large national insurance company. The town infrastructure has been growing to accommodate this growth. New housing developments have pushed out into the surrounding agricultural area. Several new business centers, including a new discount supercenter and several small strip malls, also have been built in the former agricultural area. Most of the development has occurred in a leapfrog fashion, fragmenting agricultural lands.

People have noticed that the town is changing and open spaces are being lost. The downtown area of St. Joseph has not grown along with the rest of the town. In fact, several businesses that had been in the downtown business area for many years have closed in favor of new locations in the new development areas. Agricultural lands are being

rapidly lost. While most of the new developments have planned small playgrounds and parks, there are no large parks or outdoor recreation opportunities in the area.

The town of St. Joseph has decided to do something about these problems. The town's planning committee began compiling data on land use and zoning in the county. They identified key areas, places that are important for local history, critical wildlife habitat, and areas for potential recreational growth. After identifying and prioritizing the areas of interest, they designed a plan for developing the new areas of town. By working with local developers, businesses, farmers, and community groups in their plan, they were able to achieve a successful level of open space protection.

Now the town has a healthy balance of open space and a consolidated plan for development. St. Joseph now has a new open space in the downtown area that is beginning to revitalize the business district. A developer is beginning construction of a new municipal golf course that will include some preserved wetlands, a vital wildlife habitat in the area. Developers are setting aside open space when building new neighborhoods, including wildlife habitat and wetlands to help with drainage. A section of the county has essentially been removed from development and will remain agricultural land through the use of zoning and conservation easements. Growth has increased as a result, as new businesses have been attracted to the area due to a greater sense of community and increased aesthetics of the area.

Steps to Develop an Open Space Plan

Now that we've defined what open space is and what it can do for us, we can discuss the process of planning for it in our communities. While the process seems complicated and difficult, open space plans are best completed by people who simply know and care about their community. This process is adapted from the work of Jim Gibbons, an expert in land use planning at the University of Connecticut. The public should be involved during each of these steps.

1. Someone must take charge.

The plan has to start somewhere. The process can begin with a public agency, such as a local planning commission, or a private group, such as a neighborhood group. The best plans are ones that involve many groups, with the same basic goals shared by all.

2. Inventory local open space and natural resources.

It is important to know the area for which the plan is being developed. Basic land use information can be very helpful, as well as information for finding areas that have potential for protection as open space. Any areas that are already preserved should be noted. Outline areas such as golf courses, camps, trails, or unique features that the community finds important to preserve. GIS is a critical tool for this step.

3. Categorize open space areas.

Placing open space into the categories listed above can be useful when determining how to preserve it in the future. It is vital to work with the public who are likely to know how the land is currently being used.

4. Identify corridors and greenways.

Open space functions best when it is connected to other open space areas and not fragmented. Streams, wildlife corridors, trails, and contiguous forest areas are all important to maintain in their entirety and not just in bits and pieces. Natural resource professionals can help determine where corridors and greenways can create the most benefit.

5. Develop objectives for the plan.

Plan objectives can include maintaining connectivity of open areas or protecting stream health and water quality. Objectives can also be quantitative and can include an overall goal for how much land the community wants to keep as open space. These objectives will determine where the process goes.

6. Prioritize.

It is important to determine the order in which land must be preserved as open space. It is critical to acknowledge that no community will be able to protect all land that is currently open — there is neither the money nor the political will to do this. Given this real-

ity, communities must ask if they want to spend precious resources protecting land that may be less valuable from an ecological, cultural, or aesthetic purpose. The objectives for the plan can help guide this prioritization. However, if land that is low on the list suddenly becomes available for purchase, or the landowner is willing to set it aside, then that action should be taken.

7. Develop a financial plan.

An assessment of the costs and funding opportunities is needed in a successful open space plan. Identify the total costs of the plan as well as sources of funding, both guaranteed and potential. This is also where the method of preservation should be determined, such as regulation, direct purchase, easements, or donation.

8. Collect information on each land parcel.

Determine ownership and other information, such as encumbrances, zoning status, and past land use, for each piece of land identified.

9. Contact landowners and work with them.

This may be the most important step of the entire process. Approach land owners before the information is made public. This will help avoid hard feelings and conflict that can doom the entire process. Discuss the plan, its objectives, and the other steps with each landowner, as well as the landowners' plans and priorities.

Optimally, many landowners will have been involved in the process from the beginning. Open space planning works best when it is done collaboratively, with input from everyone involved. This step is not simply informing the landowners of the plan; it is inviting their input and seeking the opportunity to work with them in the future.

10. Conduct public informational meetings

As mentioned at the beginning, the public should be involved during all stages of open space planning. However at the conclusion of the planning process, you should prepare presentations to take around the area to different groups or hold public meetings to share the plan with the community.

Finally, it can be very helpful to work with neighboring jurisdictions to maximize regional benefits that can accrue from open space planning.

When the steps detailed above are followed, your community will continue to have a good quality of life for generations.

Tools for Open Space Planning

Once land is identified for protection, there are a variety of tools that can be used to protect the land. These can be used either alone or in combination. These tools fall under three broad categories:

1. Regulation. This includes zoning and impact fees. These are temporary measures to protect land that can change as political will changes. Another concern with regulation is that it can infringe upon landowners' property rights. However, some types of zoning and ordinances such as cluster development allow communities to protect open space while still allowing development.
2. Purchase land. Communities can purchase land to keep it open. This is obviously an expensive option although funds can be raised in a number of ways, including: bonds, real estate transfer taxes, sales taxes, and special districts.
3. Conservation easements. Conservation easements allow land to stay in current ownership but never be developed. Landowners either sell or donate the right to develop the land to government or a land trust.

References

- Arendt, R. 1992. *Open Space Zoning: What It Is and Why It Works*. Retrieved from www.plannersweb.com/articles/are015.html
- Arnold, C. and M. Beristain. 2002. *Non-Point Source Water Pollution*. Retrieved from nemo.uconn.edu/publications/index.htm#factsheets.
- Gibbons, J. 1998. *Open Space: What Is It, How Do We Plan for It and Build Consensus to Protect It*. Open Space Fact Sheet 1: NEMO.
- Gibbons J. 1998. *Ten Steps in the Development of an Open Space Plan*. Open Space Fact Sheet 3: NEMO.
- Gibbons, J. 1999. *Natural Resource Areas to be Considered When Preparing Natural Resource Inventories and Open Space Plans: NEMO*.
- Monahan, R., J. Gibbons, and C. Arnold. 1999. Conservation Subdivisions. Retrieved from nemo.uconn.edu/publications/index.htm#factsheets.
- Tibbetts, J. 1998. *Open Space Conservation: Investing in Your Community's Economic Health*. Cambridge, MA: Lincoln Institute of Land Policy.

Additional Information

The Planning with POWER program can assist you in learning more about polluted runoff and what you and your community can do to minimize impacts to water and other natural resources. To learn more, contact:

Robert McCormick
Purdue University
Illinois-Indiana Sea Grant
195 Marsteller Street
Forestry and Natural Resources
West Lafayette, IN 47907-2033
Telephone: 765-494-3627
FAX: 765-496-6026
Email: rmccormick@fnr.purdue.edu
www.planningwithpower.org



Illinois-Indiana Sea Grant College Program is 1 of 30 National Sea Grant College Programs. Created by Congress in 1966, Sea Grant combines university, government, business, and industry expertise to address coastal and Great Lakes needs. Funding is provided by the National Oceanic Atmospheric Administration, U.S. Department of Commerce, Purdue University, West Lafayette, Indiana, and the University of Illinois at Urbana-Champaign.

