



est percentage (31%) said more should go toward building more boat ramps.

Respondents said that, for the most part, Indiana waterways were safe; however, areas that they expressed concerns about included boater and personal-watercraft-user recklessness, and alcohol use. Most boaters indicated that conservation officers should spend much more effort controlling reckless operation and alcohol use; however, they did not indicate a need for officers to spend more time on the waterways. Boaters also approved of mandatory safety classes, especially for operators 15 and older who do not have a valid driver's license. More than 50% indicated that more should be spent on boater education classes.

Conclusions

When one considers that boating is typically a three-season activity, it is evident

that boating is important in the world of outdoor recreation. Estimated 2004 boating expenditures in Indiana were \$650 million, an admirable contribution to the economy. Boats used range from motorboats to sailboats to kayaks. The overall impression is that boaters are satisfied with the facilities and IDNR. Typically, boating is a low-cost social adventure with family and friends that respondents would do more of if they could. Boaters are well aware of the hazards of reckless operation and alcohol, and would like to see better law enforcement control of offenders. One last item worth noting is that 56% RB wanted to receive more information (preferably by direct mail), such as shown in Fig. 5.

2004 Designate Trails Survey (Trail-User Survey)

The 2004 Designate Trails Survey (hereafter called the trail-user survey) was conducted June through November 2004 by Survey America. The 34-question survey was administered via touch-screen survey centers in Kmart's and libraries in 14 counties and at the 2004 State Fair. A total of 1,008 surveys were completed.

Demographics

The trail-user survey responses had a nearly even geographic distribution. The percentage of total responses from each region of Indiana was within 0.4% (range 16.5 to 16.9%). The respondent demographics are also representative of Indiana's population as compared to the U.S. Census statistics (see "Participation survey—Demographics" for comparisons).

- Genders were nearly evenly represented: male, 47%, female, 53%.
- Average age was 42.1.
- Racial/ethnic distribution was White, 82.0%; African-American, 9.9%; and Hispanic/Latino, 2.7%.



- Education-level distribution was graduated high school/some college, 54.0%; college graduate, 20.2%; graduate work, 16.9%.
- Average household income of those older than 18 was \$49,457.
- The majority of respondents lived in a community of 10,000 to 49,999 people, 29.4%; 50,000 to 149,999, 22.6%; 5,000 to 9,999, 17.0%.

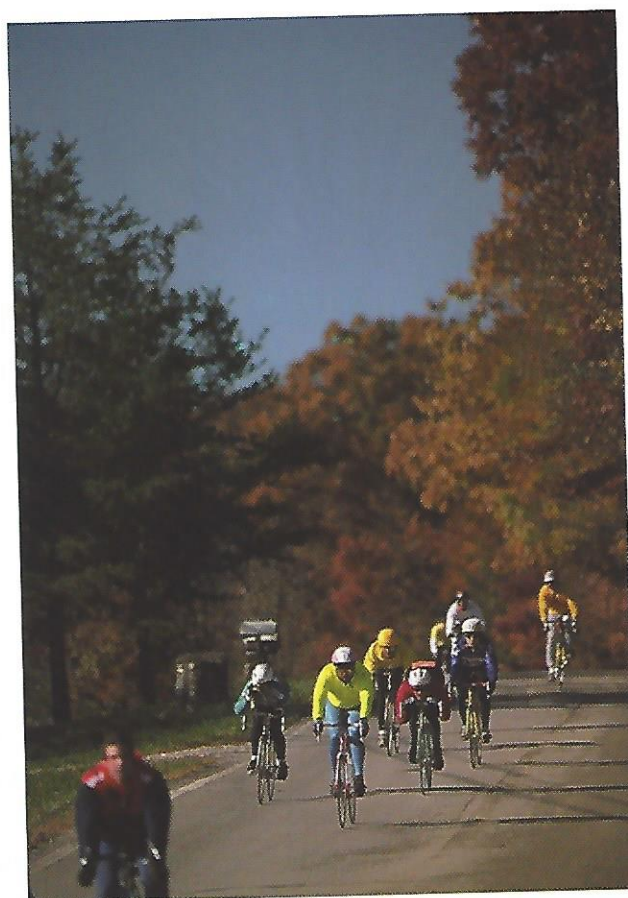
Activities

More than 57 percent (57.8%) had used a designated recreational trail within the past 12 months, 37.8% had not, and 4.4% were not sure. Although it may seem unlikely for people to be unsure whether they had used a recreational trail, consider the many interpretations of the term. Some define a trail as a dirt path through the woods. Others would say that a trail is a waterway, a bike lane along a busy street, or a paved, ADA-accessible multi-use pathway through a closed community. Each can be a designated trail, but the users may not be aware of that designation, particularly if they enter and exit at unmarked locations.

Once again, the highest percentage of respondents used trails for walking/running (72.7%), followed by hiking/backpacking (33.3%), and touring bicycling (19.8%). A significant portion (18.3%) used trails for motorized vehicles (snowmobiles, off-road four-wheel drive vehicles, off-road motorcycles and all-terrain vehicles). Canoeing/kayaking (14.1%) and horseback riding (11.5%) were other important trail activities. For a further breakdown of trails activities go to <http://www.in.gov/dnr/outdoor/>, The Indiana State Trails, Greenways, and Bikeways Plan.

The top four reasons Hoosiers used trails were:

- 1) Pleasure/relaxation/recreation
- 2) Health/physical training
- 3) Social interaction/family outing
- 4) Scenery/natural environment



Note that the top three reasons for trails use are related to physical and psychological well-being (i.e., health: stress reduction/relaxation, physical well-being, and social interaction).

The survey also assessed trails issues that do not necessarily relate to current trails use. All of the following trails issues were rated as "somewhat important" to "very important" by more than 50% of the respondents:

- Developing trails close to home – 63.6%
- Publishing trail map guides – 61.8%
- Linking existing trails – 59.1%
- Building more trails – 57.6%
- Improving trails for the disabled – 55.2%
- Developing bike-commuting trails – 54.4%
- Acquiring more land for trails – 53.8%
- Designating roads as bike routes – 53.6%
- Designating a funding source – 51.2%
- Building long-distance trails – 50.9%

Note that 55.2% said improving trails for the disabled was important, while fewer (37.7%) said paving a trail with



asphalt was important. Granted, persons with disabilities or limitations do not necessarily need paved surfaces but many people associate the two. This apparent contradiction may be another example of the perception of what constitutes a "trail" being more limited than the definition of "trail."

One question that received a lower percentage (22.7%) for "somewhat" to "very" important was "... developing trails for motorized use." This may reflect that these trails are typically specialized and the "limited" population who uses them, especially considering that motorized-vehicle use ranked ninth in the participation survey results.

Locations

The survey did not ask for specific locations of current trails use.

A complete list of trails can be found at <http://www.in.gov/dnr/outdoor/trails/index.htm> and plans for future trail devel-

opment can be found in The Indiana State Trails, Greenways, and Bikeways Plan.

Time

Most respondents (62.2%) reported using designated trails once a week or less, 10.9% used trails two to four times a week, followed by 2.0% who said they used trails five to seven times a week. Asked "What are the primary reasons you don't use recreational trails more often?" 64.4% said "not enough time," 27.0% said "trails too far away," and 24.5% didn't know where trails were located.

Although many respondents used trails once a week or less, there was high interest in participating in trails activities. Below are specific activities and the percentage of respondents interested.

- Walking a public trail in their city – 61.3%
- Day hikes in the wilderness – 50.9%
- Bicycling in their city – 46.5%
- Canoeing – 45.3%
- Horseback riding – 35.1%





- Bicycling outside of the city – 32%
- Running/jogging – 28.5%
- Overnight backpack hiking – 28.2%
- Off-road four-wheel drive riding – 23.4%
- All-terrain vehicle riding – 21.1%
- Snowmobiling – 19.0%
- Cross-country skiing – 16.8%
- In-line skating – 16.4%
- Off-road motorcycling – 14.4%

These results may indicate that respondents would use trails more often if they had enough time. Trails that are close to home that connect people to destinations and/or provide a circular route with opportunities to experience a natural environment may be the appropriate solution. It may also be true that trails built within a community would be of greatest economic benefit to both user and provider.

Funding

Survey respondents said that general taxes should be the primary source of trails funding (27.5%) followed by donations (27.1%). Asked "If the money was spent in your local area ... would you be willing to pay an annual fee to use ... trails?" 37.1% of respondents said "yes," 37.1% "maybe." Of those respondents, 28.7% said they would pay \$5 to \$9.99; 21.2% would pay less than \$5; and 20.1% would pay \$10 to \$15.

The general population may not be aware of the grants available for trails development. For more information, go to <http://www.in.gov/dnr/outdoor/>.

Conclusions

The use of trails is an important aspect of outdoor recreation. Many people may not understand the diversity of trails or the many different components that can be integrated into a trail system (e.g., street, waterway, natural cover); however, people use trails regularly and see a need for new trail development. Some of the greatest need includes bringing trails closer to communities, linking ex-

isting trails, and connecting communities to destinations (e.g., landmarks, parks, schools or businesses). Although the survey did not assess the economic impact of trails, one could extrapolate that the improved health (mental, physical and social) gained by trail use will benefit both the individual and the economy through reduced health costs and, potentially, reductions in chronic illness. Park use may increase if linked with nearby communities by way of multi-use trails. Conversely, community businesses may see an increase in revenues from park visitors. Additionally, trails built with universal design and diverse populations in mind could allow people with limitations or disabilities to experience their community in a new, meaningful way.

The priority population for the preceding surveys was users. The purpose was to determine the outdoor recreation activities that citizens were involved in and what they would like to do in the future. The next two surveys (Recreation Issues Survey and Trails-Provider Survey) focused on providers and their perspectives, issues, goals and limitations.

Recreation Issues - Provider Survey

The recreation-provider survey development and implementation was a three part process. During 2002 and 2003, we analyzed 55 five-year master plans and interviewed four park and recreation superintendents. The results from the analyses and interviews were compiled to create an issues survey including both open-ended and specific list-response questions. The survey was mailed to 484 park and recreation leaders. "Leaders" were defined as "park board members and park superintendents or employees" (Ball State University, 2004). Questionnaires were mailed in November 2003. A total of 182 were completed and returned by Jan. 31, 2004, then used for this study.



Group and number of respondents	Yes, frequently (%)	Occasionally (%)	No, not at all (%)
Clubs and organizations, e.g., little league (N = 173)	59.0	34.7	6.4
Local schools (N = 177)	46.9	43.5	9.6
Volunteer groups (N = 171)	41.5	54.4	4.1
Civic organizations (N = 169)	33.1	60.9	5.9
Other units of government (N = 168)	28.0	47.6	24.4
Special interest groups (N = 167)	19.2	52.7	28.1
Non-profit recreation providers, e.g., YMCA (N = 165)	19.4	43.0	37.6
Private industry (N = 167)	10.2	56.9	32.9
Convention and Visitors Bureaus (N = 166)	17.5	39.8	42.8
Neighborhood associations (N = 159)	10.1	37.1	52.8
Health care providers (N = 164)	6.1	43.9	50.0
Commercial recreation providers (N = 164)	5.5	40.9	53.7

Table 2. Frequency of parks partnering with other stakeholders to provide outdoor recreation opportunities by percentage

Demographics

- The highest percentage of respondents (44.5%) were municipal park and recreation department employees, followed by members of park boards (32.4%), and employees of county park and recreation departments (10.4%).
- The highest percentage of communities represented had both a park board and a park and recreation department (60%), park boards only (30%), park and recreation department only (5%).
- Communities with populations of 10,000 to 49,999 had the highest response rate (39.6%), followed by 4,999 or less (25.3%), 5,000 to 9,999 (14.8%).
- 68% of the respondents were male; 32% were female.
- The highest percentage of years of park experience was six to 10 years (30.0%), one to five years (25.9%), 21 years or more (19.4%).
- The average years of experience for board members was 8.9; the figure for park department employees was 14.8 years.

Major issues identified with open-ended questions

Budgeting and funding was one of the most important issues reported in master plans, interviews and survey results. This topic included not only budgeting and funding for new development,



but also funding for maintenance and upgrading of facilities. Although some grants are available for land acquisition, those funds do not provide for the future upkeep of those facilities. Budget constraints and finding effective means to deal with them has been a challenge for several years. Park superintendents and boards must use effective long- and short-range planning to address the needs of today and the future, not only to satisfy the end user, but also to ensure that the facilities last. Some of the ways that park leaders are currently dealing with this issue are:

- Using marketing strategies to more effectively position the park within the community mindset
- Increasing awareness of the programs and services offered
- Partnering with other stakeholders to share land, facilities and programming
- Soliciting donations
- Developing short-term goals for facility maintenance and renovation
- Developing long-term goals for capital projects and land acquisition

Table 2 highlights some of the stakeholders with whom parks partner for the provision of outdoor recreation opportunities.

Land acquisition and new park development was another important issue in the master plans and surveys. Indiana ranks 15th in the nation for population size. The population grew by 191,488 between 2000 and 2005 (U.S. Census Bureau, 2005). In contrast, the amount of public land available for recreational purposes remains close to 4% of Indiana's total land. Park leaders expressed concern that land acquisition is not keeping pace with population growth. Additional concerns included:

- Available space
- Land for purchase
- New areas for future parks
- Location of future parks, especially in regard to new residential areas
- Trail development



Some areas have concerns due to tourism impacts on facilities without the benefit of tax-generated funds for new park development. Land acquisition and new park development is especially important in counties defined as "critical". Critical counties have a deficit in total acreage available for outdoor recreation as compared to the NRPA/Indiana total recreational land standard (see chapter three) of 55 acres per 1,000 people and having a population growth higher than the State average.

Obviously, funding for land acquisition and new park development is important. Finding funding sources or different ways to increase facilities may require innovative thinking from park leaders. Some methods that park leaders currently use to increase available lands are donations, purchases and partnerships with local school corporations.



Issues	Ranking	
	Employee	Board
Budgets/funding	1	1
Land acquisition	2	2
Personnel	3	6
Maintenance/facility renovation	4	3
Community/economic growth	5	8
Capital projects	6	5
Meeting community needs	7	7
Political support	8	4

Table 3. Comparison of major issues identified by open-ended questions

Personnel/staffing was a third issue identified by the survey. Two basic sub-categories were identified: 1) budgeting for personnel and 2) quality/type of personnel.

When discussing budgeting for personnel, park leaders listed (1) budget constraints limiting employee numbers, and (2) money available for capital projects but not for personnel to staff them, as the main challenges.

The main comments about quality/type of personnel were (1) quality of seasonal staff, (2) needing to do more with less staff, (3) aging employees, and (4) the need to train new, younger staff members.

Some park leaders indicated money is available for facility maintenance but not for programming. If a park had money available for programming, then budgets were cut, decreasing or eliminating programming was among the first methods used to reduce costs. Unfortunately, this approach could also decrease public awareness of the facility and reduce revenues.

Facility maintenance and renovation was identified as a challenge for park leaders. Once again budget and financial constraints affected the ability of the managers to perform necessary repairs and upkeep. Parking lots, restrooms and shelter houses were a few of the facilities reported to suffer when budgets tighten. Not only are these facilities essential for park users, if left in disarray, they will

detract from community appeal, which could ultimately decrease vital patronage.

Survey responses show that park leaders are more interested in taking care of what they have than in capital projects. One park sold facilities because of a lack of maintenance funding. There can be a balance between maintaining the old and building the new; however, the common response when budget constraints are in place is the scales tip toward taking care

of the present facilities.

Capital projects are an important issue. Even when budgets are low, park leaders realize they must consider the needs of the community and how its demographics are changing. Parks must plan ahead as to how often they should pursue capital projects, if they should pursue them, and whether the projects should be traditional or non-traditional efforts. The SCORP can be an indicator of the trends in Indiana that point the direction for capital projects, but local park managers and park boards need to watch and talk to the people in their community to make informed, sound decisions.

The responses to the open-ended questions indicate some differences between views of park employees and park boards. Table 3 shows a comparison of how park employees ranked major issues versus how park board members prioritized them. Readers should not generalize the results because of the small sample size (park employees, N=103; park board, N=62).

Major issues identified from a specific list

The survey included a specific list of issues (generated by the 2006-10 SCORP Planning Advisory Committee); respondents were asked to select the top three



issues they face. This was a check and balance for the open-ended questions. This portion also included issues not mentioned in the open-ended question responses, which helped to identify the importance of those at the local level.

The issues identified from the list (ranked in order from highest to lowest importance) were

- Staffing
- Competition from other recreation providers
- Level of public participation
- Number of programs offered
- Amount of facilities available
- Communication issues
- ADA compliance
- Safety
- Perceived value of parks and recreation
- Land for recreation
- Staff training and development

Note: several of the last five issues received much lower scores than the first six. Additionally, the last five issues can be more closely related to budgeting or financial constraints, whereas the first six issues can be more closely associated with daily park management and public awareness.

Even though financial difficulties are a reality in outdoor recreation, providers

Capital Projects	Frequency	Percentage of Respondents
Playgrounds	105	58
Multi-use trail	98	54
Land acquisition	93	51
Parking lot	90	50
Other buildings (restrooms, concession stand, nature center)	89	49
Garden or picnic area	74	44
Shelter house	77	43
Soccer field/athletics field	63	35
Nature/interpretive trail	59	33
Lighting system	56	31
Skatepark	55	30

Table 4. Capital projects planned in the next five years (N = 182)

Renovation Projects	Frequency	Percentage of Respondents
Playgrounds	90	50
Parking lots	87	48
Other buildings (restrooms, concession stand, nature center)	73	40
Shelter houses	67	37
Tennis courts	64	35
Baseball diamonds	62	34
Swimming pool	48	27
Basketball/volleyball courts	56	31
Lighting system	47	26
Picnic areas/gardens	40	22

Table 5. Facility renovation projects planned in the next five years (N = 182)

are planning ahead for the benefit of their communities. Providers have five-year plans in place for capital projects and facility renovations. Tables 4 and 5 list the projects being planned for the future.

Although parks have not traditionally prioritized specific populations when planning improvements or new develop-

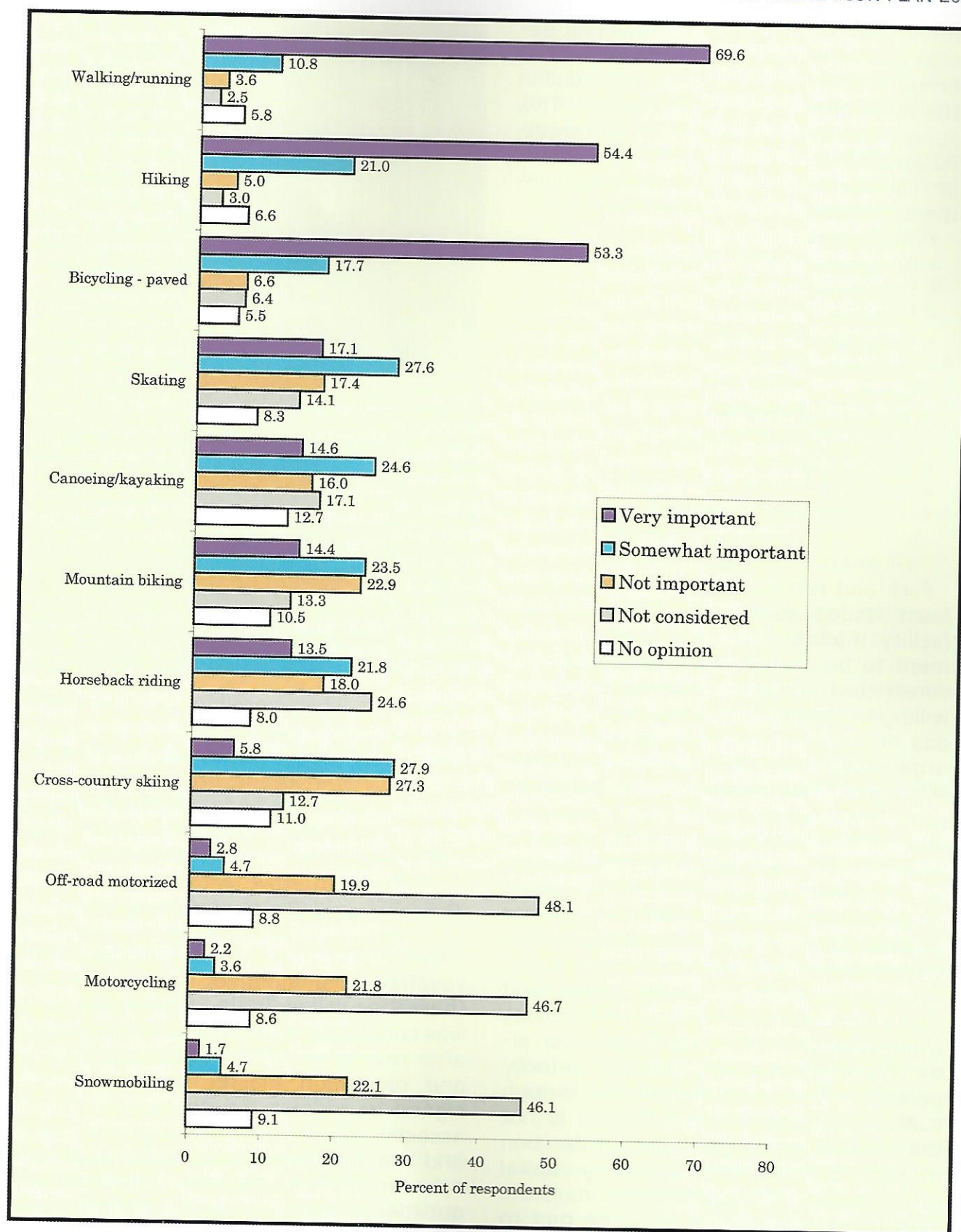


Figure 6. Organizations' degree of importance placed on trail-use opportunities



ment/facilities, a focus on universal design and meeting ADA specifications has brought this concept to the forefront in the mind of some decision makers. This survey included a question about targeted audiences to determine if park leaders consider population-specific improvements. The results are listed by rank:

- Youth/children
- All citizens/we do not target
- Senior citizens
- Families
- Persons with disabilities
- All age groups
- Teens
- Racial/ethnic groups
- Socioeconomic groups
- Walkers/hikers
- Adults

Conclusions

Park and recreation leaders concur on most issues addressed. They consider facility maintenance and new development to be challenges when faced with constricted budgets; however, they are willing to seek and implement new methods of funding, partnerships with other organizations and innovative marketing strategies. The majority of respondents value maintaining and upgrading current facilities more than capital projects when funds are tight. They are willing to cut costs through decreasing capital projects, hiring fewer staff members or dismissing them, and eliminating or decreasing available programs.

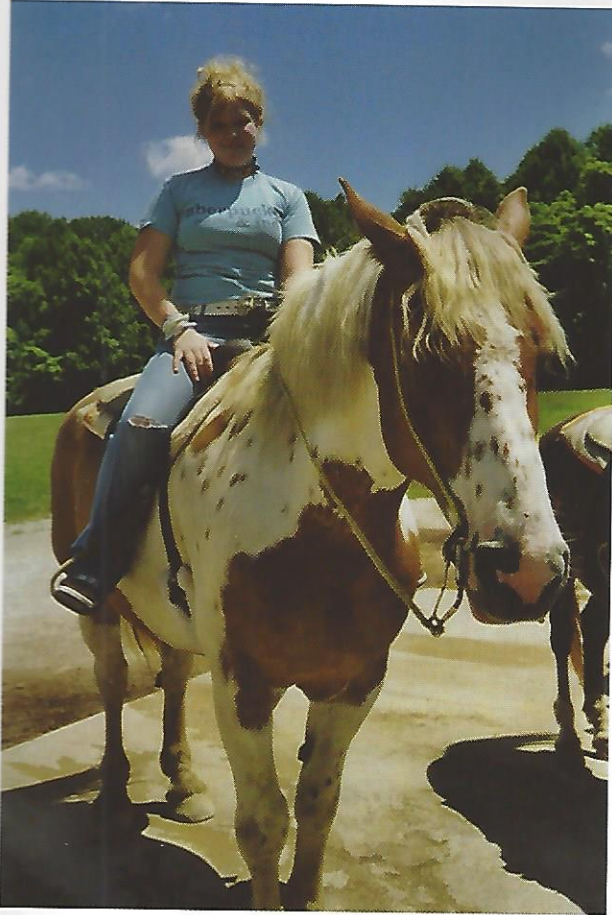
Most park leaders consider youth and seniors to be their primary audiences when they address specific groups; although many do not consider priority populations when planning. Even though considering a primary audience is not the norm, it may be prudent for decision makers to do so when planning capital projects. One of the many reasons is the ADA requirements that must be met to receive grant funding. Additionally, by considering universal design and imple-



menting it when possible, providers will automatically cover a broad population. Conversely, planners may need to identify the needs of a specific group as community demographics change and to satisfy those needs for community awareness and acceptance.

Professional Trails-Provider Survey

The Professional Trails-Provider Survey/Trails Management Issues Survey (hereafter called Trails-Provider Survey) was conducted in 2004. It was developed after reviewing 150 random current park and recreation master plans and designed to address the needs and issues associated with trail development, use and maintenance. The survey included open-ended and specific list-response questions, and a comment section. A total of 362 completed surveys were returned and analyzed.



Demographics

- The highest percentage of communities represented had a population of 10,000 to 49,999 (32.9%), followed by 50,000 to 149,999 (17.1%), 4,999 or less (7.7%)
- "Organizations" with the highest representation were cities (27.3%), not-for-profits (22.7%), State (19.1%).
- Annual operating budget used for trails was 0 to 5% of budget (63.0%), 6 to 10% (10.2%), greater than 50% (5.5%).

Importance

Fig. 6 represents how respondents rated the level of importance of various trail opportunities in their community. Organizations viewed linear trails for non-motorized use as the highest priority. Sev-

eral reasons for this include but are not limited to consumer demand, less specialization, environmental impact of motorized vehicles, primary use of properties and maintenance cost.

Trails professionals agreed about many trails issues. The majority agreed or strongly agreed on the following:

- Road improvements should include trail expansion (89.5%).
- Trails should be an important part of community infrastructure (88.4%).
- Adjacent landowners/businesses need to be involved in trail planning/maintenance (85.3%).
- Standardized trail signs and symbols should be used throughout Indiana (83.4%).
- State legislation should support railroad corridor acquisition for trails development (81.5%).
- Interpretive signs along trails are important (80.6%).
- There should be state tax incentives for citizens and utilities for trails acquisition (75.9%).
- Legislative action will assist in multi-use trail network development (68.3%).
- Trail development and renovation should comply with ADA accessibility standards (67.1%).

An idea that professionals strongly disagreed with is having a multi-use natural surface trail that could include off-road motorized vehicle use. Several respondents cited safety issues when discussing trails that allowed motorized vehicles and pedestrians, bicyclists or horseback riders. Even though providers have safety concerns about trails that allow motorized travel and non-motorized travel, providers are advocates of multi-use trails (i.e., for either motorized use or non-motorized use) citing health, economics and increased use as positive reasons for building trails.



Trail planning

As with any project, trail development can and should be an extensive project. Planners should consider many facets of trails prior to building. These considerations include community needs, ultimate usage, marketing, funding, design, materials and long-term maintenance. The majority of communities represented by survey respondents had neither ordinances nor regulations to facilitate trail development. Some communities did perform background research using the U.S. Census Bureau, public information sources, and/or in-house experts. Few respondents considered consulting health and wellness professionals when developing trails. That group may be an untapped resource for assistance with universal design or ADA compliance.

Funding

Funding is a major trail development and maintenance issue. Respondents did not believe adequate funding was available for increasing trail systems or for

trails maintenance, particularly in small communities. Respondents did say there should be more trails and that trails would benefit their community economically. They also said trails would be an excellent way to connect residential communities with business districts, but cited the need for improvements to essential facilities (such as water treatment plants), which took precedence over funding new trails. Another barrier trail providers reported was grants apply specifically to new land purchases rather than to developing currently owned land.

Conclusions

Trail professionals believe trails are a tremendous benefit for users and the community in terms of economics, education, health and well-being. They agree that interconnected trails and an extensive trails system is essential to Indiana and would increase trail use. Although trail planners already use many resources, it may benefit them to enlarge their local resource pool by surveying the community, conducting community forums and requesting the assistance of



professionals from tangential fields.

The Indiana trails vision is having a trail accessible within 15 minutes or 7.5 miles of every citizen by 2016 (The Indiana State Trails, Greenways, and Bikeways Plan, 2006). Achieving the goal may require trail providers to work much more closely with communities, organizations and citizens at the grassroots level when determining the most comprehensive and user-friendly trail system for that specific population. If end users have significant input and perceive that their needs are being met, they will be more likely to accept ownership of the project and be involved in fund raising, development and future trail maintenance. Trail providers may need to use effective marketing strategies to make full use of community resources and build community involvement. In the face of strict budgets and limited external funds, expending the time and effort (cost) needed to integrate local community into the planning, implementation and preservation of a desirable trail system may be well worth it.

