

# 1988 IOWA OPEN SPACES PLAN

## EXECUTIVE SUMMARY

The phase "Iowa Open Space" brings to mind one of many possible images, depending on One's thoughts and interests at any given time. It could be a wooded river valley... city park... prairie... historic battleground... highway right-of-way... pothole marsh... or rolling hills... to name just a few. It could be abundant throughout the state, or relatively rare and unique. Land developments may be diminishing it, or resource management enhancing it. Whatever your images, chances are you also have an interest in protecting these areas for future use, enjoyment, and benefits.

The state legislature during their 72<sup>nd</sup> General Assembly in 1987 addressed the need for additional open spaces protection in Iowa. It directed the Iowa Department of Natural Resources in House File 520 to "prepare a statewide, long-range plan for the acquisition and protection of significant open space lands...." Other government agencies and private sector organizations are also specified to be directly involved in preparing the plan. An overall goal stated in H.F. 620 is "...that a minimum of the percent of the state's land area be included under some form of public open space protection by the year 2000.

Iowa has approximately 625,000 acres of land under public protection. Almost all this property is under fee title ownership and includes fish and wildlife areas, park and recreation areas, forests, preserves, lakes, and cultural sites. Ten percent of Iowa's total 35 million acres is 3.6 million acres, which results in the legislature's goal being 3 million additional acres to be placed under protection over the next 11 years. This goal is extremely energetic and, in fact as discussed later, may be unrealistic.

Open space protection proposals are organized into geographic and resource units. Approximately 2 million acres of land are in the proposals and distributed among the units as shown in the following table.

Additional planning and resource inventories are needed in some open space categories such as urban projects, Mississippi River bluff protection, protected water areas, scenic highways, trails, reforestation, prairie restoration, and wildlife habitat enhancement. This work will undoubtedly result in additional acres of proposed open space protection.

Implementation of open space protection in Iowa will involve coordination, cooperation, and action from all levels of government and several private organizations. Various protection methods will need to be used, including fee title acquisition, easements, leases, preserve dedications, tax incentives, and zoning. While appropriations by the Iowa legislature from the General Fund should be the primary source of funds, all other implementation entities will need to commit significant amounts of money for the program to be successful and accomplish its goals. The general public also has important roles. A statewide telephone survey conducted in December 1987 shows

strong support for open space protection. Continued use of open spaces and expressions of the many public benefits will provide justification for federal, state, and local elected and government officials to commit funds and staff to the program. Donations of land, conservation easements and money for the purpose of open space protection to a government agency or nonprofit organization are also significant contributions.

As noted earlier, the state legislature's 10% goal may be unrealistic. It translates into an estimated \$2.1 billion expenditure over an 11-year period, assuming fee title acquisition at \$700 per acre as the exclusive protection method. Employment of all available protection methods could decrease this to \$1.3 billion assuming a 3.5% reduction in protection costs. Even when taking into consideration that several entities will be involved and providing funds, this is still an enormous investment over relatively few years.

Long term costs of operations and maintenance are not included in the above estimates. These costs range from \$8 to \$50 per acre per year, depending on the type of resources and public use area. House File 620 provides for local tax reimbursements of lost revenues to local governments due to public open space protection. This is also an annual budget commitment. An Iowa Open Space Stewardship Trust Fund is proposed for operation, maintenance, and property tax costs. The trust fund would be created by placing into it \$1.50 for each \$10 spent on open space acquisition and protection. The annual interest earned by the trust would then be used for operations and taxes.

Alternatives to the 10% goal as stated in H.F. 620 involve decreasing the percentage of land to be protected, increasing the implementation period beyond the year 2000, or emphasize other than fee title acquisition as a means of protection. A combination of the above three alternatives may be the most appropriate course of action. It is recommended however, the legislature reconsider its 10% goal, taking into account information in the Open Spaces Plan. Options for action include reaffirmation of the 10% goal or development of any one of several possible combinations of percentages and time periods. An alternative goal suggested in here is to double the amount of protected open space by the year 2000 and a commitment in Iowa to be active, on-going protection program in the years beyond.

