

# PRELIMINARY INFORMATION CONSIDERED IN PREPARING THE DRAFT BERGEN COUNTY PARKS MASTER PLAN OF OCT. 11, 2019



Delivered as a Draft as of  
April 18, 2018

## Acknowledgements

The Rutgers Center for Urban Environmental Sustainability (CUES) and their project partners acknowledge and appreciate the participation and efforts of the Bergen County Parks and Planning Departments, the Technical Advisory Group, many non-profit groups, recreation groups, municipalities, and the general public who gave their time to attend public meetings and offer suggestions to help develop this plan. Throughout the Master Planning process, CUES received many constructive comments, suggestions, and corrections regarding the plan recommendations and content. This public participation and support was essential to our efforts to develop a plan that addresses the need for public Open Space and outdoor recreation, and the future parkland needs of Bergen County.

The consultants responsible for the preparation of this plan have made every effort to correctly identify places and names. Any misspellings or misidentifications are unintentional and subject to future correction.

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# **PRELIMINARY INFORMATION CONSIDERED IN PREPARING THE DRAFT BERGEN COUNTY PARKS MASTER PLAN OF OCT. 11, 2019**

Prepared for  
**The Bergen County Department of  
Parks, Recreation, Historic and Cultural Affairs**

Draft As Of April 18, 2018

Prepared By  
**Rutgers Center for Urban Environmental Sustainability (CUES)**

And Project Partners:  
**Biohabitats, Inc.**  
**DNA**  
**Eventage Event Productions, Inc.**  
**Town Square**  
**Voorhees Transportation Center (VTC), Rutgers University**

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## **CHAPTER 9: APPENDICES**

Separate digital submission to Bergen County on April 18, 2018.

- 9.1 Section 1 Inventory & Analysis Report
- 9.2 Public Outreach & Surveys
- 9.3 Other Planning Documents
- 9.4 Demographics
- 9.5 Transportation
  - A Intercept Survey Methodology and Findings
  - B Detailed Maps of Proposed Regional Connections
  - C Individual Park Transportation Analyses
  - D Parking Demand Table
- 9.6 Municipal Open Space
- 9.7 Individual Park Recommendations
- 9.8 Exploration: Bergen County Zoological Gardens
- 9.9 Long Term Capital Planning
- 9.10 Branding

# 1 PREFACE

## THE IMPORTANCE OF PARKS & A PARKS MASTER PLAN

### PARKS MAKE OUR LIVES HEALTHIER AND MORE ENJOYABLE BY:

- Providing nature that helps us relax and de-stress
- Providing places to exercise and be active
- Providing spaces to socialize and connect with others
- Protecting critical habitats that could otherwise be lost

This is how parks contribute to the high quality of life we have in Bergen County. They help make our County unique. Parks are also the public face of the County. For most residents and visitors, the first interaction they will have with Bergen County is through our Parks.

**PARKS ADD REAL VALUE.** Parks add economic value. They raise the value of our real property and keep it high. Homes near parks sell for a premium everywhere in the world. Having great parks and investing in them will provide benefits – of healthier people and better community spaces.

**WHY CREATE A MASTER PLAN?** There are many reasons to adopt a Master Plan. The Master Planning process gives the public a chance to participate in planning the future of our parks. The Master Plan develops solutions to complex problems. Most importantly, a Master Plan ensures that our long-term goals and priorities will endure.

### WHAT WILL THE MASTER PLAN DO?

The Parks Master Plan is a blueprint and a road map. It lays out a vision for the future of our Parks and establishes goals that will make the vision a reality. The Plan calls for nine goals that will improve and invest in Parks in the following ways:

- Preserve and Balance Our Diversity Open Space
- Improve Park & Open Space Access and Connectivity
- Steward Our Environmental Resources
- Provide Diverse Recreational Opportunities
- Improve and Invest in Existing Infrastructure
- Enhance Programming and Provide Engaging Education
- Increase Public Access to Information
- Operate and Maintain Sustainable Parks
- Develop a Sustainable Business Model



Figure 1. Parks are critical to health and quality of life in to Bergen County (Courtesy of CUES).

## General Benefits of Community Green Space



**\$162,000**

The U.S. Forest Service calculated that over a 50-year lifetime, one tree generates \$31,250 worth of oxygen, provides \$62,000 worth of air pollution control, recycles \$37,500 worth of water, and controls \$31,250 worth of soil erosion.<sup>1</sup>



**\$8,870**

Average amount that street trees add to sales price.<sup>2</sup>



**+148%**

Increase in property value within a block of the Indianapolis Cultural Trail, a high-quality 8-mile biking and walking trail, since its opening in 2008.<sup>3</sup>



**22%**

Of adults 20 or older in Bergen County are obese. Adult obesity in New Jersey has grown from 18.5% in 2000 to 25.7% in 2015.<sup>4</sup>



**50%**

Of vigorous, heart healthy exercise and about 14% of moderate exercise takes place in nearby neighborhood parks.<sup>5</sup>



**\$1.92 - \$9.32**

Projected return to community for every \$1 invested in a proposed multi-use path in Charleston, SC. Return benefits were associated with reduction in air pollution, congestion, direct medical care cost, gasoline usage, and increased tourism.<sup>6</sup>

## Economic Value of NJ State Parks & Forests<sup>7</sup>



**\$953 million - \$1.4 billion**

Estimated annual gross benefits of NJ State parks and forests



**\$240-\$369 million**

Annual total recreational value of visits in 2000-2004



**\$359-\$605 million**

Estimated annual value of ecosystem services



**7,000**

Jobs supported

## REFERENCES CITED

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- 4 New Jersey State Health Assessment Data. 2013-2014. Bergen County Public Health Profile Report.
- 5 Rand Corporation. 2013. *Quantifying the contribution of neighborhood parks to physical activity*.
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- 7 Mates, W.J and J. Reyes. 2004. *The economic value of New Jersey State parks and forests*. <http://www.nj.gov/dep/dsr/economics/parks-report.pdf>. Accessed 2 October, 2017.

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# 2 EXECUTIVE SUMMARY

## A BRIEF INTRODUCTION TO THE PARKS MASTER PLAN

Parks and open space play a vital role in the quality of life enjoyed by Bergen County residents. However, for over seventy years the Bergen County Parks system had no comprehensive Master Plan that established goals and objectives for county parklands. To address the lack of this critical planning document, the Bergen County Parks Department commissioned Rutgers Center for Urban Environmental Sustainability (CUES) to draft this Master Plan.

### HISTORIC CONTEXT

The 1938 New Jersey State Planning Board noted that Bergen County “suffered greatly from development... [and] almost completely ignored amenities such as parks”<sup>1</sup>. Although neighboring counties acquired and built parklands, Bergen County did not address its lack of parks until after World War II.

In 1946, the County requested the State of New Jersey legislation required to create a Parks Commission in order to provide recreational open space for Bergen County residents. This forerunner of the Bergen County Parks department was created in 1947. For forty years, the Bergen County Parks Commission (BCPC) was responsible for the design, development, and construction of the park system. The BCPC ended in 1987 when the Commission was incorporated into the reorganized Bergen County government as the Department of Parks, Recreation, Historic and Cultural Affairs.

The current leadership of the Bergen County Parks Department embraced the vision of the original BCPC Commissioners. Open Space owned by Bergen County now totals 9,335 acres, which is approximately 50% of the total available Open Space in the County. Based on Trust for Public Land standards, only twenty of the seventy Bergen County municipalities are currently well served by their amount of available public Open Space. The southern region of the County was recognized as an underserved area seventy years ago by the BCPC, and this parkland deficit remains today.



Figure 1. Public information sessions were critical factors in the development of the Bergen County Parks Master Plan (Courtesy of CUES).

Demographic projections through 2040 predict that the fifty municipalities currently underserved by available Open Space will see population increases, which will increase their current parkland deficit. This first Bergen County Parks Master Plan builds on the original park system, focusing on the County’s rivers and critical habitats, and enhances overall Open Space for County residents. The plan also identifies amenities and connections that are beyond the capability of an individual municipality.

To meet Open Space needs of future Bergen County residents, the existing parklands must be well managed and ecologically enhanced, naturalized parcels and corridors must be connected, and new parklands acquired.

# BERGEN COUNTY PARKS

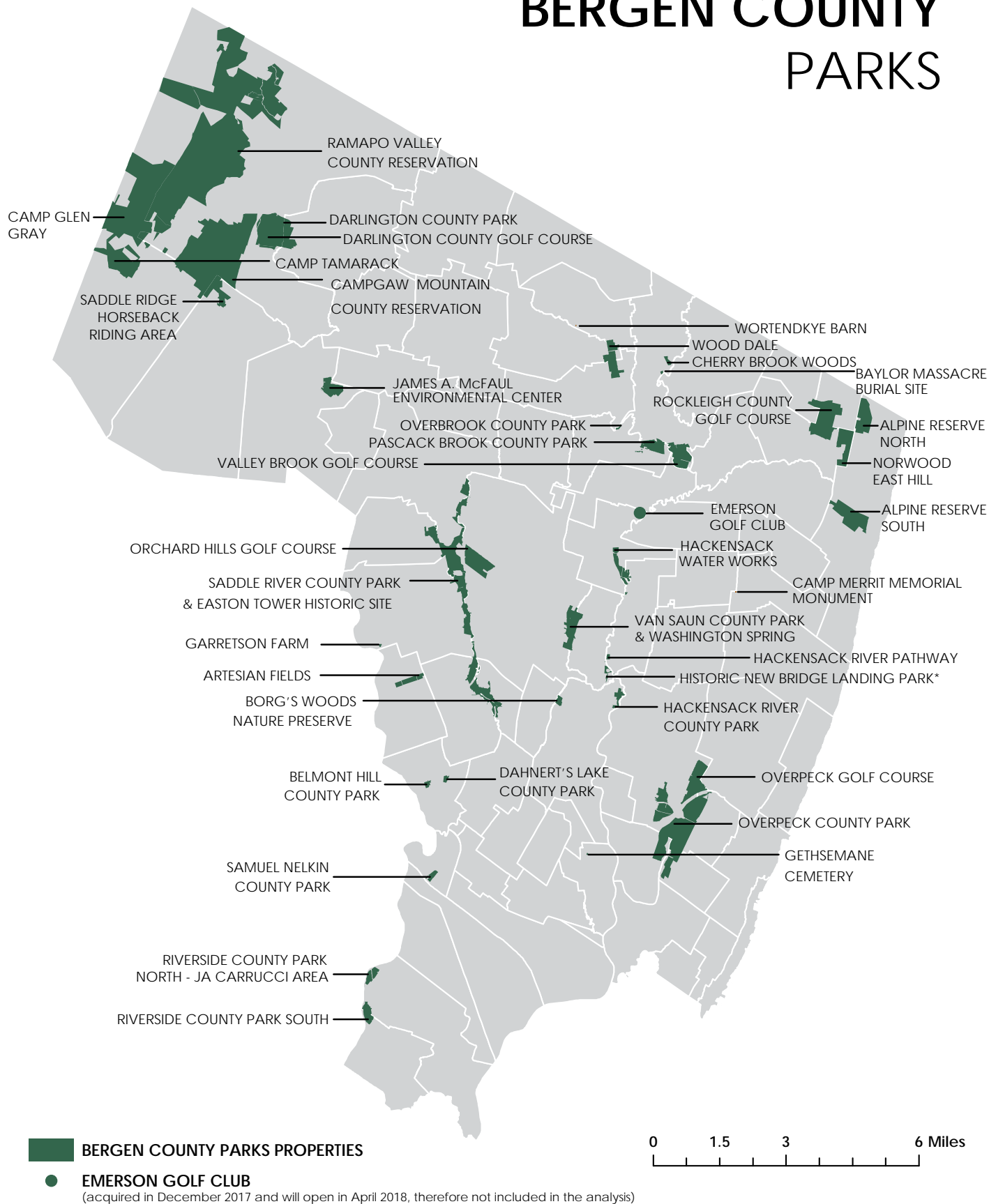


Figure 2. (Courtesy of CUES).

### CHAPTER 3: MASTER PLAN VISION & GOALS

The Master Plan envisions a diverse Bergen County Park system **From Marshes to Mountains**, which stretches from the Meadowlands estuary in the south to the northern peaks of the Ramapos and the Palisades. This vision for Bergen County Parks is one in which parks are an integral part of each resident's life, providing easy access to the Open Spaces of Bergen County, while preserving our natural areas and making outdoor recreation available to all. In this vision, Bergen County Parks compliment municipal, State, and non-profit open space, facilitating a regional network of diverse, connected recreational lands. Public open spaces are linked to each other and the surrounding communities, making a trip to the park safe, easy, and enjoyable for every resident.

Chapter 3 also outlines goals of the Master Plan that include:

1. Preserve and Balance Our Diversity of Open Space
2. Improve Park & Open Space Access and Connectivity
3. Steward Our Environmental Resources
4. Provide Diverse Recreational Opportunities
5. Improve and Invest in Existing Infrastructure
6. Enhance Programming and Provide Engaging Education
7. Increase Public Access to Information
8. Operate and Maintain Sustainable Parks
9. Develop a Sustainable Business Model

### CHAPTER 4: PAST – ECOLOGIC & PARK SYSTEM HISTORY

Bergen County's landscape is derived from the region's glacial history. Early development and transportation patterns followed rivers and waterways, leaving mountainous areas sparsely developed. County Open Spaces are closely associated with natural features of the landscape. Chapter 4.1 describes these ecologic foundations.

At the end of World War II, there was a deficit of publicly owned parkland in Bergen County required to meet the needs of the rapidly growing population. A Countywide referendum established the Bergen County Park Commission (BCPC) in 1947 with a mandate to design and build the County's Park system. Chapter 4.2 describes the forty year history of the BCPC's successful public outreach, land acquisitions, park construction, and programming activities. In 1987, the County Parks, Recreation, Historic and Cultural Affairs Department was established when Bergen County adopted an Executive form of government. Although a formal park Master Plan was never drafted by the Commission or the County, a number of other planning documents have been completed that include park-related elements. These plans are reviewed in Appendix 9.3.

### CHAPTER 5: PRESENT – POPULATION & PARKS

Planning a future park system requires an understanding of County demographic trends. Chapter 5.1 examines current ecologic conditions in County parklands. Chapter 5.2



Figure 3. A significant finding that came from the public outreach highlighted the diversity of resident interests and needs, from additional activity opportunities to desired amenities (Courtesy of CUES).



Figure 4. Public parks play a vital role in the quality of life enjoyed by Bergen County residents (Courtesy of CUES).

examines Bergen County demographic patterns. The analyses identify existing conditions and spatial patterns within Bergen County based upon population density, income, age, race and ethnicity, car ownership, and park accessibility.

Public outreach and involvement are crucial to the successful future implementation of the County Parks Master Plan. Chapter 5.3 describes the Master Plan outreach meetings and the public comments from these meetings. The online survey (2,200 respondents), and comments received from the communication link established on the CUES project website<sup>2</sup> are available in Appendix 9.2. A significant finding from the public outreach was the diversity of resident interests and needs. Another significant outcome of the public outreach process was the limited knowledge that many Bergen County residents had about the various programs and properties that compose the overall County Park system.

A Transportation analysis in Chapter 5.4 examines linkages between parks and multimodal access to parks. Pedestrian, bicycle, and vehicular circulation and parking issues were assessed.

A summary of the Bergen County parks inventory (Master Plan, Section I)<sup>3</sup> completed in 2016 describes the amenities and conditions found at each County park (Chapter 5.5).

An analysis of Bergen County parklands must also include public space owned by the seventy Bergen County

municipalities, non-governmental organizations (NGOs), and private groups/individuals. Chapter 6.6 is a compilation of available County open space. This chapter includes an analysis of whether a municipality is well served or underserved with respect to Open Space based on Trust for Public Land (TPL) criteria. A description of Open Space in each municipality can be found in Appendix 9.6.

## CHAPTER 6: FUTURE – MASTER PLAN RECOMMENDATIONS

The greatest challenge in developing the Master Plan is organizing a very diverse group of Open Space properties that do not naturally group into obvious categories. Conflicting user demands add a further challenge in conceptualizing a system that meets the needs of all residents.

The overall Master Plan vision is described by the system map in Chapter 6.1. This chapter describes the three layers of park system elements reflected in the Master Plan – Park Emphasis, Park Type, and Connectivity.

The 9,335 acres of County-owned parkland contain valuable forested, wetland, and aquatic habits that are rapidly disappearing in Bergen County. These natural habitats support a number of species currently listed on the State of New Jersey Threatened & Endangered and Species of Concern lists. Chapter 6.2 discusses the ecology of the County parklands with an emphasis on surface water management. This chapter also details actions that could increase parkland contributions to County sustainability.

Golf courses are a significant source of Bergen County parkland (10% of current acreage) and revenues (78% of 2016 park-generated income). These large tracts of open space provide affordable recreation and create opportunities for natural resource stewardship. Recommendations to improve the ecology of County golf courses are discussed in Chapter 6.3.

Operations & Maintenance Chapter 6.4 – Jim Koth To Write

Traffic, park accessibility, and parking were all concerns raised at the public outreach sessions. Chapter 6.5 contains transportation recommendations to improve existing traffic conditions in the Bergen County Park system. Detailed maps of the individual park transportation analyses and an analysis of parking demand are located in Appendix 9.5C.

Funding is needed to maintain and improve the existing County parklands. Significant revenues are being generated from for-fee amenities at some of the County parks and the Bergen County golf courses. Chapter 6.6 contains an analysis of potential events, amenities, and concessions that could enhance park visitor experiences.

In order to support the recommendations in this Master Plan, the Bergen County Parks Department requires modifications

of current business practices and an expanded management structure. Chapter 6.7 provides recommendations that could strengthen the management of County parks.

The need to create the Bergen County Parks “brand” and raise the visibility of the County Park system became very apparent during the public comment sessions. Chapter 6.8 recommends Branding, Marketing, and Communications options for the Bergen County Parks Department.

## CHAPTER 7: VISIONARY CONSIDERATIONS

Opportunities exist to expand Bergen County parklands and to enhance the visitor experience. Chapter 7 explores possible park expansion opportunities, opportunities for increased collaboration with non-County park supporters, and approaches that could increase funding to support parks.

## CHAPTER 8: IMPLEMENTATION STRATEGY

Implementation of the Bergen County Parks Master Plan is a long-term project that will span multiple administrations and ultimately multiple generations. A detailed prioritization and Implementation Strategy in Chapter 8 lays out critical steps that begin this process. An Implementation Matrix will be developed by Bergen County Parks Department and CUES subsequent to Freeholder adoption of the Master Plan.



Figure 5. A large number of groups, stakeholders, and individuals are passionate about the Bergen County Park system (Courtesy of CUES).