Bringing it together

It is all about recreation, getting away from the pressures of life and taking a moment to relax, enjoy and absorb the outdoors. Even in this world of high technology and responsibility to employer and family, Hoosiers believe in enjoying the natural environment in Indiana. They enjoy walking her trails, boating in her waterways, taking in the sights and sounds of fairs and festivals, and socializing with friends and family. Activities such as hunting and fishing that have bonded several generations are still highly important in our culture. While new activities, such as Frisbee golf, ORV driving and flying remote control airplanes continue to emerge.

Users and providers agree that there are not enough locations or opportunities. Equally important, there is not

enough funding to adequately expand them. During this time when health and well-being are at the forefront of our nation's mind, outdoor recreation offers an astounding array of opportunities to help Hoosiers improve their lifestyles and meet the initiatives set forth by State and federal governments. The ability to enhance opportunities is nevertheless stymied. But Hoosiers need not be held back or denied their wishes. Park and recreation professionals are working to find non-traditional ways to meet these needs. They are finding new, innovative ways to get funds, and partnering more with local organizations for facilities. Providers are scrutinizing ways to use what they already have to connect to other facilities and add enough new features to meet community needs. Communities are responding with donations and volunteerism. Citizens and professionals want to see outdoor recreation flourish. They see the economic, health, social and personal benefits outdoor recreation can provide and they are willing to give for the greater gain.

But the work has only begun. Even more collaborative efforts need to be made. Effective marketing and public relations will be essential in the future. Involving community members in decision-making and allowing them to take some ownership of the improvements may be an option for increasing money through donations, bequests, volunteerism and awareness. Teamwork and open communication will be an essential element in the future of outdoor recreation. The team players will look beyond park and recreation professionals to include experts from tangential fields as well as the end users. As park and recreation specialists become more adept at working within their community, the use of outdoor recreation facilities will flourish, the needs of both ends of the spectrum will be met, and the win-win situation will be an example for years to come.





CHAPTER 2

Comparing and Contrasting Themes and Trends

This chapter takes the survey data introduced in Chapter 1, provides an analysis to identify the trends, then converts those trends into statements of needs. The needs statements were used as a foundation for the Outdoor Recreation Priorities for Providers and Stakeholders in Indiana. Chapter 2 brings together information from all of the surveys to explore what Hoosiers really want for recreation and what managers face when trying to satisfy those desires.

Limitations of the Surveys

When a survey is used for the first time, the surveyors do not know whether the respondents will react to the questions, their order or the format in the manner the surveyors planned. Experienced survey administrators use various ways to minimize this problem; however, there is no fail-proof method. The Boater Survey was being used for the first time; therefore no previous results could be used to validate the quality and precision of the survey questions. The 2004 Outdoor Recreation Participation Study has been used for several SCORPs and does offer some ability to look at the results of the survey over time, but there were small to moderate changes in the wording of questions from one study to the next. If a survey question changes even slightly from one version to the next, it is more difficult to tell if changes in the survey results are from respondent changes or from variations in the way the question was asked. For example, a question may ask, "How many days did you walk in the past year?" If the question is altered to read "How many days did you briskly walk in the past year?" the responses from the same person could be extremely different.

The sample size of a survey helps determine whether the survey results accurately represent the larger population being assessed. If a survey does not gather enough complete, valid responses then it does not represent the larger population. Up to a point, the larger a survey's sample size is, the better it is at predicting what the responses might have been from the main population. The 2004 Recreation Issue Survey had a scientifically valid sample size of 182. The survey is representative but may not have "generalizability" to a larger population.

All surveys used in this SCORP were created separately; therefore, the survey question sets do not always work well together. For example, one public-based survey asks about public preferences for sources of funding for parks and recreation. Another may ask how willing respondents might be to pay a fee. These two questions do not allow for direct comparison of results.

What Sets Each of the Six Surveys Apart?

Each of the six surveys used in this SCORP had different goals, intent, audience, survey population and results. The following surveys were intended for the general public or specific user publics:

- 2003 Outdoor Recreation Participation Study
- 2004 Boaters Survey
- 2004 Designate Trails Survey
- 2005 National Survey of Recreation and the Environment (NSRE)

The NSRE survey was used as a reference tool. It was neither administered nor contracted by the DOR. Consequently its results differ from all the others in this SCORP. The NSRE asked only about demographics and activity participation, not about any motivations, barriers, or other preferences. The data in the NSRE were separated by demographic criteria, and



were, at best, an information source for questions about participation rates in the survey's 85 specific recreation activities. The other public-based surveys focused more on motivations and perceptions, demographics and recreation activity preferences (see Table 6).

The following two surveys were given to recreation professionals:

- 2004 Recreation Issues - Professional Survey
- 2004 Trails-Provider Survey

The surveys asked objective questions about facilities, budgets and program types. The 2004 Recreation Issues Survey asked professionals about priorities, capital projects, partnerships, issues, budget and programs. The 2004 Trails-Provider Survey asked trail professionals about their trail systems, trails use, land purchase, ADA compliance, planning, funding and trail development (see Table 6).

Common Themes

As outlined in the introduction, each survey was created separately using different questions to achieve different goals. Because of this, comparing results was difficult; however, a series of related themes and issues emerged from analysis of the results. The following section and Table 7 are cross-sections of a few of the common themes.

	Survey				
	Date(s)	Number	Methods	Respondents	Subjects
2003 Outdoor Recreation Participation Study Survey America	May 2003 – February 2004	6,686 (completed all questions)	Touch-screen survey centers	All residents	Recreation participation, specific activities, locations, barriers, funding preferences
2004 Indiana Boaters Survey Responsive Management	January – February 2004	1007 general population; 1001 registered boaters	Telephone	General public and registered boaters	Water-related participation, avidity, safety, DNR programs, access, expenditures
2004 Designate Trails Survey Survey America	June – Nov. 2004	1008 (completed all questions)	Touch-screen survey centers	All residents	Trail use, expenditures, types of use, motivations, barriers, issues, funding
2004 Recreation Issues - Providers Survey Ball State University	2002-2004	182	Qualitative analysis of 55 five-year master plans and statewide mail survey	Park and recreation professionals and stakeholders	Organizational demographics, internal programs and services, partnerships, capital, issues, budget
2004 Trails Issues Survey IDNR	2004	500	Mail survey	Trail managers, professionals or trail stakeholders	Organizational demographics, trails data & types, projects, cooperation, ADA
2005 NSRE*: Indiana Residents USDA Forest Service	1999 - 2005	400	Telephone	Residents aged 16 and over	Detailed demographics, outdoor recreation participation in 85 specific activities

Table 6. Survey methods

* NSRE = National Survey of Recreation and the Environment

Hoosiers like to walk

All of the public surveys dealing with land-based recreation asked a question like: "What is your preferred type of recreation?" Walking/jogging/running/hiking was the top response each time. The NSRE (2005) reports walking as "the single most popular (recreation) activity" and estimates that 176 million



	Barriers to recreation	Preferred recreation	Distance willing to travel	Accessibility issues
2003 Outdoor Recreation Participation Study Survey America	Too little time (52%)	Walking/hiking/jogging (84%)	16-60 minutes, maximum acceptable travel time (32%)	13% report a disability that interferes with participation in recreation
2004 Indiana Boaters Survey Responsive Management	No. 1, lack of interest No. 2, lack of time	Visiting an Indiana state reservoir	Travel less than 2 hours for day trips (87%) Of these, travel less than 1 hour (47%)	Old age, physical limitations consistently in top three reasons for non-participation
2004 Designate Trails Survey Survey America	Not enough time (64%)	Walking/running (72%)	Second most frequent reason for not using trails more often, "... too far away" (27%)	6% reported being disabled or asked for better access for users with disabilities
2004 Recreation Issues - Providers Survey Ball State	Third-highest concern, level of public participation	No. 1 planned facility renovation in the next five years, playgrounds (58%)	N/A	Priority populations: No. 3, senior citizens, No. 5, persons with disabilities
2004 Trails Issues Survey IDNR	N/A	Hiking (69%)	"Trails should be developed more for high-density populations ...", 37% disagreed, 18% no opinion, 30% agreed	66% agreed or strongly agreed trail developments or renovations must comply with latest accessibility standards
2005 NSRE*: Indiana Residents USDA Forest Service	N/A	Walking for pleasure (81%)	N/A	N/A

Table 7. Recurrent themes

* NSRE = National Survey of Recreation and the Environment

in the United States participate. Walking requires no specialized equipment, no unique facilities, no exceptional skills or training, has minimal expense, and can be either a solitary or group activity. Walking can be an activity for people of all ages, lifestyles and incomes; it can take place in the city or the country. People with mobility impairments, those who use wheelchairs, and those without

limitations can participate as long as the walking surfaces are accessible.

Hoosiers don't have much free time

When public survey respondents were asked "What are your reasons for not recreating more?", "lack of time" always ranked either 1st or 2nd. The 2003 Outdoor Recreation Participation Survey asked respondents for the "... MAIN reason you do not have time to participate in outdoor recreation activities more often." "My job demands too much time" was the top answer by a margin of more than 25% (Survey America, 2003). The "lack of time" response was echoed from the recreation professionals surveyed in the 2004 Trail Issues Survey. The recreation professionals rated "level of public participation" at their facilities as their 3rd highest concern;

if users have no time to recreate, then recreation professionals are not going to see as many users at their facilities.

Hoosiers like to recreate close to home

Asked how long they were willing to travel to participate in outdoor recreation, people strongly indicated that they



wanted to recreate fairly close to home. For example, in the 2003 Outdoor Recreation Participation Survey, respondents said that 16 minutes to an hour was the "maximum acceptable travel time" (Survey America, 2003). It is possible that this desire to have recreational opportunities a short distance from home may be related to respondents' lack of free time for recreation; less distance traveled equals less time spent traveling. Respondents to the 2004 Indiana Boaters Survey also indicated that they do not want to travel far from home to recreate. Eighty-seven percent said they like to travel less than two hours for day trips, 47% of those respondents actually travel less than one hour.

Hoosiers consider disabilities both a challenge and a priority

All surveys except the NSRE asked questions that involved the Americans with Disabilities Act (ADA). Two surveys reported that some respondents had disabilities that interfered in some way with their participation in recreation. The 2003 Outdoor Recreation Participation Study reported that 13% of respondents had a disability that interfered with their recreation (Survey America, 2003). This percentage reflects the U.S. Census Bureau 2005 estimate that 13.6% of the U.S. population, 21 to 64 years old, has a disability (U.S. Census Bureau, 2006). The 2004 Indiana Boaters Survey indicated that "old age/physical limitations" were consistently in the top three reasons why respondents did not participate in boating-related activities (Responsive Management, 2004). In several surveys, recreation professionals agreed that ADA compliance was a high priority for their organizations and that people with disabilities as a user group had a high priority. In the 2004 Recreation Issues Survey, respondents ranked their priority publics as 1) youth, 2) all citizens/we do not target, 3) senior citizens, 4) families, and 5) persons with disabilities. In the 2004 Trails Issues Survey, 66% of respondents agreed or strongly agreed that trail developments or renovations must follow the latest ADA accessibility standards. The surveys indicate that accessibility in Indiana is an important priority for recreation professionals, as well as an area that could be improved.

Other Common Themes or Trends *Participant trends*

- Outdoor recreation continued to be very popular with all demographics of Indiana residents.
- The aging of the baby boomer generation did not slow down its use of recreation facilities or programs.



- Lack of mobility or other kinds of disability did not prevent people from recreating if appropriate opportunities and facilities were available.
- The amount of recreation for many respondents was limited by lack of free time.
- Many people surveyed were not willing to travel far to participate in recreation activities; most stayed within an hour's drive of home.

It was clear from the survey data that all types of recreation were popular with Hoosiers, and that the demand for facilities and services was greater than ever. An aging national population has not decreased that group's overall use of recreation facilities and programs, but they may be changing the kind of service they prefer. For example, older segments of the surveys' populations tended to participate more in passive activities than active pursuits, such as walking or biking compared to volleyball or racquetball.

With advances in technology and facility design, more people with disabilities can participate in recreation activities. Participation rates for people with disabilities were almost as high as for those who did not report being disabled.

The pace of modern life seems to speed up each year. This was reflected in respondents' perceived lack of time for recreation and leisure. They said they had to fit these activities into lives filled with jobs, family obligations, money issues and social obligations. An article about stress and exercise in The Hudson Valley Business Journal quoted Dr. Kenneth Glatt, commissioner, Dutchess County (New York) Department of Mental Hygiene, as saying "People are experiencing more stress than ever as society has become more fast-paced." (Darcy, 2000).

Participants made it clear that they do not travel far to participate in recreation; many travel only one or two hours driving distance to participate in their favor-





ite activities. Factors affecting preferred driving distance may include changing fuel prices, perceived lack of time, type of recreation facility available, and location of the person surveyed.

Activity trends

- Walking, jogging, running or hiking for pleasure was the most popular outdoor recreation activity.
- Recreation activities that do not require great cost, complicated equipment, lots of training, or specialized facilities were the most popular.
- Recreation activities that can be social were as popular as individual pursuits.

A majority of respondents reported walking, jogging, running or hiking for pleasure as one of their favorite recreation activities. Walking is just one example of the many top recreation activities that are relatively simple. At least half of the most popular recreation activities reported are, or can be, social in nature. Spouses, children, friends and extended family were the preferred partners.

- Some of the most popular activities were not necessarily traditional parks and recreation department activities.

Local parks and recreation departments are commonly known for providing activities such as swimming, softball leagues and youth soccer. Respondents frequently reported participating in less traditional activities such as attending fairs or festivals, gardening, nature observation/photography and sightseeing.

Facility or program trends

- Tight budgets resulted in park professionals eliminating capital projects, deferring vital maintenance and laying off or not hiring needed workers.
- Use of many recreation facilities and

programs was increasing.

- Health and wellness issues were being increasingly tied to recreation.

Professionals reported their most common responses to budget cuts were elimination of capital projects, deferred maintenance and renovations, and reduced staffing. The NSRE and other surveys indicate that recreation facility and program use is increasing. A growing body of research indicates that increased personal use of active recreation opportunities may improve overall health and decrease the likelihood or impact of long-term chronic medical conditions such as obesity or diabetes (U.S. Surgeon General, 1996; Orsega-Smith, Payne, and Godbey, 2003).

Funding, budget, land, and staff

Funding issues, budget concerns, land acquisition and staffing were also com-





mon themes in the surveys.

- The 2004 Recreation Issues Survey contained a set of ranked issues based on open-ended questions from the survey. The top three issues were: 1) budget/funding, 2) land acquisitions, and 3) personnel (Ball State Univ., 2004).
- According to the 2004 Designate Trails Survey, acquiring more land for trails was rated "very important" or "somewhat important" by over 53% of those surveyed (Survey America, 2004).
- The 2003 SCORP Outdoor Recreation Participation Survey asked: "If the public sector (government) is to raise money for the development or improvement of outdoor recreation facilities, how should they do it?" Less than 2% of respondents answered "no more money needed" (Survey America, 2003).
- Concerning staffing, a registered Indiana boater made this comment in the 2004 Boaters Survey: "I think the conservation officers that I do see do a great job ..." (Responsive Management, 2004)
- Another registered Indiana boater made this comment: "Resources are stretched thin, and it is an absolute travesty that more funds cannot be allocated to such a vital resource" (Responsive Management, 2004).
- The 2003 Outdoor Recreation Participation Survey asked about participating with others. More than 50% of respondents said they participated with friends and 42% with their spouse. Thirty-nine percent of respondents participated with their children.
- The 2004 Boaters Survey asked registered boaters several questions about participating with other people. Fifty-two percent of respondents said they

participated with their spouses.

Forty-eight percent participated

with their children and 42%

participated with their friends.

Extended family was the 4th highest

choice at 26%. Being with friends

and family was the 3rd most

important reason (13%) why people

boated in Indiana. The survey also

reported that 54% of those

surveyed take two and four people

with them when boating (Responsive

Management, 2004).

- The National Survey on Recreation and the Environment (2004) asked about activity use and then analyzed it against demographics information. This comparison showed that the segment of the Hoosier population between ages 55 and 64 had a high rate of participation in "walking for pleasure" (81%), "gardening or landscaping" (85%), and "family gatherings" (65%). This same population segment did not participate much in activities like "water skiing" (1.5%), "orienteering" (0%), and "horseback riding on trails" (3%). Older Hoosiers were participating in recreation as much as the younger age groups, but in different activities.

Some Contrasting Themes

As stated earlier, the surveys for this SCORP differ significantly. The public surveys included questions concerning people's opinions, motivations and preferences; the surveys of professionals did not. The surveys administered to professionals were more objective and did not address personal feelings, needs, desires or motivations (See Table 8).

A contrast was seen between the high number of people who like to walk, run, jog or hike and the lack of budget for most trail providers. "Small rural communities across Indiana typically do



not have the funding to even consider any kind of coordinated trail development ..." was a comment from the Trails Issues Survey (2004). Budget was a limiting factor for recreation professionals in several of the surveys. If no funding to pay for capital projects exists, then community needs may remain unsatisfied.

Professionals indicated struggling between paying for capital projects and funding facility maintenance. "Due to budget cuts and a relatively small community, (Town X) has very little available funds for trail maintenance or improvements. While still functional, improvements would greatly enhance community interests and usage" (Trails Issues Survey, 2004). Another respondent said "Our town of 513 residents has incorporated a walking/running trail in their five-year plan for the town park. But at this time, our water and wastewater systems are our top priorities." Tight budgets force some professionals to choose between caring for their properties and responding to community needs. Lack of funding

can also affect other areas of a park and recreation system, including ADA compliance, marketing and public relations, and following current facility and programming trends.

	Funding sources	Facilities maintenance/ renovation	Construction/ capital projects	Survey intent
2003 Outdoor Recreation Participation Survey Survey America	No. 1, lottery/ gaming proceeds (27%)	N/A	No. 2, use of facility, fairs and festivals	Determine types, location, frequency of activities
2004 Indiana Boaters Survey Responsive Management	From additional comments: "DNR undercharges ... compared to other states."	Spend slightly more ... rebuilding, maintaining existing boat ramps (GPB*, 57%)	GPB*, spend same amount of effort increasing boating access on rivers ...	Analyze and compare GPB* vs. RB** activities, motivations, barriers
2004 Designate Trails Survey Survey America	No. 1, general taxes (25.6%) No. 2, donations (25.2%)	N/A	57% indicated building more trails was somewhat important or very important	Identify trail use, frequency, location of use, expenditures
2004 Recreation Issues - Providers Survey Ball State University	Indicated a trend to provide more "alternative" funding sources	No. 1, playgrounds; No. 2, parking lots	5-year projects: No. 1, playgrounds No. 2, multi-use trails	Identify providers' priorities: capital projects, partnerships, issues, budget, programs
2004 Trails Issues Survey IDNR	75% agree or strongly agree "there should be State tax incentives to citizens and public utilities for ... land acquisition"	89% agree or strongly agree "roadway ... bike/pedestrian improvements are important"	Trail development rated higher in importance than other facilities by an 8.6% margin	Identify providers' challenges concerning use, land acquisition, ADA, planning, funding, and development

Table 8. Contrasting themes from user and provider surveys

*General Population Boaters, ** Registered Boaters

Note: The 2005 National Survey of Recreation and the Environment is not included in Table 8 because funding, maintenance and renovation, and capital projects were not included in its scope.



Needs Analysis

The following section overviews the needs that were identified through the comparing and contrasting of the surveys.

Facility or program

- Add, expand or improve facilities such as trails, urban greenways or walking paths for safe use by walkers, joggers or runners.
- Add non-traditional recreation activities into programming and site design at the State and local level, from passive activities to extreme sports.
- Factor in life-cycle costs when planning new facilities; include everything from planning to facility removal. Set aside funds in advance.
- Consider more local options for providing recreation services; changing fuel costs and lack of recreation time may encourage residents to use local facilities and programs.
- Create a sense of community ownership by bringing together local users; encourage partnerships to provide better service.

The overwhelming number of respondents who preferred linear activities indicates that there is strong public support for more facilities such as trails, urban greenways or walking paths. Innovative thinking may help recreation professionals create new opportunities in their area. Fresh, trendy activities may attract new users to parks, trails and other attractions. Some popular recreation activities identified by the NSRE, but not specifically included in the other surveys, were not commonly offered by most park and recreation organizations. These included orienteering, rock climbing and attending outdoor sporting events (NSRE 2005).

Special populations

- Increase use of universal design principles at the State and local levels to better serve people with disabilities or limitations.
- Provide more appropriate activities and facilities for our aging population; physical limitations and economic access will be a concern.

The surveys showed that many Hoosiers consider meeting ADA guidelines to be a priority for Indiana parks and recreation. A significant number of respondents said there are still some accessibility challenges in parks and recreation. Universal design elevates accessibility and allows people with disabilities or limitations to more fully participate in their chosen recreational activities. Additionally, input from users with disabilities might ease identification of accessibility solutions in recreation facilities or programs.

As the baby boomer generation enters retirement, its recreation preferences will likely change. Older Hoosiers who are on a fixed income or have limited mobility are likely to use recreation activities that better fit their lifestyle. Recreation facility and program managers may wish to monitor the age demographics of their users to ensure faster adaptation to these shifts.

Health or quality of life

- Plan for recreation facilities and programs that encourage social group use like family picnic areas, large group interpretive areas or broad walking paths.
- Partner with local health and wellness organizations when planning new facilities or programs.

The SCORP surveys' results indicated a definite trend toward recreation activities that have a social component. Effective planning could meet this desire with the proper facilities.

The connections between health, well-



being and physical activity are well documented and strongly supported by scientific research. Creating partnerships with local health and wellness organizations would benefit park and recreation planners. By partnering with outside health and wellness experts, park and recreation professionals could share ideas concerning (1) enhancing overall community design, (2) improving facility designs for better access, (3) improving opportunities for exercise and fitness, (4) forming partnerships to foster wellness. Health professionals encourage their publics to be more active; more active people can save money on health-care costs (Pratt, Macera and Wang, 2000). If recreation professionals can provide better means for the publics to be more active, everyone wins.

Funding or budget

- Explore alternative funding sources

for the State and local levels to offset shrinking budgets and the growing public use of recreation.

- Provide consistent funding for renovation and planned maintenance of facilities.
- Use the economic, social, health, aesthetic, quality of life, and other benefits of parks and recreation as selling points for grant applications.

Survey respondents supported many kinds of funding, including alternative sources such as lottery/gaming proceeds and donations. Fund raising, endowments, grants, bequests, in-kind donations and volunteers offer potential funding alternatives to cash-strapped park and recreation organizations.

Both the professional and public respondents emphasized the importance of maintenance for recreation facilities and equipment. Preventive maintenance is especially effective in providing cost



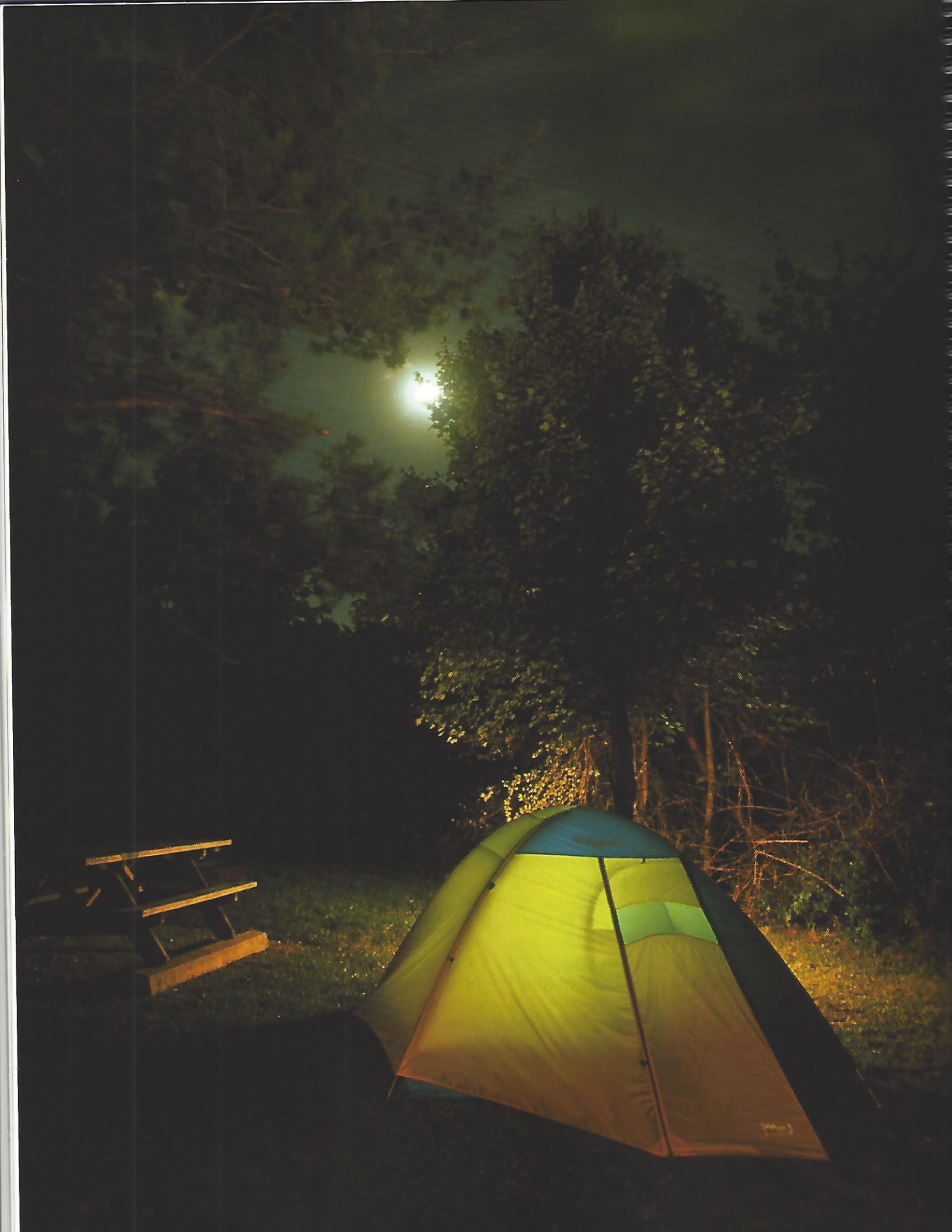
savings to facility managers. For example, repairing a damaged roof is much less expensive than replacing the roof and repairing damages to the interior of the building. Showing the long-term cost savings possible in preventive facility maintenance often helps convince budget authorities to provide consistent, permanent funding.

A great deal of research that emphasizes the benefits of parks and recreation is available for recreation professionals and supporters. Using this material to promote parks and recreation to potential funding sources, donors, volunteers and grant providers can be effective.

Some Web sites that offer high quality information are:

- <http://www.nrpa.org/content/default.aspx?documentId=3749>
- <http://www.americantrails.org/resources/benefits/HealthGrnwy.html>

- <http://www.nrpa.org/content/default.aspx?documentId=3743>
- <http://www.nrpa.org/content/default.aspx?documentId=3634>
- <http://www.nrpa.org/content/default.aspx?documentId=3640>
- <http://www.lib.niu.edu/ipo/1999/ip990539.html>
- <http://www.nysrps.org/benefits.shtml>
- <http://ipra.blogspot.com/2006/06/top-10-parks-recreation-values.html>
- http://www.tpl.org/content_documents/tx_HGBenefits.pdf#search=%22Benefits%20of%20Parks%20and%20Recreation%20National%22
- <http://www.americantrails.org/resources/economics/GreenwaySumEcon.html>





CHAPTER 3

Outdoor Recreation Supply

The previous two chapters discussed demand for outdoor recreation opportunities in Indiana. The surveys were the instruments used to assess what people were doing, where they were active, their perceptions of their experiences, and further needs that should be met. The surveys also addressed the needs, supplies and issues from the perspective of outdoor recreation providers.

This chapter addresses the supply of outdoor recreation acreage in Indiana. There are national benchmark standards that we have used as the baseline for our assessments. We have also used State recommendations (as defined in this chapter). The Division of Outdoor Recreation maintains a facilities inventory database to help determine the status of supply in Indiana. We compare the inventory against the standards to help set the priorities for our State.

Recreation, Parks and Open Space Guidelines

In 1983 the National Recreation and Park Association (NRPA) published a classification system and recommendations for park acreages per 1,000 people within each of those systems. The basic guidelines are

- Mini-Park: Service area < ¼ mile radius, 1 acre or less, ¼ to ½ acres/1,000 population
- Neighborhood Park/Playground: Service area ¼ to ½ mile radius with population up to 5,000, 15-plus acres, 1.0 to 2.0 acres/1,000 population
- Community Park: Service area 1 to 2 mile radius (several neighborhoods), 25-plus acres, 5.0 to 8.0 acres/1,000 population
- Regional/Metropolitan Park: Service area one hour driving time (several

communities), 200-plus acres, 5.0 to 10.0 acres/1,000 population

- Regional Park Reserve: Service area 1 hour driving time (several communities, 1,000-plus acres (80% of land reserved for natural resources management and conservation, 20% for recreational development), Variable acres/1,000 population
- Linear Park, Special Use Areas, and Conservancy Areas: No applicable standards

(Lancaster [Ed.], National Recreation and Park Association, 1983)

The NRPA guidelines have remained the golden standard for baseline recommendations. NRPA has always said that the recommendations should guide outdoor recreation planning and should remain flexible. In 1996 the NRPA began to shift away from this population ratio method to a level-of-service system of recommendations. Level-of-service (LOS) is a strategic planning process that considers the demand for recreation opportunities within the community, current resources available, and opinions and views of the population. We rely more heavily on the use of an LOS system to assess the outdoor recreation needs in Indiana; we also refer back to the 1983 guidelines.