The doubling goal constitutes an additional 625,000 acres, or a total of approximately 1.25 million protected acres. This goal is estimated to cost \$284 million, or about \$26 million a year in 1988 dollars, assuming a mixture of protection methods. The following table presents a scenario for distributing this level of commitment amongst the various implementation entities, not including operations, maintenance, and taxes.

In closing, open space protection in Iowa is important to our quality of life. The state legislature recognizes this and demonstrated support by directing the preparation of a statewide plan. Government agencies and private organizations interested in open spaces recognize it as demonstrated in their commitment to existing protection

programs and the preparation of this plan. Iowans in general recognize the importance of protected open spaces and they clearly demonstrated support in a telephone survey conducted as part of this planning effort. The challenge before all of us is to implement protection in ways and at a rate that serves the needs of Iowans and our open space resources for years to come.

## INTRODUCTION

Iowa is a land of pleasing natural beauty. Forests prairies, wetlands and river valleys portray the evidence of the vast wealth of natural resources that bless this state. Indians and many of the pioneers that settled this region recognized this wealth. Many artifacts can be found today that give us clues to our history. Some of Iowa's natural resource landmark areas are nationally important, the Mississippi and Missouri River valleys are two fine examples.

For decades, most Iowans had taken their state's natural beauty for granted. This attitude has led to the decline and demise of much of Iowa's natural resource heritage. Many opportunities to protect Iowa's landscapes and their associated cultural artifacts having regional or national significance have passed. Now the need exists for efforts to preserve and protect the forests, prairies, wetlands, and natural river valleys that remain. Public attitudes are changing, and there is a growing recognition of the importance of saving and protecting our natural and cultural heritage, Iowa's open spaces.

Open spaces, while once being all of Iowa, now exist primarily as delicate threads which connect our developed, man-made environments. Just what an open space is a more difficult question than it would at first appear as each person's image of open space can differ. But, it is an important question because in order to protect something we must know what it is as well as what it is not.

Open spaces for the purpose of this plan are defined as: Natural and cultural resource areas that contain natural vegetation, fish, wildlife, and/or have historic, scenic, recreation, and education value. Examples of open spaces in cities or towns may include: parks, riverfronts, and town squares. In rural areas, open spaces include such areas as woodlands, marshlands, river corridors, lakeshores, parks, and wildlife areas.

Under this definition, not just any "relatively undeveloped" area qualifies; intensively farmed land and highly developed urban areas are excluded. An area needs to have a number of the listed values associated with it before it becomes an open space in terms of this definition.

An open space can be a cultural resource or it can include cultural resources within the range of its component parts. Cultural resources are those manmade components of our environment which are judged worthy of preservation, recognition and interpretation. Cultural resources can be significant in their own right or they can be representative in nature, serving to evoke a sense of time and place representative of our past. They

span the time from the first humans who visited Iowa through the present day. The majority of identified cultural resources are individual historic buildings, structures, objects, or sites, usually associated with a minimal amount of land. As such, few of these resources qualify as open spaces by themselves. Larger cultural resources, composed of numerous components, such as historic districts, institutional complexes, or the like contribute to the quality of life in a community or the state in general. Components of such complexes can be significant. For example, the Pine Creek Mill is a small part of a much larger state park, a cultural resource in a natural setting. When the open spaces and cultural resource definitions are combined, a new set of criteria emerges, combining a sense of openness or size with the presence of a cultural resource.

Iowa's dwindling open spaces may be related to the fact that Iowa has less land in public ownership than most all states in the nation (less than two percent). Much of that publicly owned land is road right-of-way and large areas underwater in federal reservoirs. These areas fall short of providing the resources and values referred to in the definition of our statewide open spaces. Relatively speaking, there is little left in Iowa that is "natural." In both urban centers and rural landscapes, the natural open spaces that remain share the same importance that make Central Park such a valuable asset to the residents of Manhattan, an island in a sea of development.