## CHAPTER 9: APPENDICES

Supporting documents that provide additional specific information related to recommendations in this Master Plan:

- 9.1 Inventory & Analysis
- 9.2 Public Outreach & Online Survey
- 9.3 Other Planning Documents
- 9.4 Demographics
- 9.5 Transportation
  - A Intercept Survey Methodology & Findings
  - B Maps of Proposed Regional Connections
  - C Individual Park Transportation Analyses
  - D Parking Demand Table
- 9.6 Municipal Open Space
- 9.7 Individual Park Recommendations
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- 9.9 Long Term Capital Planning
- 9.10 Branding

## REFERENCES CITED

- 1 Bergen County's Park Program First Annual Report of the Bergen County Park Commission 1947.
- 2 CUES. 2018. Bergen County parks masterplan. Website. <http://cues.rutgers.edu/bergen-park-system/>. Accessed 22 January 2018.



Figure 6. Implementing this Parks Master Plan will enhance the quality of life and improve overall County-wide environmental conditions for current residents and future generations (Courtesy of CUES).



# CHAPTER 3:

## Master Plan Vision & Goals

The vision **From Marshes to Mountains** for the Bergen County Park system provides a comprehensive framework for the Master Plan goals and recommendations. This vision is based on a thorough inventory analysis and evaluation of public input from multiple meetings, online surveys, and in person interviews. The Master Plan goals translate the vision into tangible actions for implementing the Master Plan. The individual goals are specifically informed by the analysis of current conditions, discussions with the parks administration, and active community engagement.

# 3 MASTER PLAN VISION & GOALS

FROM MARSHES TO MOUNTAINS

RAMAPO



PALISADES



VAN SAUN



OVERPECK



MEADOWLANDS



0 1.25 2.5 5 Miles

## MASTER PLAN VISION

The mission of the Bergen County Parks Department is to provide exceptional parks, programs, and recreational experiences while conserving the natural, cultural, and historic resources of the County for the enjoyment of current and future generations. The Bergen County Parks vision:

**Bergen County Parks are an integral part of each resident's life, providing easy access to the open spaces of Bergen County – from its southern marshes to the mountainous northern landscape – preserving our natural areas and making outdoor recreation available to all.**

The County of Bergen aspires to be home to the premier park system in the State of New Jersey. This Master Plan describes tangible steps needed to transform that vision into an attainable future. The Master Plan recommendations reflect our analysis of the opportunities and constraints that need to be addressed to achieve this future.

In this vision, Bergen County Parks compliment municipal, State, and non-profit open space, facilitating a regional network of diverse, connected recreational lands. Public open spaces are linked to each other and the surrounding communities, making a trip to the park safe, easy, and enjoyable for every resident. Green corridors, clean waterways and robust habitats within parks support local and migratory wildlife species and provide every resident access to a nature experience, whether kayaking in the Meadowlands, hiking in the Ramapo Mountains, or actively recreating somewhere in between. Recreational opportunities in the parks reflect the needs of Bergen County's diverse population, while engaging programming enlivens the parks year-round, promoting socialization, encouraging wellness, and adding to the residents' quality of life.

An efficient, responsive Parks Department works in partnership with Bergen County residents and non-profit groups to provide an outstanding visitor experience; encourage learning, participation, and stewardship; and provide open space expertise and coordination on a regional scale. This stewardship must include a commitment to sustainability throughout park programming, activities, and amenities that conserve and improve parks for future generations.

Achieving this future will ensure that parks will always be one of the main reasons for residents and businesses to locate in Bergen County, and will remain a pivotal and iconic part of life in a healthy and vibrant County.

# MASTER PLAN GOALS

## 1. PRESERVE & BALANCE OUR OPEN SPACE DIVERSITY

The County of Bergen wants to increase Open Space for conservation and recreation, and address areas that are underserved.

Open Space preserves significant environmental resources. It provides the habitats needed by threatened species and protects our water supply. It provides environmental and health benefits by sequestering carbon and improving our air quality. Open Space also provides residents with the intrinsic value of nature and natural beauty. It provides areas for fitness and recreation and supports healthy and active living choices.

Open space has a positive effect on adjacent property values. Preserving land as Open Space reduces new development that requires increased taxes to support.

The County of Bergen seeks to appropriately balance active and passive recreation. Diverse and balanced facilities will ensure almost everyone will find something to do or enjoy in the park system.

## 2. IMPROVE PARK & OPEN SPACE ACCESS AND CONNECTIVITY

The County of Bergen wants to make it safe, easy, and convenient to get to parks.

Great parks are of little benefit if people cannot easily reach them. Improving access to parks will make it safer and more

convenient for people to get to parks and enjoy their benefits. In particular, we want to solve the parking and traffic issues. Not everyone wants to drive to parks. Increasing walking and bicycling access gives more people the opportunity to visit parks. It can give those who would normally drive to parks the opportunity to walk or bike, reducing their vehicle use and encouraging a more active and healthy lifestyle. Establishing and maintaining full ADA compliance can ensure County parks are safely and efficiently accessible for all users; easy access for everyone is a way of ensuring our parks are inclusionary (Fig. 1).

Connections between parks, commonly called greenways, can increase the amount of Open Space. Greenway connectors allow users to enjoy the features of more than one park in the same visit. Greenways can provide the dual benefits of more recreational opportunities and more alternative, non-motorized transportation.

## 3. STEWARD OUR ENVIRONMENTAL RESOURCES

The County of Bergen wants to protect critical environments and habitats, and mitigate flooding by managing storm water with green infrastructure in our parks.

It is our priority to protect and conserve our natural areas. The parks system protects sizeable natural resources, in woodlands, in wetlands, in stream valleys, and other natural areas. By protecting these areas, we preserve biological diversity.

Protecting our natural areas brings additional benefits when used to better manage storm water. Natural areas slow rain and flood waters, filter pollutants, and reduce the need for engineered infrastructure systems and their associated capital and operating costs.

## 4. PROVIDE DIVERSE RECREATIONAL OPPORTUNITIES

The County of Bergen wants to provide the types of fields, athletic facilities, and variety of places to exercise, relax, and socialize required by a diverse County population.

Public recreation in the form of participation in a team or group activity, or a stroll along a walkway, or a hike in the mountains, is essential to the quality of life in Bergen County.



Figure 1. The Parks Department is committed to improving park access and environmental stewardship so that everyone can enjoy the parks for generations to come (Courtesy of CUES).

Recreational facilities provide places for people to engage in physical fitness, rest and relaxation, and socialization. Increasing the diversity of recreational opportunities can help more people realize the benefits of these activities.

## 5. IMPROVE & INVEST IN EXISTING INFRASTRUCTURE

The County of Bergen wants to fix areas in need of repair, maintain parks to high standards, and invest in needed infrastructure, particularly in golf courses and older properties.

Better infrastructure will improve visitor experiences, which can result in more numerous and more satisfied park users. Improving running, biking, walking, and riding trails can provide better recreation and transportation opportunities.

An enhanced Bergen County Zoo can continue to provide for the physical, environmental and behavioral needs of the animals in its care, and could provide a diverse array of programs that accommodate the interests of residents and visitors alike.

An improved McFaul Environmental Center can better educate residents about local and global wildlife and habitats. Learning about animals, plants, conservation, and sustainability can encourage respect for and conservation of natural resources.

Improved Bergen County golf courses can continue to provide affordable, convenient golf for residents and visitors. The quality of the infrastructure, facilities, and programming are critical to the attractiveness of the courses. Improving the visitor experience, and optimizing the use of facilities for food service and social gatherings, can result in greater use of the courses and generate additional park revenues.

## 6. ENHANCE PROGRAMMING & PROVIDE ENGAGING EDUCATION

The County of Bergen wants to give people many reasons to visit parks by having diverse, exciting, and educational programming for all ages and backgrounds.

By increasing the seasons, days, and hours of programs offered, and by offering them in more locations, more people will be encouraged to visit parks and enjoy their benefits.

## 7. INCREASE PUBLIC ACCESS TO INFORMATION

The County of Bergen wants every resident and visitor to know about our parks and their public amenities, programs, and events.

We want to utilize the most up-to-date and convenient digital communications to inform people about parks (Fig. 2). Increased public access to information can communicate the benefits of parks and programs to a greater number of people, which in turn can increase the use of, care for, and involvement in parks.

## 8. OPERATE & MAINTAIN SUSTAINABLE PARKS

The County of Bergen wants to operate parks in the most organized and efficient manner.

Adequately maintaining and operating the park system now ensures that this system and all the benefits and opportunities in it, will be available for future generations. We want to manage parks in sustainable ways and be responsive and accountable to residents and visitors.

## 9. DEVELOP A SUSTAINABLE BUSINESS MODEL

The County of Bergen wants to administer parks as a sustainable financial operation, providing the best experiences to residents and visitors at the most reasonable cost.

A sustainable financial model will help keep programs and activities, and the parks themselves, free or affordable for residents and visitors. Affordable and free parks ensure that people will be able use and enjoy them now and in the future.

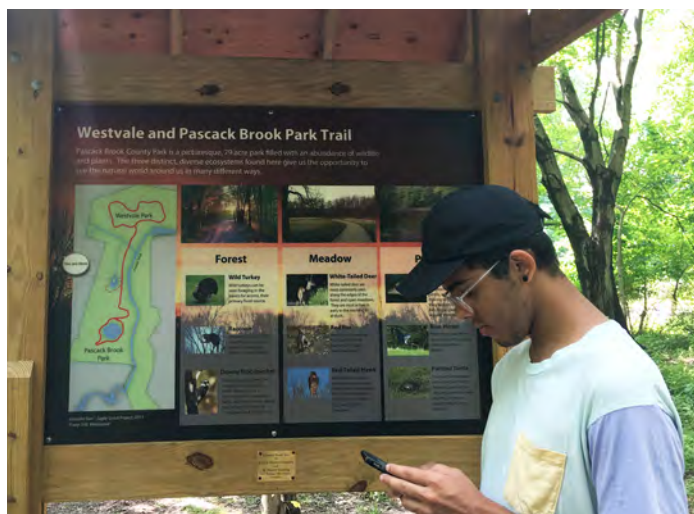


Figure 2. Digital technologies provide opportunities to enhance public awareness of recreation and educational opportunities in the parks (Courtesy of CUES).



# CHAPTER 4:

## Past – History

The ecologic history of the region formed the landscape from which the park system evolved. The Bergen County Parks System was created as a reaction to the rapid expansion of residential and commercial land use after World War II. The County parks preserve some of the natural resources that originally shaped the landscape and that enhance the quality of life for Bergen County residents.

# 4.1 ECOLOGICAL HISTORY

## ECOLOGICAL HISTORY OF BERGEN COUNTY



Figure 1. Formation of Bergen County surface waters and landforms: a) retreat of the Wisconsin glacier; b) formation of glacial Lake Hackensack; c) drainage and formation of the NY/NJ Harbor Estuary (Courtesy of J. Quinn<sup>3</sup>).

Bergen County is a landscape defined by its glacial history. The development patterns, transportation corridors, and even the locations of the County's parks and Open Spaces were dictated by the hydrological and ecological features that developed as a result of the Wisconsin glaciation.

### ECOLOGICAL HISTORY

The Wisconsin glaciation covered the entirety of Bergen County. Its retreat 12,000 years ago left glacial drift deposits and postglacial lakes. Glacial Lakes Hackensack and Passaic were created from boulders carried by the glacier that formed a "dam." As sea levels rose and overtopped this dam the glacial lakes drained and created the Passaic, Hackensack and Hudson River valleys, tributaries and floodplains (Fig. 1).

The resultant Bergen County landforms bordered by the rivers are included within two physiographic regions - the New England Highlands west of the Ramapo Fault Line and the Piedmont east of the fault line (Fig. 2). The Piedmont Region includes the Palisade cliffs along the eastern border of Bergen County, rolling landscapes with river and stream corridors in the center of the county, the marshy Meadowlands in the south, and the mountainous Ramapos in the northwest.

Before Europeans arrived, members of what is believed to be the Lenni - Lenape tribe used the diverse land and water resources of the County, albeit with a lighter footprint due to low human density. Pre-colonial forests were dominated by oak and hickory with some elm, ash, cottonwood, maple, beech,

and birch (Fig. 3). There were also pockets of hemlock forest and hardwood swamps. Wildlife within the Piedmont region included black bear, wolf, cougar, red fox, rabbit, meadowlark, ruffed grouse, woodcock, thrushes, woodpeckers, ducks, geese, heron, mink and muskrats. The region's open water, marshes, and wetlands provided critical habitat for migratory birds and other species.

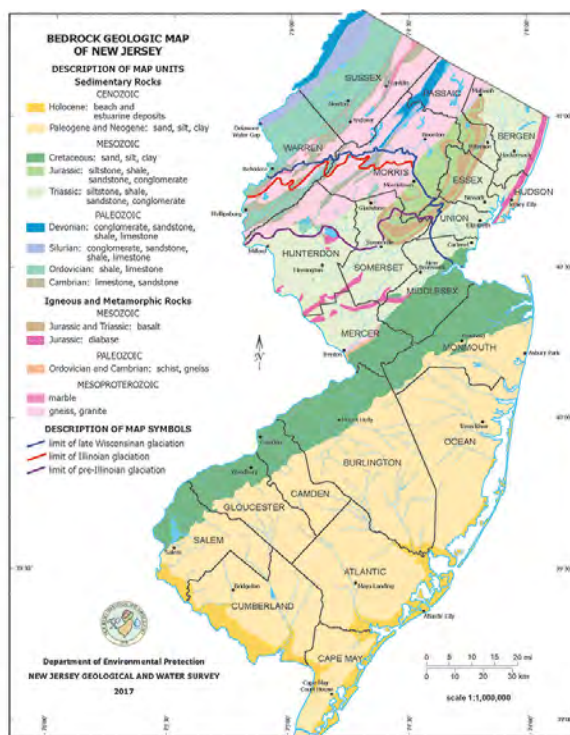


Figure 2. Bergen County, New Jersey soils (Courtesy of NJ DEP<sup>2</sup>).

## A CHANGING LANDSCAPE

Ecologic resources of the region were used to support the early settlers, who established communities in the southern portion of Bergen County adjacent to the Hackensack and Passaic Rivers, and the New York/New Jersey Harbor. Natural resources in the southern portion of the County, dominated by the Hackensack Meadowlands, were extracted and ultimately two-thirds of the original marshes were drained or filled.

As development continued throughout the County, forests were heavily logged and forested freshwater river valleys were cleared for development. After clearing, the rich organic soils (Fig. 4) in the rivers' floodplains supported farming in the central and

northern portions of Bergen County, growing European crops of wheat, corn, barley, flax, and hemp, which were later followed by celery, pumpkins, peaches, apples, and strawberries.

Colonial water management engineering technology (diking, draining, ditching) came with the first Bergen County immigrants from Holland and England. The freshwater white cedar forests were logged for timber to build houses, ships, and the first “corduroy” roads (Fig. 5). One of the oldest roads (Bellville Turnpike) led to the first colonial copper mine, Arlington Mine. Sand, gravel, and clay were also extracted, while high marsh salt hay was harvested (Fig. 6) for animal fodder and packing material.



Figure 3. Hickory-oak forest (Courtesy of Biohabitats).

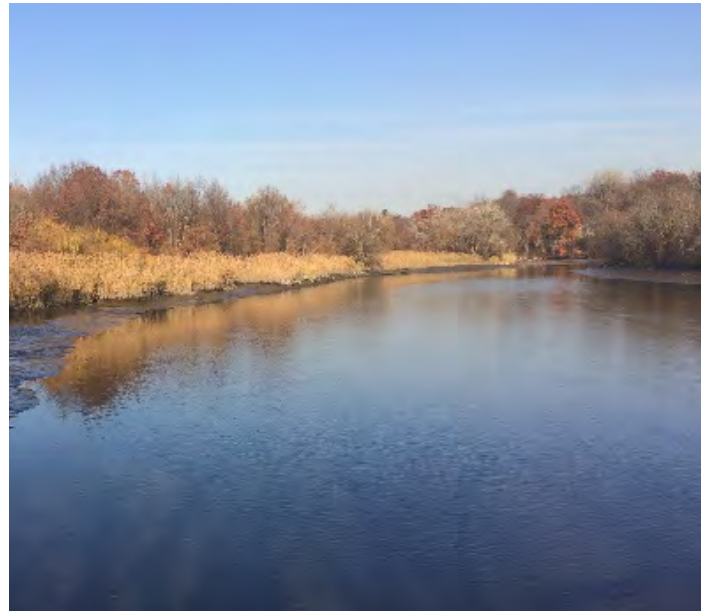


Figure 4. Fertile riparian lowlands (Courtesy of Biohabitats).



Figure 5. Harvesting the white cedar timber (Courtesy of New Jersey Meadowlands Commission Master Plan<sup>3</sup>).

Human land use during the post-colonial era changed the ecologic landscape of Bergen County. The rivers throughout the county supported industry and agriculture by providing power (dams) for industry and agriculture (mills). By 1834, there were cotton and woolen factories and textile mills in Bergen County. By 1836, Industrial Revolution railroads provided transportation connections from New York City to Bergen County, crossing and fragmenting the Bergen Meadows (Fig. 8). “Reclamation” of the southern Bergen County marshes was undertaken at the end of the 19th Century in an effort to eradicate mosquito populations

and to “reclaim” the marsh lands (Fig. 7). As residential neighborhoods, farms and commercial developments were established and industry advanced through the County, native plant and wildlife species decreased in number and diversity, soil and water resources were tainted, and landforms were altered.



Fig. 6. Harvesting high marsh salt hay. (Courtesy of Sebold<sup>4</sup>).

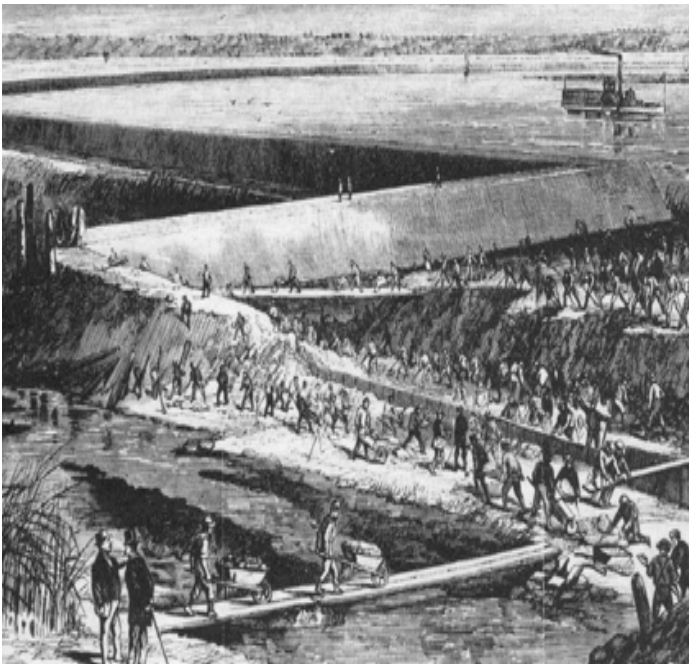


Figure 7. Draining the Hackensack marshes for profit (Courtesy of Sebold<sup>4</sup>).