The surveys presented in this SCORP are the major means of assessing the demand for outdoor recreation in Indiana. Trends are also assessed by comparing the current survey responses to those from previous surveys. Changes or lack of changes in trends give a good idea of which outdoor recreation activities will remain consistent for extended periods of time and which are fads or have small user populations. For example, walking, hiking and jogging have remained the top outdoor recreation activities for the past three SCORPs (i.e., 15 years); remote control devices have never been in the top 10 respondent activities (see Table 9). This is not meant to imply that activities that ranked lower on the partici-



1979	1989	1995	2000	2005
Picnicking	Picnicking	Hiking/walking/ jogging	Hiking/walking/ jogging	Hiking/walking/ jogging
Fishing	Pleasure driving	Picnicking	Fairs/festivals	Fairs/festivals
Swimming	Walking	Swimming	Fishing	Swimming/SCUBA/ snorkeling
Hiking	Swimming	Camping	Camping	Nature observation/ photography
Biking	Fishing	Fishing/hunting	Picnicking	Camping
Play fields	Bicycling	Biking	Swimming/SCUBA/ snorkeling	Fishing
Camping	Camping	Boating	Nature observation/ photography	Picnicking
Boating	Nature observation	Nature observation	Playground use	Bicycling
Playgrounds	Motor boating	Playground use	Bicycling	Motorized vehicle use
	Golf		Boating/ water skiing/ personal watercraft	Boating/ water skiing/ personal watercraft
				Court sports

Table 9. Activity trends in Indiana, top 10 ranked in order
(Outdoor Recreation Participation Surveys, 1979-2003)

pation survey scale are not important and should not be considered. It may be that a community has a very active user group (e.g., a remote control airplane club) that would be an excellent partner in resource development. The needs of such a group should be addressed. However, the most popular trends tend to have the highest user population, which typically translates into the greatest supply of resources.

Facilities Inventory

The Division of Outdoor Recreation maintains a facilities inventory database that reflects the current supply of outdoor recreation opportunities in the State. The inventory is updated regularly through on-site inspections, self-report data from municipalities, and public information (e.g., State school directories). The Indiana Facilities Inventory includes recreational facilities owned and man-

aged by both public and private sectors. The inventory can be divided by area type: private, commercial, public, municipal, township, county, state, federal and school corporation.

By comparing demands for outdoor recreation opportunities and the supplies currently available, the Division of Outdoor Recreation is able to determine standards for acres per 1,000 people for Indiana. Standards currently in place are:

- Counties: 20 acres per 1,000 people (0.02 acre per person) of public local recreation acres (i.e., owned by township, municipal, county, and privately owned but open for public use)
- Indiana Regions: 35 acres per 1,000 people (0.035 acre per person) of public regional recreation acres (i.e., owned by State or federal entities)
- State: 55 acres per 1,000 people (0.055 acre per person) of public



recreation acres (i.e., a total of all acres in the above categories)

These standards are presented a bit differently than the NRPA standards; they are presented by geographic location (i.e., county, Indiana region, or State) versus by type of park system. Determination of acreage amounts is based on publicly owned lands; therefore, it excludes private (not open for public use) and commercial acreages. School corporation acreage has also been excluded because we do not have a complete and current assessment of schools that allow public use of their properties versus those that do not. Inclusion of school properties could skew the data and under-represent or over-represent outdoor recreation facilities by a substantial margin.

We also assess supply of local, regional and total acres at the county and Indiana region levels to help determine areas with the highest need. To determine the neediest counties, we include the population growth (compared to the State average population growth) and the most recent inventory of total recreation acres available within the county.

Local Outdoor Recreation Supply – Township, Municipal, County, and Privately owned but open for public use

The NRPA/Indiana standard of 20 acres of local public outdoor recreation opportunities per 1,000 people is used to determine which areas have an adequate supply or a deficit of smaller scale outdoor recreation acres (e.g., city or municipal parks rather than state parks).

County Level

Assessing local outdoor recreation acres at the county level may be the best way to identify counties that need more assistance in improving their outdoor recreation supply. Some of these counties may need additional funding, advocacy, organization,

or community resources, or there may be an abundance of State or federally owned properties in the county leading citizens to believe that local outdoor recreation is not a priority. Whatever the reason, data analysis indicates that an overwhelming number of counties lack local outdoor recreation acreage.

Table 10 shows that 22 of Indiana's 92 counties have an adequate supply of local outdoor recreation acres. Column 6 of Table 10 (Difference-Local Acres) indicates the acres greater than (positive number) or less than (negative number) the recommendations. For example, the recommendation for Adams County, with a population of 33,849 people, is 677 acres of local recreation opportunity; however, Adams has 312 acres, a deficit of 365 acres.

Indiana Region Level

The State was divided into 15 planning regions in the late 1960s or early 1970s through the Indiana Department of Planning. Three of the regions (1, 3, and 13) were subdivided into two sections (A and B). Although many of the original regional planning commissions no longer exist, the DOR maintains the regional boundaries for our purposes. This helps to assess trends, developments and losses through time. It also allows for easier study and assessment of supply and demand. See Appendix F for a complete list of counties within each region.

The State is also divided into three major regions based on its physiography (physical description of Earth's surface). These major regions include:

- The Northern Lake and Moraine region
- The Central Drift region
- The Southern Upland and Lowland region



Indiana county - local acres					
Number	Name	PPN 2005*	Recommended		Difference
			20 a/1000	Current	
1	Adams	33,849.00	676.98	312.00	(364.98)
2	Allen	344,006.00	6,880.12	4,691.23	(2188.89)
3	Bartholomew	73,540.00	1,470.80	1,236.00	(234.80)
4	Benton	9,039.00	180.78	57.00	(123.78)
5	Blackford	13,849.00	276.98	91.00	(185.98)
6	Boone	52,061.00	1,041.22	597.55	(443.67)
7	Brown	15,154.00	303.08	76.00	(227.08)
8	Carroll	20,426.00	408.52	119.50	(289.02)
9	Cass	40,130.00	802.60	900.57	97.97
10	Clark	101,592.00	2,031.84	779.20	(1252.64)
11	Clay	27,142.00	542.84	284.00	(258.84)
12	Clinton	34,091.00	681.82	242.00	(439.82)
13	Crawford	11,216.00	224.32	33.00	(191.32)
14	Daviess	30,466.00	609.32	1,070.51	461.19
15	Dearborn	49,082.00	981.64	375.00	(606.64)
16	Decatur	25,184.00	503.68	235.34	(268.34)
17	Dekalb	41,659.00	833.18	285.00	(548.18)
18	Delaware	116,362.00	2,327.24	498.11	(1829.13)
19	Dubois	40,858.00	817.16	1,306.00	488.84
20	Elkhart	195,362.00	3,907.24	3,240.45	(666.79)
21	Fayette	24,885.00	497.70	112.00	(385.70)
22	Floyd	71,997.00	1,439.94	675.00	(764.94)
23	Fountain	17,462.00	349.24	432.50	83.26
24	Franklin	23,085.00	461.70	312.00	(149.70)
25	Fulton	20,665.00	413.30	306.70	(106.60)
26	Gibson	33,408.00	668.16	370.00	(298.16)
27	Grant	70,557.00	1,411.14	338.57	(1072.57)
28	Greene	33,479.00	669.58	680.00	10.42
29	Hamilton	240,685.00	4,813.70	2,911.93	(1901.77)
30	Hancock	63,138.00	1,262.76	297.20	(965.56)
31	Harrison	36,827.00	736.54	867.13	130.59
32	Hendricks	127,483.00	2,549.66	1,112.73	(1436.93)
33	Henry	47,244.00	944.88	1,334.00	389.12
34	Howard	84,977.00	1,699.54	415.91	(1283.63)
35	Huntington	38,236.00	764.72	322.13	(442.59)
36	Jackson	42,237.00	844.74	269.65	(575.09)
37	Jasper	31,876.00	637.52	189.49	(448.03)
38	Jay	21,606.00	432.12	237.10	(195.02)
39	Jefferson	32,430.00	648.60	309.00	(339.60)
40	Jennings	28,427.00	568.54	343.10	(225.44)
41	Johnson	128,436.00	2,568.72	1,056.50	(1512.22)
42	Knox	38,366.00	767.32	787.25	19.93
43	Kosciusko	76,072.00	1,521.44	406.95	(1114.49)
44	LaGrange	36,875.00	737.50	711.50	(26.00)
45	Lake	493,297.00	9,865.94	10,637.39	771.45

Table 10: County recreation acres-local
 *Population, U.S. Census Bureau, 2005



Indiana county - local acres					
Recommended					
Number	Name	PPN 2005*	20 a/1000	Current	Difference
46	LaPorte	110,512.00	2,210.24	2,150.20	(60.04)
47	Lawrence	46,403.00	928.06	857.00	(71.06)
48	Madison	130,412.00	2,608.24	1,283.06	(1325.18)
49	Marion	863,133.00	17,262.66	10,986.74	(6275.92)
50	Marshall	46,945.00	938.90	323.25	(615.65)
51	Martin	10,386.00	207.72	1,171.03	963.31
52	Miami	35,620.00	712.40	261.85	(450.55)
53	Monroe	121,407.00	2,428.14	4,610.59	2182.45
54	Montgomery	38,239.00	764.78	907.08	142.30
55	Morgan	69,778.00	1,395.56	289.00	(1106.56)
56	Newton	14,456.00	289.12	115.00	(174.12)
57	Noble	47,448.00	948.96	808.60	(140.36)
58	Ohio	5,874.00	117.48	55.00	(62.48)
59	Orange	19,770.00	395.40	434.00	38.60
60	Owen	22,823.00	456.46	68.90	(387.56)
61	Parke	17,362.00	347.24	657.00	309.76
62	Perry	19,032.00	380.64	152.30	(228.34)
63	Pike	12,766.00	255.32	469.28	213.96
64	Porter	157,772.00	3,155.44	1,820.60	(1334.84)
65	Posey	26,852.00	537.04	218.81	(318.23)
66	Pulaski	13,783.00	275.66	78.50	(197.16)
67	Putnam	36,957.00	739.14	98.00	(641.14)
68	Randolph	26,684.00	533.68	533.83	0.15
69	Ripley	27,710.00	554.20	596.09	41.89
70	Rush	17,823.00	356.46	34.25	(322.21)
71	St. Joseph	266,160.00	5,323.20	500.33	(4822.87)
72	Scott	23,820.00	476.40	3,779.49	3303.09
73	Shelby	43,766.00	875.32	69.20	(806.12)
74	Spencer	20,528.00	410.56	186.08	(224.48)
75	Starke	22,933.00	458.66	211.50	(247.16)
76	Steuben	33,773.00	675.46	602.03	(73.43)
77	Sullivan	21,763.00	435.26	2,109.00	1673.74
78	Switzerland	9,718.00	194.36	70.00	(124.36)
79	Tippecanoe	153,875.00	3,077.50	2,765.72	(311.78)
80	Tipton	16,385.00	327.70	181.57	(146.13)
81	Union	7,208.00	144.16	12.00	(132.16)
82	Vanderburgh	173,187.00	3,463.74	3,171.31	(292.43)
83	Vermillion	16,562.00	331.24	179.90	(151.34)
84	Vigo	102,592.00	2,051.84	2,252.33	200.49
85	Wabash	33,843.00	676.86	179.50	(497.36)
86	Warren	8,785.00	175.70	46.50	(129.20)
87	Warrick	56,362.00	1,127.24	2,052.59	925.35
88	Washington	27,885.00	557.70	968.87	411.17
89	Wayne	69,192.00	1,383.84	1,233.53	(150.31)
90	Wells	28,085.00	561.70	176.03	(385.67)
91	White	24,463.00	489.26	126.00	(363.26)
92	Whitley	32,323.00	646.46	309.50	(336.96)

Table 10, continued

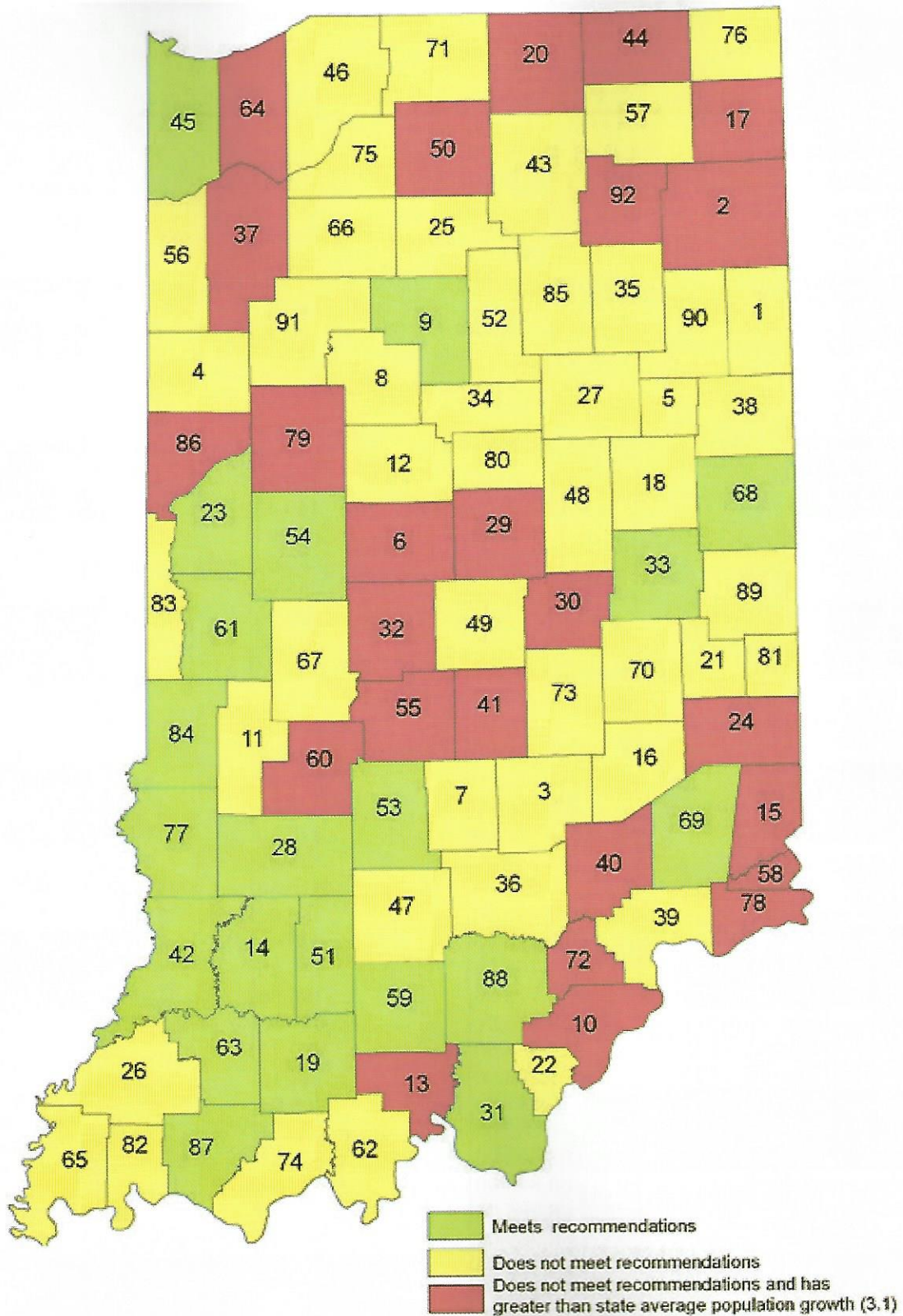


Figure 7. County outdoor recreation – local Recommendation – 20 acres/1000 persons



Indiana region - local acres				
Region	PPN 2005*	Recommended 20 a/ 1000	Current	Difference
1A	761,581.00	15,231.62	14,608.19	(623.43)
1B	107,511.00	2,150.22	720.49	(1,429.73)
2	584,539.00	11,690.78	7,750.14	(3,940.64)
3A	188,655.00	3,773.10	2,753.76	(1,019.34)
3B	447,599.00	8,951.98	5,464.26	(3,487.72)
4	281,917.00	5,638.34	4,570.30	(1,068.04)
5	231,620.00	4,632.40	2,246.10	(2,386.30)
6	426,714.00	8,534.28	4,315.67	(4,218.61)
7	222,378.00	4,447.56	5,580.23	1,132.67
8	1,588,480.00	31,769.60	17,437.73	(14,331.87)
9	119,108.00	2,382.16	1,391.78	(990.38)
10	144,230.00	2,884.60	4,679.49	1,794.89
11	156,115.00	3,122.30	1,816.99	(1,305.31)
12	176,326.00	3,526.52	2,060.19	(1,466.33)
13A	159,100.00	3,182.00	4,565.79	1,383.79
13B	289,809.00	5,796.18	5,812.71	16.53
14	262,121.00	5,242.42	3,359.40	(1,883.02)
15	124,170.00	2,483.40	2,894.91	411.51

Table 11. Indiana region outdoor recreation acres-local
*Population, U.S. Census Bureau, 2005

Each of the 15 planning regions has similar topographical elements that help divide them into areas more suited for traditional outdoor recreation activities and sites or areas that may require non-traditional, more innovative ideas. Currently, 13 regions do not have an adequate supply of local outdoor recreation acres (See Table 11).

State Level

With such a deficit of local outdoor recreation acres at both the county and regional level, it follows that the State as a whole does not meet NRPA/Indiana recommendations of 20 acres per 1,000 people. The

State has a total population of 6,271,973 people and a current total of 92,028 local recreation acres. NRPA/Indiana recommends a total of 125,439 local recreation acres; therefore, Indiana is 33,411 acres below recommended acreage for local outdoor recreation opportunities.

Regional Outdoor Recreation Supply – State and Federal

In this section "Indiana region" refers to geographic location within the State (e.g., Region 1A) and "region or regional outdoor recreation" refers to supply of recreation opportunities (i.e., State or federally owned properties).



Indiana county - regional acres					
Number	Name	PPN 2005*	Recommended 35 a/ 1000	Current	Difference
1	Adams	33,849.00	1,184.72	547.42	(637.30)
2	Allen	344,006.00	12,040.21	2.50	(12,037.71)
3	Bartholomew	73,540.00	2,573.90	881.85	(1,692.05)
4	Benton	9,039.00	316.37	1,715.00	1,398.64
5	Blackford	13,849.00	484.72	0.00	(484.72)
6	Boone	52,061.00	1,822.14	28.38	(1,793.76)
7	Brown	15,154.00	530.39	67,950.30	67,419.91
8	Carroll	20,426.00	714.91	269.37	(445.54)
9	Cass	40,130.00	1,404.55	2.00	(1,402.55)
10	Clark	101,592.00	3,555.72	28,998.24	25,442.52
11	Clay	27,142.00	949.97	2,652.32	1,702.35
12	Clinton	34,091.00	1,193.19	30.79	(1,162.39)
13	Crawford	11,216.00	392.56	43,734.05	43,341.49
14	Daviess	30,466.00	1,066.31	8,150.33	7,084.02
15	Dearborn	49,082.00	1,717.87	47.20	(1,670.67)
16	Decatur	25,184.00	881.44	36.08	(845.36)
17	Dekalb	41,659.00	1,458.07	9.40	(1,448.67)
18	Delaware	116,362.00	4,072.67	0.00	(4,072.67)
19	Dubois	40,858.00	1,430.03	14,204.38	12,774.35
20	Elkhart	195,362.00	6,837.67	444.95	(6,392.72)
21	Fayette	24,885.00	870.98	108.00	(762.98)
22	Floyd	71,997.00	2,519.90	2,068.32	(451.58)
23	Fountain	17,462.00	611.17	575.24	(35.93)
24	Franklin	23,085.00	807.98	9,640.96	8,832.98
25	Fulton	20,665.00	723.28	1,613.44	890.17
26	Gibson	33,408.00	1,169.28	3,194.10	2,024.82
27	Grant	70,557.00	2,469.50	1,619.00	(850.50)
28	Greene	33,479.00	1,171.77	8,455.78	7,284.02
29	Hamilton	240,685.00	8,423.98	1.00	(8,422.98)
30	Hancock	63,138.00	2,209.83	40.00	(2,169.83)
31	Harrison	36,827.00	1,288.95	15,441.73	14,152.79
32	Hendricks	127,483.00	4,461.91	0.00	(4,461.91)
33	Henry	47,244.00	1,653.54	3,784.54	2,131.00
34	Howard	84,977.00	2,974.20	80.00	(2,894.20)
35	Huntington	38,236.00	1,338.26	16,923.89	15,585.63
36	Jackson	42,237.00	1,478.30	35,489.73	34,011.44
37	Jasper	31,876.00	1,115.66	6,287.49	5,171.83
38	Jay	21,606.00	756.21	482.28	(273.93)
39	Jefferson	32,430.00	1,135.05	24,382.26	23,247.21
40	Jennings	28,427.00	994.95	18,156.24	17,161.30
41	Johnson	128,436.00	4,495.26	5,755.71	1,260.45
42	Knox	38,366.00	1,342.81	418.52	(924.29)
43	Kosciusko	76,072.00	2,662.52	3,877.03	1,214.51
44	LaGrange	36,875.00	1,290.63	9,907.91	8,617.29
45	Lake	493,297.00	17,265.40	5,937.39	(11,328.00)

Table 12. County outdoor recreation acres-regional
*Population, U.S. Census Bureau, 2005



Indiana county - regional acres					
Number	Name	PPN 2005*	Recommended 35 a/ 1000	Current	Difference
46	LaPorte	110,512.00	3,867.92	11,788.83	7,920.91
47	Lawrence	46,403.00	1,624.11	17,631.12	16,007.02
48	Madison	130,412.00	4,564.42	303.69	(4,260.73)
49	Marion	863,133.00	30,209.66	2,533.54	(27,676.12)
50	Marshall	46,945.00	1,643.08	1,124.85	(518.23)
51	Martin	10,386.00	363.51	79,769.13	79,405.62
52	Miami	35,620.00	1,246.70	6,441.68	5,194.98
53	Monroe	121,407.00	4,249.25	69,111.49	64,862.24
54	Montgomery	38,239.00	1,338.37	2,450.30	1,111.94
55	Morgan	69,778.00	2,442.23	6,851.76	4,409.53
56	Newton	14,456.00	505.96	14,206.46	13,700.50
57	Noble	47,448.00	1,660.68	4,883.50	3,222.82
58	Ohio	5,874.00	205.59	22.29	(183.30)
59	Orange	19,770.00	691.95	51,011.02	50,319.07
60	Owen	22,823.00	798.81	12,315.31	11,516.51
61	Parke	17,362.00	607.67	7,827.62	7,219.95
62	Perry	19,032.00	666.12	70,900.42	70,234.30
63	Pike	12,766.00	446.81	14,851.35	14,404.54
64	Porter	157,772.00	5,522.02	15,739.68	10,217.66
65	Posey	26,852.00	939.82	10,931.49	9,991.67
66	Pulaski	13,783.00	482.41	9,695.00	9,212.59
67	Putnam	36,957.00	1,293.50	7,289.38	5,995.88
68	Randolph	26,684.00	933.94	432.61	(501.33)
69	Ripley	27,710.00	969.85	33,406.82	32,436.97
70	Rush	17,823.00	623.81	0.00	(623.81)
71	St. Joseph	266,160.00	9,315.60	3,654.03	(5,661.57)
72	Scott	23,820.00	833.70	3,903.59	3,069.89
73	Shelby	43,766.00	1,531.81	9,802.50	8,270.69
74	Spencer	20,528.00	718.48	5.50	(712.98)
75	Starke	22,933.00	802.66	4,402.60	3,599.95
76	Steuben	33,773.00	1,182.06	5,796.26	4,614.21
77	Sullivan	21,763.00	761.71	20,340.48	19,578.77
78	Switzerland	9,718.00	340.13	1,372.03	1,031.90
79	Tippecanoe	153,875.00	5,385.63	3,184.47	(2,201.16)
80	Tipton	16,385.00	573.48	0.00	(573.48)
81	Union	7,208.00	252.28	9,406.77	9,154.49
82	Vanderburgh	173,187.00	6,061.55	617.12	(5,444.43)
83	Vermillion	16,562.00	579.67	5,002.02	4,422.35
84	Vigo	102,592.00	3,590.72	306.62	(3,284.10)
85	Wabash	33,843.00	1,184.51	17,241.02	16,056.51
86	Warren	8,785.00	307.48	0.00	(307.48)
87	Warrick	56,362.00	1,972.67	6,793.02	4,820.35
88	Washington	27,885.00	975.98	15,620.31	14,644.33
89	Wayne	69,192.00	2,421.72	24.53	(2,397.19)
90	Wells	28,085.00	982.98	2,547.47	1,564.50
91	White	24,463.00	856.21	476.34	(379.87)
92	Whitley	32,323.00	1,131.31	680.06	(451.24)

Table 12, continued

66



Indiana region - regional acres				
Region	PPN 2005*	Recommended 35 a/1000	Current	Difference
1A	761,581.00	26,655.34	33,466.00	6,810.67
1B	107,511.00	3,762.89	35,067.00	31,304.12
2	584,539.00	20,458.87	9,350.00	(11,108.87)
3A	188,655.00	6,602.93	38,191.00	31,588.08
3B	447,599.00	15,665.97	3,107.00	(12,558.97)
4	281,917.00	9,867.10	8,225.00	(1,642.10)
5	231,620.00	8,106.70	25,378.00	17,271.30
6	426,714.00	14,934.99	6,622.00	(8,312.99)
7	222,378.00	7,783.23	43,418.00	35,634.77
8	1,588,480.00	55,596.80	15,216.00	(40,380.80)
9	119,108.00	4,168.78	9,539.00	5,370.22
10	144,230.00	5,048.05	81,426.00	76,377.95
11	156,115.00	5,464.03	104,358.00	98,893.98
12	176,326.00	6,171.41	87,027.00	80,855.59
13A	159,100.00	5,568.50	114,425.00	108,856.50
13B	289,809.00	10,143.32	21,536.00	11,392.69
14	262,121.00	9,174.24	71,931.00	62,756.77
15	124,170.00	4,345.95	198,355.00	194,009.05

Table 13. Indiana region outdoor recreation acres-regional
*Population, U.S. Census Bureau, 2005

County Level

The DOR assesses regional outdoor recreation acres at all levels (county, Indiana region, and State). County level assessment identifies specific areas that are lacking in supply and do not meet the NRPA/Indiana recommendations of 35 acres of regional outdoor recreation opportunities per 1,000 people. This also helps the State make informed decisions concerning land acquisition and future outdoor recreation development. Table 12 shows that 52 counties have an adequate supply of regional outdoor recreation acres.

Indiana Region Level

Three of the 15 Indiana regions are subdivided into two sections (1A, 1B,

3A, 3B, 13A, and 13B) for a total of 18 planning sections. This is important in analysis of supply of regional outdoor recreation acres because Region 3A has an adequate supply; Region 3B does not. One very significant difference between these sections is Fort Wayne with its population of more than 220,000 and the industrial and agricultural base within the surrounding counties.