Following are a number of reasons why it is important and beneficial to protect open spaces. Many of these were confirmed by Iowans in a recent survey.

1. Enhance quality of life
2. Increase tourism
3. Keep natural ecosystems functioning properly
4. Prevent erosion
5. Provide habitat for plants and animals
6. Maintain natural diversity
7. Provide examples of natural and cultural heritage
8. For people to enjoy/relax
9. For future generations
10. Attract businesses to Iowa, as well as other forms of economic development
11. Maintain and enhance scenic beauty and visual pleasure
12. Create or enhance areas that provide "micro" climates and habitats for relatively rare and unique opportunities

Knowing what to protect is the first step towards protection. This plan will identify our most valuable natural and cultural resources and describe methods for their protection. The plan also establishes goals and priorities. Implementation of this plan's recommendations will help insure that our valuable open space resources will not continue to disappear.

The State Legislature recognized the value of Iowa's open spaces during their 72<sup>nd</sup> General Assembly in 1987 and took an important step toward increased protection. The State Legislature directed the Iowa Department of Natural Resources (IDNR), under House File 620 (see Appendix A) to prepare an open spaces plan by July 1, 1988. The plan is to address the protection of significant elements of the state's natural and cultural open spaces. H.F. 620 was an outgrowth from the Recreation, Tourism, and Leisure Legislative Study Committee which highlighted the need to adequately address protection of Iowa's open spaces.

The plan's successful and comprehensive implementation will depend on monetary commitments and cooperative planning and management by numerous agencies at all levels of government, as well as from interested private organizations. "Protection" of open spaces may be accomplished using a number of mechanisms, such as acquisition, easements, preserve dedication, local zoning and others.

House File 620 specifically directs IDNR to:

- 1) Prepare and conduct new education and awareness programs designed to create greater public understanding of the needs, issues, and opportunities for protecting the state's significant open spaces.
- 2) Prepare a statewide, long-range plan for the acquisition and protection of significant open space lands. The plan includes: identification and prioritization of open spaces, modifications, and/or development recommendations for federal programs to facilitate the effectiveness of Iowa's open space programs.
- 3) Acquire and/or protect open space properties as identified by priority in the plan, and as funding is made available.
- 4) Submit annual budget requests to the General assembly to pay property taxes on open space property acquired by the DNR on or after July 1, 1987.

An overall goal stated in H.F. 620 is to have ten percent of all land in the state under some form of public protection by the year 2000. This equivalent to approximately 3.6 million acres.

H.F. 620 specifies that the Department of Transportation, Economic Development, and Cultural Affairs, along with private organizations, county conservation boards, city park and recreation departments and federal agencies with land in the state shall be directly involved in preparing the open space plan. IDNR formed a task force inviting representatives from each of these agencies in response to H.F. 620. A complete listing of those agencies and individuals serving on the task force committee is found in Appendix B.

Open Space Program Goals

The overall goal of the Open Spaces Program is to protect more of the best, remaining land and water areas in Iowa having natural vegetation, fish, wildlife, historic, scenic, recreation, and outdoor education value for public use, enjoyment, and benefit. Following are more specific goals:

1. Accelerate existing programs that contribute to open space protection by providing money to complement existing sources of funds.
2. Increase public opportunities to use, enjoy, and benefit from Iowa's protected open spaces.
3. Increase the amount of public land for the management of fish, wildlife, and forest resources.
4. Protect representative examples of Iowa's land and water areas containing natural and cultural resources, including those in a range from common to rare and unique.
5. Maintain and improve Iowa's scenic resources.
6. Provide buffer areas around existing public lands.
7. Increase public awareness of the economic and social benefits of protecting Iowa's open spaces to help direct and motivate the existing broad base of support.
8. Provide the most appropriate protection of open spaces by using a variety of available methods, such as land acquisition, easements, leases, preserve dedications, local zoning, and property tax incentives.
9. Coordinate open space protection among federal, state, county, and municipal government and private organizations.