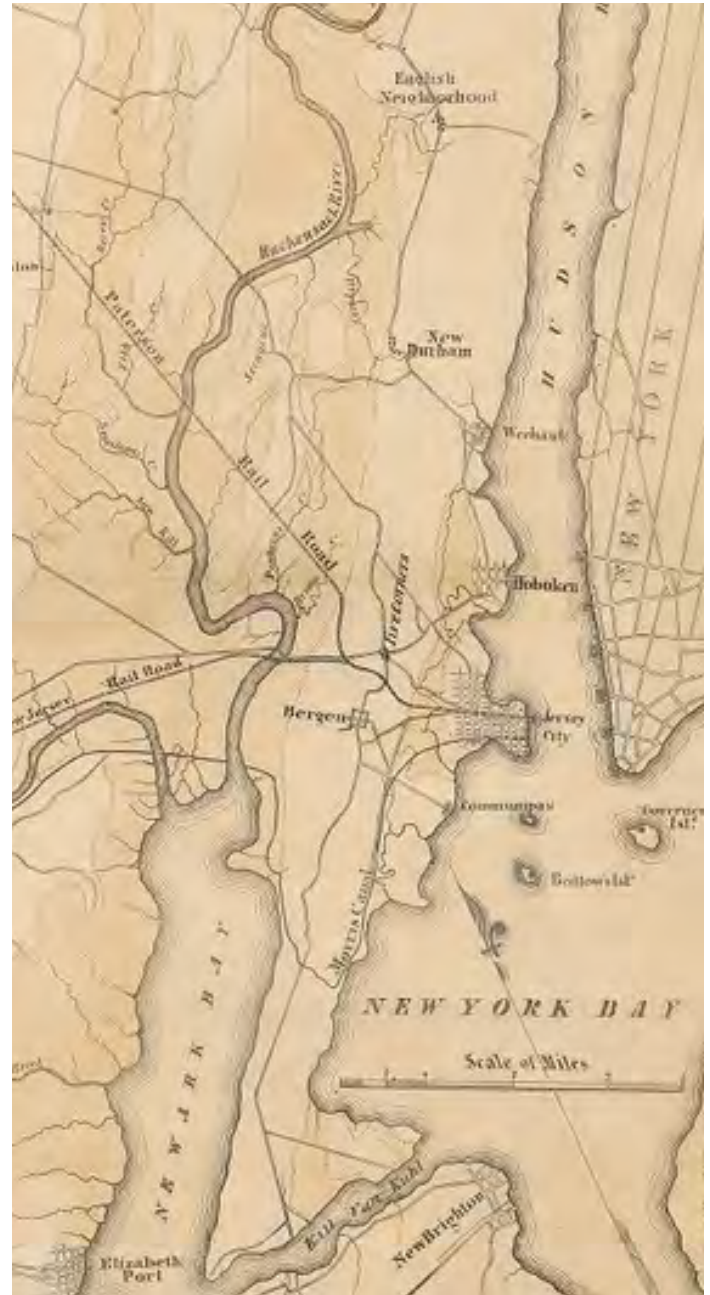


Figure 8. Map of the Bergen Meadows with the Adjoining Country (New York: Graham & Price, 1836) (Courtesy of Princeton University Library Historic).

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- 5 Ibid.

Note: Higher resolution copies of the historical images in this chapter are unfortunately not available. However, we believe the value these images provide in illustrating early beginnings of Bergen County Park merited their inclusion in this Master Plan chapter.

## 4.2 PARKS HISTORY

### THE CREATION OF THE BERGEN COUNTY PARKS SYSTEM

Prior to the Industrial Revolution, Bergen County relied on its network of rivers to support commerce, industry and agriculture. The earliest development patterns were associated with the Passaic and Hackensack Rivers, which provided power and a transportation highway within the sparsely populated County. Introduction and expansion of the steam locomotive in the mid- to late-1800s connected towns located along the river corridors and created a nexus between the railroad lines and the rivers. Railroads owned land adjacent to the rail lines, and by the early 20th century, they were developing and marketing suburban communities connected by the trains, thus shaping the development patterns within Bergen County (Fig. 1).

#### DEVELOPMENT PRESSURES

The 1938 New Jersey State Planning Board noted that Bergen County “suffered greatly from development... [and] almost completely ignored amenities such as parks”<sup>1</sup>. Although neighboring counties (most notably Essex) were acquiring and building parklands, Bergen County did not begin to address its lack of parks until after World War II. Although still concentrated in the southern portion of the County, the post-World War II population was expanding along rail lines in the central river valleys. Spurred by the opening of the George Washington Bridge, the post-war “Baby Boom” and the urban exodus of the 1960s, Bergen County developed exponentially for decades. In 1946, the County requested the necessary State legislation to create a Parks Commission in order to provide recreational open space for Bergen County residents.

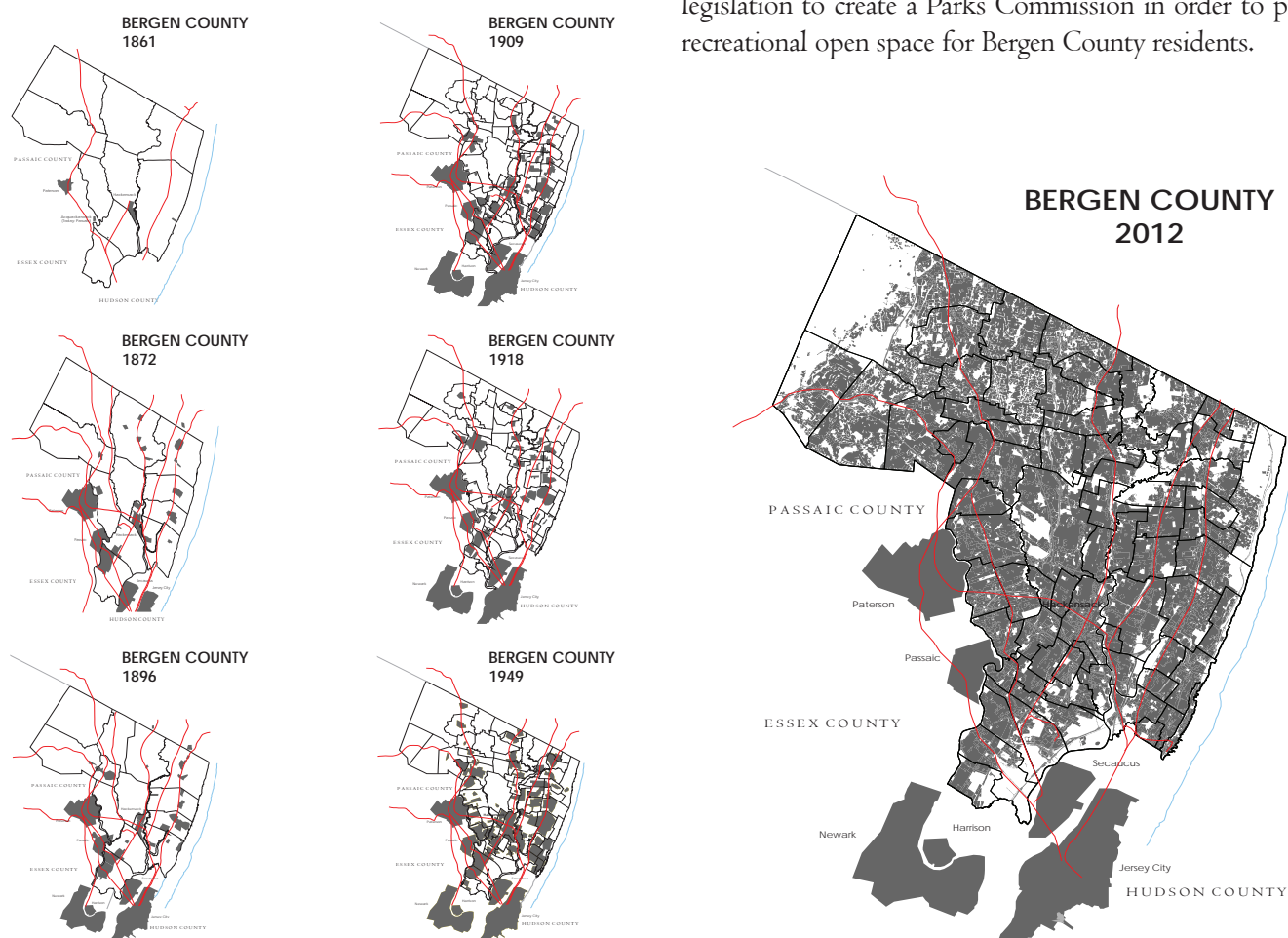


Figure 1. Bergen County development in gray tone from 1861-2012<sup>84-90</sup>. Red indicates railroad lines.

On the 70th Anniversary of the founding of the Bergen County Parks Commission (BCPC), the Bergen County Parks Department is drafting a formal Master Plan for the park system. This plan builds on the history of the original BCPC. The Commission's success illustrates the importance of visionary leadership, organizational structure, and strong collaborative partnerships in the development and management of a public park system. Data included in this section are derived from the BCPC Annual Reports (1947-1984), which were digitized by the Bergen County Department of Historic and Cultural Affairs. These reports are available on the project website<sup>2</sup>.

In November 1946, a Bergen County referendum, authorized by the New Jersey Legislature, was held to determine public support for creating a Bergen County Parks Commission. This referendum passed and on January 22, 1947, Bergen County Freeholders appointed the first park Commissioners, who held their inaugural meeting on February 5, 1947. For forty years, the BCPC planned, acquired, and managed the County's parklands, until April 3, 1987, when the BCPC was merged into a reorganized County government as the Division of Parks, Recreation, Historic and Cultural Affairs.

### EARLY YEARS (1947-1949)

The first years of the BCPC's existence were characterized by the methodical approach used to gather data, followed by application of this knowledge to develop the blueprint for building the Bergen County park system. The first Commissioners considered the parkland acreage needed

(based on current and future population estimates), the land acquisition costs, and the population of each municipality. They compared Bergen County data with data from adjacent counties (Essex, Hudson, Passaic, Union, Westchester) and other states (Minnesota, Wisconsin).

The BCPC began its work by reaching out for information – from Bergen County municipalities and local community groups, adjacent counties, and the Palisades Interstate Park Commission. Initial priorities included development of operating policies and identifying sites for future parks, followed by land acquisition. Although their vision was not written into a formal Master Plan, the BCPC established principles to guide their work. The Commissioners decided County Parks would focus on providing services that were too expensive or impractical for municipalities to offer (boating, riding, camping, hiking, picnic groves, swimming, fishing, skiing, amphitheaters for concerts and pageants); they prioritized waterways and adjacent riparian lands as sites for future parks; and they decided that proportionate emphasis should be given to income producing facilities and non- income producing facilities within the County parks<sup>3</sup>. These priorities and policies continue to influence the use and development of Bergen County's park properties today.

BCPC engaged the National Recreation Association to inventory and appraise developed and undeveloped land in the County<sup>4</sup>. Commissioners toured parks and analyzed park financial information from other counties. Using national statistics, they decided that 10% of Bergen County land

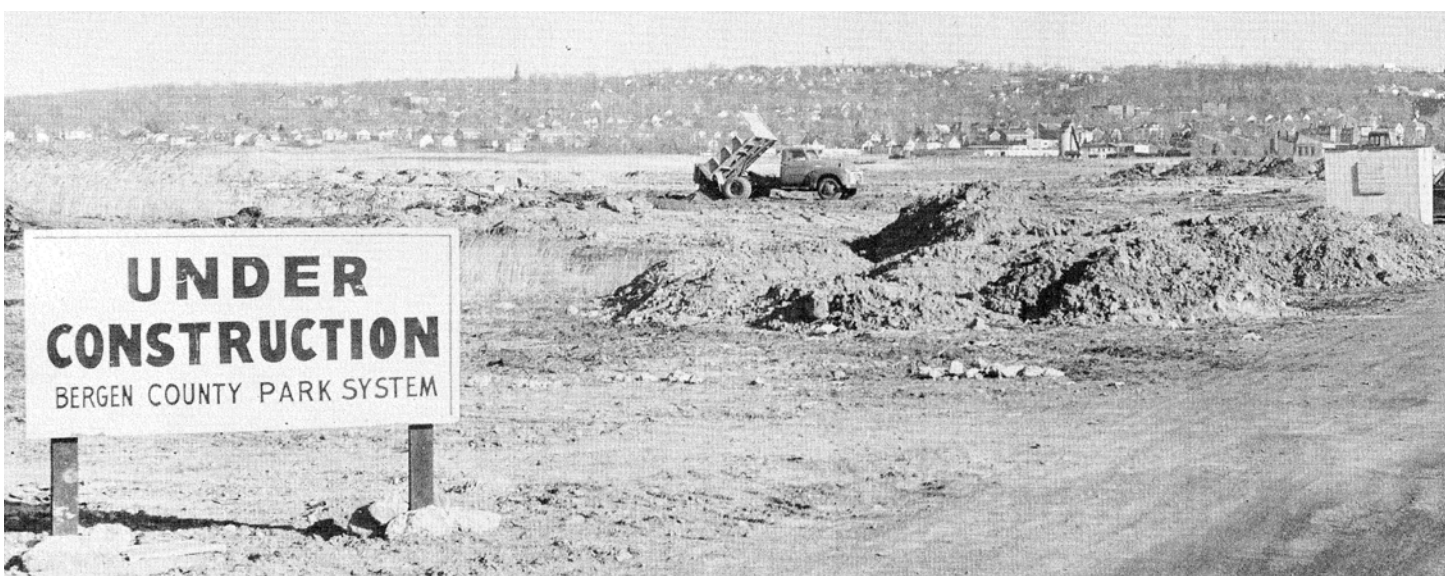


Figure 2. Construction in 1954 of Ridgefield Park Section of Overpeck County Park (Courtesy of Eighth Annual Report of the Bergen County Parks Commission 1954).

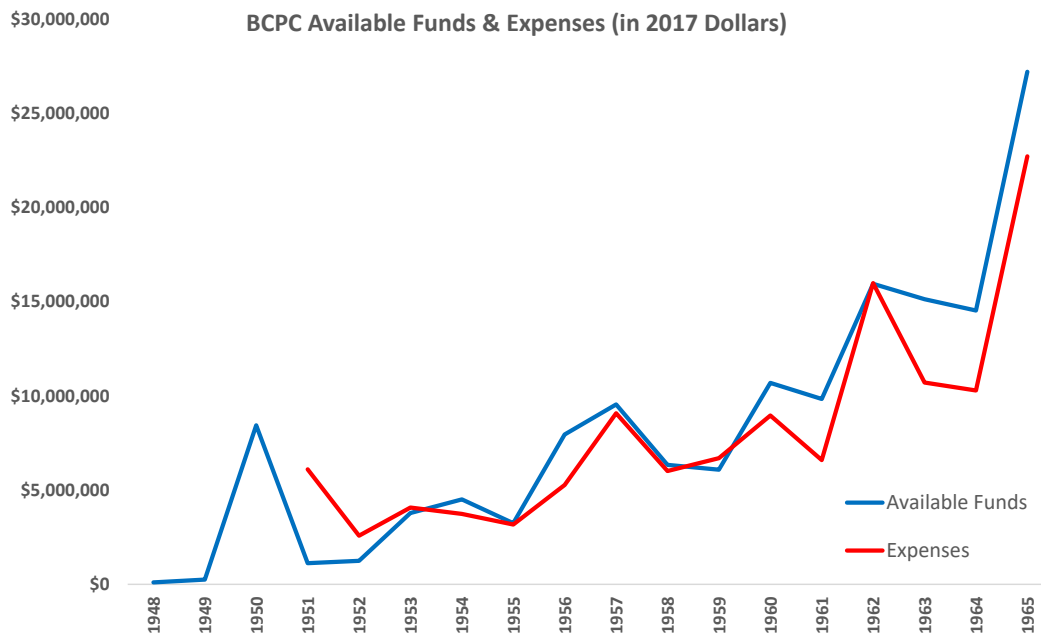


Figure 3. Bergen County Park Commission expenses and available funds (Courtesy of 1948 - 1965 BCPC Annual Reports) converted to 2017 dollars (Calculator courtesy of [www.Saving.org](http://www.Saving.org)).

should be public parkland (15,000 acres), half municipal- and half non-municipal-owned. The 1947 County-owned parkland deficit was estimated to be approximately 5,000 acres<sup>5</sup>.

### FINANCIAL BEGINNINGS

The early (1948-1965) financial beginnings of the park system can be traced from data in the BCPC annual reports (Fig. 3). Initial funding came from a combination of Freeholder appropriations and County bonding revenues dedicated to BCPC for land acquisition and capital construction. The Commission structure allowed BCPC to retain unspent funds from year to year. Audited figures in these reports illustrate the strong financial support the County provided BCPC, as well as the Commission's fiscal discipline and ability to match expenses with revenues.

### FOCUS ON WATERWAYS

One of the BCPC's first actions was to obtain a land Inventory using "airview photographs" to view the Overpeck and Hackensack, Passaic, and Saddle River waterways (Fig. 4). Based on recommendations from the Bergen County Planning Board, the Commissioners concluded that land bordering the County waterways should be under public control, especially lands bordering Overpeck Creek and the Hackensack River. The need for parks was determined to be greatest in southern Bergen County. However, there was little land available at "reasonable cost" in the County's most densely populated southern municipalities.

After collecting data, reviewing riparian boundaries, and identifying potential parkland parcels, the Commissioners embarked in 1948 on a campaign to engage the public. Municipalities were asked to donate public lands adjacent to the rivers for the County park system<sup>6</sup>. Private owners were also asked to consider transferring specific sites to the park system<sup>7</sup>. BCPC Commissioners began on a public relations campaign, speaking to Rotary, Kiwanis, Lions, Garden, and



Figure 4. Hackensack River aerial survey for Bergen County Parks Commission (Courtesy of 1947 BCPC Annual Report).

Republican Clubs<sup>8</sup>. The public response was positive, and the first initiative in this land acquisition program saved land along the Saddle River in Rochelle Park from development<sup>9</sup>. Garfield passed a Resolution to transfer seventy acres to the County for parkland, and Hackensack River marshes from Route 4 to Newbridge Rd. were dedicated as a game preserve<sup>10</sup>.

The land acquisition program accelerated in 1949 (Fig. 5), when the first land transfer from Garfield was completed (90 acres). Teaneck transferred Overpeck lands (490 acres), Lyndhurst and North Arlington transferred Passaic River lands (50 acres), and Lodi transferred Saddle River lands (40 acres)<sup>11</sup>.