There are 13 Indiana planning sections (10 ½ regions) that meet the recommendation of 35 acres of regional outdoor recreation acres per 1,000 people (See Table 13). It is not surprising that Indiana planning sections that do not meet the standards (2, 3B, 4, 6, 8) are in the northern half of the State. Southern Indiana regions, with their vast supply of woodlands and undeveloped acres, lend themselves to development of traditional



Indiana county - total acres					
Number	Name	PPN 2005*	Recommended 55 a/ 1000	Current	Difference
1	Adams	33,849.00	1,861.70	859.42	(1,002.28)
2	Allen	344,006.00	18,920.33	4,693.73	(14,226.60)
3	Bartholomew	73,540.00	4,044.70	2,117.85	(1,926.85)
4	Benton	9,039.00	497.15	1,772.00	1,274.86
5	Blackford	13,849.00	761.70	91.00	(670.70)
6	Boone	52,061.00	2,863.36	625.93	(2,237.43)
7	Brown	15,154.00	833.47	68,026.30	67,192.83
8	Carroll	20,426.00	1,123.43	388.87	(734.56)
9	Cass	40,130.00	2,207.15	902.57	(1,304.58)
10	Clark	101,592.00	5,587.56	29,777.44	24,189.88
11	Clay	27,142.00	1,492.81	2,936.32	1,443.51
12	Clinton	34,091.00	1,875.01	272.79	(1,602.21)
13	Crawford	11,216.00	616.88	43,767.05	43,150.17
14	Daviess	30,466.00	1,675.63	9,220.84	7,545.21
15	Dearborn	49,082.00	2,699.51	422.20	(2,277.31)
16	Decatur	25,184.00	1,385.12	271.42	(1,113.70)
17	Dekalb	41,659.00	2,291.25	294.40	(1,996.85)
18	Delaware	116,362.00	6,399.91	498.11	(5,901.80)
19	Dubois	40,858.00	2,247.19	15,510.38	13,263.19
20	Elkhart	195,362.00	10,744.91	3,685.40	(7,059.51)
21	Fayette	24,885.00	1,368.68	220.00	(1,148.68)
22	Floyd	71,997.00	3,959.84	2,743.32	(1,216.52)
23	Fountain	17,462.00	960.41	1,007.74	47.33
24	Franklin	23,085.00	1,269.68	9,952.96	8,683.28
25	Fulton	20,665.00	1,136.58	1,920.14	783.56
26	Gibson	33,408.00	1,837.44	3,564.10	1,726.66
27	Grant	70,557.00	3,880.64	1,957.57	(1,923.07)
28	Greene	33,479.00	1,841.35	9,135.78	7,294.44
29	Hamilton	240,685.00	13,237.68	2,912.93	(10,324.74)
30	Hancock	63,138.00	3,472.59	337.20	(3,135.39)
31	Harrison	36,827.00	2,025.49	16,308.86	14,283.38
32	Hendricks	127,483.00	7,011.57	1,112.73	(5,898.83)
33	Henry	47,244.00	2,598.42	5,118.54	2,520.12
34	Howard	84,977.00	4,673.74	495.91	(4,177.82)
35	Huntington	38,236.00	2,102.98	17,246.02	15,143.04
36	Jackson	42,237.00	2,323.04	35,759.38	33,436.35
37	Jasper	31,876.00	1,753.18	6,476.98	4,723.80
38	Jay	21,606.00	1,188.33	719.38	(468.95)
39	Jefferson	32,430.00	1,783.65	24,691.26	22,907.61
40	Jennings	28,427.00	1,563.49	18,499.34	16,935.86
41	Johnson	128,436.00	7,063.98	6,812.21	(251.77)
42	Knox	38,366.00	2,110.13	1,205.77	(904.36)
43	Kosciusko	76,072.00	4,183.96	4,283.98	100.02
44	LaGrange	36,875.00	2,028.13	10,619.41	8,591.29
45	Lake	493,297.00	27,131.34	16,574.78	(10,556.55)

Table 14. County outdoor recreation acres-total
*Population, U.S. Census Bureau, 2005



Indiana county - total acres					
Number	Name	PPN 2005*	Recommended 55 a/ 1000	Current	Difference
46	LaPorte	110,512.00	6,078.16	13,939.03	7,860.87
47	Lawrence	46,403.00	2,552.17	18,488.12	15,935.96
48	Madison	130,412.00	7,172.66	1,586.75	(5,585.91)
49	Marion	863,133.00	47,472.32	13,520.28	(33,952.04)
50	Marshall	46,945.00	2,581.98	1,448.10	(1,133.88)
51	Martin	10,386.00	571.23	80,940.16	80,368.93
52	Miami	35,620.00	1,959.10	6,703.53	4,744.43
53	Monroe	121,407.00	6,677.39	73,722.08	67,044.69
54	Montgomery	38,239.00	2,103.15	3,357.38	1,254.23
55	Morgan	69,778.00	3,837.79	7,140.76	3,302.97
56	Newton	14,456.00	795.08	14,321.46	13,526.38
57	Noble	47,448.00	2,609.64	5,692.10	3,082.46
58	Ohio	5,874.00	323.07	77.29	(245.78)
59	Orange	19,770.00	1,087.35	51,445.02	50,357.67
60	Owen	22,823.00	1,255.27	12,384.21	11,128.95
61	Parke	17,362.00	954.91	8,484.62	7,529.71
62	Perry	19,032.00	1,046.76	71,052.72	70,005.96
63	Pike	12,766.00	702.13	15,320.63	14,618.50
64	Porter	157,772.00	8,677.46	17,560.28	8,882.82
65	Posey	26,852.00	1,476.86	11,150.30	9,673.44
66	Pulaski	13,783.00	758.07	9,773.50	9,015.43
67	Putnam	36,957.00	2,032.64	7,387.38	5,354.74
68	Randolph	26,684.00	1,467.62	966.44	(501.18)
69	Ripley	27,710.00	1,524.05	34,002.91	32,478.86
70	Rush	17,823.00	980.27	34.25	(946.02)
71	St. Joseph	266,160.00	14,638.80	4,154.36	(10,484.44)
72	Scott	23,820.00	1,310.10	7,683.08	6,372.98
73	Shelby	43,766.00	2,407.13	9,871.70	7,464.57
74	Spencer	20,528.00	1,129.04	191.58	(937.46)
75	Starke	22,933.00	1,261.32	4,614.10	3,352.79
76	Steuben	33,773.00	1,857.52	6,398.30	4,540.78
77	Sullivan	21,763.00	1,196.97	22,449.48	21,252.51
78	Switzerland	9,718.00	534.49	1,442.03	907.54
79	Tippecanoe	153,875.00	8,463.13	5,950.19	(2,512.93)
80	Tipton	16,385.00	901.18	181.57	(719.61)
81	Union	7,208.00	396.44	9,418.77	9,022.33
82	Vanderburgh	173,187.00	9,525.29	3,788.43	(5,736.86)
83	Vermillion	16,562.00	910.91	5,181.92	4,271.01
84	Vigo	102,592.00	5,642.56	2,558.95	(3,083.61)
85	Wabash	33,843.00	1,861.37	17,420.52	15,559.15
86	Warren	8,785.00	483.18	46.50	(436.68)
87	Warrick	56,362.00	3,099.91	8,845.61	5,745.70
88	Washington	27,885.00	1,533.68	16,589.18	15,055.50
89	Wayne	69,192.00	3,805.56	1,258.06	(2,547.50)
90	Wells	28,085.00	1,544.68	2,723.50	1,178.82
91	White	24,463.00	1,345.47	602.34	(743.13)
92	Whitley	32,323.00	1,777.77	989.56	(788.20)

Table 14, continued



outdoor recreation opportunities. Northern Indiana regions are traditional agricultural areas. Unfortunately, this unbalanced distribution of regional outdoor recreation acres leaves a large gap in opportunity between ends of the State. This deficit in opportunity and tremendous difference in physiography opens the door to innovative thinking and development of culturally specific outdoor recreation opportunities in deficit regions.

State Level

Indiana meets the NRPA/Indiana state level recommendation of 35 acres of regional outdoor recreation acres per 1,000 people. Currently there are 906,641 acres for regional outdoor recreation. The recommended acreage is 219,519; therefore, Indiana is 687,122 acres above the recommendation.

Total Outdoor Recreation Supply-Local and Regional

NRPA/Indiana guidelines recommend 55 acres per 1,000 persons of total outdoor recreation acres. This acreage includes all township, municipal, county, privately owned but open for public use, State, and federal lands. Once again, total acres are assessed at the county, Indiana region and State levels.

County Level

Currently, 52 counties meet recommendations for total outdoor recreation acreage (See Table 14). Of those 52 counties, 16 have an adequate supply of both local and regional outdoor recreation acres. The 16 counties are:

- Daviess
- Dubois
- Greene
- Harrison
- Henry
- Martin
- Monroe

- Montgomery
- Orange
- Parke
- Pike
- Ripley
- Scott
- Sullivan
- Warrick
- Washington

Fountain County is the sole county in the State that has a deficit of regional outdoor recreation (OR) acres that is offset by a large enough supply of local acres to equal an adequate supply of total outdoor recreation acreage. Fountain County is ranked 16th in the State for estimated population, has 433 local OR acres (+83) and 575 regional acres (-36) for a total of 1,008 OR acres (+47).

The remaining 35 counties that have an adequate supply of total outdoor recreation acres do so because of State and federal lands within their boundaries. The vast majority of these counties are located in the southern half of Indiana; however, there are a few pockets of adequate total supply in northern regions.

Indiana Region Level

Currently 13 Indiana planning sections (10 ½ regions) meet NRPA/Indiana recommendations for 55 acres of total outdoor recreation acres per 1,000 people. Regions 2, 3B, 4, 6, and 8 do not have enough public outdoor recreation acreage to support their populations (See Table 15). Four of the deficient areas include counties that have a population growth rate higher than the State average and have a major city or cities:

- Region 2: Elkhart and Marshall counties, Elkhart
- Region 3B: Allen and Dekalb counties, Fort Wayne
- Region 4: Tippecanoe and Warren counties, Lafayette
- Region 8: Boone, Hamilton, Hancock, Hendricks, Johnson, Morgan counties, Indianapolis



Indiana region - total acres				
Region	PPN 2005*	Recommended 55 a/1000	Current	Difference
1A	761,581.00	41,886.96	48,074.09	6,187.14
1B	107,511.00	5,913.11	35,788.38	29,875.28
2	584,539.00	32,149.65	17,100.56	(15,049.09)
3A	188,655.00	10,376.03	40,945.39	30,569.36
3B	447,599.00	24,617.95	8,571.05	(16,046.89)
4	281,917.00	15,505.44	12,795.47	(2,709.96)
5	231,620.00	12,739.10	27,624.24	14,885.14
6	426,714.00	23,469.27	10,937.78	(12,531.49)
7	222,378.00	12,230.79	48,998.67	36,767.88
8	1,588,480.00	87,366.40	32,653.62	(54,712.78)
9	119,108.00	6,550.94	10,931.08	4,380.14
10	144,230.00	7,932.65	86,106.29	78,173.64
11	156,115.00	8,586.33	106,174.95	97,588.63
12	176,326.00	9,697.93	89,087.99	79,390.06
13A	159,100.00	8,750.50	118,990.67	110,240.17
13B	289,809.00	15,939.50	27,348.44	11,408.94
14	262,121.00	14,416.66	75,290.50	60,873.84
15	124,170.00	6,829.35	201,250.16	194,420.81

Table 15. Indiana region outdoor recreation acres-total
*Population, U.S. Census Bureau, 2005

State Level

Currently, the Indiana Facility Inventory shows 998,669 acres of outdoor recreation opportunities. This includes every site that is open for public use (excluding school grounds). NRPA/Indiana guidelines recommend 55 acres per 1,000 persons (at this level). With an estimated State population of 6,271,973 (U.S. Census Bureau, 2005) current acreage exceeds the recommendation of 344,959 total outdoor recreation acres by 653,711 acres.

Conclusion of Total Outdoor Recreation Acres

This indicates that acquisition of new lands and development of new outdoor recreation opportunities have not or are not keeping pace with population growth. Maintaining or improving the balance between outdoor recreation and economic growth, urban sprawl, and environmental or social health can require extensive planning and community organization and involvement. Unfortunately, funding and the amount of time it takes to develop a new site can also affect balance. For example, there have been major additions to the amount of outdoor recreation acreage in Tippecanoe County (e.g., Prophetstown State Park and a proposed 13 miles of ADA trails throughout West Lafayette), but population growth still overrides these tremendous advances.

One might think these figures indicate that Indiana is in fine shape, but look back to the original NRPA guidelines. Regional/Metropolitan Park and Regional Park Reserve have a service area defined by driving time. The boundaries of the service area extend beyond a park's physical boundaries. The service area can also overlap into other counties, Indiana regions, or even other States.

Additionally, every park category has a service area limited by population density. For example, if the service area was a perfect circle, and a 200 acre park in downtown Indianapolis was the center of the circle, that park would have a smaller service area (circumference) than a 200 acre park in downtown Fowler (Benton County) because of the population difference.

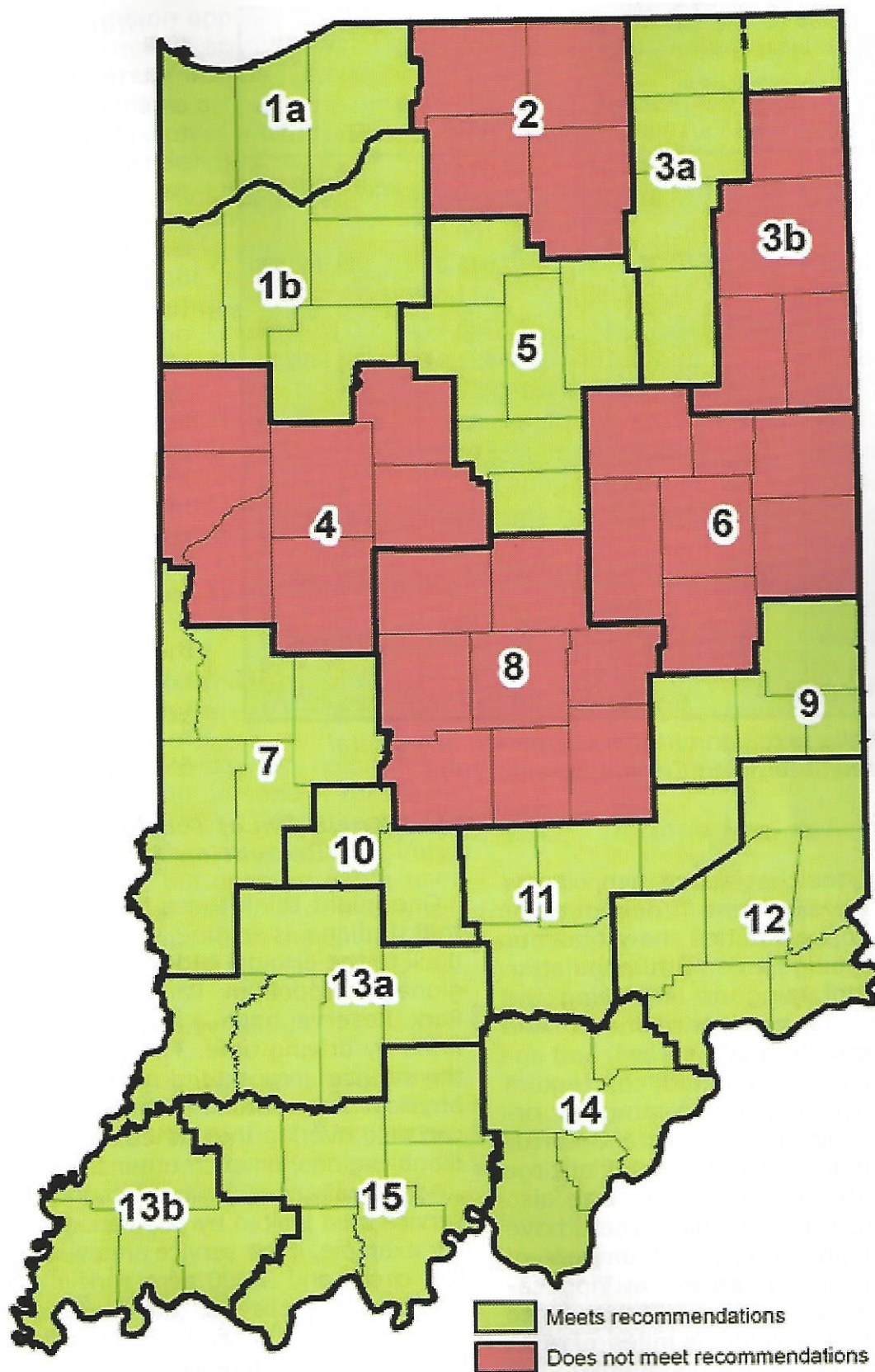


Figure 9. Indiana region outdoor recreation – total
Recommendation – 55 acres/ 1000 persons



In this SCORP we have simplified the guidelines; however, that does not equate to the State being equally balanced or without problems. A theoretical example, Mounds State Park could have a service area that includes parts of Hancock County, the third-fastest growing county in Indiana (U.S. Census Bureau, 2005). If Anderson, which is closer to Mounds SP, has a population increase, the service area of Mounds would "shrink" to be able to absorb that increase in population density. Since Hancock County is already below standards for outdoor recreation supply, "shrinkage" of Mounds' service area would have a ripple effect and further increase Hancock County's shortage.

Our interpretation indicates that the State has adequate acreage; however, service areas of outdoor recreation sites in the southern third of the State do not extend to Lake or Allen counties. Each has a greater than 10,000-acre deficit in outdoor recreation supply. Allen has a population growth rate greater than the State average of 3.1% (U.S. Census Bureau, 2005).

Technological advances make it easier to assess park service areas based on population density; DOR hopes to include these assessments in future SCORPs.

One last thought before moving to the most critical areas in Indiana. Our state ranks 14th in population in the country. The total acreage is 23,307,520. Of that land, 998,669 acres is designated for outdoor recreation. That means Indiana has a mere 4.28% of her land allotted to recreation. The U.S. Census Bureau (2005) reported an estimated average population increase of 3.1% for the State from 2000 to 2005, with an estimated total population of 6,546,000 to 7,158,000 by 2025. The percentage of land for outdoor recreation has increased by 0.41% since 1999. It is evident that Indiana has not kept pace with population growth. As future population growth occurs, the State, regions, counties, municipalities, and townships will need to develop new

outdoor recreation sites to accommodate current and expected deficiencies because our present outdoor recreation supply is not distributed in a manner that serves all areas of the State.

Critical Counties and Regions

DOR also assesses the critical counties (see Fig. 10). The definition of a critical county has changed slightly from the 2000-04 SCORP due to changes in the State's population growth. The current definition of a critical county is

A county that does not have the recommended outdoor recreation supply acreage of 55 acres per 1,000 population and has a population growth rate that is higher than the 2000-05 population growth rate of 3.1% for the Indiana (as reported by the U.S. Census Bureau).

Note: DOR is in the process of redefining "critical county" to include "degree of need." For example, Lake and St. Joseph counties, both of which have a total deficit of greater than 10,000 acres, are not currently considered critical counties because of population growth lower than the State average.

Counties that have been determined to be critical counties based on the defined criteria are

- Allen
- Boone
- Dearborn
- Dekalb
- Elkhart
- Hamilton
- Hancock
- Hendricks
- Johnson
- Marshall
- Ohio
- Tippecanoe
- Warren
- Whitley

Tables 16 and 17 show more detailed information regarding local and total outdoor recreation acres in critical counties.



Critical counties - local acres						
Number	Name	PPN 2005*	Growth percent	Recommended 20a/1000	Current	Difference
2	Allen	344,006.00	3.70	6,880.12	4,691.23	(2,188.89)
6	Boone	52,061.00	12.90	1,041.22	597.55	(443.67)
15	Dearborn	49,082.00	6.40	981.64	375.00	(606.64)
17	Dekalb	41,659.00	3.40	833.18	285.00	(548.18)
20	Elkhart	195,362.00	6.90	3,907.24	3,240.45	(666.79)
29	Hamilton	240,685.00	31.70	4,813.70	2,911.93	(1,901.77)
30	Hancock	63,138.00	14.00	1,262.76	297.20	(965.56)
32	Hendricks	127,483.00	22.50	2,549.66	1,112.73	(1,436.93)
41	Johnson	128,436.00	11.50	2,568.72	1,056.50	(1,512.22)
50	Marshall	46,945.00	4.00	938.90	323.25	(615.65)
58	Ohio	5,874.00	4.50	117.48	55.00	(62.48)
79	Tippecanoe	153,875.00	3.30	3,077.50	2,765.72	(311.78)
86	Warren	8,785.00	4.30	175.70	46.50	(129.20)
92	Whitley	32,323.00	5.30	646.46	309.50	(336.96)

Table 16. 2006 Critical counties: Outdoor recreation acres-local
 *Population, U.S. Census Bureau, 2005

Critical counties - total acres						
Number	Name	PPN 2005*	Growth percent	Recommended 55 a/1000	Current	Difference
2	Allen	344,006.00	3.70	18,920.33	4,693.73	(14,226.60)
6	Boone	52,061.00	12.90	2,863.36	625.93	(2,237.43)
15	Dearborn	49,082.00	6.40	2,699.51	422.20	(2,277.31)
17	Dekalb	41,659.00	3.40	2,291.25	294.40	(1,996.85)
20	Elkhart	195,362.00	6.90	10,744.91	3,685.40	(7,059.51)
29	Hamilton	240,685.00	31.70	13,237.68	2,912.93	(10,324.74)
30	Hancock	63,138.00	14.00	3,472.59	337.20	(3,135.39)
32	Hendricks	127,483.00	22.50	7,011.57	1,112.73	(5,898.83)
41	Johnson	128,436.00	11.50	7,063.98	6,812.21	(251.77)
50	Marshall	46,945.00	4.00	2,581.98	1,448.10	(1,133.88)
58	Ohio	5,874.00	4.50	323.07	77.29	(245.78)
79	Tippecanoe	153,875.00	3.30	8,463.13	5,950.19	(2,512.93)
86	Warren	8,785.00	4.30	483.18	46.50	(436.68)
92	Whitley	32,323.00	5.30	1,777.77	989.56	(788.20)

Table 17. 2006 Critical counties: Outdoor recreation acres-total
 *Population, U.S. Census Bureau, 2005

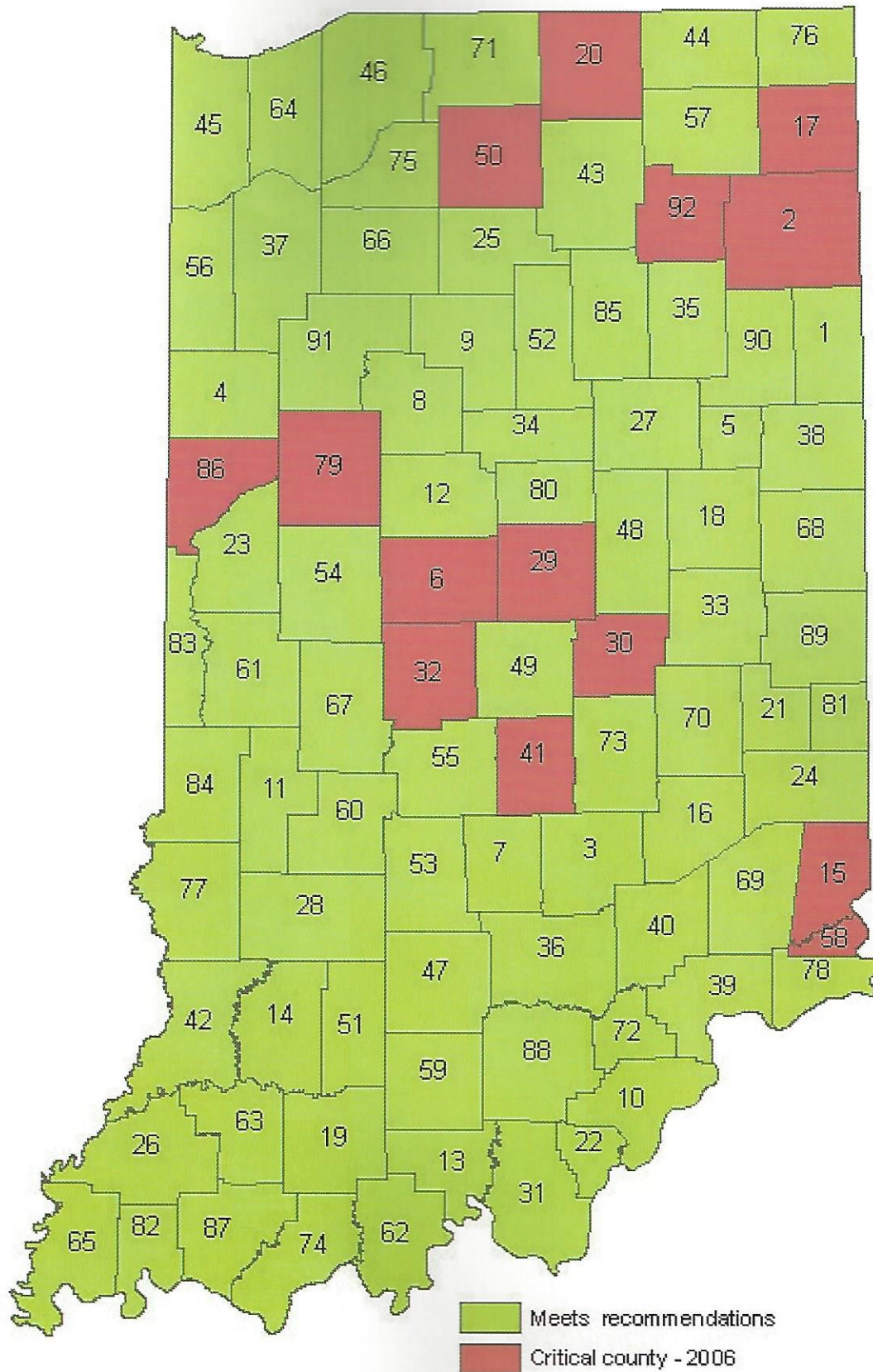


Figure 10. 2006 Critical counties





CHAPTER 4

Indiana Wetlands

Outdoor recreation is more than supply and demand. It is about meeting people's needs while preserving the integrity of the land. It also includes retaining or restoring natural topography and native plants and wildlife. In northern Indiana prairies and fens are being restored, in southern Indiana marshes and other wetlands have been purchased and are also being returned to their original state. These restoration projects do not eliminate outdoor recreation; they blend experiencing native Indiana topography with modern day recreation.

Wetlands have been dramatically diminished throughout the United States, enough so that the Land and Water Conservation Fund (L&WCF) has placed a priority on them. Each SCORP must contain a section specific to wetlands and the State's initiatives to retain and/or

restore them. The following section outlines Indiana's wetlands initiatives.

Section 303 of the Emergency Wetlands Resources Act (EWRA) of 1986, (16 U.S.C. §§ 3901-3932, November 10, 1986, as amended 1988 and 1992.) requires all Statewide Comprehensive Outdoor Recreation Plans: "... address wetlands within that State as an important outdoor recreation resource ..." as part of the National Park Service SCORP approval process. The Division of Fish and Wildlife has created the "Indiana Wetlands Conservation Plan" (IWCP) as required by, and consistent with, the EWRA's National Wetlands Priority Conservation Plan. The IWCP contains a lot of information about wetlands in Indiana, and sets priorities for their identification and conservation. To view or download the IWCP, go to <http://www.in.gov/dnr/fishwild/publications/inwetcon/wetconpl.htm>.

This section of the SCORP provides a synopsis of both federal and State of Indiana wetlands documentation and regu-



lations, and provides information for setting priorities for wetlands conservation.

Definition and Traits (from the EWRA)

Definitions of wetlands vary. The most commonly accepted scientific definition is that used by the U.S. Fish and Wildlife Service. In 1979, Cowardin, Carter, Golet, and LaRoe published "Classification of Wetlands and Deepwater Habitats of the United States." This document was adopted by the U.S. Fish and Wildlife Service as its standard for wetlands classification. It defines wetlands as "...lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water."

Wetlands in this standard also must have one or more of the following three traits:

1. Some of the time, the vegetation of the site consists mainly of aquatic plants.
2. The underlying materials are mostly undrained, moist (wetland) soils.
3. The underlying materials are not actually soils, and are saturated with water or covered by water at some time during the growing season of each year: examples include peat, sand, or muck.

This definition and traits are used in some form by most state agencies that have the authority to create wetland conservation initiatives. The State of Indiana uses this definition in an almost identical form.

Benefits to Hoosiers (from the IWCP)

It is vitally important for Indiana to conserve and restore wetlands whenever possible for many reasons. Wetlands offer a significant set of financial, ecological and recreational benefits to Hoosiers, including:

- Flood control – Wetlands can store large amounts of storm runoff,



such as the constructed wetlands and settling ponds at Miller-Showers Park in Bloomington.

- Groundwater inlet and outlet – Aquifers can receive and expel water as needed through wetlands, such as the recharge taking place in Celery Bog Park in West Lafayette.
- Improved water quality – Wetlands can act as a biological filter for pollutants such as fertilizers, animal wastes, road runoff, sediments, pesticides and more; water filtered by wetlands costs less to treat and use as drinking water. This filtration process is used to treat acid coal-mine drainage at the IDNR Interlake site in Pike and Warrick counties.
- Sewage disposal – Constructed wetlands are being used as highly effective disposal methods for treated sewage from livestock farms and municipal wastewater. Constructed wetlands are being used for treated sewage disposal



at Historic Prophetstown and Prophetstown State Park in Tippecanoe County.

- Fish and wildlife habitat – Wetlands are one of the most biologically diverse ecosystems in Indiana. Many fish and wildlife species depend on wetlands for some or all of their food, shelter or water needs. Many species of plants also require the conditions found in wetlands to survive. Goose Pond and Bee Hunter Marsh near Linton, are being restored as diverse wetlands by a consortium of partners including the IDNR, the Natural Resources Conservation Service, and others; one reason for this project is to re-establish historically diverse plant and animal communities.
- Soil stabilization – Wetlands slow erosion by slowing the movement of water through a watershed, and by holding soil down (especially on shorelines) with extensive

aquatic plant root systems. The Indiana Department of Environmental Management has approved several projects on private property that use wetlands as a part of a larger soil stabilization project.

- Food – Wetlands are an important source of food for both wildlife and humans, including edible plants, fish, shellfish, waterfowl, deer and other animals.
- Timber production – If managed carefully, valuable timber and forest products can be harvested from wetlands.
- Fun – Wetland areas offer many popular forms of outdoor recreation, such as canoeing, kayaking, fishing, hiking, nature photography, bird-watching, swimming, boating and sightseeing. Pisgah Marsh in Kosciusko County is an example of a multiple-use IDNR Fish and Wildlife Area that actively supports many types of outdoor recreation.





Acres in Indiana

Due to time and funding constraints, it is difficult to assess total wetlands acreage in Indiana. Primary assessment is based on interpretation of high-altitude color infrared aerial photographs that are part of the National Wetlands Inventory (NWI). As of April 2004 the NWI data for Indiana was photography from the 1980s. For more about the NWI, go to <http://www.fws.gov/nwi/index.html>.