#### 1970s Open Space Appropriations

Governor Ray in 1973 signed an appropriation bill into law creating the open Spaces Land Acquisition Program. The bill authorized the Iowa Conservation Commission to purchase land from willing sellers. The initial appropriation provides \$2 million. Appropriations continued on an annual basis until 1979 and totaled \$6.4 million. The program was quite successful with a total of 7,878 acres in 20 counties being purchased with the first appropriation and a grand total of about 15,000 acres over the duration of the program. Types of areas purchased include wildlife areas, forest areas, trout streams, state parks, county areas and preserves. Wildlife areas constitute over half of the total acreage acquired as seen in Table 1.

Priorities for acquisition were decided by a committee which rated each proposal according to a ten-item set of criteria. The ten items were:

1. Project significance
2. Natural uniqueness
3. Threat of conversion or destruction
4. Effects on cropland or development
5. Relocation Considerations
6. In-holdings, expansions, consolidations
7. Multi-use potential
8. Public benefits
9. Regional equity
10. Costs

Items were assigned a point value and weighted to reflect their relative importance.

Appropriations ended in 1979, leaving many high ranking areas on the list of proposed Open Space acquisitions.

#### Public Attitudinal Survey on Open Spaces

Crowley Market Research Company of Des Moines conducted a statewide telephone survey for the Iowa Department of Natural Resources on attitudes regarding open spaces. The survey was conducted December 14-17, 1987 and consisted of 400 telephone interviews randomly chosen to represent Iowa's general population. This sample size is considered adequate to measure attitudes within a four percent margin of error.

Following are the specific informational objectives of the Open Spaces Survey:

1. To measure Iowans' attitudes about current and future open spaces in the state.
2. To examine Iowans' opinions on possible actions the state could take regarding open spaces.
3. To test the reaction of Iowans to methods of protection other than acquisition of open spaces.
4. To measure Iowans' perceptions of the importance of protecting various types of open spaces.
5. To test the reactions of Iowans to proposed sources for funding the protection of open spaces.

Nearly all Iowans (almost 90 percent) visit open spaces in the state with the most popular areas being those associated with water. Lakes ponds, reservoirs, rivers, creeks, and riverfronts were favored by 37 percent. Parks and camping areas, many of which are also associated with water, were favored by 32 percent; woodlands and forest trails by 15 percent, and wildlife habitat areas by 14 percent.

Most lowans (82 percent) feel open spaces are “very important” to the quality of life in the state. Given an open-ended question as to why open spaces should be protected, about three-fourths of those reasons related to human use and enjoyment of those open spaces, while about one-fourth relate specifically to protection for wildlife, vegetation, and soil and water conservation.

When provided a list of six specific reasons to protect open spaces, soil erosion led the list (68 percent) as most important, followed by preserving the landscape and heritage (60 percent), environmental education (43 percent), providing urban parks (37 percent), providing hiking and camping (34 percent), and provide hunting and fishing (26 percent).

There is much agreement among lowans on the types of open spaces considered to be important to them. From 95 to 99 percent agree that the following open spaces are either “very important” or “somewhat important:” Wildlife areas, woodlands, endangered species areas, parks, lakeshores, historical/archaeological sites, trout streams, prairies, river valleys, and urban woodlands. Marshlands, open space type considered by biologists to be one of the most important types, has a 90 percent agreement among the public as an important open space. Abandoned railroad beds, considered by many as a major open space opportunity for the future if converted to public multi-purpose recreation trails, received a 60 percent share of the “important responses. In all responses, the number of persons saying these types of open spaces were “very important” were from about two to eight times greater than those saying these types of open spaces were “somewhat important.”

A large majority of lowans (79 percent) favor public ownership of open spaces. There is also major agreement that existing open spaces be improved (89 percent agree); that more be acquired (76 percent agree); and that privately owned open spaces should come under state protection to keep their environmental value (75 percent agree).