However, it was soon recognized that the original legislation funding mechanism could not provide the monies needed to acquire lands proposed for the new park system. The State Legislature amended the original law, authorizing the Freeholders to provide funds for parkland acquisition and capital improvements through bonding. Under the

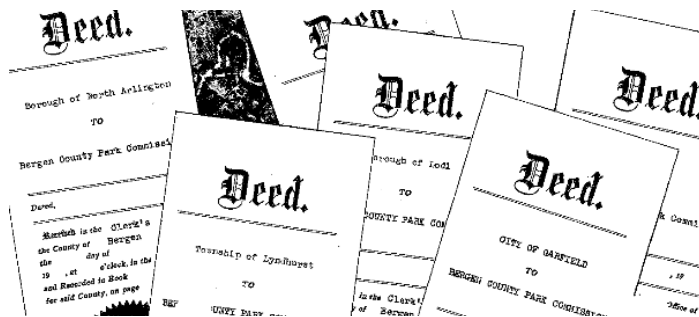


Figure 5. Deeds transferring municipal lands to the Bergen County Park Commission (Courtesy of Bergen County's Park Program Third Annual Report of the Bergen County Park Commission 1949).

modified legislation, funding could not exceed the aggregate sum of \$1,000,000<sup>12</sup>. This amendment also authorized the Freeholders to appropriate for the use of the BCPC moneys that came from park revenue producing facilities, in addition to Freeholder appropriations for BCPC expenses and debt service<sup>13</sup>. The public relations initiatives continued in 1949 with BCPC Commissioners holding 118 meetings or conferences<sup>14</sup>.

## THE A. THORNTON BISHOP YEARS (1950 –1958)

A. Thornton Bishop (Fig. 6) became BCPC President in 1950, a transition that placed an architect in charge of the BCPC. Bishop was an artist and educator, as well as a previous Chairman of the Teaneck town planning board. He believed the “dominant feature [in planning] must be the community purpose”, and urged citizens to have “deep regard for the shape [post-war] growth will take,” because, “the responsibility will rest with them”<sup>15</sup>. This talented architect brought his public-spirited attitude to the leadership of the BCPC at a critical moment, when land acquisitions and funding permitted the BCPC to begin actual park construction.



Figure 6. A. Thornton Bishop (Courtesy of Eleventh Annual Report of Bergen County Park Commission 1958).

The Commission's policy was to find sites that could be easily expanded to 100 acres; lands along waterways were prioritized to “protect streams against misuse, and to [have] a source of water for [park] installations requiring water”<sup>16</sup>. Park locations would be accessible to major highways to avoid traffic on local streets and the parks should not duplicate municipal park facilities<sup>17</sup>. Deeds for 927 acres of municipally owned land along Overpeck Creek were donated to the County by Ridgefield Park, Leonia, Palisades Park, and Teaneck.

Park Bond Anticipation Notes were issued in 1950, providing \$785,000 to purchase 992 parcels (1,003 acres) identified for the County Park system. Approximately \$500,000 was spent to acquire 1,103 acres, and 1,234 acres were conveyed by ordinance from municipalities at no cost<sup>18</sup>. However, the Korean War effort legislation (“Federal Voluntary Credit Restraint Program”) curtailed further land purchases.

The BCPC's emphasis shifted to site development and construction (Fig. 7), which began with clearing and grading in Van Saun and Lyndhurst. Trees and shrubs removed from a site were replanted in other park locations and a nursery was started in Van Saun Park. The BCPC continued to reach out to civic organizations and municipalities.

Due to funding limits, a general plan was created that described how park sites would be developed over a period of years based on four factors: character of the soil, urgency for recreational facilities in an area, suitability of land for development, and money available<sup>19</sup>. Hackensack River progress was hampered by external factors - awaiting results from a Sewer Authority project and state road building plans<sup>20</sup>.

## BERGEN COUNTY PARKS OPEN TO THE PUBLIC



Figure 7. Park construction (Courtesy of Annual Report for 1962 Bergen County Park Commission).

The first Bergen County parks opened to the public in 1952. These properties included the Ridgewood Duck Pond (Fig. 8), a softball diamond and play area in Saddle River Park (Lodi), play and picnic areas in Lyndhurst and Van Saun, and ball diamonds in Garfield. Several hundred roses were donated by the Garfield Rotary Club for planting in the Belmont Hill oval. The Ridgewood Duck Pond was flooded for winter ice skating, and by 1954, 2,500 people were skating on the Wild Duck Pond and Dahnert's Lake.

Drainage and water management were important features of park construction because the low-lying County rivers were subject to flash flooding. Freeholders retained a hydraulic engineer to coordinate Saddle River flood control with park development along the river<sup>21</sup>. The emphasis on engineered



Figure 8. Ridgewood Duck Pond (Courtesy of Sixth Annual Report of the Bergen County Park Commission 1952).

construction included filling of land along the Saddle River<sup>22</sup>, changing the river's flow path, and constructing a retaining reservoir for flood control<sup>23</sup>. A tidegate was installed in 1955 on Overpeck Creek and a Sanitary Landfill plan was developed to fill 400 Overpeck acres<sup>24</sup> in anticipation of future park development. BCPC continued discussions with transportation entities in their attempts to avoid fragmenting Overpeck lands into multiple areas due to the construction of the New Jersey Turnpike<sup>25</sup>.

A requested referendum to increase the BCPC's funding was passed by the New Jersey State Legislature, but vetoed in 1954 by Governor Meynor; however, the Legislature overrode his veto<sup>26</sup>. The Bergen County Freeholders authorized \$3 million in bonding to support parkland construction, and in the 1955 budget, appropriated \$277,000 for maintenance



Figure 9. Bergen County suburban development (Courtesy of Tenth Annual Report Bergen County Park Commission 1956).

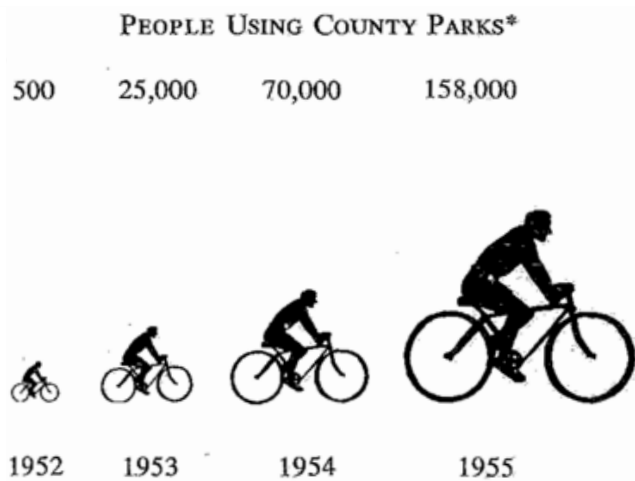


Figure 10. Estimated use of Bergen County Parks by resident population of 675,000 (Courtesy of Eight Annual Report of Bergen County Park Commission 1955).

and land acquisition<sup>27</sup>. However, the BCPC Annual Reports from 1954-1957 highlight the Commission's sense of urgency in obtaining additional funds needed to acquire land and construct the planned parks.

By 1955, the Bergen County park system was identified as one of the fastest growing in the U.S. (Fig. 10). County population totaled 675,000 residents and Bergen County was one of the fastest developing areas in the NY metro region<sup>28</sup>. In response to this development pressure (Fig. 9), the planning team for Overpeck Park included landscape architects, road planners, and engineers. Overpeck landuse goals included relieving traffic congestion on Teaneck Road and Grand Ave., creating a circulatory road system, and reclaiming land by dredging<sup>29</sup>.



Figure 11. Van Saun horseback riding (Courtesy of Tenth Annual Report of Bergen County Park Commission 1956).

The 10th anniversary of the BCPC in 1957 was designated the "Year of Decision"<sup>30</sup>. Emphasis was turning to park amenities and programming, and events like the Van Saun Cerebral Palsy Horse Show and the Christmas Exhibit attracted over 25,000 visitors<sup>31</sup>. With a County population increasing by 100,000 residents every four years, the Commissioners believed that a planned acquisition program had to occur immediately before land became prohibitively costly and future construction would be curtailed<sup>32</sup>.

By 1958 (the year of A.Thornton Bishop's death) the Bergen County Park system consisted of: the eighteen hole Rockleigh Golf Course, a flood control basin on the Saddle River, a Museum of Arts & Sciences in Teaneck, thirteen ballfields, two football fields, one soccer field, four day camps, seven picnic areas, two children's play areas, three miles of bridle path, a horse show paddock and equestrian school (Fig. 11), five ice skating areas, four lakes, and a formal rose garden<sup>33</sup>.



Figure 12. Overpeck tide gate (Courtesy of Bergen County's Park Program 1957 Eleventh Annual Report Bergen County Park Commission).

The challenges in developing Overpeck Park were first acknowledged in 1958 (Fig. 12). These challenges included competition for land with transportation (road construction) entities, conflicting engineering data regarding flooding and the lake, difficulties with drainage, problems with the tide gate, and lack of a financing schedule<sup>34</sup>.

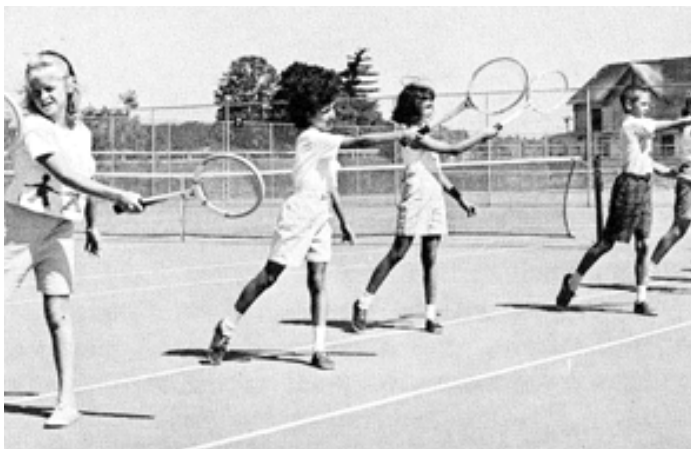


Figure 13. Van Saun tennis clinic (Courtesy of Annual Report for 1962 Bergen County Park Commission).

### THE SIXTIES (1959 – 1969)

Harold Hollenbeck, a lawyer and politician (mayor and member of Congress), assumed the presidency of the BCPC after Bishop's death in October 1958. At the end of 1959 Bergen County's population passed 700,000 residents<sup>35</sup>, and the County Park system consisted of 3,300 acres<sup>36</sup> hosting over 500,000<sup>37</sup> visitors annually. Permits to use ballfields, picnic or camping grounds were issued to over 500 groups<sup>38</sup>. By the end of the decade, bus service to the parks was initiated from southern Bergen County<sup>39</sup>, park revenues reached \$700,000 (generated primarily by three golf courses)<sup>40</sup>, 3,000 park use permits were issued annually<sup>41</sup>, visitors exceeded three million<sup>42</sup>, and thousands of trees, shrubs, and bulbs had been planted within the parks<sup>43</sup>.

As Bergen County population growth continued, public amenities were added to the park system, including new roadways. Land use conflicts between transportation entities and parkland planners emerged, particularly with respect to Overpeck Park. Construction of the Bergen- Passaic Expressway took 190 acres from the Overpeck Creek area and forced redesign of the original Overpeck Park plan<sup>44</sup>. Parking lots and park drives were added to older parks to accommodate visitors arriving by automobile. To meet the public demand for tennis, twelve courts and a tennis center were constructed in Van Saun Park in 1960 (Fig. 13), the same year the children's zoo opened<sup>45</sup>. Campgaw-Ramapo wilderness totaled 1,204 acres, and a ten acre nursey at Campgaw cultivated stock for use within the park system<sup>46</sup>.

Bergen County parks celebrated a number of "firsts" in 1962. Park attendance reached two and one half million, and Bergen County became the first public entity to be

awarded State of New Jersey Green Acres funds<sup>47</sup>. The \$130,000 Green Acres grant supported the acquisition of Norwood land, which added a nine hole expansion to the 9,000 member Rockleigh Golf Course, whose 1962 visits totaled 97,508<sup>48</sup>. The first County tennis tournament was held at the Van Saun Tennis Center and tennis center use doubled to 11,246 visits. A dam was installed in the first section of Wood Dale Park and the first rustic Adirondack overnight camping shelter was built in Campgaw. The first park open air concert was also held.

Golf, tennis, and pony rides were now activities that generated revenues retained by the BCPC. Revenues were also generated by the 1,325 park use permits issued. Free park amenities included summer Sunday concerts and July-August tennis clinics. The antique replica train (Fig. 14) was added to Van Saun Park in 1963<sup>49</sup>.

Overpeck Park challenges were finally resolved in 1963 when a settlement was reached with the State that gave the County title to 800 acres of parkland. The State agreed to construct a bridge to connect the park sections split by Rt. 80<sup>50</sup>. The Darlington Country Club was also purchased in 1963, adding two swimming/diving lakes (Fig. 13) and a fishing/ boating lake to the park system<sup>51</sup>. Grant funding to purchase Darlington came from New Jersey Green Acres (\$1.5 million) and a Federal grant (\$189,068)<sup>52</sup>.



Figure 14. Van Saun antique replica train (Courtesy of Bergen County Park Commission Annual Report 1963).



Figure 15. The purchase of Darlington County Club added two swimming lakes (Courtesy of Bergen County Park Commission Annual Report 1965).

The first art exhibition of 1,000 paintings was held in Van Saun Park in 1965 in collaboration with the Bergen County Artists Guild, and an exhibition of Mastodon bones unearthed in Hackensack was mounted in collaboration with the American Museum of Natural History<sup>53</sup>. A four year drought necessitated the first use of irrigation in the parks<sup>54</sup>.

In 1966, an eight acre lake for Overpeck golf course and a two and one-half acre pond on a former pig farm, now the McFaul Wildlife Center in Wyckoff, were excavated<sup>55</sup>. The Campgaw visitor's center was completed in 1968 and a machine to make snow for the ski slope was installed<sup>56</sup>.

Park fees were introduced in 1965 for groups of fifty or more, as well as for use of the Campgaw campsites<sup>57</sup>. The following year, bonding authority for park construction was increased from \$3 million to \$5 million<sup>58</sup>. As the decade ended, the revenues and expenses associated with the park system were a primary focus of the annual BCPC reports.

### THE GROWTH YEARS: ATTENDANCE, ACERAGE, REVENUES (1970-1979)

During the final decade of the BCPC's existence, Bergen County parks and park programs were an integral part of residents' lives. In 1970, voters approved a \$2 million bonding increase, providing \$5 million for land acquisition and park construction<sup>59</sup>. Park revenues in that year approached \$1 million (\$968,866, an 11% increase over the previous year), generated by the golf courses, ski and tennis centers, and permit receipts (5,000 permits)<sup>60</sup>. Park naturalists conducted 640 programs for 20,000 children and seventy adult programs. A fifth recreation area in Rochelle Park was added to Saddle River Park, a rope tow and a second ski lift were added to Campgaw. Campgaw also added a refrigerated toboggan chute, the first lease agreement in the County park system<sup>61</sup>. A cafeteria opened in Van Saun Park and Overpeck athletic fields in Palisades Park opened.

Park revenues exceeded \$1 million in 1971 and 98,635 residents (over 10% of the County's population) registered to use the parks fee facilities<sup>62</sup>. This use resulted in weekend overcrowding and golf course wait times of four hours<sup>63</sup>. The Campgaw visitor's center expanded to accommodate ski rentals, first aide, and storage, and four new snow making machines were added.

Overpeck development continued with landfilling, excavation, and construction in Leonia. Extreme weather conditions affected park operations – the drought conditions of the 1960's gave way to summer flooding in 1971 from one of the five most severe floods in New Jersey history<sup>64</sup>. Rain (three to eleven inches), which fell for thirty-two hours, caused damage in the streamside parks. The Darlington season was shortened, the golf courses were closed, and debris, including picnic tables and trees, washed into the streams.

The 25th Anniversary of the Bergen County Park system in 1972 saw the opening of the 624-acre Ramapo Valley Reservation for hiking, fishing, and tent camping. This park increased total County park acreage to 4,669 acres in twenty-

three recreation areas<sup>65</sup>. The Commission acquired a show-mobile that included a stage and loud speakers to support events in the parks. BCPC employed 260 people and owned 226 vehicles; Freeholder appropriations totaled \$3,309,361 and park fees generated revenues of \$989,758<sup>66</sup>.

By 1975, the County was supporting buses going to Van Saun and Darlington that stopped in 63 municipalities in the summer<sup>67</sup>. There was also a year-round cross-County bus going to Van Saun and the Wyckoff Wildlife Center<sup>68</sup>. Riding Centers were opened in Franklin Lakes<sup>69</sup> (Saddle Ridge, 1974) and Leonia (Overpeck, 1975), and a pony ring was added in Van Saun; hang gliding was introduced at Campgaw (1976). Bergen County jail inmates built 300 picnic tables for wages of \$5 per table<sup>70</sup>, and construction of the Darlington golf course was halted when the contractor defaulted. Park fees collected in 1976 exceeded \$1.5 million<sup>71</sup>.

As a result of the New Jersey state-mandated budget cap, the first BCPC cutback of park services occurred in 1977, when the free summer concerts were eliminated<sup>72</sup>. However, a mounted patrol was added to the Campgaw-Ramapo parks and a Saddle River trail addition brought the total length of the ten-year-old trail to six miles. A lawsuit, related to Overpeck development, filed by Ridgefield Park, was settled with an agreement to complete Overpeck construction by



Figure 17. Van Saun zoo (Courtesy of 1960 Fourteenth Annual Report).

1986<sup>73</sup>. The capital funds bonding limit was raised again by \$5 million in 1978 for construction of facilities, Overpeck development, and the Van Saun Zoo<sup>74</sup>. Zoo attendance was over one million visitors, and acquisition of one of the last wilderness tracts added 469 acres to Ramapo parklands<sup>75</sup>. Revenues topped \$1.5 million and the overall park budget was \$5,803,409<sup>76</sup>, almost six-fold higher than at the start of the decade. The 1979 Annual Report also noted that vandalism in the parks was a management issue.

### THE FINAL BCPC YEARS (1980 – 1987)

The 1980 – 1984 Annual Reports of the Bergen County Park Commission mark a noticeable change from reports of the prior thirty two years. Gone are pictures of the public enjoying the parks, images of construction activities, conceptual landscape design plans, tables describing acreage acquired, and visionary excitement about the growth of parklands, programs and park amenities. These items were replaced by paragraphs that focused on challenges (vandalism, grounds keeping “chores”, increased operating costs, revenue needs, Workman’s Compensation payments, a recession induced cutback in park personnel, reduction in operating hours, water shortages). There is also an enhanced focus on the amount of revenue specific activities produced and the ratio of revenues to park expenses (twenty eight to thirty four percent). These reports do include discussions of new smaller initiatives, but the tone dramatically changed from that of reports prior to 1980.