A significant part of the reason for the urgency of wetlands conservation in the State is the considerable loss of Indiana wetlands acreage over time. According to the 1996 IWCP, the most recent analysis of the acreage of wetlands in Indiana by habitat type was completed in 1991 by R.E. Rolley. At that time, Indiana had approximately 813,000 acres of wetlands divided into seven basic types (see Table 18). For comparison, it has been estimated that in the 1780s, as the first settlers arrived, Indiana had approximately 5.6 million acres of wetlands. This indicates that Indiana has lost approximately 85%

of its wetlands to agriculture, roads, community development, pollution, vegetation clearing and other land uses.

Although 1991 was the last formal analysis of wetlands acreage by habitat type in Indiana, many new wetlands have been added to the State's inventory, such as the 8,000-acre Goose Pond/Bee Hunter Marsh in Greene County and more than three-quarters-of-a-mile of fen at Prophetstown State Park in Tippecanoe County.

A tangential program that has had a positive impact on Indiana's watersheds is the USDA Conservation Security Program (CSP). The Upper East Fork White watershed has been nominated for the 2007 CSP. The watershed covers 519,331 acres in seven counties and would be the eighth Indiana watershed program to be funded since 2004.

Actions and Initiatives for Wetlands Conservation in Indiana

There are dozens of small programs that are solely concerned with wetlands conservation in the State. Many other conservation programs include wetlands components; however, they are not their primary focus. The IWCP includes a list of wetlands conservation programs.

National programs that emphasize wetlands conservation are not commonly used in Indiana. The U.S. Environmental Protection Agency's Wetland Grants Program and the National Park Service's Wetland Program are two examples of national programs with limited Indiana impact. Here are examples of two of the larger wetlands conservation programs in Indiana.

Wetlands Habitats	Acres	% of Total
Scrub-Shrub	42,131	5.2
Forested	504,336	62.0
Wet Meadow	55,071	6.8
Shallow Marsh	67,564	8.3
Deep Marsh	20,730	2.5
Open Water	98,565	12.1
Other	24,633	3.0
Total	813,032	100

Table 18. Indiana wetland acres (Rolley, R.E., 1991)

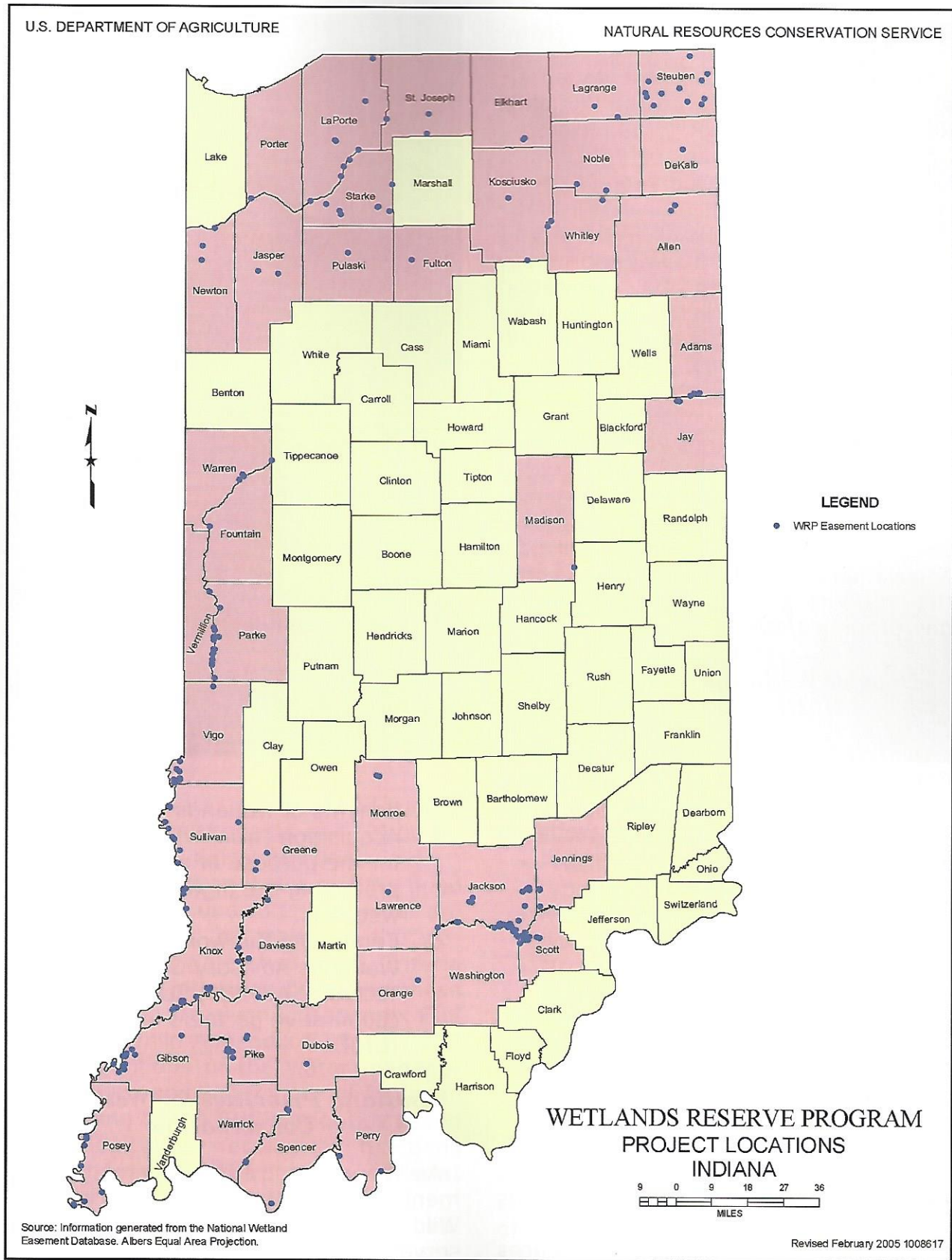


Figure 11. Indiana Wetlands Reserve Program locations



Indiana Wetlands Reserve Program

The biggest wetlands conservation effort in the State is the Indiana Wetlands Reserve Program (IWRP), administered by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). In 1994, Indiana began participating in the IWRP. The IWRP is a voluntary landowner-participation program that encourages protection, restoration and enhancement of wetlands on private property. As of 2002, more than 31,000 acres had been enrolled in the IWRP.

Two large IWRP projects are The Wilder Project in Greene County (7,200 acres) and the Kankakee Sands Project in Newton County (2,800 acres). Two hundred sixty-one private landowners in 44 counties were enrolled in the WRP as of December 2002, with a backlog of eligible applications. For more information about the WRP go to <http://www.nrcs.usda.gov/programs/wrp/>.

Hoosier Wetlands Conservation Initiative (HWCI)

The IWCP created the Hoosier Wetlands Conservation Initiative (HWCI) as the action component of the plan. The HWCI uses six tactics for conserving wetlands in Indiana:

1. Planning and implementing the IWCP through local wetland conservation partnerships.
2. Obtaining more scientific information about Indiana's wetland resources, with an emphasis on making conservation techniques that are effective and cost-efficient.
3. Providing positive incentives to motivate people to conserve and restore wetlands.
4. Providing educational opportunities for technical staff, landowners, schoolchildren and other audiences to enhance community understanding of the functions and



benefits of wetlands.

5. Acquisition (from willing owners) for the purpose of permanently protecting the highest priority wetlands.
6. Continuing the work of the IWCP's Wetlands Advisory Group and Technical Advisory Team as cooperative partners led by the IDNR.

Indiana Priorities for Wetlands Conservation

As mandated by the federal government, the IDNR Division of Fish and Wildlife has created priorities for the conservation of wetlands in the State. The IWCP separates the priorities for wetland conservation into two types: priorities



based on (1) water quality, flood control and groundwater benefits and (2) on biological and ecological functions.

Priorities based on water quality, flood control and groundwater benefits are recommended to be made on the watershed or sub-watershed level. Criteria for identifying priorities based on these three aspects are given in Appendix E of the IWCP, while Appendix F of the IWCP has descriptions of the water management basins and watersheds of Indiana.

According to the IWCP, priorities based on biological or ecological functions should be developed from these criteria:

- Rarity of wetland type
- Presence of endangered, threatened or rare species
- Presence of endangered, threatened or rare species habitat, but species

not yet identified at the site

- Diversity of native species
- Proximity of other valued ecosystem types
- Natural quality (amount of disturbance/degradation)
- "Irreplaceability" (can the wetland type be re-created)
- "Recoverability" (can the wetland type recover from disturbance it has experienced)
- Size
- Location

The IWCP also states that these priorities should be identified based on the natural regions used by the IDNR Division of Nature Preserves, the IDNR Division of Fish and Wildlife, and other agencies and organizations. Appendix F of the IWCP identifies natural regions and wetland



ecology found in each watershed. Appendix G of the IWCP describes wetland communities. Recreation and historical benefits of wetlands are also mentioned in the IWCP as items to be considered when identifying priorities. Planners trying to create priorities for wetlands conservation in their area are highly encouraged to use the IWCP as their primary guidance document.

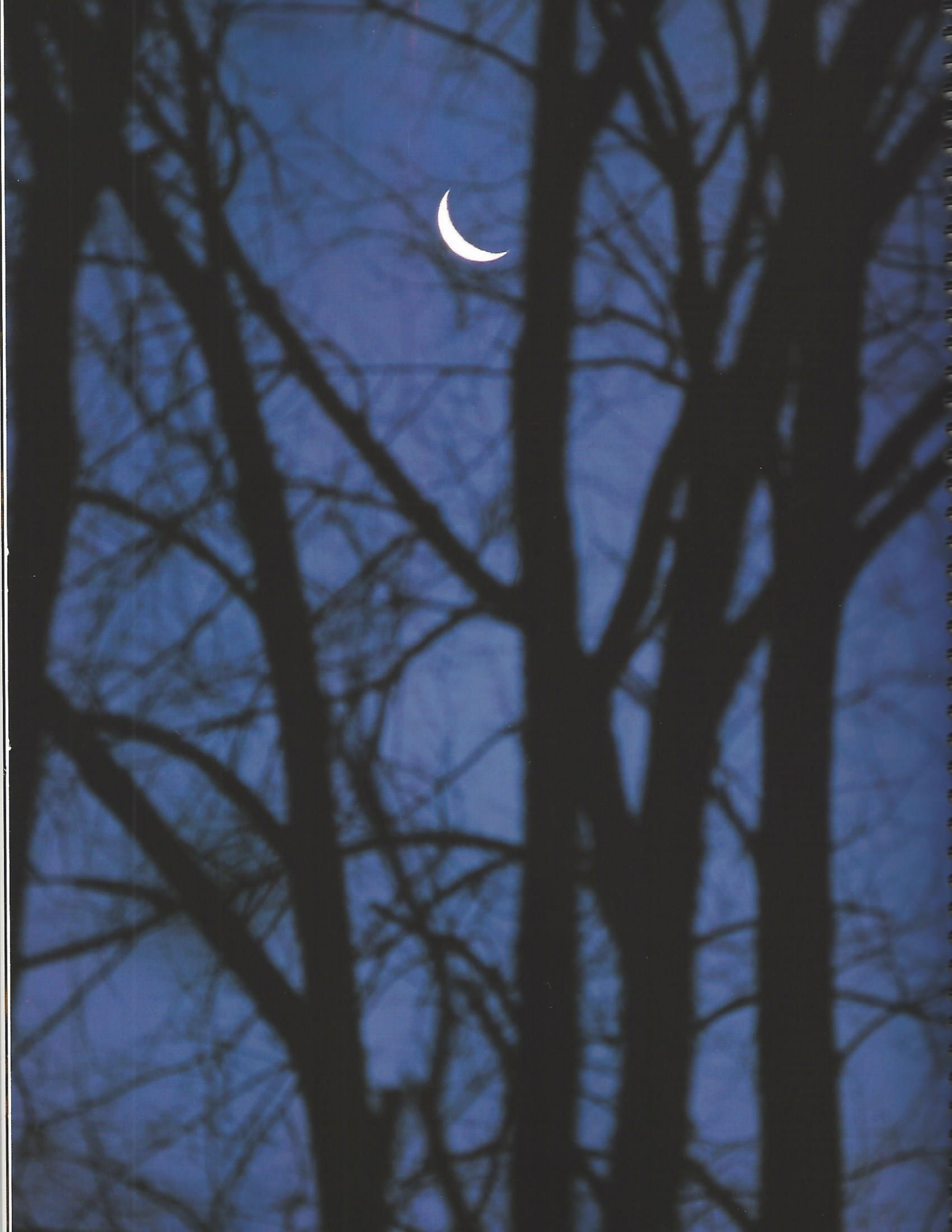
Conclusions

Indiana placed a low priority on wet-

lands conservation in the past. The economic and material needs of agriculture, industry and population growth took its toll on our former wetlands. That attitude is changing, as is evident by the continuous effort to reclaim many of the lost acres. The IWCP identifies damages that have been done and the areas that need to be restored. State, federal, private and not-for-profit organizations are working together with Indiana residents to identify, purchase and restore some of the former wetlands to return a portion of the State to its natural beauty.









CHAPTER 5

Accessibility and Universal Design

Many issues must be considered when restoring lands and providing for people who use outdoor recreation sites. One of the current requirements for outdoor recreation providers is meeting ADA standards for new and renovated facilities and programs. One of the requests of users is for outdoor recreation providers to exceed ADA standards and address the needs of all user groups. This section deals with universal design – taking accessibility to a higher level to meet the requirements of multiple users in the most cost-efficient manner.

Accessibility and Universal Design Explained

The parks and recreation professionals surveyed for this SCORP were fully aware of the ADA (1990, as amended) and the requirements to make any additions or renovations to their sites and services accessible. There is still confusion when local park and recreation professionals, park boards, and other interested parties assess the accessibility of their programs and facilities. All local and state governments fall under Title II of the ADA. Title II is designed to prevent discrimination on the basis of disability in services, programs and activities provided at state and local levels. While there are no checklists specific to recreation facilities, help for those assessing ADA accessibility is available.





The following are some Internet resources that make assessment of accessibility easier and more cost-effective:

U.S. Access Board:

<http://www.access-board.gov>

Independent federal agency responsible for developing minimum requirements for accessible design.

The following are guidelines and standards that may be useful.

ADA Accessibility Guidelines (ADAAG):

<http://www.access-board.gov/adaag/about/index.htm>

Covers the built environment, such as parking lots, accessible routes, entrances, bathrooms and much more.

Revised ADA/ABA Guidelines (ADA/ABA):

<http://www.access-board.gov/ada-aba/final.htm>

Combination of ADAAG and Uniform Federal Accessibility Standards creat-

ed for the Architectural Barriers Act of 1968. Updates built environment design specifications and adds recreation facilities, such as playgrounds, boating and fishing facilities, golf courses, and swimming facilities.

Outdoor Developed Areas Final Report (1999):

<http://www.access-board.gov/outdoor/outdoor-rec-rpt.htm>

Guidelines address accessibility in outdoor recreation facilities, such as trails, camping, facilities, beaches, picnic tables, benches, grills, overlooks and viewing areas.

Center for Universal Design:

<http://www.design.ncsu.edu/cud/>

Starting point for those who would like to learn more about universal design and how it can cost-effectively improve ADA compliance.

Disability Info.gov:

<http://www.disabilityinfo.gov/digov-public/public/DisplayPage.do?parentFolderId=500>



Figure 12. ADA-compliant entry doors; left-hand set of doors is manually operated; right-hand set may be manually operated or opened by the switch at the right.

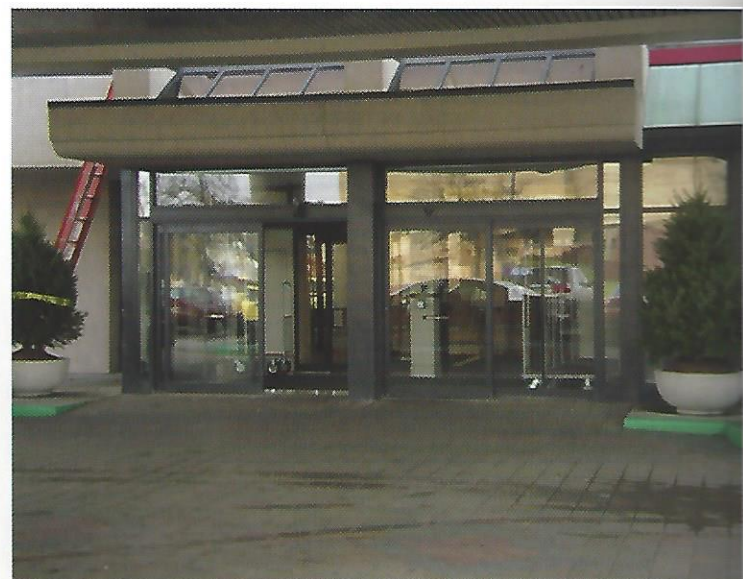


Figure 13. ADA-compliant entry doors with universal design principals applied; doors open automatically and offer no significant barrier to anyone.



Huge one-stop shop for all kinds of links, reports, guidelines and data on accessibility from a wide variety of sources; one of the most comprehensive sets of disability information on the Internet.

National Center on Accessibility:

<http://www.ncaonline.org>

Home page for a leading recreation accessibility-research and technical-assistance organization; consultation and information services are available.

U.S. Department of Justice ADA Regulations and Technical Assistance Materials:

<http://www.usdoj.gov/crt/ada/publicat.htm>

Great list of materials available in hard copy or for immediate download, including the "Title II Technical Assistance Manual" (excellent State and local government ADA compliance guide and examples), and "ADA Guide for Small Towns" (cost-effective tips and examples for small local governments).

Checklists**Uniform Federal Accessibility Standards (UFAS) Checklist:**

<http://www.access-board.gov/ufas/UFASchecklist.txt>

Workbook designed to help people survey their facilities for compliance with the UFAS accessibility standards (related to the 1968 Architectural Barriers Act). An older, but helpful reference (not recreation-specific) for those assessing the accessibility of their built facilities.

ADAAG Checklist:

<http://www.access-board.gov/adaag/checklist/a16.html>

Checklist (not recreation-specific) that is newer than the UFAS and aimed at buildings and facilities.

The Americans with Disabilities Act versus Universal Design

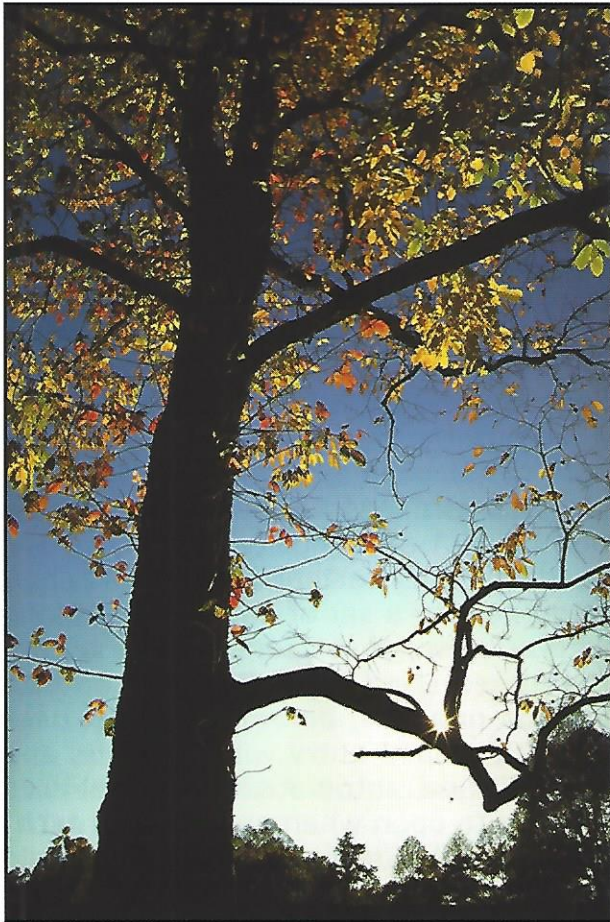
Universal Design (UD) is a design theory with seven principles. It is a way of designing things so they can be used by everyone. The ADA requires new construction or alterations to be accessible to people with disabilities. The difference between the two approaches is adaptation versus inclusion. ADA requires at least adaptation; UD's intent is to make a facility/site/program appealing and usable to all people, regardless of ability or circumstances. A common application of ADA accessibility guidelines is a building entrance that has a wheelchair ramp next to a set of entry stairs, along with one door that opens when a button is pressed (Fig. 12). UD enhances that idea by providing an entrance that uses a gently sloped entry with no stairs and a set of wide, automated doors that uses sensors to open when anyone approaches (Fig. 13). Such a UD entrance could easily be used by someone who uses a wheelchair or is blind or deaf. Implementing UD can be as simple and inexpensive as replacing standard light switches with large rocker switches.

The following is an excerpt from a North Carolina State University Center for Universal Design document. It was copyrighted in 1997 and is reprinted by permission. See Appendix G for the full text with both the principles and guidelines.

UNIVERSAL DESIGN:

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

The authors, a working group of architects, product designers, engineers and environmental design researchers, collaborated to establish the following



Principles of Universal Design to guide a wide range of design disciplines including environments, products, and communications. These seven principles may be applied to evaluate existing designs, guide the design process and educate both designers and consumers about the characteristics of more usable products and environments.

The Principles of Universal Design are presented here, in the following format: name of the principle, intended to be a concise and easily remembered statement of the key concept embodied in the principle; and a definition of the principle: a brief description of the principle's primary directive for design.

PRINCIPLE ONE: Equitable Use

The design is useful and marketable to people with diverse abilities.

PRINCIPLE TWO: Flexibility in Use

The design accommodates a wide range

of individual preferences and abilities.

PRINCIPLE THREE: Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

PRINCIPLE FOUR: Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

PRINCIPLE FIVE: Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

PRINCIPLE SIX: Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

PRINCIPLE SEVEN: Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Please note that the Principles of Universal Design address only universally usable design, while the practice of design involves more than consideration for usability. Designers must also incorporate other considerations such as economic, engineering, cultural, gender, and environmental concerns in their design processes. These Principles offer designers guidance to better integrate features that meet the needs of as many users as possible.

"The Principles of Universal Design were conceived and developed by The Center for Universal Design at North Carolina State University. Use or application of the Principles in any form by an individual or organization is separate and distinct from the Principles and does not constitute or imply acceptance or endorsement by The Center for Universal Design of the use or application."

The Principles of Universal Design



should be cited as follows: "The Center for Universal Design (1997). *The Principles of Universal Design, Version 2.0*. Raleigh, NC: North Carolina State University."

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More than just physical access

Universal design covers much more than removing physical barriers to access. For example, we could consider UD in a nature center on a park property. All displays would be built to be seen from any height, from that of seated in a child's size wheelchair, to the perspective of someone more than 7 feet tall. Displays in this center could include tactile items that could be held and "seen" with the hands, smelled, and heard. Audio versions of interpretive information would be built into each display. Signs in the building could be mostly characters or icons with a Braille strip at-

tached, such as the familiar, commonly used male/female restroom logo. Providing character-based signs offers multiple benefits, including removing language barriers and accommodating people who have visual impairments or a developmental disability.

More than people with disabilities

UD principles meet the needs of most any person with a temporary or permanent limitation. An automatic door can assist someone carrying a big bag of groceries, someone on crutches or a pregnant woman. A non-English-speaking park visitor can find a restroom or a telephone more easily if character-based signs are used. It is simpler and more efficient to have automatic sensors on bathroom faucets instead of handles, which can be hard to operate; spread germs; and can break, leak, or be left on.





More than just access for people with disabilities

Using UD as a design requirement for new or remodeled facilities can do more than provide everyone better access to a recreation site.

It can save money.

Using UD principles can save:

- Water - with automatic devices like faucets and toilets
- Heating costs - with automatic doors that open and close quickly when clear
- Electricity - with automatic light switches or timers
- Construction costs - by designing in accessibility instead of retrofitting
- Construction costs - by eliminating duplicate features, such as installing both regular doors and a switch-operated door

UD offers a chance for recreation professionals to reach out to the growing number of older Americans, regardless of ability level. UD also offers opportunities to attract other users that may be underserved, such as:

- Residents who speak English as a second language
- Tourists/visitors who may not speak English
- People with disabilities (permanent or temporary)
- People with limited range of motion or poor balance
- Small children and the people who care for them
- The elderly and those who care for them
- Pregnant women
- People with chronic or debilitating illnesses or conditions

Universal Design Examples in Indiana

There are many UD examples in Indiana. The Indiana State Museum, for instance, has begun integrating these

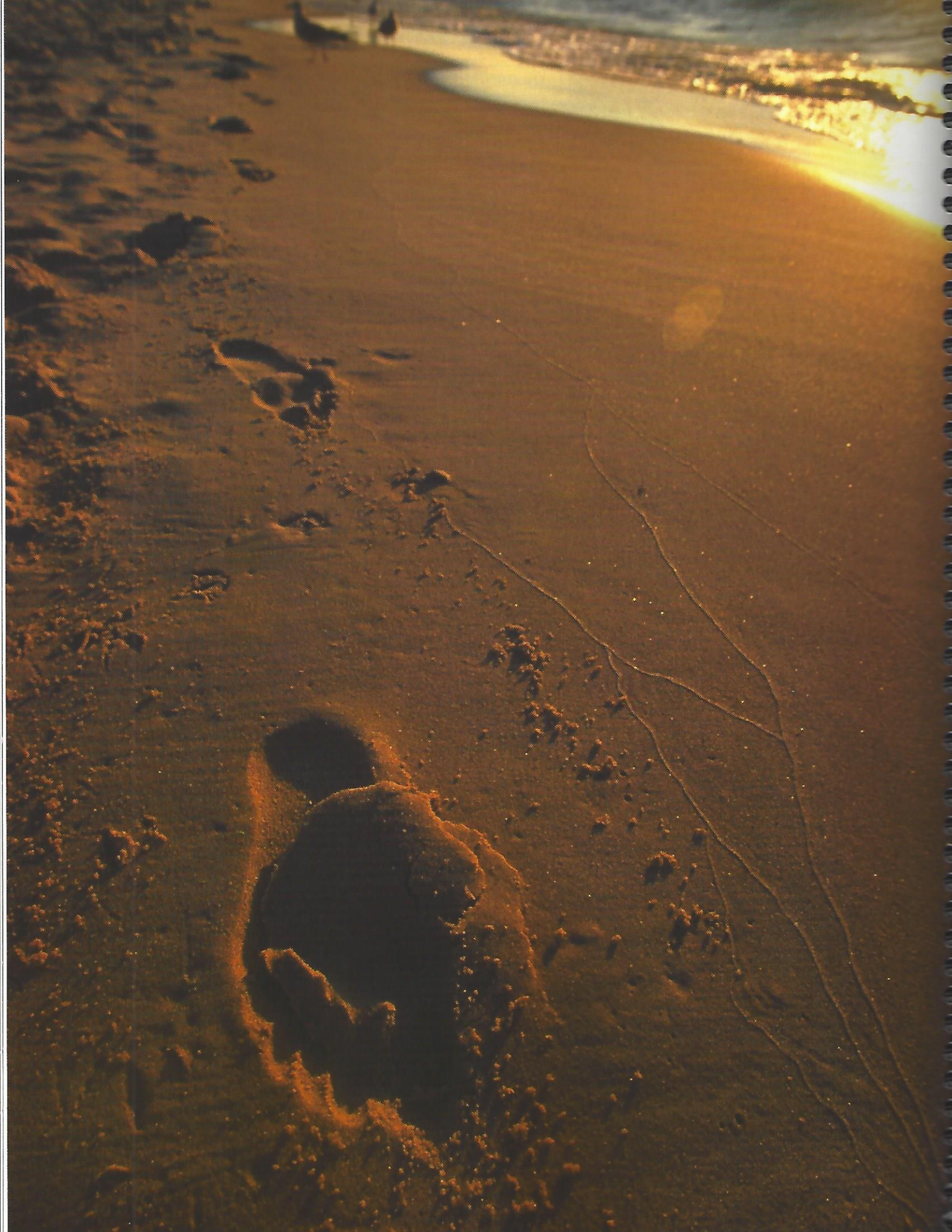
principles in all of its new displays, exhibits and facility renovations. The entryways are designed and automated so all visitors can enter with ease, without barriers. The Indianapolis International Airport terminal features restrooms with doorless entries that double-back to create a "modesty wall" and provide fully accessible entry. Many commercial buildings are now being constructed with UD in mind; when was the last time you pulled open a door at a grocery store?

A quality example of park design that goes above and beyond ADA guidelines is the Pisgah Marsh Boardwalk. This three-tenths-of-a-mile long boardwalk is ADA accessible, as are the parking lot and restrooms. The facility also includes an observation deck that uses cables instead of boards so children and people in wheelchairs have an unobstructed view of the nearby marsh. Interpretive signs and an educational kit that is provided to teachers and other groups further enhance the outdoor experience.

UD is a way to be considerate of many types of park users.

A Note on Universal Design from the IDNR-DOR Staff

The UD section of this SCORP serves as a suggestion for future design of park construction or rehabilitation. ADA compliance is required; UD is not. Please consider UD to enhance ADA compliance as a best management practice, and design parks accordingly.