When given alternatives besides public ownership to protect open spaces, most lowans (84 percent) favored city and county zoning for protection; the second favored alternative (75 percent) was property tax incentives to private landowners to protect the areas; the third favored alternative (44 percent in favor with 48 percent opposed) was government purchase of easements. It is likely that survey participants were not as familiar with easements as an alternative to outright purchase of open spaces, yielding the negative response. This may mean that public education on the value of easements might be needed if easements are to be a tool for government to use in protection of open spaces.

Given the positive responses just listed, the positive response to funding sources is not surprising. Just slightly less than half said they would pay a small increase in sales tax, income tax, or property tax to protect open spaces. About two thirds supported higher prices for park user fees and hunting and fishing licenses. Nearly three-fourths favored applying more of present taxes to open spaces protection; and almost 90 percent supported greater use of lottery receipts for open spaces projects. (As a note of



comparison, a similar public opinion survey one year earlier on the issue of ground water protection showed 86 percent of the respondents felt groundwater pollution was a serious issue; however, fewer than one-third of the respondents supported more state taxes to resolve the issue.)

In summary, Iowans:

- 1) showed very strong support for open space protection efforts and this support is spread evenly throughout the state, with no statistical differences between rural and urban areas;
- 2) are aware of natural open spaces;
- 3) visit open spaces and feel very strongly that such areas are important to the quality of life; and
- 4) feel more money should be directed at expanded protection efforts.

A long-term funding source is required for purchase of existing wetlands, drained wetland basins, and surrounding upland habitat before acquisition and restoration begin. In some cases, funding would be needed for the installation of dikes, ditch plugs, small water control structures and destroying or plugging subsurface tile drainage systems. Acquisition and management of upland habitat is necessary to provide adequate nesting habitat, prevent inundation of surrounding private land, and reduce sedimentation of the wetland.

Open Space wetland projects are presented in four categories: (1) four-county pothole area; (2) 35-county pothole area; (3) river oxbow wetlands; and (4) Fens. Figure 15 and 16 summarize the proposed acres in these categories.

The four-county pothole area includes Clay, Dickinson, Emmet, and Palo Alto Counties. The DNR Wildlife Bureau has identified this area as high priority for wetland acquisition and restoration. Large concentrations of existing and restorable wetlands, valuable for waterfowl production, are located in these four counties. Wetland restoration work basically involves constructing low-level dikes and plugging agriculture drain tiles.

The 35-County area includes the Des Moines Lobe land-form region, which is Iowa's natural lake and prairie marsh territory. The high priority four-county area is a subset of these 35 counties. River oxbow wetland proposals include areas associated with the Missouri and Mississippi Rivers. Protection of oxbow wetlands along Iowa's major interior rivers is incorporated in the River Corridors Unit.

Fen proposals were taken from the DNR Preserves and Ecological Services' natural areas inventory scorecards. These relatively rare wetlands are some of the high ranking scorecard projects.

## Urban Unit

It is projected that eighty percent of Americans will live in urban areas by the year 2000. Though this percentage may be somewhat lower in Iowa, there are over 950 incorporated municipalities in the state today. Urban open space acquisition, protection, and development are vitally important to urban residents as their numbers and demands for local outdoor recreation continue to rise.

There are nearly 49,200 acres of protected, municipally owned open spaces in 2484 areas across the state. Land acres makes up the bulk of this open space type (47,200 acres) while the remaining 2,000 acres are water acres.

A basic role of urban open space is bringing outdoor recreation areas (active or passive) to urban residents and making these areas available as part of their daily lives. Many types of urban open space can satisfy more than one purpose as is true in all open space units. Urban open space may be: Greenbelts/greenways, parks, trails, scenic or historic sites, town squares, lakeshores, riverfronts, and woodlands. These open spaces offer outdoor recreation opportunities and education opportunities. They also impact economic development decisions, improve urban residents' awareness of the outdoors and enhance community viability.