Each report mentions the issue of “rampant vandalism throughout the park system”<sup>77</sup>, a topic not noted prior to 1979. The number of scheduled programs (864) were decreasing, as were the number of zoo visitors<sup>78</sup> (369,491).



Figure 16. Camping in the park (Courtesy of Bergen County Park Commission Annual Report 1964).

A severe drought (1980-81) and restrictions on watering damaged plantings<sup>79</sup>. Budget limitations and inflation resulted in reduced operating hours, an end to professional tennis services and the tennis tournament at Van Saun, a shorter swimming season, and the holiday closing of some park facilities; the zoo aviary closed due to deterioration<sup>80</sup>.

Equestrian activities were among the first to become concessions at Saddle Ridge (1981) and Overpeck (1983). The final BCPC report (1984) again notes austerity imposed by the State of New Jersey budget caps. The golf courses closed two weeks early and the swim season opened three weeks late; Darlington closed one month early and the Van Saun railroad closed two days each week<sup>81</sup>. The BCPC continued to operate with 260 permanent employees.

On November 7, 1985, the voters of Bergen County adopted the County Executive form of government. Subsequently, on November 4, 1986, voters elected Bergen County's first County Executive and seven members for the Bergen County Board of Chosen Freeholders. This form of government is included within the 1972 Optional County Charter Law, N.J.S.A.40:41A-I, which allows increases in the centralization and management capacity of the County

by separating the executive and legislative functions, and by providing for a chief executive officer, primarily responsible for managing government operations<sup>82</sup>. The law allows counties to reorganize their methods of service provision as long as the required services are maintained. The County Executive option, adopted by Bergen County<sup>83</sup>, creates a chief elected official with strong administrative, appointive, budgetary, and veto powers. On March 4, 1987, the Board of Chosen Freeholders adopted the Administrative Code of Bergen County, with an effective date of April 4, 1987. As part of the County government reorganization, the Bergen County Park Commission ceased to exist, and the Bergen County Department of Parks, Recreation, Historic and Cultural Affairs, the department responsible for management of Bergen County parklands today, was created.

The members of the original Bergen County Parks Commission employed data analysis, extensive public outreach, and visionary planning to build the foundation of the Bergen County Park system. The Master Planning team has used a similar approach to evaluate the existing conditions of Bergen County parks (Section I), determine priorities and gain public support (Section 2, Chapter 5.3) in order to articulate a vision for the future County park system.

Note: Higher resolution copies of the historical images in this chapter are unfortunately not available. However, we believe the value these images provide in illustrating early beginnings of the Bergen County Parks system merited their inclusion in this chapter.

## A BRIEF HISTORY OF THE BERGEN COUNTY PARKS

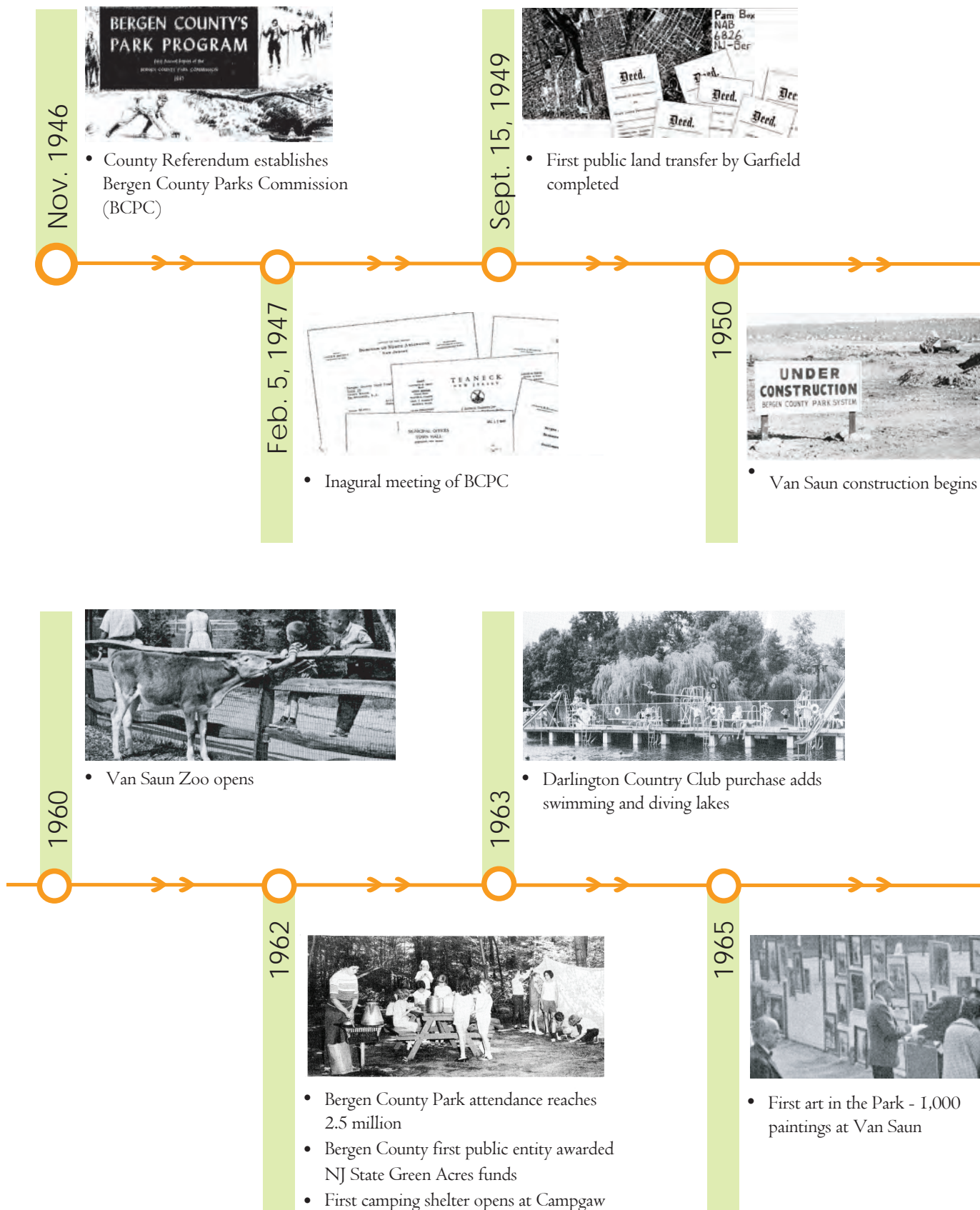


Figure 18. Highlights of the Bergen County Park Commission history (Courtesy of Bergen County Parks Commission Annual Reports and CUES).

1952



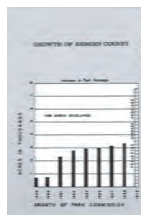
- First County Parks open: Saddle River Park, Van Saun, Garfield, Lyndhurst

July 4, 1958



- Rockleigh Golf Course opens

1955



- Bergen County park system identified as one of the fastest growing in the U.S.

1959



- Van Saun Christmas Exhibit attracts 30,000 visitors

1972



- Ramapo Valley Reservation opens

1978



- Zoo attendance reaches one million visitors

1974 - 1975



- Riding Centers and Van Saun Pony Ring open

1987



- BCPC becomes Bergen County Department of Parks, Recreational, Historic and Cultural Affairs

TO  
PRESENT

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# CHAPTER 5:

## Present – Population & Parks

The current Bergen County park system is the result of an historic evolution, as various properties were acquired over a period of decades. This complex system now provides numerous ecological and experiential amenities for a diverse and growing population. However, development pressures required transportation infrastructure, which today affects park access and the current availability of the Open Spaces that are greatly valued by Bergen County residents.

# 5.1 EXISTING ECOLOGICAL CONDITIONS

## BERGEN COUNTY PARKS AS CRITICAL NATURAL RESOURCES

Bergen County is still defined by landforms and river systems created during the glacial period. Transportation corridors largely run north to south in patterns similar to the County's rivers and valleys. Parklands are primarily located along river and stream banks in riparian floodways, and residential and commercial development is chiefly located within the southern and central areas of the County. The Ramapo Highlands in the northwest, the Palisades in the northeast, and the Meadowlands in the southeast are less developed than

other areas, largely due to the geologic and hydrologic patterns that make building in these areas more difficult.

### NATURAL RESOURCES LOST

The State of New Jersey has recognized the unique resources of Bergen County and two of the State's three planning regions create additional protections for the resources within these areas (Fig. 1). Although most of the County is developed, the Highland's freshwater aquifers and surface waters of the Ramapo River provide drinking water to more than half the families in New Jersey. The Meadowlands, which form the estuarine boundary where the freshwaters of the Passaic and Hackensack Rivers drain to the saline waters of the Atlantic Ocean, provide important habitat and breeding grounds for many species. Both areas are under constant development pressure, and efforts are repeatedly taken to relax the environmental protections put in place to preserve these unique and important resources. In addition, the Meadowlands are threatened by invasive plants (Fig. 2), animals and pests, have been impacted by dumping and

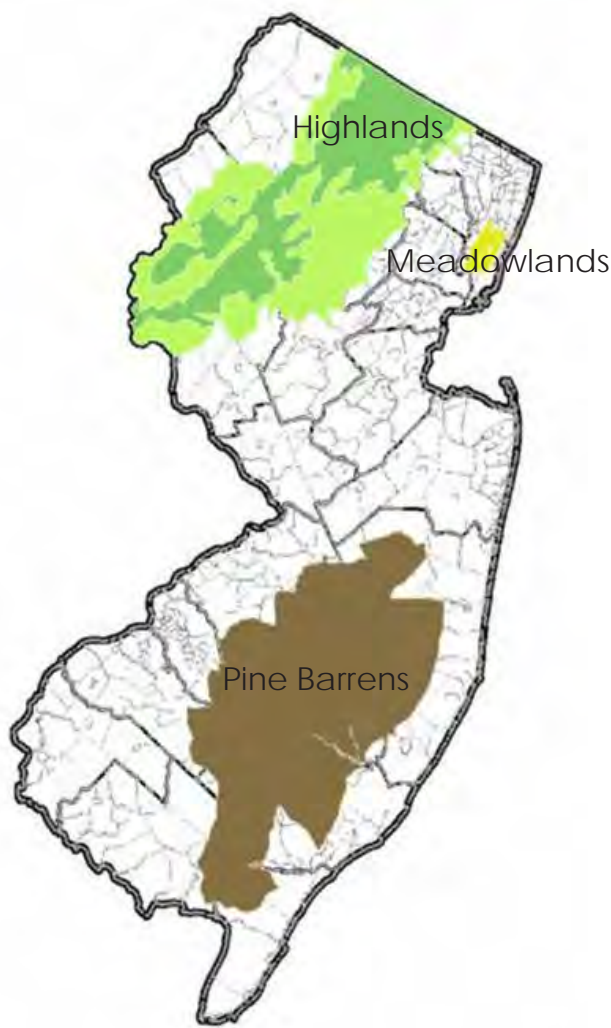


Figure 1. New Jersey's three regulated Planning Regions: Highlands, Meadowlands, Pine Barrens (Courtesy of NJ Future).



Figure 2. Common reed monoculture (Courtesy of Biohabitats).

pollution, and in some areas have been contaminated by organic compounds and heavy metals.

In fact, these pressures from invasive species, development and pollution affect all of Bergen County and its natural resources. Contaminants in the southern portion of the Hackensack River include arsenic, mercury, lead, zinc, and nickel. The tidal portion of the Passaic and the Hackensack Rivers are closed to commercial fishing and crabbing due to the presence of contaminants including chlordane, dioxin, and PCBs concentrated in the river sediments. Although some portions of the lower Passaic River are now undergoing a cleanup, the river is currently designated the largest Superfund site in the United States. Conversely, the Ramapo River remains a popular destination for fishing, since the Highlands are relatively preserved.

Forested areas are very limited within the County. Those forests that do exist tend to be highly fragmented (Fig. 3) and under constant threat due to invasive species, a changing climate, disease and development. Similarly, intertidal, wetland and riparian habitats are limited, fragmented and typically border vertical upland, bulkheads or riprap shoreline (Fig. 4-5), which further reduce opportunities for foraging and nesting wildlife and avian species.



Figure 3. Fragmented forests (Courtesy of Biohabitats).



Figure 4. Isolated foraging and fragmented forest (Courtesy of Biohabitats).



Figure 5. Bulk headed shoreline (Courtesy of Biohabitats).



Figure 6. Ramapo Valley County Reservation (Courtesy of CUES).

## HYDROLOGIC CONDITIONS

Watersheds and subwatersheds that bound the landforms within Bergen County include the Lower Hudson River, Hackensack River, Pascack Brook, Ramapo River (Fig. 6), Saddle River, and Lower Passaic River (Fig. 7). These watershed areas are designated as Principal Watersheds of New Jersey by the NJDEP and fall within three Watershed Management Areas: WMA-3, WMA-4, and WMA-5.

WMA 5 includes the Lower Hudson River, Hackensack and Pascack Brook watersheds, and is one of the most densely developed watersheds in New Jersey. The Lower Hudson River Watershed lies along the County's eastern border, with a few tributaries draining into the lower Hudson River from the northeastern section of the County. Approximately 11,000 acres of land lie within the Lower Hudson River Watershed, which accounts for 7% of the County and makes up only 2% of the overall Lower Hudson Watershed.

The Hackensack River Watershed is bifurcated by the Oradell Dam, which separates the tidal brackish estuary in southern Bergen County from the drinking waters north of the dam. The northern portion of the watershed, which is dammed to create the drinking water reservoirs, is less developed than the highly urbanized southern portion. The majority (58%) of this watershed is located in Bergen County. The southern tidal reach of the watershed, comprised primarily of the Hackensack Meadowlands, continues to be affected by historic contamination associated primarily with the river's sediments. The Pascack Brook Watershed, located within the Pascack Valley

in the center of the County, drains to the northern freshwater section of the Hackensack River above the Oradell Dam.

WMA 4 includes the Lower Passaic Watershed and the Saddle River Watershed. The Lower Passaic Watershed originates from the confluence of the Pompton River, and continues downstream to discharge into Newark Bay. The watershed includes areas within Bergen County, but also encompasses areas in Hudson, Passaic and Essex Counties.



Figure 7. Bergen County Watersheds (Courtesy of Karl Musser').

The Passaic River continues to be one of the most polluted rivers in the United States. Available habitat is limited and fragmented after a long history of industrialization, contamination and municipal waste disposal. Intertidal foraging areas for birds are limited to isolated mudflats.

Bergen County surface waters receive permitted discharges from a number of sources (Fig. 8), including Combined Sewer Overflows (CSOs). The CSOs are primarily in the southern portion of the watershed, and during heavy precipitation can divert untreated stormwater and raw sewage into the Hackensack and Passaic Rivers.

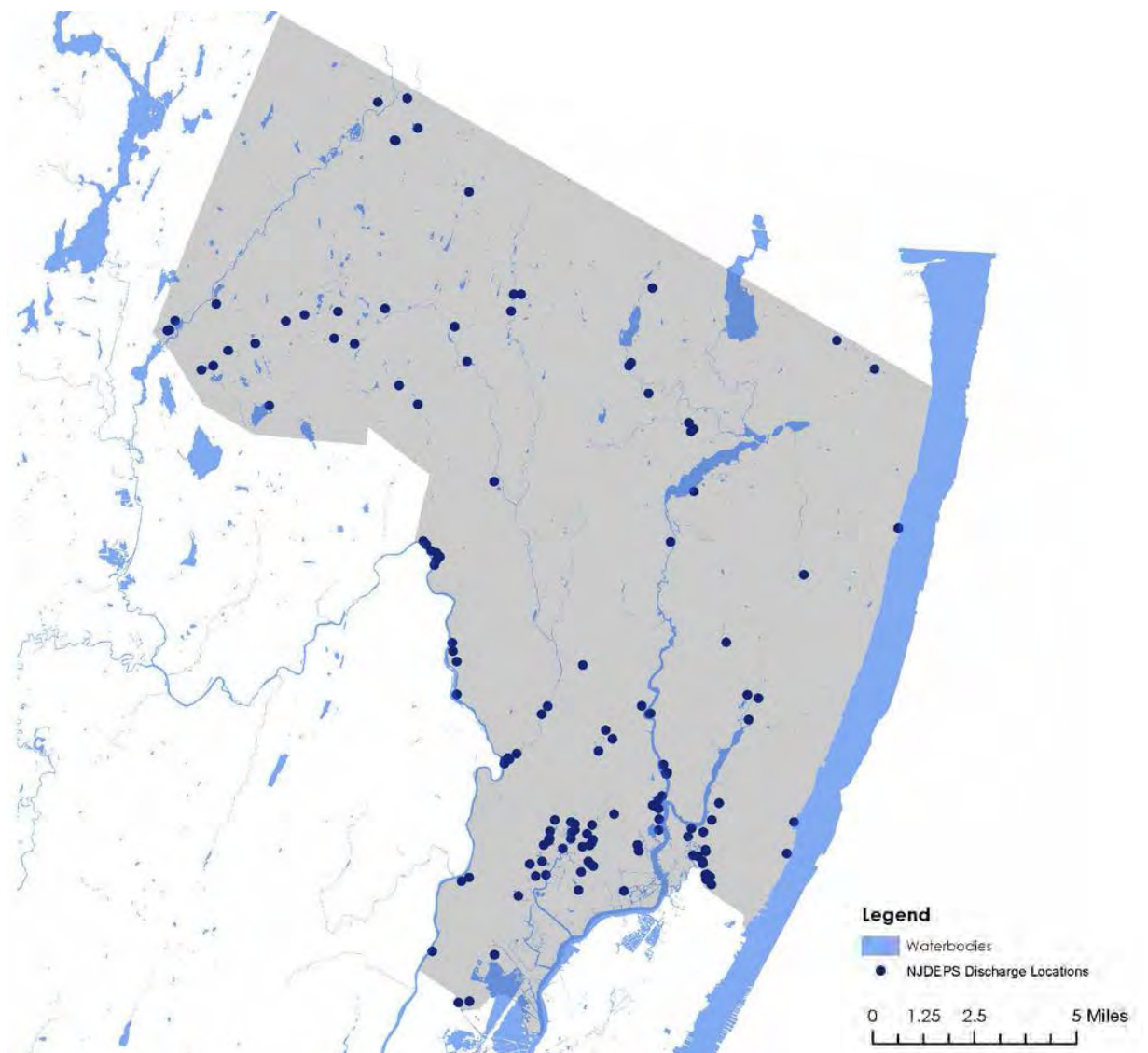


Figure 8. New Jersey Permitted Discharge (NJDEPS) locations within 1000 feet of a Bergen County waterway (Courtesy of CUES).



Figure 9. Stormwater management practices within the parks have an impact on the health of critical water resources, such as the Saddle River (Courtesy of Biohabitats).