CHAPTER 6

Outdoor Recreation: Its Relationship with Health, Well-being, and Aging

Professionals in the field know the health benefits of outdoor recreation. To help market the product and increase use and revenues, it is important that we educate users about how outdoor recreation sites and facilities promote improved health and well-being.

How do you do that? Start with the national information, then state level, then local community. There is not much outdoor recreation cannot do that is beneficial to humans, but it still has to be brought into the users' realm. In other words, you must determine the needs of the local people, how those needs can be met, and the best way to alert users of the options available.

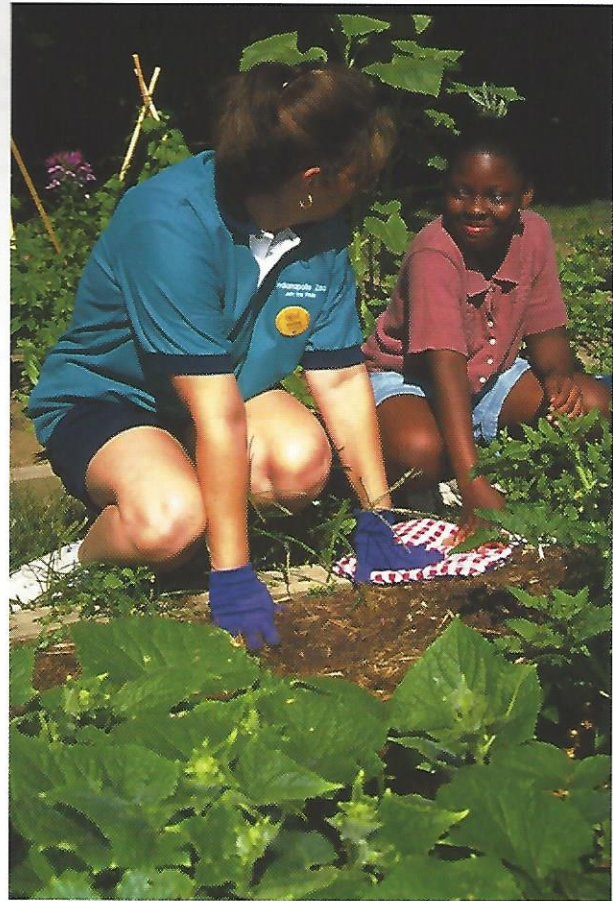
The National Picture

Healthy People 2010 (U.S. Department of Health and Human Services [HHS], 2000) is the nation's initiative to improve the overall health of U.S. citizens by 2010. This document has two major overlapping goals. The first is to increase the quality and years of healthy life. The second is to eliminate health disparities. There are also 28 focus areas of health that have been given a high priority for change. Additionally, Healthy People 2010 identifies 10 health priorities, which are the Leading Health Indicators for the nation and the top 10 areas of concern for citizens and communities. If the incidence of even one of these priorities is positively affected by outdoor recreation, the overall health picture in the United States will have improved. For a complete list of the 28 focus areas and how they relate to the 10 leading indicators, go to http://www.healthypeople.gov/LHI/Touch_fact.htm.

The 10 Leading Health Indicators are:

- Physical activity
- Overweight and obesity
- Tobacco use
- Substance abuse
- Responsible sexual behavior
- Mental health
- Injury and violence
- Environmental quality
- Immunization
- Access to health care

Many national organizations are cooperating with each other and/or endorsing each other's initiatives to improve the nation's health. For example the National Coalition for Promoting Physical Activity (NCPA) strongly advocates Senate and Congressional bills (e.g., S. 3711, the Gulf of Mexico Energy Independence Act of 2006), which provide land acquisition funds (Land and Water Conservation Fund, LWCF), as well as funding for trails and alternative transportation (nation's surface transportation bill [SAFETEA-



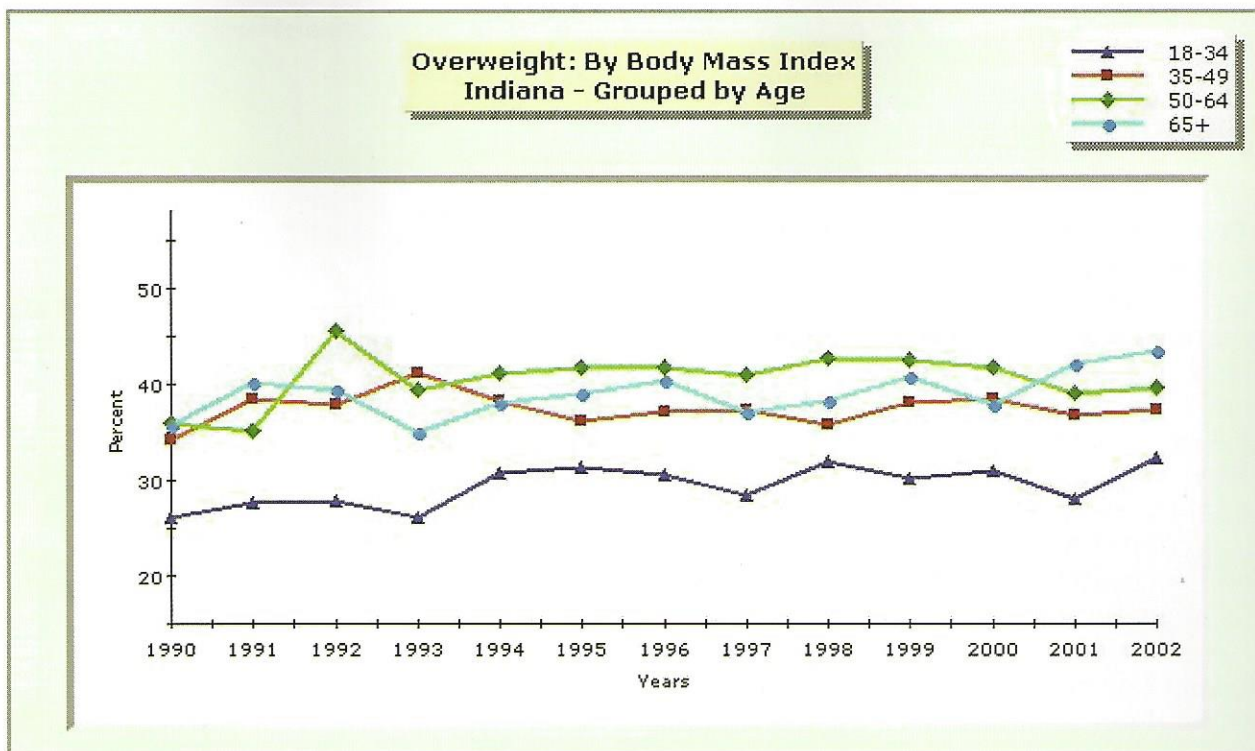


Figure 14. Overweight trends (Behavioral Risk Factor Surveillance System, CDC, 2003)

LU]) (National Coalition for Promoting Physical Activity, 2006).

The actions being taken nationally may not be fully reproducible at the local level, but they are a beginning. The national actions should point to ideas and practices that local outdoor recreation providers can use or tweak to suit local demographics. Examples of ways innovative marketing and program development in outdoor recreation can impact each of the 10 leading health indicators are:

- Provide multiple opportunities for exercise (physical activity)
- Promote community walking/exercise groups in a safe environment – increased exercise can translate into weight loss (overweight and obese)
- Have smoke-free facilities (tobacco use)
- Develop activity-before-addiction programs (substance abuse)
- Offer programs geared for teenagers to keep them off the streets (responsible sexual behavior)

- Enrich green spaces with garden areas that include ponds, flowers, low hanging trees and quiet walkways (mental health)
- Be a community safe haven (injury and violence)
- Offer educational opportunities (e.g., Project Learning Tree, Project WET, Project Wild, Hoosier Riverwatch) (environmental quality)
- Partner with the county health department to reach low-income families for no/low cost immunization days (immunization)
- Open facility doors for free clinics (Access to Health Care)

As you can see, outdoor recreation and health go hand-in-hand.

The State Picture

This section of the SCORP focuses on the leading health indicators that can be most directly impacted by outdoor recreation (i.e., obesity and overweight and physical activity).

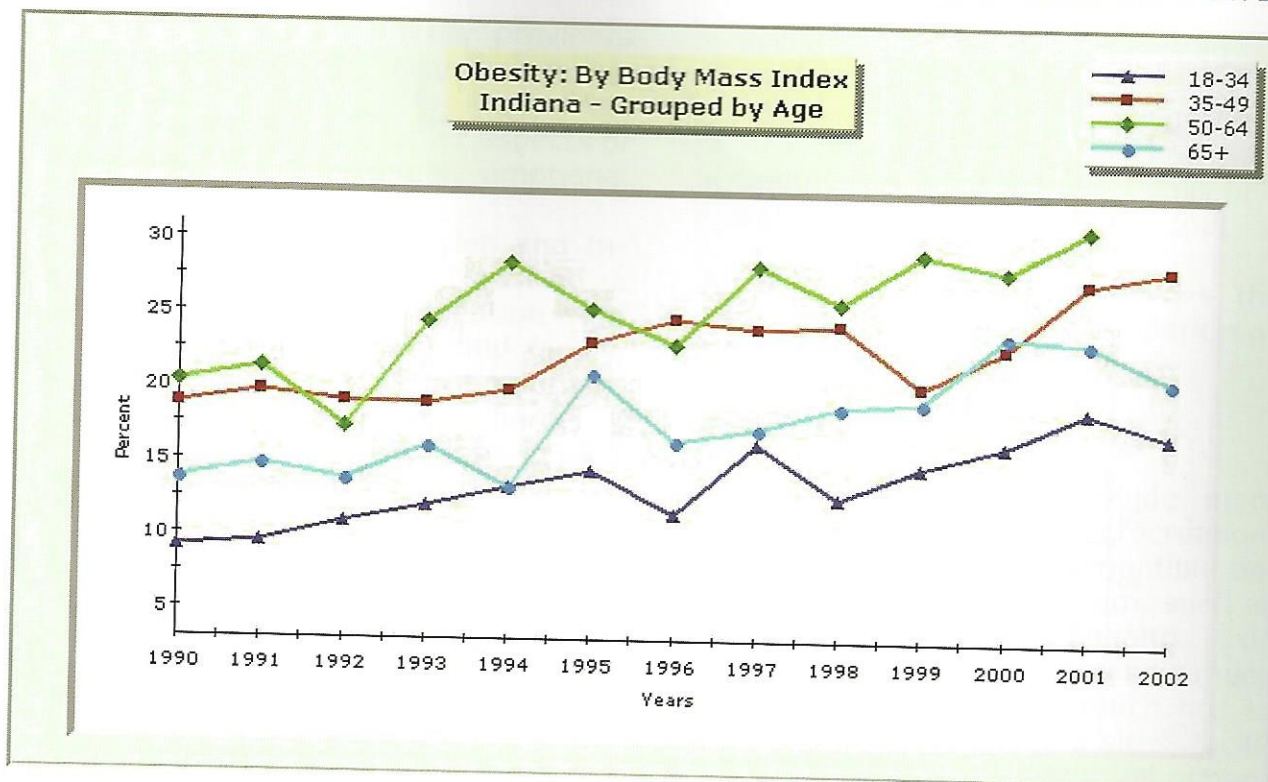


Figure 15. Obesity trends (Behavioral Risk Factor Surveillance System, CDC, 2003)

The first two charts deal with overweight and obesity. The percentage of overweight Hoosiers, as defined by a body mass index (BMI) between 25.0 and 29.9, increased from 31.7% in 1990 to 37.2% in 2002 (see Fig. 14).

The percentage of Hoosiers recorded as being obese, as defined by a BMI equal to or greater than 30.0, increased from 14.5% in 1990 to 24.1% in 2002 (see Fig. 15).

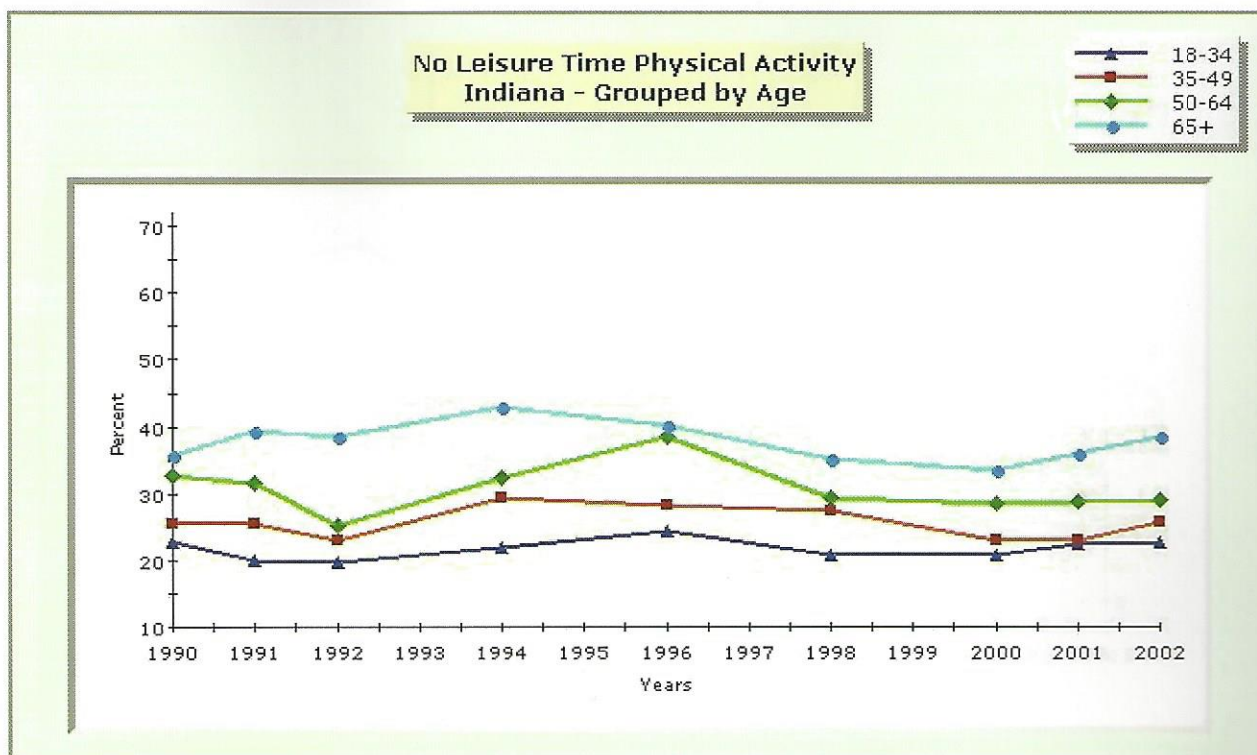
The significance of the increase in overweight and the more dramatic increase in obese is that increasingly more people are moving from overweight into the obese range, and more people are moving from the normal range into the overweight and obese categories. Many studies confirm that numerous diseases and health disparities can be attributed to or compounded by obesity, including cardiovascular disease, diabetes, arthritis and digestive disorders. The economic impact of obesity alone on the State is astounding. According to

National Center for Disease Control and Prevention (CDC, 2006) the estimated direct costs of obesity to Indiana from 1996 to 2000 were:

- Total population - \$1,637 million
- Medicare population - \$379 million
- Medicaid population - \$522 million

These numbers do not include indirect costs from absenteeism, lost productivity and reduced activity. It is no wonder that initiatives have been instituted to reduce the burden of obesity in both our nation and in Indiana. Outdoor recreation providers can be key players in the battle to decrease and prevent the upward trends of overweight and obesity in Indiana.

For more than 10 years studies have shown that physical activity is a primary means of decreasing disability and chronic conditions. Inactive people can improve their health with even moderate increases in activity, and several mental conditions may improve with increased physical activity (CDC, 1996). Exercise or physical activity is also a key



*Figure 16. Physical activity trends
(Behavioral Risk Factor Surveillance System, CDC, 2003)*

component in weight loss.

As Fig. 16 shows, the percentage of individuals in Indiana who did not participate in leisure-time physical activity peaked in 1994 and 1996 (depending on age group). Inactivity decreased for all age groups from 1996 to 2000, but the numbers increased again in 2000, excluding people in the 50 to 64 years-of-age range.

Providing outdoor recreation opportunities and marketing them effectively could reverse this trend toward sedentary lifestyles before it affects the health and well-being of hundreds of citizens.

One challenge is providing variety within sites and facilities so that several demographic groups are attracted to the location. This could require implementing a multidisciplinary approach and joining forces with several professional segments to achieve an outcome that is effective, cost efficient, and crosses over several user groups. For example, renovating or building an ice skating

rink that is used only for ice skating may be cost prohibitive. However, the same project might also include a bandstand, additional seating and wheelchair-access points so the facility can be used for music concerts, rollerblading, dance-a-thon fund-raisers, support group meetings for persons with disabilities and community forums, to name a few options. The facility would then go beyond being a place for physical activity to being a focal point for physical activity, social support, community involvement, and socialization among and between all segments of the population. Achieving this multifunctional perspective may require community focus group sessions and partnerships with professionals in many fields, including but not limited to health care (e.g., pediatrics, gerontology), health promotion, horticulture, architecture and psychology. Although physical activity should remain one of the primary focuses of outdoor recreation and striving to stay aligned with national and State



guidelines should be a priority, providers should remember that health is multi-faceted. When designing facilities, trails and sites, be mindful of other aspects of health, such as intellectual, emotional and social needs.

Reducing sedentary lifestyles and increasing physical activity must be a high-priority item. The competition from time commitments to work and family, distance to facilities, cost of equipment or training, and television is fierce. A person's perceived benefit from visiting a recreational site for physical activity or any other reason must exceed the perceived cost of visiting that site. The more user needs a site can satisfy, the higher the benefits of using it become. If a site can be provided that has an integrated design that encompasses

- An area that is exciting, colorful, and informative for a preschooler,
- A more challenging playground and a hands-on educational area for an elementary school student,

- Social areas (sports courts, open areas) for teenagers,
- Relaxing benches and water gardens for working adults and
- Gently sloping interpretive trails or walkways for grandparents - that circle the activity areas

All of which follow ADA guidelines, the benefit of a family night at the park may outweigh the cost or hassle.

It's a Balancing Act

Health and well-being include more than physical activity. Outdoor recreation, done properly, can address multiple aspects of the wellness spectrum, such as social, mental, and spiritual health. To do that, the provider has to know how much can be provided and how much has to be left out. When designing sites, facilities or programs, considering all dimensions of health (physical, intellectual, emotional, social, sexual, and spiritual) could yield crucial information for meet-





ing the needs of myriad different user groups. For example, pregnant females are more comfortable in a different style of chair than are athletic males. In respect to social health, men and women have different general social tendencies. Clusters of chairs may be a more appropriate setting for women, whereas men may prefer benches facing sports courts or fields. Women may prefer pastel colors in displays and brochures; men may prefer bold or nature-toned colors. Subtle changes in materials can affect the first perception of a product or environment; that is one reason remaining aware of the user community is a must.

Mental health should be addressed when discussing environments and programs. One example is the influence of outdoor recreation on stress. Several health conditions can be stress-related; the whole population's perceived stress level seems to be increasing. Outdoor recreation can positively affect stress

thereby reducing signs and symptoms of illness. Opportunities that increase a person's coping skills, whether they be a rock climbing wall, skating park or a solitary bench facing a waterfall surrounded by shrubs, trees, or aromatic flowers are just a few examples of ways outdoor recreation could benefit a person's overall mental and emotional health. Obviously, outdoor recreation is not a complete solution to severe mental health problems; however, partnering with associations that provide services to persons with mental health challenges maybe a beneficial venture for both organizations. Perhaps dedicating public kiosks that post information about community services such as crisis centers, hot lines, mental health associations and homeless shelters could be feasible.

Outdoor recreation providers can look even further outside the box. Spiritual health is different for each individual. Places of worship are not the only loca-



tions people frequent for spiritual well-being. Some people love to hike or just sit in a natural setting. Having safe, yet isolated areas where individuals can meditate or experience a degree of solitude may promote spiritual health. Additionally, partnering with local religious organizations for facilities and activities may increase public awareness, which could translate into an increase in facility users.

Simple steps like planning strategically placed seating that has taken several aspects of health and well-being into consideration (e.g., gender, mental, and spiritual health) can meet the needs of many. Careful consideration of current and future user communities, partnering with tangential organizations and long-range planning can increase the cost effectiveness of facility/programming development and improvements. If implemented with proper consideration, improvements to the outdoor recreation

site/programs will be applicable and usable for many years. Although, there are trends that come and go, there are also aspects of health that remain constant. People will always walk, activities will become more passive as people age, and grandparents will always enjoy time with their grandchildren. When planning sites, facilities and programs that are long-term investments, providers should focus on stables and accent with trends, adjust as needed through time, but keep the basics for future generations.

A Specialized Population

Average life expectancy has increased dramatically in the last 100 years. In 1901 males lived about 44 years, females about 46. Today both live about 35 years longer (CDC, 2005). The average life expectancy in the United States in 2005 was 77.6 years (National Center for Health Statistics). As life expect-



tancy has increased, chronic conditions have become more prevalent in the older population. These conditions often mean increased medical expenses, decreased quality of life and increased dependency on others. Therefore, increasing quality of life and decreasing health disparity for the older population is becoming more important, especially as the population grows and baby boomers approach retirement.

One major determinant of continued high quality of life as one ages is the amount of physical activity a person is involved in. The 2000 Behavioral Risk Factor Surveillance System asked older adults what physical activities they had participated in the past month. Nearly 70% of active older adults reported that walking was their activity of choice. Other activities that were reported include:

- Gardening – 9.6%
- Bicycling – 3.9%
- Home exercise – 3.3%
- Golf – 2.8%

Aerobics, swimming, weight lifting, running/jogging and tennis were also reported as activities that older adults enjoy doing.

The "State by State Report Card on Healthy Aging" ranked states on several health issues, including physically unhealthy days, frequent mental distress, disability, and no leisure-time physical activity. Indiana's rank in the nation is listed below (ranking order: 1 = least/best, 51 = most/worst):

- Physically unhealthy days (2001) – 44
- Frequent mental distress (2000-2001) – 13
- Disability (2002) – 33
- No leisure-time physical activity – 44

Indiana's rankings show a definite need for increased physical activity among aging Hoosiers.

As stated previously, lack of exercise is directly related to chronic disease and disability (the main cause of death today). As people age they become increasingly prone to chronic conditions, decreased



mobility, decreased balance, and hearing and visual limitations. In 2000 less than 15% of Indiana's population was reported to be 65 years old or older. By 2015 the percentage of citizens 65 years old and older is expected to increase to 15 to 19.9% of the population (Merck Institute of Aging and Health [MIAH], 2004). These figures indicate that we need to prepare now for an increase in the aging population and the related additional costs and considerations that must be taken into account when planning for the future of outdoor recreation environments, facilities, and programs. Some innovative ideas may be providing paved multi-use trails that connect retirement centers/communities to the outdoor recreation location, building or adapting facilities to be user-friendly for seniors (e.g., large print signs, handrails near walk ramps, shorter height stairs, increased ADA stalls in restrooms), and ensuring that the senior population has adequate representation at public forums and planning groups. To be a partner in the fight to decrease health disparity and increase quality of life, providers need to prepare for the aging population in their communities/user groups. The following Web sites are good sources for more information about the older population in regards to physical activity, programs promoting physical activity, and collaborative efforts to reduce the burden of disease and disparity:

- <http://www.cdc.gov/steps/index.htm>
- http://www.aarp.org/health/fitness/get_motivated/a2004-06-28-workbook-users.html
- <http://aoa.gov/youcan/>
- <http://healthyagingprograms.org/>
- <http://ucsf.edu/champs/>
- <http://www.agingblueprint.org/>

Conclusions

The link between outdoor recreation and health, wellness and aging may seem a foreign and mystical beast; a

way outside the box idea that cannot be integrated into the traditional views. But the American Association of Retired Persons (AARP), National Blueprint, IN-shape Indiana, and coalitions for the senior population disagree. Outdoor recreation providers may have reached the edge of a new era. The time when considering the overall health of the community and individual users will be essential for providing locations, facilities and services that will outlast changing trends and truly satisfy overarching needs and demographic segments.

Perhaps the cliché "all for one and one for all" should be the resounding theme for the future. As we look at budget constraints that providers continually face, becoming increasingly aware of needs within the service area may be a window of opportunity. By demonstrating a desire to meet needs of the communities within the site's service area and by reaching out to those communities, the provider may open doors for community ownership and the partnerships and funding opportunities that go with it. For example, specific user groups could provide matching funds needed for grant applications or money for smaller projects. If initiatives are targeted or marketed toward improving the health and quality of life of all, concerned citizens may band together and respond.

Outdoor recreation goes hand in hand with health and quality of life. It blends with each of the 10 Leading Health Indicators and can significantly impact each. It is the responsibility of the provider to show the community how this is a truth and a reality, and to provide the means for the community to have ownership. Providing multifactoral sites may seem a landscaper's fantasy, but it can become reality when enough people catch the vision and work together. Building community resources and community capacity for outdoor recreation is no dream. It is a necessity.





CHAPTER 7

The Final Word

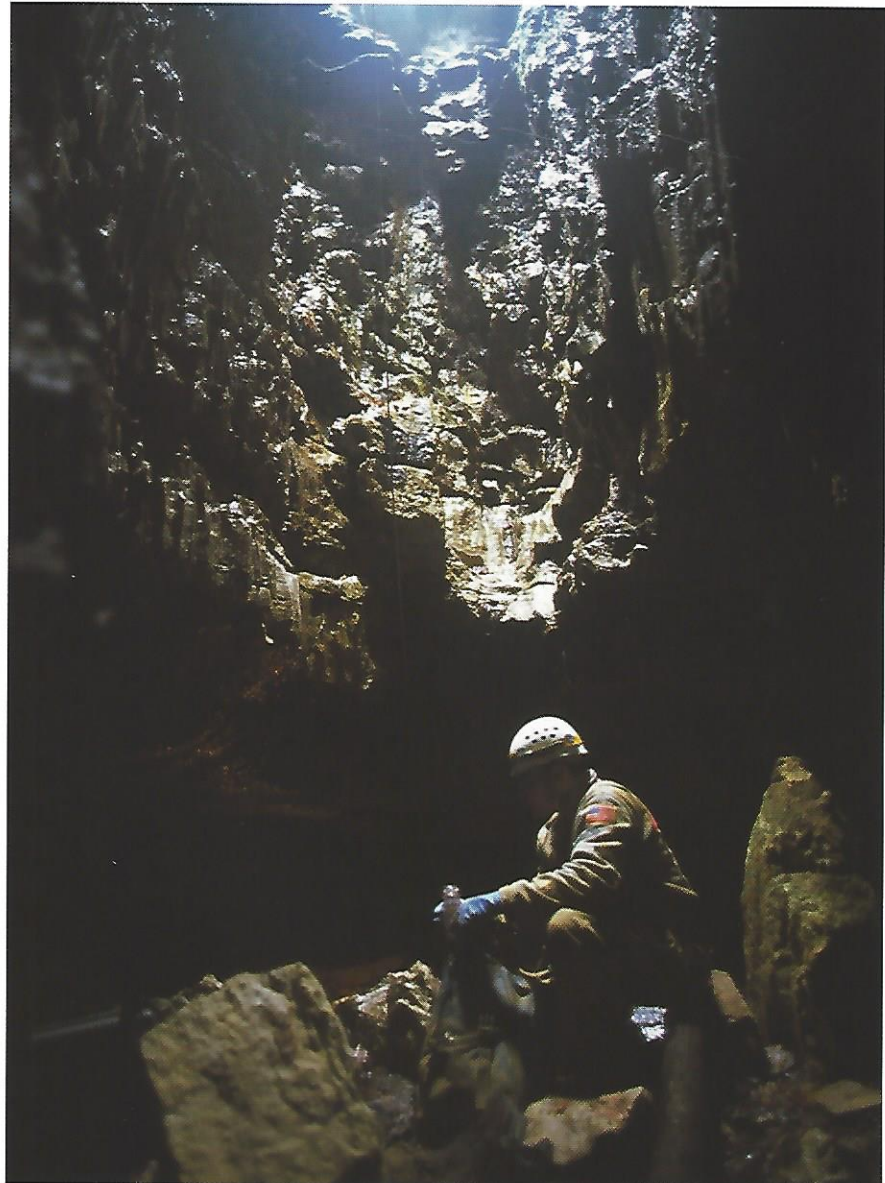
One of the goals of Indiana Department of Natural Resources is effective "stewardship of the resources entrusted to DNR by Hoosiers for future generations" (DNR, 2005). It is our responsibility as agents of the citizens of Indiana to "preserve, protect, restore, regulate, manage, provide recreation, and educate" (DNR, 2005). All outdoor recreation providers are stewards who are responsible for meeting the needs of people while maintaining the integrity of the land.

As stewards our job is to serve others. To best serve the user populations of Indiana's outdoor recreation sites, we must know communities' demographics, changes that can be expected in the near and distant future, and the desires of diverse user groups within each community. We must work with people and partner with outside organizations to see the big picture. By opening the doors to community input and networking beyond the field of natural resources, we may also avail ourselves of new sources of revenue, increased user populations, and greater acceptance within local areas.