Urban areas possess the vast majority of surveyed and designated cultural resources, including those which fall within the parameters of open spaces. By definition, the vast majority of historic districts, in combination with parks or other undeveloped parcels (squares, plaza, etc.) are to be found in urban areas. Public greens, not infrequently former inner city cemeteries, are frequently incorporated into planned park networks in larger communities, and integrate the downtown core with outlying residential areas.

## Proposed Additional Open Space

Typical Iowa open space projects undertaken at the community level are presented in Figure 17. Following is a brief description of these projects.

- 1) Development of greenbelts, trails and public access corridors. These projects generally consist of strips of land that improve accessibility to other open spaces, link new or existing parks, forests, refuges or in the case of trails, provide hiking, biking, and/or horseback riding opportunities. Many greenbelts and trails continue from one side of town to the other, allowing a great number of persons access within a very short distance from their home or place of work.
- 2) Provide linkages between city, county, and/or state facilities. Linking of facilities may or may not be an objective of urban greenbelts or trails, but linking parks, refuges, other trails, historic or scenic areas will increase awareness and interest for using these facilities and satisfy an increasing demand for these types of projects.

- 3) Preservation of wildlife habitat areas. Preservation projects are generally designated to protect areas of natural vegetation and associated native animals. Urban wildlife species require shelter and food sources just as rural wildlife requires, and diversity in urban wildlife habitat will support a diversity of urban wildlife. Wildlife habitat areas in an urban setting include greenbelts, vacant grassy areas, woodlands, parks, and wetlands. Wildlife that have successfully adapted to urban environments include rabbits, songbirds, squirrels, turtles, frogs, butterflies, and fish.
- 4) Designation of areas with scenic and/or historical significance. Such designation will protect the site from direct development and adverse effects caused by nearby development and other urban activities taking place in the area.
- 5) Developing educational demonstration plots. Developing prairie grasslands or actively managing urban woodlands, demonstrating proper windbreak landscaping or landscaping for urban wildlife are examples of demonstration plot projects. Educational and community awareness program opportunities abound and can be held close to home. Providing these types of areas in the city will help break up the steel and concrete landscape as well as provide wildlife habitat.
- 6) Provide buffer areas for existing public land. Buffer areas control land use adjacent to existing open space, historic sites, etc. thereby protecting the area from intrusion of incompatible land use.
- 7) Expand existing city parks.
- 8) Protect additional cultural resources.

There are additional urban open space projects equally beneficial as those briefly discussed above. Examples may include: protection of creeks, streams and rivers that traverse municipalities, development of facilities which are supportive of open space, that encourage tourism and economic development for local communities and the state, and the provision of cultural and educational programs near population centers. It is imperative that urban residents have the opportunity to experience outdoor recreation on a daily basis. The only way to accomplish this is to provide these opportunities within or very near the urban area.

#### Nonunit Areas

The previously described units are not inclusive of all open spaces that warrant protection in Iowa. Such "miscellaneous" open space projects must not be overlooked, so this plan groups them together and calls them nonunit areas. Types of projects in nonunit areas are basically the same as are in the defined units. The distinguishing factor is that they fall outside the geographical boundaries and resource definitions of the units.

Some people may think that areas outside the open space units include only agricultural, residential, industrial, and commercial lands. However, scattered amongst this developed land are properties that deserve protection under this program. These properties are generally relatively small bits and pieces, but some large, contiguous acreages also exist. Table 12 summarizes existing protected open spaces in Nonunit Areas.

Figure 18 summarizes open space proposals in Nonunit areas. Iowa's natural lakes are all located in the north central portion of the state referred to as the Des Moines Lobe Landform Region. This is the same area described as the pothole marsh territory in the wetlands Unit. Iowa's natural lakes are surrounded mostly by residential and commercial developments. Shorelines that fall within the definition of open space are mostly in public ownership, but private holdings still remain.