## STORMWATER MANAGEMENT ISSUES AND OBSERVATIONS IN THE PARKS

Management of stormwater and surface water runoff is a critical aspect in enhancing and protecting the ecologic values provided by the Bergen County park system. When properly managed, stormwater becomes a resource that not only irrigates the County's parklands, but also contributes to enhancing the natural experience enjoyed within the parks (Fig. 9). If unmanaged, stormwater flows contribute to erosion of streambanks and flooding of park venues. These waters can also transport excess nutrients and urban pollution into receiving surface waters.

To understand current stormwater management practices in the County Park system, the team conducted a desktop analysis of stormwater landscape considerations, followed by a series of site visits to a number of the County parks to observe stormwater flows, hydrologic conditions, opportunities for

infiltration or other green infrastructure opportunities, and general management and maintenance practices.

Some general observations evident in all parks included the following:

- Buffers along streams and rivers have been removed or are compromised, creating conditions that can increase further erosion and destabilization.
- Impervious surfaces in many locations drain directly to surface water bodies. Structural improvements are needed to capture runoff and promote infiltration (Fig. 10).
- A small number of inlets were serving large drainage areas, causing these inlets to clog (Fig. 11).



Figure 10. Without interventions to capture runoff, impervious surfaces can drain directly into adjacent water bodies (Courtesy of Biohabitats).



Figure 11. Inlets clog where a small number of inlets serve large drainage areas at Riverside County Park North (Courtesy of Biohabitats).



Figure 12. Stormwater flows on steep slopes degrade habitat at Van Saun County Park (Courtesy of Biohabitats).



Figure 14. Impervious surfaces concentrate flows into open areas causing isolated ponding at Van Saun County Park (Courtesy of Biohabitats).



Figure 13. Outfall on steep grade contributes to erosion at Van Saun County Park (Courtesy of Biohabitats).



Figure 15. Runoff from impervious surfaces and maintenance/storage areas may contain sediment, nutrients and/or contaminants that flow into surface waters (Courtesy of Biohabitats).

- Stormwater flows are directed down steep slopes, eroding forest and riparian habitats (Fig. 12).
- Impervious surfaces concentrated flow into erosion gullies located on steep grades (Fig. 13).
- Impervious surfaces concentrate flows into open areas causing isolated ponding and sedimentation (Fig. 14).
- Runoff from maintenance and/or storage facilities, which may contain organic matter, sediment, nutrients, and/or contaminants, is flowing directly into surface water bodies (Fig. 15-16).



Figure 16. Water flow at maintenance area at Van Saun County Park (Courtesy of Biohabitats).

## STREAMBANK EROSION, DESTABILIZATION, AND DEGRADATION

Current management of County park stormwater affects surface water bodies. Sheet flow to pervious surfaces in the vicinity of paved areas is already helping to disperse and infiltrate water in some locations, and is a better alternative than piping runoff directly into a stream or other surface water body. However, observations of negative conditions in County parks are listed below:

- Incised streams are disconnected from the floodplain, creating conditions that lead to downstream flooding, bank erosion and stream destabilization (Fig. 17 & 18).
- Some programmed park uses within the floodplain may increase the potential for bank instability and erosion, as well as the flooding of park amenities (Fig. 19).
- Natural edge conditions along streams are narrow and constricted, limiting flood protection (Fig. 20).
- Large flocks of geese contribute to poor water quality due to the flow of unmanaged runoff through areas filled with goose droppings.
- Nutrient inputs from manicured lawns within the general parklands, as well as from the County's golf courses, impair water quality.
- Limited forested buffers do not provide enough root protection from destabilization, increasing the risk of stream bank erosion where shallow, concentrated flows enter water bodies (Fig. 21-23).



Figure 17. Bank erosion along stream disconnected from the floodplain (Courtesy of Biohabitats).



Figure 18. Incised stream channel at Van Saun Park is disconnected from the floodplain, creating conditions that lead to degradation and destabilization downstream (Courtesy of Biohabitats).



Figure 19. Amenities like benches located near water within the floodplain have increased risk of experiencing flooding (Courtesy of Biohabitats).



Figure 20. Limited vegetative buffers do not provide enough root protection, increasing the risk of stream bank erosion (Courtesy of Biohabitats).



Figure 21. Limited forested buffers do not provide enough root protection, increasing the risk of stream bank erosion (Courtesy of Biohabitats).



Figure 22-23. Without adequate stream buffers, shallow concentrated flow running into water bodies creates the potential for stream degradation at Rockleigh Golf Course (Courtesy of Biohabitats).

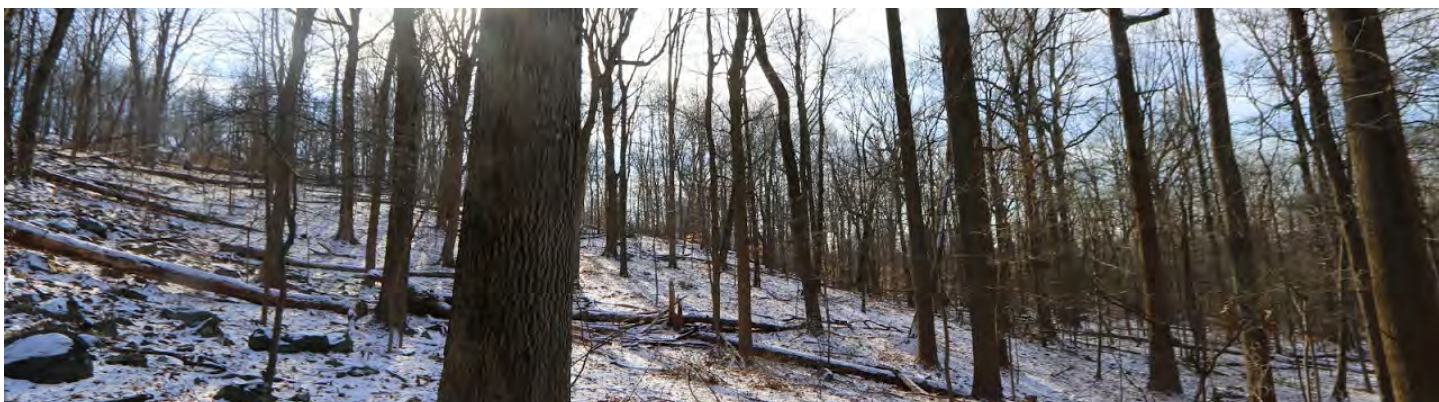


Figure 24. Oak-hickory dominated forest (Courtesy of Biohabitats).

## BERGEN COUNTY PARKLANDS – A CRITICAL ECOLOGIC RESOURCE

Just as Bergen County is defined by its natural landforms and industrial history, so too are the County’s parklands defined by valleys, ridges, waterways and historic land uses. The northernmost County parks occur on lands where farming and development were historically difficult due to steep slopes; central and southern parks occur in areas with historically wet conditions. As a result, the County parks tend to encompass significant habitats (Table 1) including forests, wetlands, streams and creeks, and contain sensitive plant and animal species that rely on these resources for nesting, breeding, cover and food. However, due to different histories of protection and development pressures, these resources vary in condition from near pristine to greatly altered.

The largest contiguous forested areas in the County are found in the Ramapo Valley County Reservation and Alpine Reserve North and South. However, since the County was logged extensively in the 18th and 19th centuries, most wooded areas within the parks are second-growth forests. There is one old growth forest remaining in Bergen County – Greenbrook Sanctuary, a 165-acre preserve that contains about 10 acres of old growth, dominated by oak species. Greenbrook Sanctuary is located south of the Alpine Reserve.

The Alpine Reserve is typical, and is dominated by a mixed oak-hickory (*Quercus-Carya* species) forest along the steep upland slopes (Fig. 24). Vegetative species found within these areas are typically observed within other wooded areas of Bergen County. Trees species include maple (*Acer*), birch (*Betula*), beech (*Fagus*), ash (*Fraxinus*), cherry (*Prunus*), and dogwood (*Cornus*) species. Shrub species typically include maple-leaved viburnum (*Viburnum acerifolium*), arrowwood (*Viburnum dentatum*), pink azalea (*Rhododendron periclymenoides*), mountain laurel (*Kalmia latifolia*), and black huckleberry (*Gaylussacia baccata*). The herbaceous layers often contain mayapple (*Podophyllum peltatum*), wild sarsaparilla (*Smilax ornata*), wood anemone (*Anemone nemorosa*), false Solomon’s seal (*Smilacina racemosa*), white wood aster (*Eurybia divaricata*), sweet cicely (*Myrrhis odorata*), and jack in the pulpit (*Arisaema triphyllum*).

American chestnut trees once dominated the area, but were decimated by the chestnut blight fungus in the early 1900s. The Tenafly Nature Center (located just south of the Alpine Reserve) is working with the Chestnut Foundation and has set up an education demonstration plot with a variety of chestnut hybrids.

WATERSHED	ACRES OF FOREST IN COUNTY PARKS	ACRES OF WETLAND IN COUNTY PARKS	ACRES OF SURFACE WATER IN COUNTY PARKS
Ramapo River	4341	296	87
Hackensack River	1428	272	208
Hudson River	429	70	3
Saddle River	173	186	65
Passaic River	69	44	8

Table 1. Largest forest areas, by watershed, are found in the following parks: Ramapo Valley County Reservation, Saddle River County Park, James McFaul Environmental Center, and Alpine Reserve North and South (Courtesy of Biohabitats).

Significant wetland resources are found throughout the County and its parklands, from the emergent tidal wetlands in the Meadowlands (which are not under Bergen County Park management), to the floodplains and riparian areas found along the County's river systems, to the wetlands located within the highland sections of the Ramapos, to the vernal pools found in small sections of many parks (such as those observed throughout Saddle River Park). Significant wetland acreage remains within the County parks in the Ramapo, Hackensack and Saddle River watersheds. The vegetative species vary greatly, dependent on the type of wetland and its hydrogeomorphic location (defined as the landscape position, source of water, and direction and strength of the water flow). For example, the tidal marshes of the Meadowlands are dominated by common reed (*Phragmites australis*) as well as salt marsh grass (*Spartina*) species, whereas forested wetlands tend to be dominated by trees such as maples, birches and willows.

Despite the number of sensitive and significant habitats found within the County parks, many of these habitats have been greatly altered. Steep slopes are flattened, wetlands filled, trees and other native species cut or mowed, or the landscape developed for some other use.

Many of the riparian areas border vertical upland, bulkheads, or riprap shoreline, reducing the opportunity for broader foraging and nesting. The tidal portion of the Passaic is closed

to commercial fishing and crabbing due to the presence of contaminants including chlordane, dioxin, and PCBs in the sediments.

## THREATENED, ENDANGERED, AND SPECIES OF SPECIAL CONCERN

Bergen County's parklands provide habitats for a number of species included on the New Jersey State lists of Threatened or Endangered Species and Species of Special Concern.

A species is designated as "endangered" if its prospect for survival within the State is in immediate danger due to one or several factors, such as loss or degradation of habitat, over-exploitation, predation, competition, disease or environmental pollution. An endangered species likely requires immediate action to avoid extinction within New Jersey. The designation of "threatened" applies when a plant or animal may become endangered if conditions surrounding it begin to, or continue to, deteriorate. The designation "special concern" applies to plants and animals that need special protection because they are vulnerable to environmental threats, but do not yet warrant an endangered or threatened status. This category would also be applied to plants and animals if scientists know little about their population status within New Jersey. Species listed by New Jersey as Threatened, Endangered, or of Special Concern are shown in Tables 2 and 3.

TYPE	COMMON NAME	LATIN NAME	STATUS	HABITAT NEEDS
Animal	Bobcat	<i>Lynx rufus</i>	S-E	Coniferous and mixed forest
	Bald Eagle	<i>Haliaeetus leucocephalus</i>	S-E	Close proximity to water
	Barred Owl	<i>Strix varia</i>	S-T	Riparian woodlands
	Black Crowned Night Heron	<i>Nycticorax nycticorax</i>	S-T	Forest, scrub/shrub, marshes, ponds as nesting and roosting habitats
	Cattle Egret	<i>Bubulcus ibis</i>	S-T	Marshy areas, nesting in trees or shrubs near water
	Henslow's Sparrow	<i>Ammodramus henslowii</i>	S-E	Sedge meadows, high, dense vegetation and thick layer of ground litter
	Red-Headed Woodpecker	<i>Melanerpes erythrocephalus</i>	S-T	Open upland and wetland forested areas with dead or dying trees and sparse undergrowth
	Yellow Crowned Night Heron	<i>Nyctanassa violacea</i>	S-T	Forests with open understory or suburban parks with suitable habitat
Reptile	Timber Rattlesnake	<i>Crotalus horridus horridus</i>	S-E	Rocky hillsides with underground crevices below the frost line, areas lacking tree canopy
	Wood Turtle	<i>Glyptemys insculpta</i>	S-T	Waters relatively remote and clean; undisturbed uplands (fields, meadows, forests)
Insect	Gray Petaltail	<i>Tachopteryx thoreyi</i>	S-E	Forests with cold water streams and seepages, skunk cabbage

Table 2. Bergen County State Threatened & Endangered (T&E) Species. S-E = State Endangered List; S-T = State Threatened List (Courtesy of Biohabitats).



Figure 25. Gray Petaltail (*Tachopteryx thoreyi*), on the list of New Jersey Endangered Species (Courtesy of Dr. Everett Cashatt/Illinois State Museum)<sup>2</sup>.



Figure 26. Bobcat (*Lynx rufus*), on the list of New Jersey Endangered Species (Courtesy of Don DeBolt)<sup>3</sup>.



Figure 28. Barred Owl (*Strix varia*), on the list of New Jersey Threatened Species (Courtesy of Peter K. Burian)<sup>5</sup>.



Figure 27. Bald eagle (*Haliaeetus leucocephalus*) on the list of New Jersey Endangered species (Courtesy of Peter K. Burian)<sup>4</sup>.

TYPE	COMMON NAME	LATIN NAME	HABITAT NEEDS
Bird	Black Throated Blue Warbler	<i>Debdiuca caerykescebs</i>	Understory of deciduous and mixed woodlands and partially cleared forest
	Broad-Winged Hawk	<i>Buteo platypterus</i>	Deep deciduous forests in spring and summer
	Brown Trasher	<i>Toxostoma rufum</i>	Shrub area in deciduous forests in clearings and edge
	Cerulean Warbler	<i>Dendroica cerulean</i>	Mature deciduous forest in river valleys and swamp
	Cooper's Hawk	<i>Accipiter cooperii</i>	Deciduous and mixed riparian or wetland forest.
	Glossy Ibis	<i>Plegadis falcinellus</i>	Marsh, swamp ponds, estuaries
	Great Blue Heron	<i>Ardea Herodias</i>	Nesting in wetlands or uplands near water bodies
	Hooded Warbler	<i>Wilsonia citrina</i>	Deciduous woodland understory near streams
	Little Blue Heron	<i>Egretta caerulea</i>	Wetland forest bordering water bodies
	Northern Parula	<i>Parula americana</i>	Deciduous or mixed forests near water
	Red-Shouldered Hawk	<i>Buteo lineatus</i>	Forested wetlands, fragmented woods forest edge
	Snowy Egret	<i>Egretta thula</i>	Wetland and forest bordering water bodies
	Veery	<i>Catharus fuscescens</i>	Forested wetlands with shrubby understory
	Wood Thrush	<i>Hylocichla mustelina</i>	Deciduous or mixed forest with dense canopy and well developed understory
	Worm-Eating Warbler	<i>Helminthos vermivorum</i>	Upland deciduous forest usually on steep sloped with patches of understory
Reptile	Eastern Box Turtle	<i>Terrapene carolina carolina</i>	Woodlands and meadows near streams or ponds
	Northern Copperhead	<i>Agkistrodon contortrix mokasen</i>	Rocky wooded hillsides, rocky fields, berry thickets, wooded wetlands
Inspects	Arrowhead Spiketail	<i>Cordulegaster obliqua</i>	Forests with cold water streams and seepage, skunk cabbage
	Brush-tuooed/enerakd	<i>Sinaticgkira waksguu</i>	Open swamps with small streams flowing through
	Sable Clubtain	<i>Gomphus rogersi</i>	Forests with cold water streams and seepage, skunk cabbage
	Tiger Spiketail	<i>Cordulegaster erronea</i>	Forests with cold water streams and seepage, skunk cabbage

Table 3. Bergen County State Species of Concern (Courtesy of Biohabitats).



Figure 29. Great Blue Heron (*Ardea Herodias*), on the list of New Jersey Species of Special Concern (Courtesy of Biohabitats).



Figure 30. Eastern Box Turtle (*Terrapene carolina carolina*), on the list of New Jersey Species of Special Concern (Courtesy of Uncultured/ Wikipedia Creative Commons)<sup>6</sup>.

Environmental pollution (Fig. 31), pesticide use, emerging pathogens and pests, road mortality, and predation are factors contributing to native species endangerment, as is competition from invasive species.

Predominant threats to bird species in County parklands:

- Habitat destruction
- Road mortality
- Cutting of dead trees, or thinning of forests that eliminate nesting cavities
- Air pollution, acid rain and other factors which cause a decline in moss and lichen
- Chemicals, heavy metal pollution, pesticide contaminants and oil spills (Fig. 31)
- Loss, alteration, degradation, and fragmentation of forested habitats
- Invasion of *Phragmites* and other non-native plant species
- Competition with European starlings for nesting cavities
- Disturbance to nesting colonies
- Vegetative succession
- Feral cats

The predominant threats to reptile and invertebrate species in the County are habitat destruction and groundwater disturbances, while the predominant threats to mammals in the County are rapid development and deforestation.

A successful long-term preservation, management, and possible expansion of the Bergen County Park System is of great relevance for preventing further loss of public Open Space and critical habitats. The analysis of existing ecological conditions has informed Goals I and 3.



Figure 31. Chemicals in surface waters (Courtesy of Biohabitats).

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- 5 Burian, P.K. 2017. Barred owl, Ontario, Canada. Wikipedia Creative Commons. [https://en.wikipedia.org/wiki/Barred\\_owl#/media/File:Barred\\_Owl\\_\(Canada\).jpg](https://en.wikipedia.org/wiki/Barred_owl#/media/File:Barred_Owl_(Canada).jpg). Accessed 27 January 2018.
- 6 Uncultured. 2009. Common box turtle (*Terrapene carolina carolina*) in Shenandoah National Park, Big Devil Stairs trail. Wikipedia Creative Commons. [https://en.wikipedia.org/wiki/Eastern\\_box\\_turtle#/media/File:Terrapene\\_carolina\\_carolina3.jpg](https://en.wikipedia.org/wiki/Eastern_box_turtle#/media/File:Terrapene_carolina_carolina3.jpg). Accessed 27 January 2018.