This SCORP advocates an increased awareness of how outdoor recreation can affect the health and well being of all of Indiana, not just its citizens but also the State's natural resourc-

es, economy, appeal to tourists, and development as a national leader. Providers of outdoor recreation have a significant positive influence on all aspects of a person's well being; healthy people create a healthy community; and healthy communities create a healthy State. Outdoor recreation providers have a tremendous impact through provision of new recreational opportunities, acquisition and restoration of endangered habitats, and alignment with national goals for recreation and quality of life.

We have not limited the influence of outdoor recreation to persons without



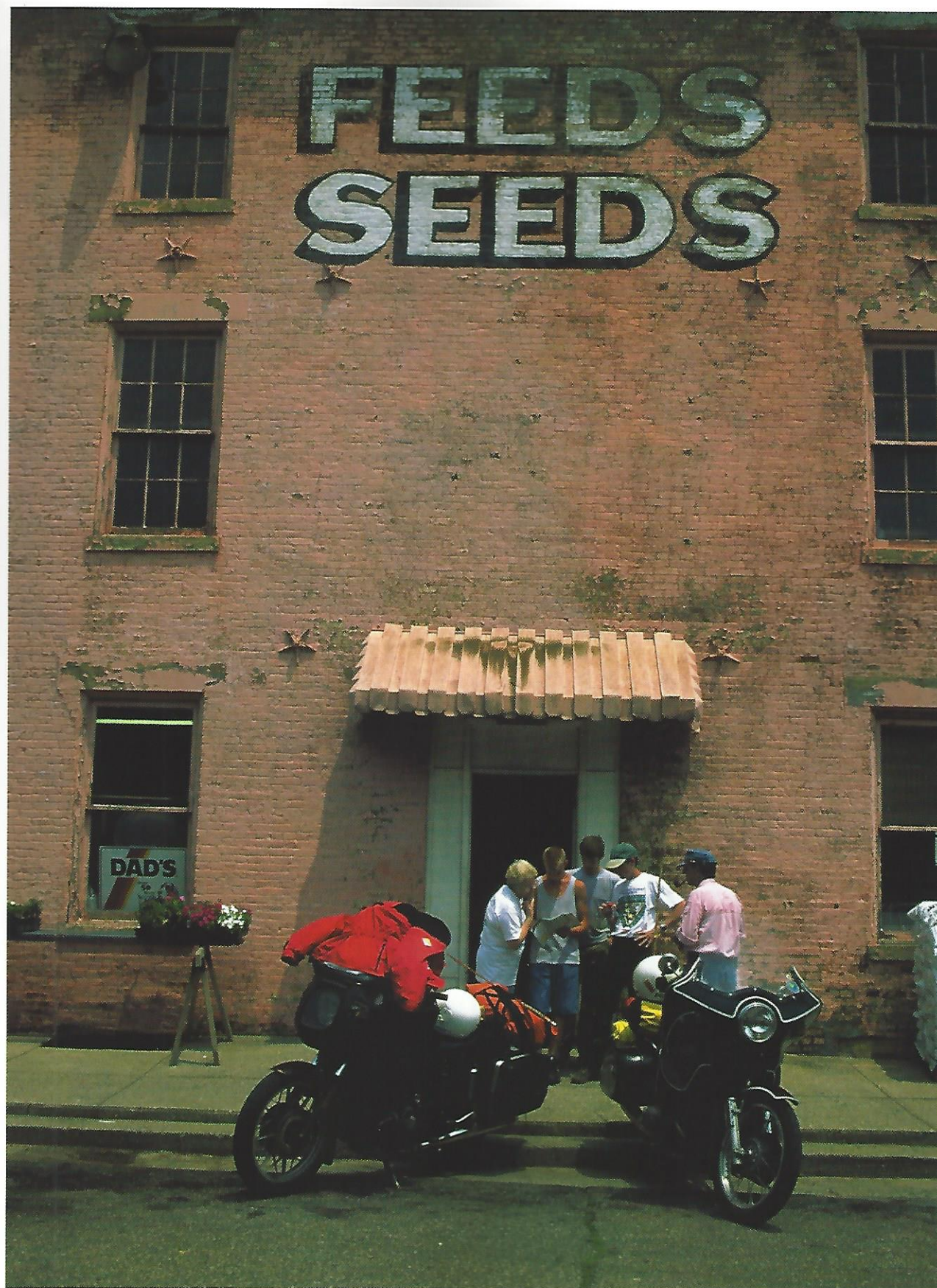


disabilities or limitations. We have advocated the use of universal design to address the needs of all. We have shown that UD goes well beyond the physical needs of Hoosiers, that it can also impact intellectual, social, sexual and spiritual health. UD spans generations and can be used to help bring families and communities together for the greater good.

This SCORP has shown that Indiana's citizens enjoy a well-rounded variety of outdoor recreation activities and the benefits they derive from them. It has shown that the State has not kept up with the population growth in land acquisition and expressed major concerns for increasing recreation opportunities at the local level. This is an issue that must be addressed soon to meet the desires of Hoosiers to have outdoor recreation opportunities close to home. Even so, this SCORP is a comprehensive plan that spans a myriad of problems and possibilities. It includes recommendations for outdoor recreation

activities and sites and encompasses everything from a meditation area in a park, to strolling down the street, to rollerblading at a skating park, fishing at a local pond, and motorboating or sailing Lake Michigan. The SCORP has recommendations for every generation and degree of physical ability, as well as for the diverse interests of user groups throughout Indiana. The recommendations in this SCORP are not just for local municipalities or local park and recreation boards. They are for every outdoor recreation provider: State, county, township, municipal, public, and private.

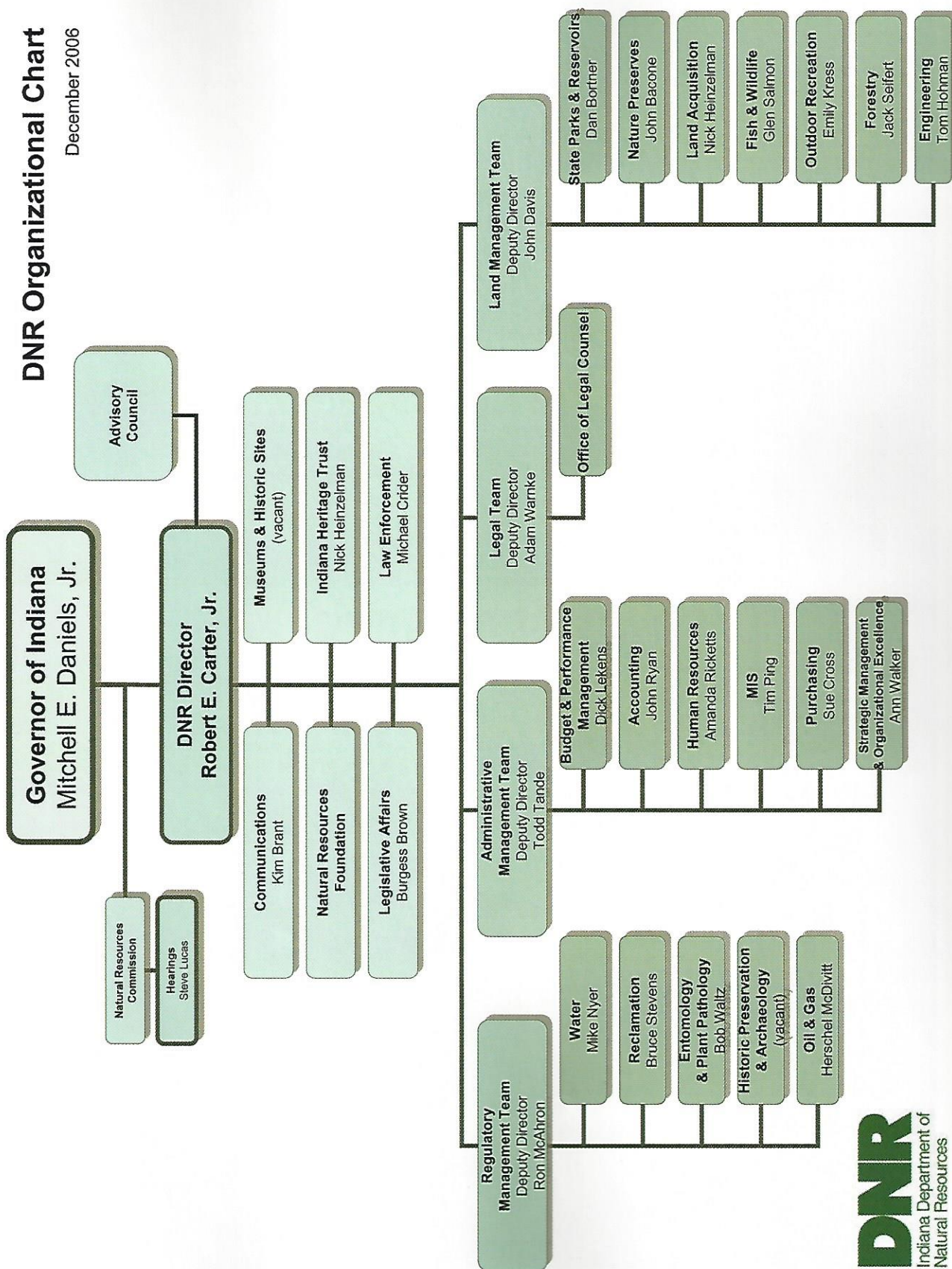
As stewards who have been entrusted with meeting the needs of Indiana's citizens it is our job to provide outdoor recreation opportunities for all people. We hope that this SCORP will provide the direction needed to develop and implement plans and actions at all levels, for all providers, to meet current and future needs of outdoor recreation in our fine State.





DNR Organizational Chart

December 2006



DNR
Indiana Department of
Natural Resources



Indiana Department of Natural Resources

Indiana Natural Resources Commission:

<http://www.in.gov/nrc/>

Twelve bipartisan resident members who meet four times per year to address problems pertaining to the DNR.

IDNR Divisions

Communications:

<http://www.in.gov/dnr/public/>

Provides internal and external communications, public relations, marketing, and public education for all of DNR.

Engineering:

<http://www.in.gov/dnr/engineer/>

Provides engineering and technical support for all DNR properties and others including architectural, sanitary, electrical, landscape, civil, and code enforcement.

Entomology and Plant Pathology:

<http://www.in.gov/dnr/entomolo/>

Provides information and technical assistance in managing plant and apiary pests; invasive and harmful species are a specialty.

Fish and Wildlife:

<http://www.in.gov/dnr/fishwild/>

Manages and monitors fish and wildlife populations throughout Indiana; technical assistance and information is available.

Forestry:

<http://www.in.gov/dnr/forestry/>

Manages the Indiana State Forests and provides information and technical assistance to foresters and private landowners.

Historic Preservation and Archaeology:

<http://www.in.gov/dnr/historic/>

Division acts as the staff for the State Historic Preservation Officer, and promotes conservation of cultural resources by facilitating state and federal preservation programs.

Human Resources:

<http://www.in.gov/dnr/humanres/>

Division acts as a resource for current and future employees of DNR. They provide information on employment, benefits, volunteering, internships, applications and more.

Law Enforcement:

<http://www.in.gov/dnr/lawenfor/>

Provides 204 Conservation Officers in 10 law enforcement districts statewide. Staff handles environmental investigations, emergency response, education, law enforcement, and property protection.

**Nature Preserves:**

<http://www.in.gov/dnr/naturepr/>

Provides permanent protection to significant natural areas in Indiana. Their goal is to maintain sustainable examples of all native ecological communities in the State.

Oil and Gas:

<http://www.in.gov/dnr/dnroil/>

Oversees petroleum production and exploration throughout the State. Three program areas under Oil and Gas are: Permitting and Compliance; Field Services; and Abandoned Sites.

Outdoor Recreation:

<http://www.in.gov/dnr/outdoor/>

Division handles State and local level park and recreation master planning, streams and trails, grants, and technical assistance for the public and recreation professionals.

Reclamation:

<http://www.in.gov/dnr/reclamation/>

Provides resource protection by overseeing reclamation of abandoned mines, active mines, mine blasting, mining permits, and public participation in the oversight and permit processes.

State Museum and Historic Sites:

<http://www.in.gov/ism/>

Operates a wide variety of historic/cultural programs and facilities statewide such as Indiana State Museum in Indianapolis, Ernie Pyle Home, Grissom Air Museum, and Angel Mounds archeological site.

State Parks and Reservoirs:

<http://www.in.gov/dnr/parklake/index.html>

Manages and operates Indiana State Parks, State Reservoirs, and State Park Inns. Provides education, recreation, resource conservation and management of these public lands.

Water:

<http://www.in.gov/dnr/water/>

Division provides oversight of both above and below-ground water statewide. Provides customer information services, permitting, technical services, and engineering services. They also operate three work groups: Floodplain Management; Resource Assessment; and the Compliance and Projects Branch.



Other related Indiana Government offices

Indiana Department of Agriculture, Division of Soil Conservation:

<http://www.in.gov/isda/soil/>

Provides guidance, education and technical assistance to public and private landowners throughout Indiana.

Indiana Department of Environmental Management:

<http://www.in.gov/idem/>

Provides branches that deal with air, water, and land. Technical oversight, permits and regulatory compliance are part of their mission.

Indiana Department of Health:

<http://www.in.gov/isdh/>

Provides policy, guidance and facilitation of public health and health care activities and programs statewide.

Governor's Council on Physical Fitness and Health:

<http://www.in.gov/isdh/programs/GovernorsCouncil/>

Promotes sound physical fitness, nutrition and health.

Indiana Department of Transportation:

<http://www.in.gov/dot/>

Works with all aspects of the statewide transportation system: bus, car, rail, air, bicycle and foot. Sometimes partners with IDNR-OR on alternative transportation projects.

Indiana Economic Development Corporation:

<http://www.in.gov/iedc/>

A public-private partnership with a twelve-member board who act as the top economic development agency for Indiana.

Indiana Office of Community and Rural Affairs:

<http://www.in.gov/ocra/>

Provides planning, grants, and technical assistance for rural economic development statewide.

Indiana Office of Tourism Development:

<http://www.in.gov/lgov/issues/tourism.html>

A stand-alone agency within State government that uses both public and private funds to expand tourism statewide.





APPENDIX A

Indiana Outdoor Recreation Participation Survey

Indiana Department of Natural Resources - Outdoor Recreation Participation Survey

How important is outdoor recreation to you?

- ☐ Essential ☐ Don't care
☐ Desirable ☐ Undesirable

Are you ...

- ☐ Male ☐ Female

In which age category are you?

- ☐ Under 11 ☐ 45-54
☐ 11-17 ☐ 55-64
☐ 18-24 ☐ 65-74
☐ 25-34 ☐ 75 & over
☐ 35-44

What is your current marital status?

- ☐ Single, never married ☐ Separated
☐ Married ☐ Widowed
☐ Divorced

Do you have any children living at home?

- ☐ Yes
☐ No

Which of the following do you consider yourself to be?

- ☐ White, non Hispanic ☐ Asian
☐ Black/African American ☐ Native Hawaiian/Pacific Islander
☐ Hispanic/Latino ☐ Multi-racial
☐ American Indian/Alaska Native ☐ Other

What is the highest level of education you have completed?

- ☐ 8th grade or less ☐ 1-3 years of college
☐ 1-3 years of high school ☐ Completed college degree
☐ Completed high school ☐ Graduate work or degree
☐ Trade or technical school

Do you consider yourself as having any sort of disability that interferes with participation in outdoor recreation activities?

- ☐ Yes
☐ No

What is your best estimate of your total household income, before taxes, in 2002?

- ☐ Less than \$10,000 ☐ \$50,000-\$74,999
☐ \$10,000-\$19,999 ☐ \$75,000-\$99,999
☐ \$20,000-\$29,999 ☐ \$100,000-\$150,000
☐ \$30,000-\$49,999 ☐ \$150,000 or more

In which Indiana county do you live? _____

- ☐ Do not live in Indiana

Which of the following best describes the community in which you live?

- ☐ Suburb of a metropolitan area ☐ A town between 5,000 & 10,000 people
☐ A city (not a suburb) of more than 500,000 people ☐ A town of less than 5,000 people
☐ A city between 50,000 & 500,000 people ☐ A rural area
☐ A city between 10,000 & 50,000 people



Did you participate in any outdoor recreation activity during the past year? (This may include anything from home gardening and horseshoes to snow skiing and mountain climbing)

☐ Yes

☐ No

Please check each of the activities in each category that you participated in REGULARLY in the last year.

Walking/hiking/jogging

☐ Hiking

☐ Walking for pleasure

☐ Jogging/running

☐ Fitness/rehabilitation

☐ Other

Bicycling

☐ BMX biking

☐ Rail-trail/bikeway corridor riding

☐ Casual riding

☐ Touring

☐ Mountain biking

☐ Competitive riding/road racing

☐ Other

☐ **Horseback riding**

Motorized vehicle use

☐ Snowmobiling

☐ 4-wheel drive vehicles

☐ ATV's

☐ Motorcycles

☐ Pleasure driving

☐ Other

Nature observation/photography

☐ Gathering (Mushroom, berry, etc.)

☐ Nature photography

☐ Bird watching

☐ Wildlife viewing

☐ Relaxation/aesthetics

☐ Fall foliage

☐ Other

☐ **Picnicking**

☐ **Playground use**

☐ **Rollerblading/roller skating/skateboarding**

Court sports

☐ Horseshoes

☐ Basketball

☐ Tennis

☐ Shuffleboard

☐ Volleyball

☐ Other

Field sports

☐ Baseball/softball

☐ Football

☐ Soccer

☐ Other

Golf

☐ Regulation golf

☐ Driving range

☐ Miniature golf

☐ Par 3

☐ Other

Camping

☐ Backpack/remote camping (Developed or undeveloped)

☐ RV/trailer camping

☐ Tent camping

☐ Car/van/truck camping

☐ Organized camping

☐ Cabins

☐ Other

**Boating/water skiing/jet skiing**

- | | |
|--|---|
| <input type="checkbox"/> Canoeing/rafting/kayaking | <input type="checkbox"/> Power boating (Includes electric & pontoons) |
| <input type="checkbox"/> Sailing/windsurfing | <input type="checkbox"/> Jetskiing/personal watercraft |
| <input type="checkbox"/> Rowing | <input type="checkbox"/> Houseboats |
| <input type="checkbox"/> Water skiing/tubing | <input type="checkbox"/> Other |

Swimming/scuba/snorkeling

- | | |
|---|---|
| <input type="checkbox"/> Pool swimming | <input type="checkbox"/> Scuba/snorkeling |
| <input type="checkbox"/> Swimming at lake, river or beach of any kind | <input type="checkbox"/> Other |

Hunting

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> Fur bearing animals | <input type="checkbox"/> Deer |
| <input type="checkbox"/> Waterfowl | <input type="checkbox"/> Small game |
| <input type="checkbox"/> Turkey | <input type="checkbox"/> Other |

Fishing

- | | |
|---|---------------------------------------|
| <input type="checkbox"/> Lake/reservoir | <input type="checkbox"/> Boat fishing |
| <input type="checkbox"/> River/stream | <input type="checkbox"/> Bank fishing |
| <input type="checkbox"/> Ponds | <input type="checkbox"/> Ice fishing |
| <input type="checkbox"/> Great Lakes | <input type="checkbox"/> Other |

Winter sports

- | | |
|---------------------------------------|--|
| <input type="checkbox"/> Ice skating | <input type="checkbox"/> Snowshoeing/hiking |
| <input type="checkbox"/> Sledding | <input type="checkbox"/> Alpine (downhill) skiing/snowboarding |
| <input type="checkbox"/> Snowmobiling | <input type="checkbox"/> Cross-country skiing |
| <input type="checkbox"/> Hockey | <input type="checkbox"/> Other |

Trapping**Shooting sports**

- | | |
|---------------------------------------|-------------------------------------|
| <input type="checkbox"/> Clay targets | <input type="checkbox"/> Rifles |
| <input type="checkbox"/> Archery | <input type="checkbox"/> Paint-ball |
| <input type="checkbox"/> Hand guns | <input type="checkbox"/> Other |

Fairs/festivals**Remote control (Cars/boats/planes)****Lawn games (Badminton/lawnbowling)****Where did you participate in this/these activities MOST frequently?**

- ☐ In Indiana
☐ Outside the state of Indiana

If you remember, in which county in Indiana did you participate in this/these activities MOST frequently? _____**If you don't remember what county, to the best of your knowledge, in which region of Indiana did you participate in this/these activities MOST frequently?**

- | | |
|------------------------------------|---|
| <input type="checkbox"/> Northeast | <input type="checkbox"/> Southeast |
| <input type="checkbox"/> Northwest | <input type="checkbox"/> Southwest |
| <input type="checkbox"/> Central | <input type="checkbox"/> Don't remember |

Now think of the ONE outdoor activity that you participated in the MOST during the past year. What type of property did you use the LAST TIME you did this activity?

- | | |
|---|--|
| <input type="checkbox"/> Private | <input type="checkbox"/> County |
| <input type="checkbox"/> Commercial | <input type="checkbox"/> City/town |
| <input type="checkbox"/> Membership only facility | <input type="checkbox"/> Own personal property |
| <input type="checkbox"/> Federal | <input type="checkbox"/> Other |
| <input type="checkbox"/> State | <input type="checkbox"/> Don't know |



With whom did you participate in this activity the MOST recent time? Select all that apply.

- | | |
|---|--|
| <input type="checkbox"/> Alone | <input type="checkbox"/> Friends |
| <input type="checkbox"/> Spouse | <input type="checkbox"/> Work colleagues |
| <input type="checkbox"/> Children | <input type="checkbox"/> Organized group |
| <input type="checkbox"/> Other family members | <input type="checkbox"/> Other |

If new recreation areas were developed or if present recreation areas were improved for the activity you participate in MOST frequently, how long would you be willing to travel to use the area?

- | | |
|--|--|
| <input type="checkbox"/> 5-15 minutes | <input type="checkbox"/> 2 hours |
| <input type="checkbox"/> 16 minutes-1 hour | <input type="checkbox"/> 3 hours |
| <input type="checkbox"/> 1-1.5 hours | <input type="checkbox"/> More than 3 hours |

What would be the MAIN reason why you would not participate in that activity MORE OFTEN?

- | | |
|---|--|
| <input type="checkbox"/> Lack of time | <input type="checkbox"/> Too demanding physically |
| <input type="checkbox"/> Lack of available facilities | <input type="checkbox"/> Family constraints (Children too young, etc.) |
| <input type="checkbox"/> Lack of money | <input type="checkbox"/> Other |
| <input type="checkbox"/> Lack of people with similar interest | <input type="checkbox"/> None |

Who do you think should provide facilities for that activity? Select all that apply.

- | | |
|---|---|
| <input type="checkbox"/> Private land owners | <input type="checkbox"/> County government |
| <input type="checkbox"/> Commercial land owners | <input type="checkbox"/> City/town government |
| <input type="checkbox"/> Membership only facilities | <input type="checkbox"/> Individual users |
| <input type="checkbox"/> Federal government | <input type="checkbox"/> Other |
| <input type="checkbox"/> State government | <input type="checkbox"/> Don't know |

Which of the following outdoor recreation activities would you be MOST LIKELY to participate in if adequate facilities were available? Select all that apply.

- ☐ Walking/hiking/jogging
- ☐ Bicycling
- ☐ Horseback riding
- ☐ Motorized vehicle use (Motorcycle, 4-wheel, ATV, snowmobile)
- ☐ Nature observation/photography
- ☐ Picnicking
- ☐ Playground use
- ☐ Rollerblading/roller skating/skateboarding
- ☐ Court sports (Tennis/basketball/volleyball/horseshoe/shuffleboard)
- ☐ Field sports (Football/soccer/baseball)
- ☐ Golf
- ☐ Camping
- ☐ Boating/water skiing/jet skiing
- ☐ Swimming, scuba, snorkeling
- ☐ Hunting
- ☐ Fishing
- ☐ Winter sports (Skiing, sledding, skating)
- ☐ Trapping
- ☐ Shooting sports
- ☐ Fairs/festivals
- ☐ Remote control (Cars/boats/planes)
- ☐ Lawn games (Badminton/lawnbowling)



If the PUBLIC SECTOR (GOVERNMENT) is to raise money for the development or improvement of outdoor recreation facilities, how should they do it? Select your top 3 answers by putting a 1 next to your first choice, a 2 next to your second choice and a 3 next to your third choice.

- ☐ No more money needed
- ☐ Additional federal funds
- ☐ Increased state income tax
- ☐ Increased state sales tax
- ☐ Lottery/gaming proceeds
- ☐ Increased user fees (Admission charges/facilities, hunting/fishing licenses)
- ☐ Increased special use taxes (Cigarette, liquor)
- ☐ Other local funding
- ☐ No preference

Which of the following BEST describes the MAIN reason you do not have the time to participate in outdoor recreation activities more often?

- ☐ My job demands too much time
- ☐ My family obligations prevent it (Housework, child care, meal preparation, etc.)
- ☐ My school or helping a family member with school prevent it
- ☐ My social obligations or my dependents prevent it (Church, clubs, etc.)
- ☐ I do not have the money
- ☐ Facilities are too far away from me or my family
- ☐ Facilities are not accessible to me or my family

Approximately how many hours PER DAY you spend on each of the following activities?

Watching Television

- | | |
|----------------------------------|---|
| <input type="checkbox"/> Zero | <input type="checkbox"/> 6 hours |
| <input type="checkbox"/> 1 hour | <input type="checkbox"/> 7 hours |
| <input type="checkbox"/> 2 hours | <input type="checkbox"/> 8 hours |
| <input type="checkbox"/> 3 hours | <input type="checkbox"/> 9 hours |
| <input type="checkbox"/> 4 hours | <input type="checkbox"/> 10 hours |
| <input type="checkbox"/> 5 hours | <input type="checkbox"/> More than 10 hours |

Performing household chores (Laundry, cleaning house, yard work, etc.)

- | | |
|----------------------------------|---|
| <input type="checkbox"/> Zero | <input type="checkbox"/> 6 hours |
| <input type="checkbox"/> 1 hour | <input type="checkbox"/> 7 hours |
| <input type="checkbox"/> 2 hours | <input type="checkbox"/> 8 hours |
| <input type="checkbox"/> 3 hours | <input type="checkbox"/> 9 hours |
| <input type="checkbox"/> 4 hours | <input type="checkbox"/> 10 hours |
| <input type="checkbox"/> 5 hours | <input type="checkbox"/> More than 10 hours |

Using your home computer for pleasure (Games, Internet, communications, etc.)

- | | |
|----------------------------------|---|
| <input type="checkbox"/> Zero | <input type="checkbox"/> 6 hours |
| <input type="checkbox"/> 1 hour | <input type="checkbox"/> 7 hours |
| <input type="checkbox"/> 2 hours | <input type="checkbox"/> 8 hours |
| <input type="checkbox"/> 3 hours | <input type="checkbox"/> 9 hours |
| <input type="checkbox"/> 4 hours | <input type="checkbox"/> 10 hours |
| <input type="checkbox"/> 5 hours | <input type="checkbox"/> More than 10 hours |

Shopping for food or clothing

- | | |
|----------------------------------|---|
| <input type="checkbox"/> Zero | <input type="checkbox"/> 6 hours |
| <input type="checkbox"/> 1 hour | <input type="checkbox"/> 7 hours |
| <input type="checkbox"/> 2 hours | <input type="checkbox"/> 8 hours |
| <input type="checkbox"/> 3 hours | <input type="checkbox"/> 9 hours |
| <input type="checkbox"/> 4 hours | <input type="checkbox"/> 10 hours |
| <input type="checkbox"/> 5 hours | <input type="checkbox"/> More than 10 hours |

Talking with family or friends

- | | |
|----------------------------------|---|
| <input type="checkbox"/> Zero | <input type="checkbox"/> 6 hours |
| <input type="checkbox"/> 1 hour | <input type="checkbox"/> 7 hours |
| <input type="checkbox"/> 2 hours | <input type="checkbox"/> 8 hours |
| <input type="checkbox"/> 3 hours | <input type="checkbox"/> 9 hours |
| <input type="checkbox"/> 4 hours | <input type="checkbox"/> 10 hours |
| <input type="checkbox"/> 5 hours | <input type="checkbox"/> More than 10 hours |



APPENDIX B1

Indiana General Population Survey on Boating in Indiana

1

Indiana General Population Survey on Boating in Indiana

Please note: This document is a survey outline rather than a full-fledged survey instrument. The survey instrument will be computer-coded, and although the questions are simply presented in a list here, the survey will automatically branch and skip certain questions in the full survey instrument. This outline is designed to present topics, content, and potential questions in a concise manner for your review.