# 5.2 Demographics

## CURRENT DEMOGRAPHIC ANALYSIS & FUTURE PROJECTIONS

As part of the Bergen County Parks Department Master Planning process, the Alan M. Voorhees Transportation Center at Rutgers University (VTC) prepared an overview of Bergen County demographics that examines key themes and variables that might influence existing and future park needs. The current demographic patterns and future projections are intended to inform the park planning process (Fig. 1).

### CURRENT DEMOGRAPHICS

Existing demographic data patterns are reported by the U.S. Census Bureau's American Community Survey (ACS), 2010-2014. The ACS provides demographic estimates at the county, municipal and block group levels.

Several demographic themes were examined to characterize existing conditions, spatial patterns and differences within Bergen County:

- Population, Density and Income
- Age
- Race & Ethnicity
- Housing Tenure
- Limited English Proficiency
- Foreign-Born Populations
- Persons with Disabilities
- Journey to Work
- Car Ownership
- Park Availability



Figure 1. Given the demographic composition of Bergen County, parks need to support a diversity of users (Courtesy of CUES).

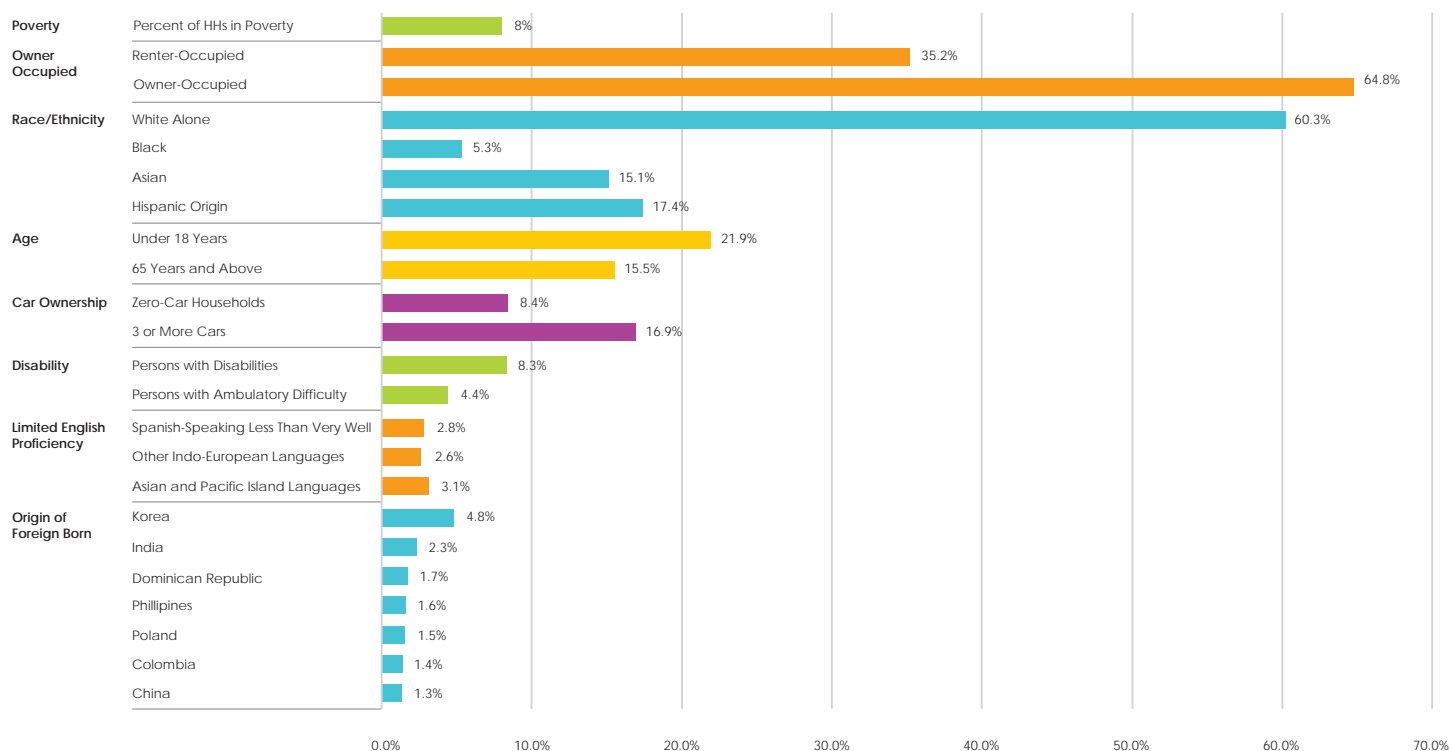


Figure 2. Select Bergen County demographics at a glance (Courtesy of U.S. Bureau of the Census, American Community Survey, 2010-2014 and CUES).

Demographic characteristics of populations surrounding each Bergen County park are presented in Appendix 9.4. A comparison of the immediate area surrounding each County park – generally within ½ mile of the park perimeter – is compared with the municipality or municipalities that are located within this park perimeter buffer and the County. This comparative approach permits a closer look at the immediate socioeconomic characteristics of the population in proximity to the park, but also acknowledges that County park users will be drawn from a greater catchment region.

Future-year population projections through the year 2040 are presented based upon the “official” demographic forecasts of the North Jersey Transportation Planning Authority (NJTPA), the region’s Metropolitan Planning Organization (MPO). The MPO’s demographic estimates and projections are available at the county, municipal and Traffic Analysis Zone (TAZ) level – a geographic level of detail more consistent with a census tract (i.e., one or more block groups).

Figure 3 provides a reference map of Bergen County parks to assist in identifying demographic patterns adjacent to County Open Spaces.

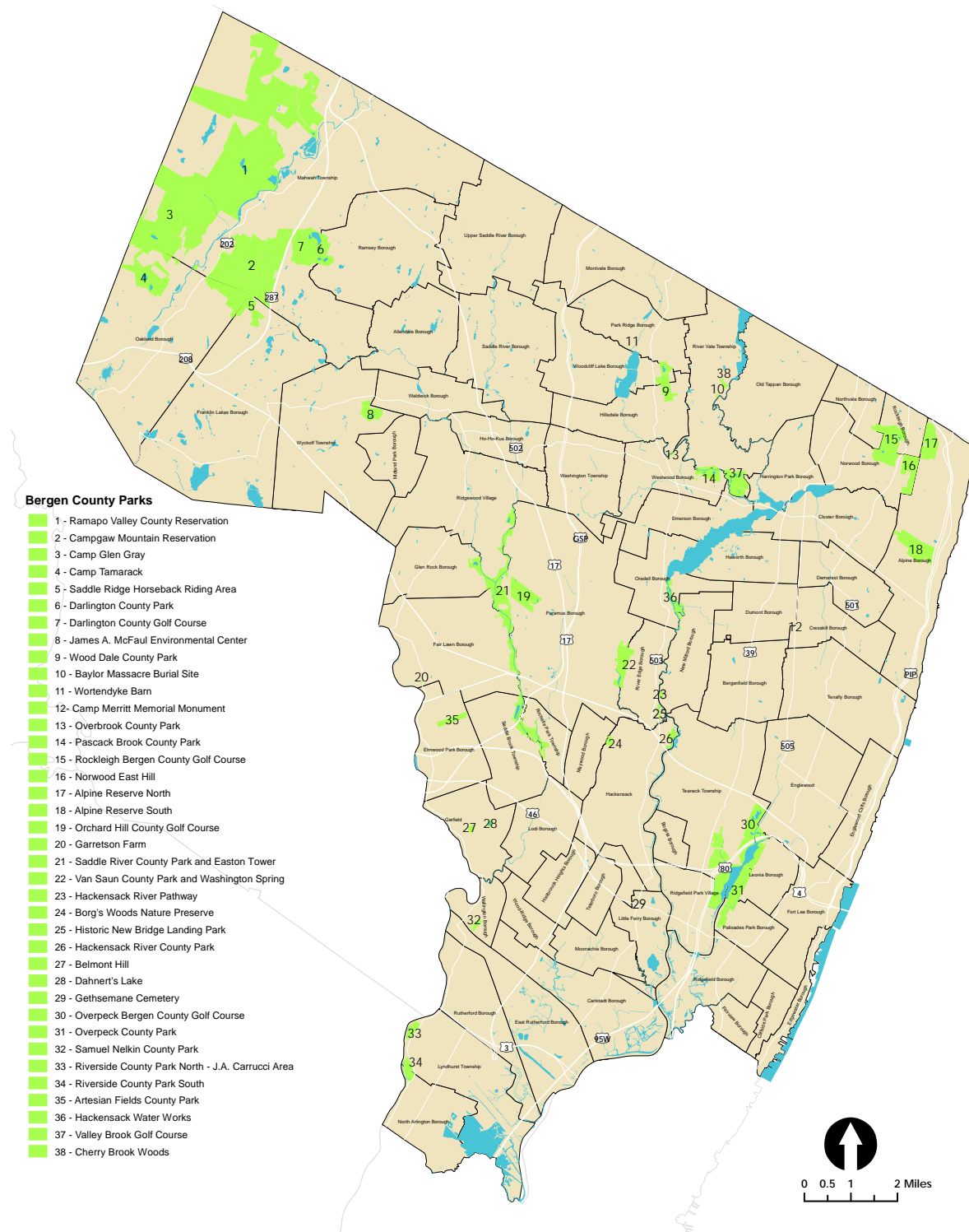


Figure 3. Reference map of Bergen County parks to assist in identifying demographic patterns near County open spaces (Courtesy of VTC).

### Population, Density and Income

Bergen County is the most populated of the northern New Jersey MPO counties, with 921,562 residents and 3,700 peoples per square mile. The County contains 335,700 households with family households comprising more than 70% of these households.

Population density is greatest along the Passaic River-Route 46 corridor in southern Bergen County and near the George Washington Bridge at the junction of the Palisades Interstate Parkway (PIP), Route 95, and Route 1 (Fig. 4). The Meadowlands communities, the northern and northwestern sections of the County are less densely populated.

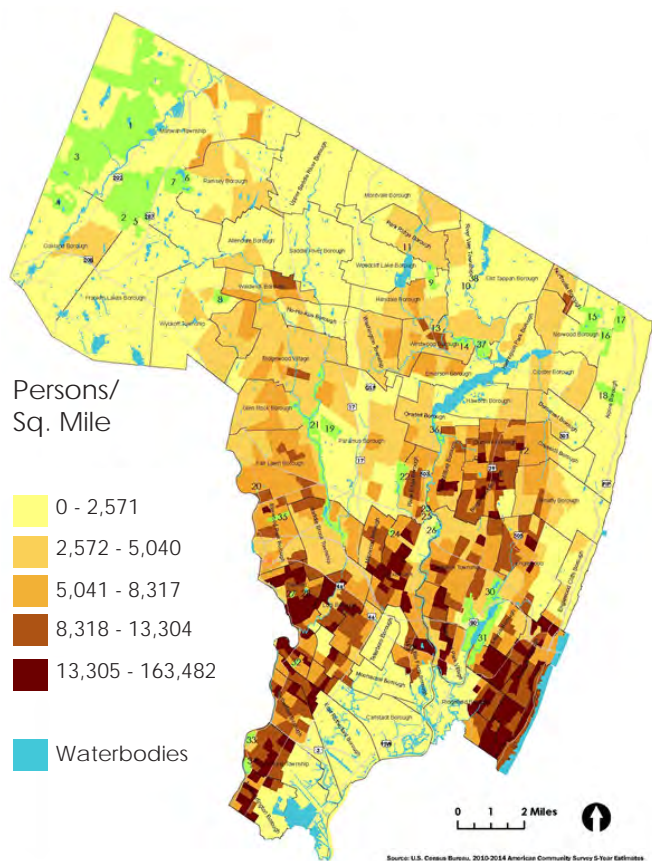


Figure 4. Population density by block group (Courtesy of VTC).

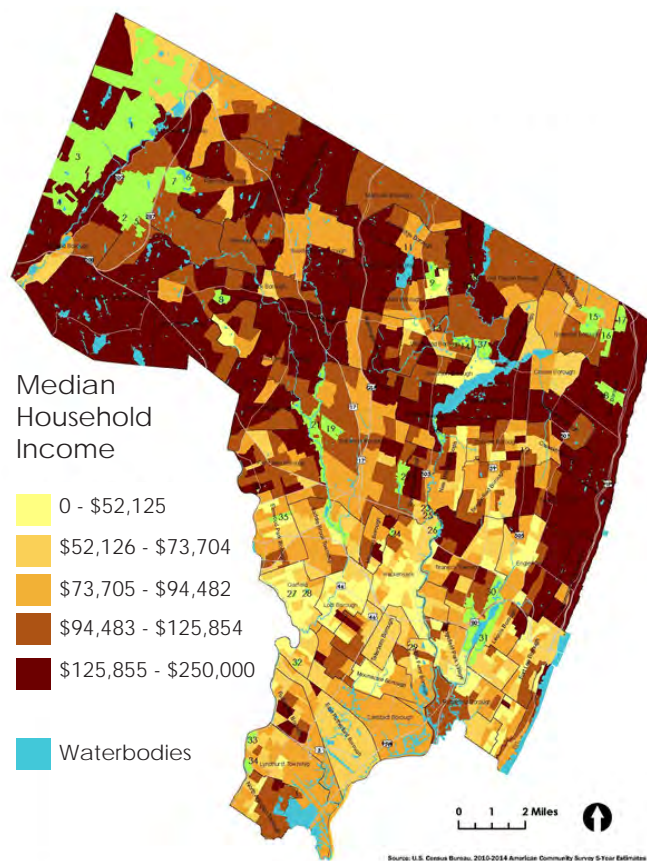


Figure 5. Median household income by block group (Courtesy of VTC).

With a median household income nearing \$100,000, Bergen County contains a relatively small percentage of households in poverty (8%). Median household income tends to increase north of State Route 4, while south of Route 4 has more lower-income residents (Fig. 5). Income influences park access and usage patterns. For persons of lower-incomes, nearby park access may function as an affordable means for getting exercise.

Family Households also follow this division, with the municipalities north of Route 4 containing a much higher number of family households than those south of Route 4 (Fig. 6).

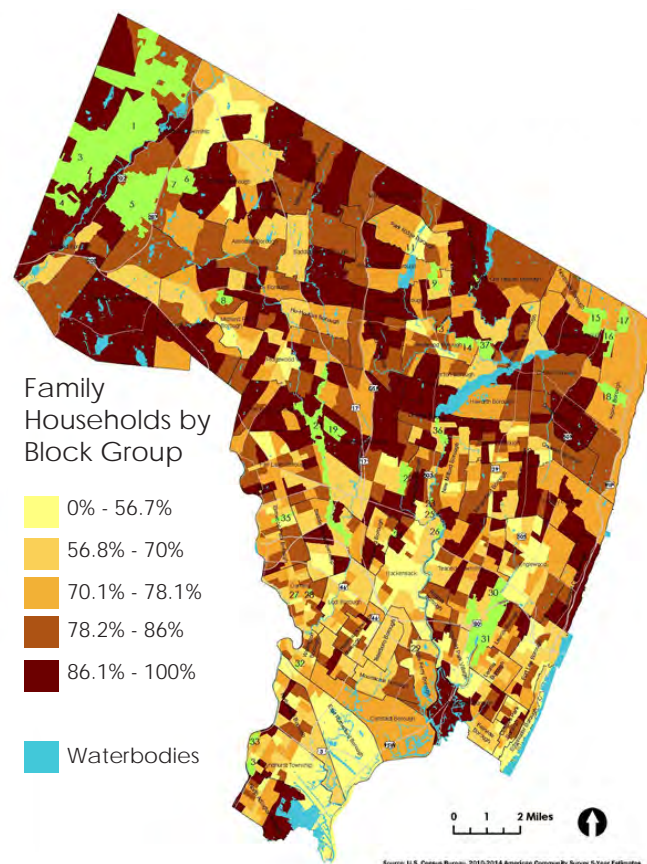


Figure 6. Family households by block group (Courtesy of VTC).

## Housing Tenure

Bergen County has a relatively high proportion of owner-occupied dwellings (64.8%) and, consequently, a smaller proportion of renter-occupied dwellings (35.2%). The spatial patterns of owner-occupied dwellings illustrate the owner-renter mix in relationship to individual parks (Fig. 7). The housing data indicates locations that host a higher population of renters. Since people who rent are less likely to have access to backyard space they may rely on public open space for leisure and recreational activities. Several County parks (Overpeck Park, Riverside Park South, Samuel Nelkin, Belmont Hill, and Dahnert's Lake are near areas with proportionately more renter-occupied dwellings.

## Age of Population in Bergen County

The age distribution of the population near a park will influence park usage patterns, design needs and programming. For example, older adults may be more interested in walking trails and passive uses or surfaces that accommodate ambulatory disabilities. They may seek park spaces physically separated from children and youth who, in turn, may be more inclined to use playgrounds and active recreational facilities (e.g., baseball, basketball, skateboards, etc.).

Persons under eighteen years of age account for just over one-fifth (21.7%) of Bergen County's population. Adults sixty five years and older represent 15.5% of the County's population. Adults sixty five years and older are proportionately greater in the areas immediately surrounding Alpine Reserve North, Norwood East Hill, Alpine Reserve South, and the Rockleigh Golf Course (Fig. 8). Camp Tamarack and Riverside County Park – North all are located in block groups with proportionately greater percentages of persons under eighteen years old (over 29%). Younger persons are also located in proportionately greater percentages near Darlington, Wood Dale, Pascack Brook, and the James J. McFaul Environmental Center (Fig. 9).

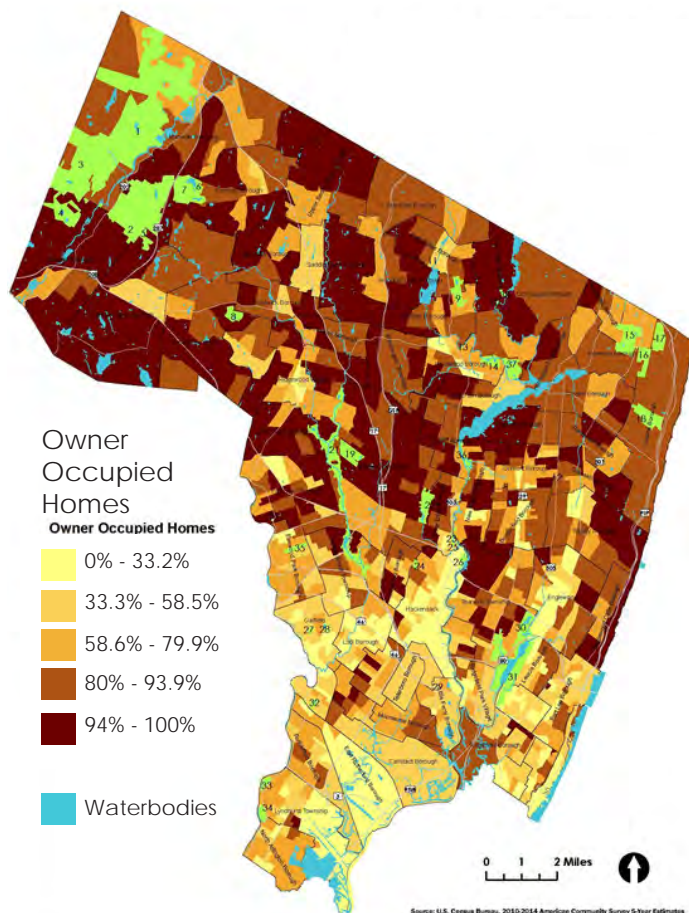


Figure 7. Owner-occupied homes by block group (Courtesy of VTC).