Survey Outline

Survey Outline	1
Introduction.....	2
Outdoor Recreation Participation	2
Boaters: General Participation.....	4
Ownership of Watercraft	4
Satisfaction with Boating Experiences	5
Boating Avidity and Behavior.....	5
Boating Locations	6
Boaters: Safety Issues	8
Perception of Boating Safety	8
Causes of Boating Accidents	9
Safety Areas of Concern.....	9
Participation in and Attitudes Toward Boater Safety Education	10
Boaters: DNR Law Enforcement Issues	11
Boaters: Program Priorities.....	13
Boaters: Facilities Issues	14
Use of Public vs. Private Facilities	14
Rating of Available Facilities	15
Boaters: Boating Expenditures	17
Non-boaters: Interest in and Likelihood to Participate in Water-Related Outdoor Recreation Activities	18
Non-boaters: Safety Issues	22
Perception of Boating Safety	22
Causes of Boating Accidents	23
Attitudes Toward Boater Safety Education	23
Boating Information	24
Interest in Various Information Topics	24
Information Dissemination	24
Demographics.....	25



INTRODUCTION

Hello my name is _____ and I am calling on behalf of the Indiana Department of Natural Resources to gather some information about YOUR outdoor recreation experiences in Indiana. We want to gather information on how you use Indiana's natural resources so that we might be able to manage our rivers, lakes, and streams to better serve you and your family. Is this a good time to answer a few questions? The survey takes about 8 – 10 minutes.

OUTDOOR RECREATION PARTICIPATION

First, I would like to ask you a few questions about outdoor recreation activities.

- 1) During the past 12 months in Indiana, have you ...? (Read list; Check all that apply; Do not include gambling boats)
 - Fished from a shore or dock
 - Fished from a boat
 - Gone motorboating
 - Operated or rode a sailboat
 - Operated or rode a sailboard
 - Canoed or kayaked
 - Rode or operated a personal watercraft (industry names include Jet Ski, Wave Runner, Sea-Doo, and Wet Bike)
 - Water skied
 - Gone swimming in natural waters such as lakes, rivers, or streams
 - Visited an Indiana public reservoir or lake
 - Visited a private reservoir or lake
 - Boated in a state other than Indiana
 - Do Not Read: None of these

Those persons who report that they had fished from a boat, gone motorboating, or gone boating in a sailboat will continue Q2. Those that report participating in the above activities that involve a watercraft will continue to questions 4-10. All others will be skipped to their respective questions (Q71).



- 2) In what type of boat did you go boating in the past 12 months in Indiana? (Check all that apply)
- Motorboat (less than 16 feet)
 - Motorboat (16-26 feet)
 - Motorboat (26-40 feet)
 - Motorboat (40-65 feet)
 - Motorboat (greater than 65 feet)
 - Sailboat (less than 16 feet)
 - Sailboat (16-40 feet)
 - Sailboat (greater than 40 feet)
 - Flat-bottomed fishing boat
 - Canoe
 - Kayak
 - Rowboat with troller
 - Pontoon boat
 - Jon boat
 - Powered catamaran
 - Other
- 3) During your LAST TRIP on the water in Indiana, what were the primary activities in which you participated? (Read list; Check all that apply)
- Fished from a shore or dock
 - Fished from a boat
 - Gone motorboating
 - Operated or rode a sailboat
 - Operated or rode a sailboard
 - Canoed or kayaked
 - Rode or operated a personal watercraft (industry names include Jet Ski, Wave Runner, Sea-Doo, and Wet Bike)
 - Water skied
 - Gone swimming in natural waters such as lakes, rivers, or streams
 - Visited an Indiana public reservoir or lake
 - Visited a private reservoir or lake
 - Boated in a state other than Indiana
 - Do Not Read: None of these

**BOATERS: GENERAL PARTICIPATION**

This survey deals with questions concerning your recreational experiences on the water in Indiana. Please refer to only to your experiences while on the water IN Indiana.

- 4) You said you fished from a boat in the past 12 months. Were you using a watercraft that you or your family owned, did you or a member of your party rent/charter the watercraft, or were you a guest on a watercraft owned by a friend or acquaintance? (Check all that apply)
 - Owned the watercraft
 - Rented/Chartered the watercraft
 - Owned by a friend/acquaintance
 - Don't know
- 5) You said you went motorboating in the past 12 months. Were you using a watercraft that you or your family owned, did you or a member of your party rent/charter the watercraft, or were you a guest on a watercraft owned by a friend or acquaintance? (Check all that apply)
 - Owned the watercraft
 - Rented/Chartered the watercraft
 - Owned by a friend/acquaintance
 - Don't know
- 6) You said you operated or rode a sailboat in the past 12 months. Were you using a watercraft that you or your family owned, did you or a member of your party rent/charter the watercraft, or were you a guest on a watercraft owned by a friend or acquaintance? (Check all that apply)
 - Owned the watercraft
 - Rented/Chartered the watercraft
 - Owned by a friend/acquaintance
 - Don't know
- 7) You said you operated or rode a sailboard in the past 12 months. Were you using a watercraft that you or your family owned, did you or a member of your party rent/charter the watercraft, or were you a guest on a watercraft owned by a friend or acquaintance? (Check all that apply)
 - Owned the watercraft
 - Rented/Chartered the watercraft
 - Owned by a friend/acquaintance
 - Don't know
- 8) You said you canoed or kayaked in the past 12 months. Were you using a watercraft that you or your family owned, did you or a member of your party rent/charter the watercraft, or were you a guest on a watercraft owned by a friend or acquaintance? (Check all that apply)
 - Owned the watercraft
 - Rented/Chartered the watercraft
 - Owned by a friend/acquaintance
 - Don't know



- 9) You said you rode or operated a personal watercraft in the past 12 months. Were you using a watercraft that you or your family owned, did you or a member of your party rent/charter the watercraft, or were you a guest on a watercraft owned by a friend or acquaintance?
(Check all that apply)
Owned the watercraft
Rented/Chartered the watercraft
Owned by a friend/acquaintance
Don't know
- 10) You said you water skied in the past 12 months. Were you using a watercraft that you or your family owned, did you or a member of your party rent/charter the watercraft, or were you a guest on a watercraft owned by a friend or acquaintance? (Check all that apply)
Owned the watercraft
Rented/Chartered the watercraft
Owned by a friend/acquaintance
Don't know
- 11) Overall, are you satisfied or dissatisfied with your experiences on the water in Indiana in the past 12 months?
Very satisfied
Somewhat satisfied
Neither satisfied nor dissatisfied
Somewhat dissatisfied
Very dissatisfied
- 12) Overall, are you satisfied or dissatisfied with the Indiana DNR in managing Indiana's boating waters?
Very satisfied
Somewhat satisfied
Neither satisfied nor dissatisfied
Somewhat dissatisfied
Very dissatisfied
- 13) How many trips/outings total during the past 12 months did you take to spend time on the water in Indiana? (Multiple outings in a single day count as one outing)
___ ___ ___ (Range between 1 – 365)
- 14) How many days total during the past 12 months did you spend on the water in Indiana?
___ ___ ___ (Range between 1 – 365)
- 15) How many hours do you usually spend on the water in a single day?
_____ (Range between 1 – 24)



- 16) At what time of the day do you generally go out onto the water? (READ LIST)
- Morning
 - Mid-day/noon
 - Afternoon
 - Evening
- 17) How long, in terms of hours, do you usually travel from your home for a DAY trip spent on the water in Indiana?
- Don't take day trips to the water
 - Less than 1 hour
 - 1 - 2 hours
 - 2 - 3 hours
 - 3 - 4 hours
 - 4 - 5 hours
 - 6 - 7 hours
 - Don't know
- 18) How long, in terms of hours, do you usually travel from your home for an OVERNIGHT trip for the primary purpose of spending time on the water in Indiana?
- Don't take overnight trips to the water
 - Less than 1 hour
 - 1 - 2 hours
 - 2 - 3 hours
 - 3 - 4 hours
 - 4 - 5 hours
 - 6 - 7 hours
 - Don't know
- 19) On which bodies of water did you spend time in Indiana in the past 12 months?
- a. _____
 - b. _____
 - c. _____
- 20) You said your total number of trips to spend time on the water was [Q13]. How many of those trips did you take to [Q19a]?
- _____
- 21) How many of those trips did you take to [Q19b]?
- _____
- 22) How many of those trips did you take to [Q19c]?
- _____
- 23) What was the last body of water on which you spent time in Indiana?
- _____



- 24) What are the reasons you do not go boating more often? (Open-ended; Check all that apply)

Time: Work obligations

Time: Family obligations

Cost/Too expensive

Do not own a boat/Depend on others that own boat to go

Boat/Watercraft in need of repair

Too far to get to water

Don't know where to go

Weather

Other interests/hobbies

Other

- 25) What is the typical number of persons who generally are with you when you are on the water in Indiana during a single outing? (NOT INCLUDING YOURSELF; IF YOU GO ALONE SAY 0)

— —

(If Q25 is 0, skip to Q27)

- 26) Who generally accompanies you when you are on the water? (Open-ended; Check all that apply)

Spouse

Children

Parents

Extended family

Friends

Co-workers

Other

- 27) Over the past 12 months, would you say your level of activity on Indiana waters has increased, decreased, or remained about the same?

Increased

Decreased

Remained about the same

Don't know



- 28) What are the most important reasons you spend time on the water in Indiana? (Open-ended; Check all that apply)
- For relaxation
 - To be with friends and family
 - To be close to nature
 - To fish
 - To catch large fish
 - To go swimming
 - For the sport
 - To sightsee
 - As part of a vacation
 - It's a hobby
 - Entertain business associates
 - Other
- 29) In the past 12 months, do you think the quality of your boating experiences in Indiana has declined, remained about the same, improved, or do you not know?
- Declined
 - Remained about the same
 - Improved
 - Don't know

BOATERS: SAFETY ISSUES

- 30) Overall, do you think that Indiana's waters are safe or dangerous?
- Very safe
 - Somewhat safe
 - Neither safe nor dangerous
 - Somewhat dangerous
 - Very dangerous
 - Don't know
- 31) What would you say is the main reason that people have boating accidents? (Open-ended, Multiple Response)
- Going too fast/speeding
 - Reckless/careless operation
 - Alcohol
 - Drugs
 - Don't know the rules of the waterways
 - Fatigue
 - Distractions
 - Not familiar with boating equipment
 - Immature/operators too young
 - Overcrowding, not enough space in waterway
 - Didn't take a boater safety course
 - Other
 - Don't know



- 32) When you are on Indiana's public waterways, how frequently do you observe other boaters operating their motorboats, EXCLUDING PERSONAL WATERCRAFT (industry names include Jet Ski, Wave Runner, Sea-Doo, and Wet Bike), in an unsafe manner?
- Always
 - Sometimes
 - Rarely
 - Never
 - Don't know
- 33) When you are on Indiana's public waterways, how frequently do you observe other boaters operating a PERSONAL WATERCRAFT (industry names include Jet Ski, Wave Runner, Sea-Doo, and Wet Bike) in an unsafe manner?
- Always
 - Sometimes
 - Rarely
 - Never
 - Don't know
- 34) Overall, what types of boating safety issues concern you the most? (Open-ended; Check all that apply)
- Reckless/careless operators
 - Alcohol
 - Drug use
 - Personal watercraft (jet skiers)
 - Inadequate operator training
 - Speed at which watercraft are operated
 - Overcrowded waterways
 - Lack of law enforcement
 - Poor buoys/signs or markers
 - Lack of public access
 - Water quality
 - Pollution
 - Not taking a boater safety class
 - Nothing
 - Don't know
 - Other
- 35) How would you rate the DNR's efforts to provide education and safety training to Indiana's boaters? Would you say the DNR does an excellent, good, fair, or poor job?
- Excellent
 - Good
 - Fair
 - Poor
 - Don't know



- 36) Currently in Indiana, persons 15 years old or older, who do not possess a valid drivers license are required to take a boating safety class to operate a motorboat. Would you support or oppose efforts to develop a mandatory statewide boater safety course that all motorboaters, other than personal watercraft operators, must take before operating a boat in Indiana?
- Strongly support
 - Moderately support
 - Neither support nor oppose
 - Moderately oppose
 - Strongly oppose
 - Don't know
- 37) Would you support or oppose efforts to develop a mandatory statewide boater safety course that all personal watercraft operators must take before operating a personal watercraft in Indiana?
- Strongly support
 - Moderately support
 - Neither support nor oppose
 - Moderately oppose
 - Strongly oppose
 - Don't know
- 38) Would you support or oppose a change in legislation that would require boat occupants aged 12 and younger to use a personal flotation device (PFD) at all times?
- Strongly support
 - Moderately support
 - Neither support nor oppose
 - Moderately oppose
 - Strongly oppose
 - Don't know
- 39) While you are on the water, would you say you and other passengers usually use a PFD:
(Read list; Check only one answer)
- At all times
 - Only when the boat is moving
 - Only for certain activities
 - Only when conditions are bad
 - Only for certain activities in bad conditions
 - Under other circumstances
 - Or do you and your passengers never wear a PFD?



- 40) In your opinion, what actions could the Indiana DNR take to make Indiana's public waters safer? (Open-ended; Check all that apply)

Nothing

Provide VOLUNTARY boating safety courses

Provide MANDATORY boating safety courses

Maintain a more visible presence on Indiana's waterways

Hire more law enforcement/conservation officers

Increase fines for operating watercraft in an unsafe manner

Increase minimum age for operating a watercraft

Increase fines for the violation of boating regulations

Increase checks for boating registrations

Implement regulations to address specific issues

Other

Don't know

BOATERS: DNR LAW ENFORCEMENT ISSUES

Now I would like to ask you some questions about law enforcement issues related to boating in Indiana.

- 41) How often have you seen the DNR's law enforcement/conservation officers patrolling and providing services while you were on Indiana waters? Do you see law enforcement/conservation officers very often, somewhat often, rarely, or never?

Very often

Somewhat often

Rarely

Never

Don't know

- 42) Do you agree or disagree that the Indiana DNR maintains a sufficient law enforcement presence on public waterways?

Strongly agree

Moderately agree

Neither agree nor disagree

Moderately disagree

Strongly disagree

Don't know

- 43) Within the past 12 months, have you had any personal contact with an Indiana DNR law enforcement/conservation officer while on the water?

Yes

No

Don't know



- 44) Would you like to see more, the same amount, or less DNR law enforcement/conservation officers on public waters in Indiana?
- Much more
 - Somewhat more
 - The same
 - Somewhat less
 - Much less
 - Don't know
- 45) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on checking for boat registrations?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know
- 46) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on checking for required safety equipment?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know
- 47) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on controlling boaters under the influence of alcohol or drugs?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know
- 48) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on controlling reckless operation?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know



- 49) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on investigating stolen watercraft?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know
- 50) Do you think the DNR's law enforcement/conservation officers should spend more, the same, or less effort on enforcing personal watercraft laws and regulations?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know

BOATERS: PROGRAM PRIORITIES

Next, I'm going to list several DNR programs that relate to boating and I would like to know if you think more, the same, or less time and effort should be devoted to each activity.

- 51) Do you think the DNR should spend more, the same, or less effort on boating safety education?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know
- 52) Do you think the DNR should spend more, the same, or less effort on informing and educating boaters on issues other than boating safety education?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know



- 53) Do you think the DNR should spend more, the same, or less effort on increasing boating access on lakes and reservoirs?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know
- 54) Do you think the DNR should spend more, the same, or less effort on increasing boating access on rivers and streams?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know
- 55) Do you think the DNR should spend more, the same, or less effort on building more boat ramps?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know
- 56) Do you think the DNR should spend more, the same, or less effort on rebuilding and/or maintaining existing boat ramps?
- Much more effort
 - Slightly more effort
 - The same amount of effort
 - Slightly less effort
 - Much less effort
 - Don't know

BOATERS: FACILITIES ISSUES

Now I would like to ask you a few questions related to the facilities the Indiana DNR provides for boating.

- 57) At the body of water you most often visit, are the boating facilities that you use while boating, such as launch ramps, public or private facilities?
- Public
 - Private
 - Don't know



- 58) Overall, would you rate the boating ACCESS FACILITIES at the area in Indiana where you visit most often as excellent, good, fair or poor?
- Excellent
 - Good
 - Fair
 - Poor
 - Don't know
 - Not applicable
- 59) Would you rate the LAUNCH RAMPS at the area in Indiana where you visit most often as excellent, good, fair or poor or are there no launch ramps at all?
- Excellent
 - Good
 - Fair
 - Poor
 - Don't know
 - Not applicable
- 60) How would you rate the PARKING at this area?
- Excellent
 - Good
 - Fair
 - Poor
 - Don't know
 - Not applicable
- 61) How would you rate the RESTROOMS at this area?
- Excellent
 - Good
 - Fair
 - Poor
 - Don't know
 - Not applicable
- 62) How would you rate the DOCKS at this area?
- Excellent
 - Good
 - Fair
 - Poor
 - Don't know
 - Not applicable



- 63) How would you rate the ROADS to this area?
- Excellent
 - Good
 - Fair
 - Poor
 - Don't know
 - Not applicable
- 64) How would you rate the SANITARY PUMP-OUTS at this area?
- Excellent
 - Good
 - Fair
 - Poor
 - Don't know
 - Not applicable
- 65) How would you rate the FISH CLEANING STATIONS at this area?
- Excellent
 - Good
 - Fair
 - Poor
 - Don't know
 - Not applicable
- 66) Are there any boating access facilities in this area that you would like to see built? (Open-ended; Check all that apply)
- None
 - More free public access
 - Launch ramps
 - Restrooms
 - Parking areas
 - Mooring or docking facilities
 - Fish cleaning stations
 - Sanitary pump-outs
 - Handicap accessible boating facilities
 - Camping areas
 - Picnic areas
 - Swimming areas
 - Lighting
 - Roads to boating areas
 - Other



- 67) Are there any boating access facilities in this area that you would like to see improved? If yes, what aspects of the facilities need to be improved? (Open-ended; Check all that apply)

None

More free public access

Launch ramps

Restrooms

Parking areas

Mooring or docking facilities

Fish cleaning stations

Sanitary pump-outs

Handicap accessible boating facilities

Camping areas

Picnic areas

Swimming areas

Lighting

Roads to boating areas

Other

BOATERS: BOATING EXPENDITURES

Now I'd like to talk about your boating expenditures in Indiana. In general, there are three primary areas where you might spend money for a boating trip: in and around your place of residence, en route to the body of water, and at the body of water. For this survey, we will only focus on the money you spent AT THE BODY OF WATER. I'm going to read a few ways you may have spent money while boating, and I'd like you to tell me how much you spent in Indiana during YOUR LAST BOATING TRIP ONLY, AT [Q23].

- 68) About how much money did you spend on lodging, travel, and food and drink, including gasoline for your vehicle, groceries and/or liquor, and money spent at eating and drinking establishments in Indiana during your most recent boating trip, AT THE BODY OF WATER?
\$ ____
- 69) About how much money did you spend on boat expenditures, such as fuel for your boat and major and minor boating equipment, in Indiana during your most recent boating trip, AT THE BODY OF WATER?
\$ ____
- 70) About how much money did you spend on access and rental fees, such as launch fees, boat rental, and rental equipment, in Indiana during your most recent boating trip, AT THE BODY OF WATER?
\$ ____



NON-BOATERS: INTEREST IN & LIKELIHOOD TO PARTICIPATE IN WATER-RELATED OUTDOOR RECREATION ACTIVITIES

If respondent says they have not participated in each corresponding activity in Q1, ask the following questions:

- 71) You said you had not FISHED FROM A BOAT in the past 12 months. How interested are you in going FISHING FROM A BOAT in the next 12 months?
- Very interested
 - Somewhat interested
 - Not at all interested
 - Don't know
- 72) What are the reasons you did not FISH FROM A BOAT in the past 12 months? (Open-ended; Check all that apply)
- Lack of time
 - Don't know where to go
 - Too far to water
 - Not interested in fishing from a boat
 - Do not know how to fish from a boat
 - Do not have necessary equipment
 - Do not know where to participate in fishing from a boat
 - No one to go with
 - Too expensive
 - Overcrowding
 - Concerned about safety
 - Too old/age/or physical limitations
 - Other
 - Don't know
- 73) Would you be likely or unlikely to go FISHING FROM A BOAT in the next 12 months if a family member or friend invited you to do so?
- Very likely
 - Somewhat likely
 - Neither likely nor unlikely
 - Somewhat unlikely
 - Very unlikely
- 74) Do you know of any family member or close friends who FISH FROM A BOAT?
- Yes
 - No
 - Don't know



- 75) You said you had not GONE MOTORBOATING in the past 12 months. How interested are you in going MOTORBOATING in the next 12 months?
- Very interested
 - Somewhat interested
 - Not at all interested
 - Don't know
- 76) What are the reasons you did not go MOTORBOATING in the past 12 months? (Open-ended; Check all that apply)
- Lack of time
 - Don't know where to go
 - Too far to water
 - Not interested in motorboating
 - Do not know how to motorboat
 - Do not have necessary equipment
 - Do not know where to go motorboating
 - No one to go with
 - Too expensive
 - Overcrowding
 - Concerned about safety
 - Too old/age/or physical limitations
 - Other
 - Don't know
- 77) Would you be likely or unlikely to go MOTORBOATING in the next 12 months if a family member or friend invited you to do so?
- Very likely
 - Somewhat likely
 - Neither likely nor unlikely
 - Somewhat unlikely
 - Very unlikely
- 78) Do you know of any family member or close friends who MOTORBOAT?
- Yes
 - No
 - Don't know
- 79) You said you had not OPERATED OR RIDDEN A SAILBOAT OR SAILBOARD in the past 12 months. How interested are you in going SAILING OR SAILBOARDING in the next 12 months?
- Very interested
 - Somewhat interested
 - Not at all interested
 - Don't know



- 80) What are the reasons you did not OPERATE OR RIDE ON A SAILBOAT OR SAILBOARD in the past 12 months? (Open-ended; Check all that apply)
- Lack of time
 - Don't know where to go
 - Too far to water
 - Not interested in sailing or sailboarding
 - Do not know how to sail or sailboard
 - Do not have necessary equipment
 - Do not know where to go sailing or sailboarding
 - No one to go with
 - Too expensive
 - Overcrowding
 - Concerned about safety
 - Too old/age/or physical limitations
 - Other
 - Don't know
- 81) Would you be likely or unlikely to go SAILING OR SAILBOARDING in the next 12 months if a family member or friend invited you to do so?
- Very likely
 - Somewhat likely
 - Neither likely nor unlikely
 - Somewhat unlikely
 - Very unlikely
- 82) Do you know of any family member or close friends who go SAILING OR SAILBOARDING?
- Yes
 - No
 - Don't know
- 83) You said you had not GONE CANOEING, KAYAKING, OR RAFTING in the past 12 months. How interested are you in going CANOEING, KAYAKING, OR RAFTING in the next 12 months?
- Very interested
 - Somewhat interested
 - Not at all interested
 - Don't know



- 84) What are the reasons you did not go CANOEING, KAYAKING, OR RAFTING in the past 12 months? (Open-ended; Check all that apply)
- Lack of time
 - Don't know where to go
 - To far to water
 - Not interested in canoeing, kayaking, or rafting
 - Do not know how to canoe, kayak, or raft
 - Do not have necessary equipment
 - Do not know where to go canoeing, kayaking, or rafting
 - No one to go with
 - Too expensive
 - Overcrowding
 - Concerned about safety
 - Too old/age/or physical limitations
 - Other
 - Don't know
- 85) Would you be likely or unlikely to go CANOEING, KAYAKING, OR RAFTING in the next 12 months if a family member or friend invited you to do so?
- Very likely
 - Somewhat likely
 - Neither likely nor unlikely
 - Somewhat unlikely
 - Very unlikely
- 86) Do you know of any family member or close friends who CANOE KAYAK, OR RAFT?
- Yes
 - No
 - Don't know
- 87) You said you had not RIDDEN OR OPERATED A PERSONAL WATERCRAFT (industry names include Jet Ski, Wave Runner, Sea-Doo, and Wet Bike) in the past 12 months. How interested are you in RIDING OR OPERATING A PERSONAL WATERCRAFT in the next 12 months?
- Very interested
 - Somewhat interested
 - Not at all interested
 - Don't know



- 88) What are the reasons you did not RIDE OR OPERATE A PERSONAL WATERCRAFT in the past 12 months? (Open-ended; Check all that apply)
- Lack of time
 - Don't know where to go
 - Too far to water
 - Not interested in riding or operating a personal watercraft
 - Do not know how to ride or operate a personal watercraft
 - Do not have necessary equipment
 - Do not know where to go to ride or operate a personal watercraft
 - No one to go with
 - Too expensive
 - Overcrowding
 - Concerned about safety
 - Too old/age/or physical limitations
 - Other
 - Don't know
- 89) Would you be likely or unlikely to RIDE OR OPERATE A PERSONAL WATERCRAFT in the next 12 months if a family member or friend invited you to do so?
- Very likely
 - Somewhat likely
 - Neither likely nor unlikely
 - Somewhat unlikely
 - Very unlikely
 - Don't know
- 90) Do you know of any family members or close friends who RIDE OR OPERATE PERSONAL WATERCRAFT?
- Yes
 - No
 - Don't know

Now I would like to ask you a few questions specifically pertaining to boating in Indiana.

NON-BOATERS: SAFETY ISSUES

- 91) First, from what you have seen and heard, do you think that boating on Indiana's waters is safe or dangerous?
- Very safe
 - Somewhat safe
 - Neither safe nor unsafe
 - Somewhat dangerous
 - Very dangerous
 - Don't know



- 92) What would you say is the main reason why people have boating accidents? (Open-ended; Check all that apply)
- Going too fast/speeding
 - Reckless/careless operation
 - Alcohol
 - Drugs
 - Don't know the rules of the waterways
 - Fatigue
 - Distractions
 - Not familiar with boating equipment
 - Immature/operators too young
 - Overcrowding, not enough space in waterway
 - Didn't take a boater safety course
 - Other
 - Don't know
- 93) Would you support or oppose efforts to develop a mandatory statewide boater safety course that all motorboaters, OTHER THAN PERSONAL WATERCRAFT OPERATORS, must take before operating a boat in Indiana?
- Strongly support
 - Moderately support
 - Neither support nor oppose
 - Moderately oppose
 - Strongly oppose
 - Don't know
- 94) Would you support or oppose efforts to develop a mandatory statewide boater safety course that all personal watercraft operators must take before operating a personal watercraft in Indiana?
- Strongly support
 - Moderately support
 - Neither support nor oppose
 - Moderately oppose
 - Strongly oppose
 - Don't know
- 95) Would you support or oppose a change in legislation that would require boat occupants aged 15 and younger to use a personal flotation device (PFD) at all times?
- Strongly support
 - Moderately support
 - Neither support nor oppose
 - Moderately oppose
 - Strongly oppose
 - Don't know

**BOATING INFORMATION**

- 96) In Indiana, the DNR is the agency responsible for protecting, enhancing, and preserving the natural, cultural, and recreational resources in Indiana. Before this survey, would you say you knew a great deal, a moderate amount, a little, or nothing about the activities of the Indiana DNR?
- Great deal
 - Moderate amount
 - A little
 - Nothing
 - Don't know
- 97) Would you be interested in more information on boating in Indiana?
- Yes
 - No (Skip to Demographic Questions)
 - Don't know (Skip to Demographic Questions)
- 98) What types of information on boating would you be interested in receiving? We are not sending out information at this time; we are simply gauging interest. (Read list; Check all that apply)
- Nautical maps and charts
 - Access information on boat ramp locations
 - Fishing information
 - Wildlife information
 - Basic seamanship
 - Boating safety courses
 - Boating safety in general
 - Boating rules and regulations
 - Indiana DNR boating programs
 - Any others
- 99) What would be the best ways to provide you with information on boating? (Open-ended; Check all that apply)
- I don't want any information
 - Direct mail
 - Internet/WWW
 - Newspapers
 - Magazines
 - TV
 - Radio
 - Indiana DNR
 - Regulations handbook
 - License agent/sporting goods store/marinas
 - Law enforcement/conservation officers
 - Other
 - Don't know

**DEMOGRAPHICS**

Finally, I would like to ask you some background questions to help us analyze the results.

100) How important is outdoor recreation to you personally? Would you say it is very important, somewhat important, or not at all important?

- Very important
- Somewhat important
- Not at all important
- Don't know

101) How important are boating and water-related activities to you personally? Would you say they are very important, somewhat important, or not at all important?

- Very important
- Somewhat important
- Not at all important
- Don't know

102) Do you consider your place of residence to be a large city, a suburban area, a small city/town, a rural area not on a farm/ranch, or a rural area on a farm/ranch?

- Large city or urban area
- Suburban area
- Small city or town
- Rural area not on a farm/ranch
- Rural area on a farm/ranch
- Refused

103) How long have you lived in Indiana?

— —

104) Were you born in Indiana?

- Yes
- No

105) What is your county of residence?

— — — —

106) What is your marital status?

- Married
- Single
- Refused

107) What are the total number of children under age 18 living in your household?

— —



108) Which of these categories best describes your profession?

- Agriculture/farming
- Construction/development
- Clerical/Office
- Computer/Technical
- Finance/Insurance
- Health care
- Industry
- Teaching/education
- Transportation
- Retired
- Other

109) What is the highest grade level you have completed in school?

- Less than a high school degree
- High school diploma
- Some college/trade school
- College graduate
- Graduate school degree

110) Which of these categories best describes your total household income before taxes last year?

- Under \$15,000
- \$15,000 - \$29,999
- \$30,000 - \$44,999
- \$45,000 - \$59,999
- \$60,000 - \$74,999
- \$75,000 - \$89,999
- \$90,000 or over
- Don't know
- Refused

111) Are you of Hispanic or Latino ethnicity?

- Yes
- No
- Don't know
- Refused