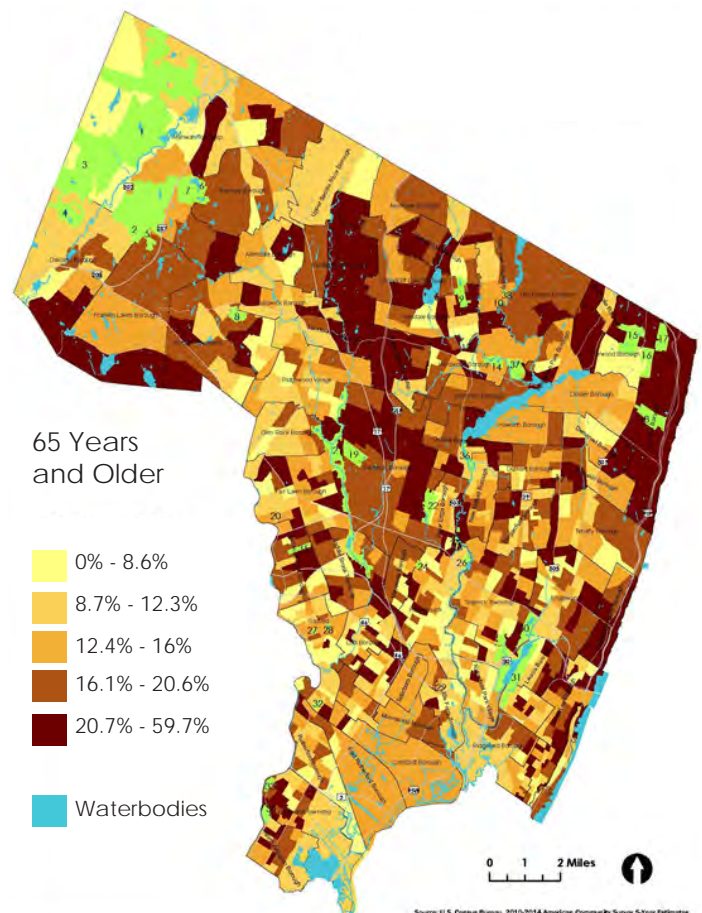


Figure 8. Population 65 years and older by block group (Courtesy of VTC).

### Race and Ethnicity

Bergen County is diverse, with a relatively higher proportion of Asians (15.1%) and Hispanics (17.4%), and a relatively lower proportions of Blacks (5.3%) than elsewhere in Northern New Jersey. Appendix 9.4 includes detailed information on the race and ethnic demographics of populations living in proximity to each of the County parks.

### Limited English Proficiency

Limited English Proficiency (LEP) refers to populations that identify a language other than English as their first language and who reported speaking English less than “very well”. An important implication of having a larger population of non-English speakers is the need for adapting signage, marketing and public outreach into other languages in order to accommodate all park users.

Bergen County’s LEP populations comprise only about two to three percent of all County households. However, there are concentrated areas of LEP persons throughout the County and in the immediate vicinity of certain parks. The tables in Appendix 9.4 provide detailed information on LEP populations for each County park.

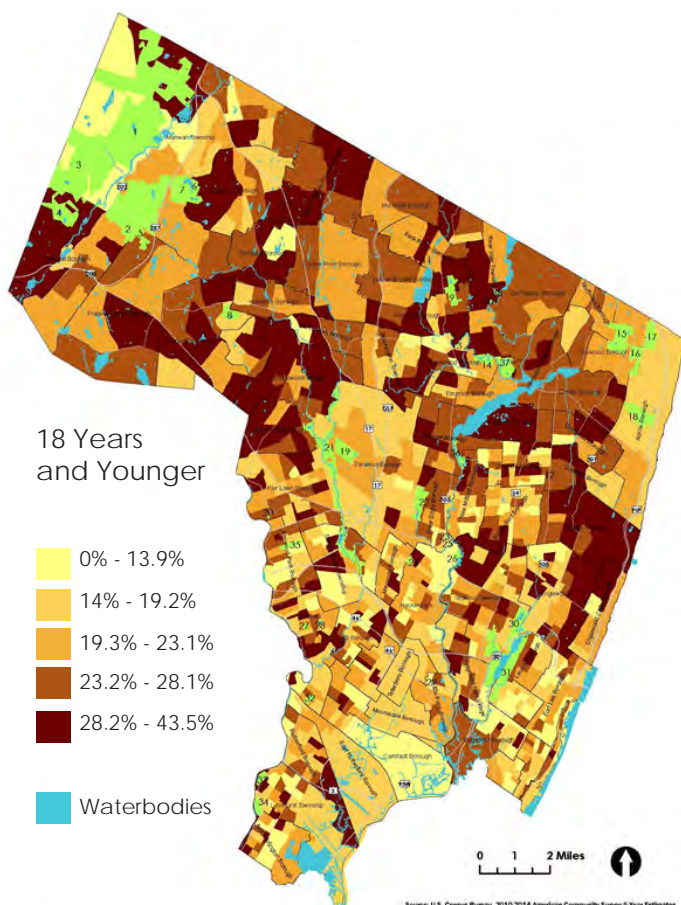


Figure 9. Population 18 years and under by block group (Courtesy of VTC).

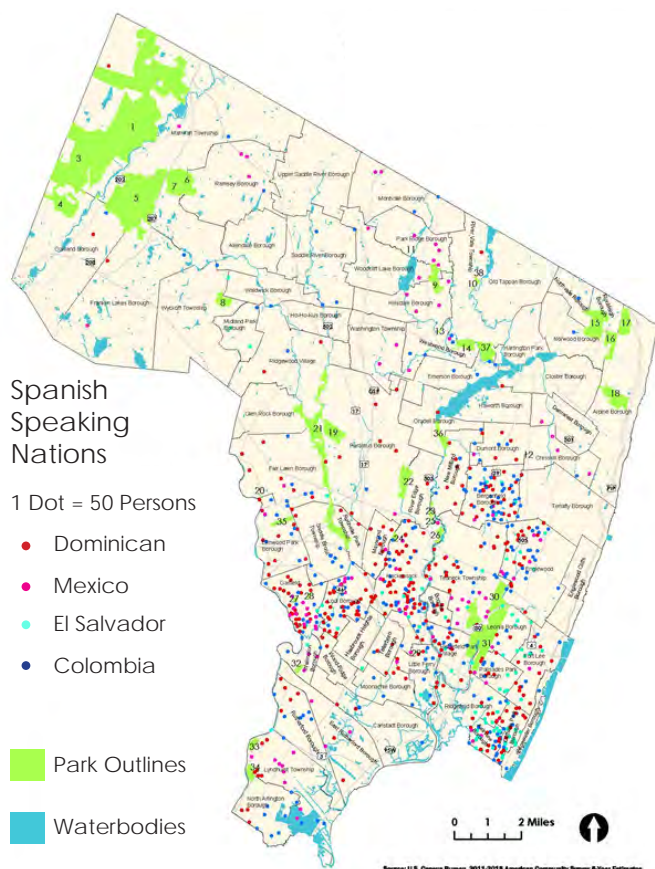


Figure 10. Foreign born populations by census tract—Spanish-speaking nations (Courtesy of VTC).

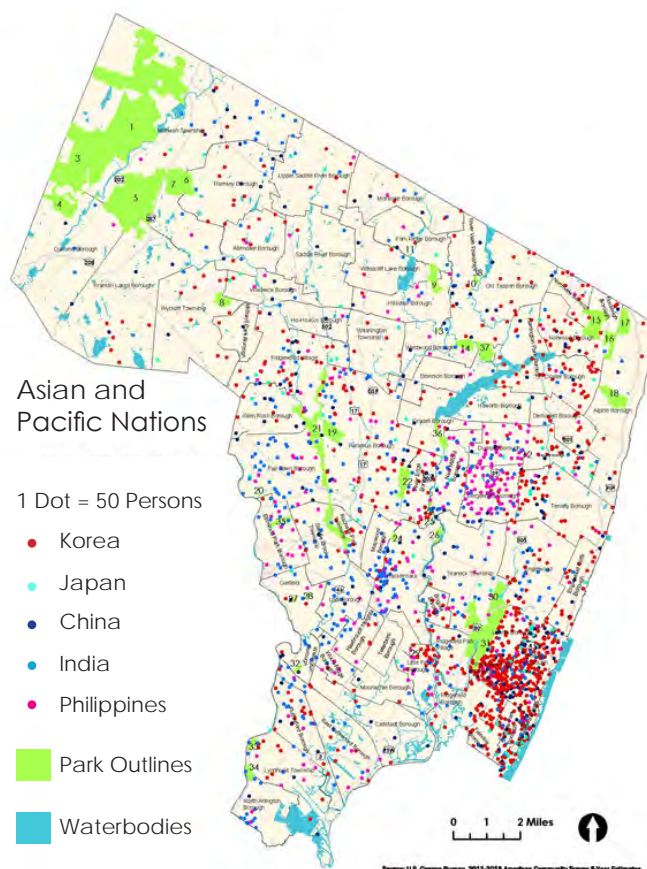


Figure 11. Foreign born populations by census tract—Asian and Pacific nations (Courtesy of VTC).

### Foreign Born Populations

Koreans are the single largest foreign-born population in the County followed by persons from India and the Dominican Republic. The Korean population accounts for just less than five percent (4.8%) of the County's population -- nearly two times greater in size than any other foreign-born population. Understanding the location and size of these communities is important for recreational planning, as there may be unique cultural traditions and customs -- and opportunities for cross-cultural exchanges -- that could influence event programming.

Figures 10-12 show the residential settlement patterns of foreign-born populations in the county. The dot density maps indicate that Koreans are located near Overpeck Park and Rockleigh Golf Course; Polish-born residents are located near Samuel Nelkin, Belmont Hill and Dahnert's Lake.

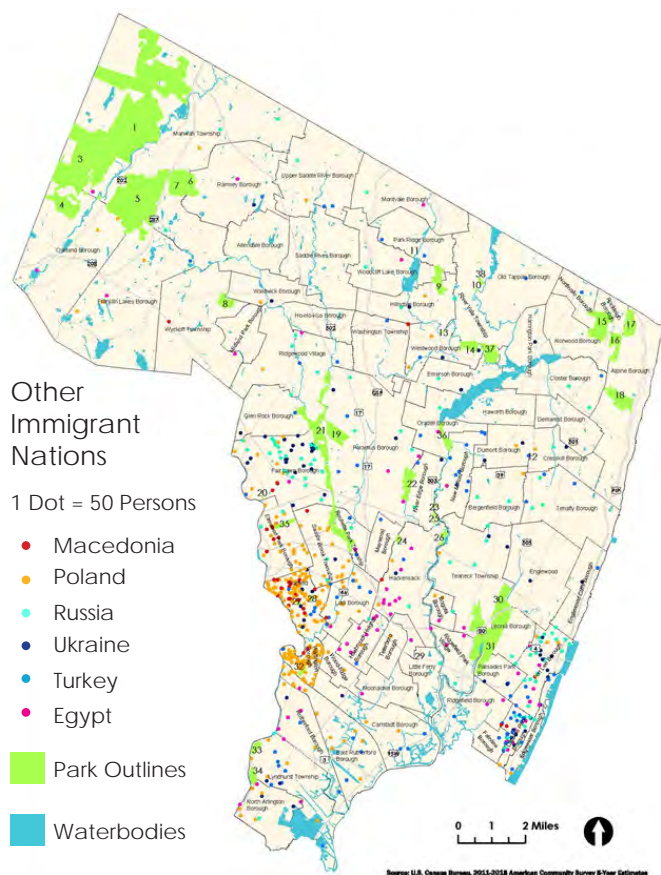


Figure 12. Foreign born populations by census tract—other immigrant nations (Courtesy of VTC).

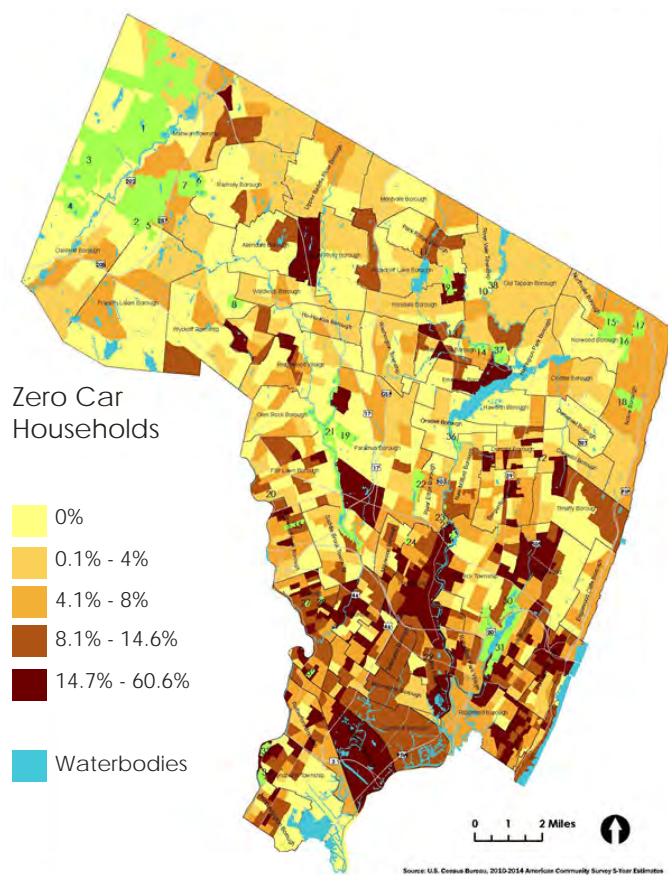


Figure 13. Zero-car households by block group (Courtesy of VTC).

### Car Ownership

Car ownership in the suburban municipalities of Bergen County is generally correlated with income. This relationship can be observed, in part, by comparing the location and percentage of zero car households (Fig. 13) and three car households (Fig. 14) with median household income (Fig. 5). Bergen County has twice as many three plus car households (16.9%) than zero car households (8.4%).

Using Route 4 as a geographic divider, northern Bergen County has swaths of block groups that have between 29% and 64% three plus car households. South of Route 4, ownership of three or more cars falls in the 6% to 20% range. The densest areas for zero-car households are located in southern Bergen County. The car ownership variable also suggests zero-car households may only be able to frequent local parks or may rely on public transportation to visit parks.

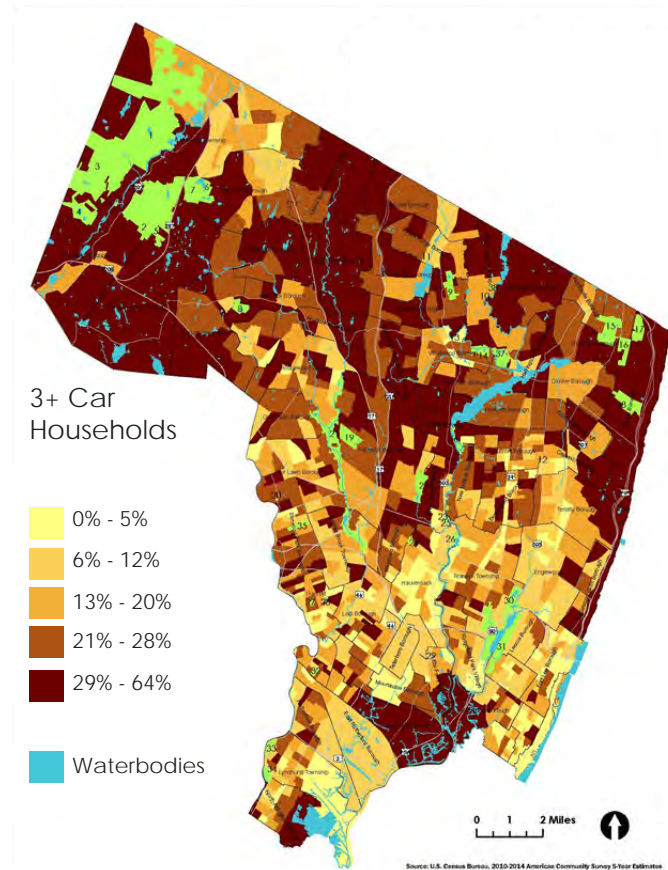


Figure 14. 3+ car households by block group (Courtesy of VTC).

### Persons With Disabilities

Park visitors with disabilities may have a specific set of needs related to handicap accessibility and alternative recreation options. Census data pertaining to persons with disabilities is divided into several categories. Among these subsets, “total disability” and “ambulatory disability” are the most relevant with regard to park analysis. Bergen County as a whole has a low overall population of persons with disabilities (8.3%); nearly half of this group have ambulatory difficulties (4.4%).

### Parks and Open Space

A parks and open space availability metric, “Acres per 1,000 residents”, provides a relatively crude indicator of locations in the County where residents may be less well-served by the availability of parks and Open Space. To calculate this metric, service area buffers were defined based on the size of a park/Open Space using the following criteria:

- Park/Open Space under 3 acres – 0.25 mile buffer
- Park/Open Space 3 to 10 acres – 0.5 mile buffer
- Park/Open Space over 10 acres – 2 mile buffer

For example, all parks and open space parcels between three and ten acres were given a service area buffer of one half mile; therefore, only the population that resides within a one half mile radius is identified as well-served by parks of these sizes. The service area buffers did not consider the road network or sidewalks to reach park access points or potential barriers to access. Rather, the calculation is completed “as the crow flies”.

The parks and Open Space metric was calculated for each block group by adding all available acres and dividing the result by the population of each block group and then multiplying that figure by 1,000.

The primary sources of parks and Open Space data for this analysis were Bergen County parks and Open Space data used for the State Development and Redevelopment Plan and from the NJDEP Green Acres Recreational Open Space Inventory (ROSI) maps of local and non-profit owned Open Space and recreation. No differentiation between passive and active recreation or park function is incorporated into this metric.

Despite the data limitations, the map (Fig. 15) provides a visualization of areas that may be well and less well-served by the existing parks and open space inventory.

### FUTURE YEAR POPULATION PROJECTIONS

The NJTPA’s demographic estimates and projections are also available at the municipal and Traffic Analysis Zone (TAZ) level. Table 2 presents the municipal-level projections for Bergen County. Widely dispersed growth is expected, but sixteen of the municipalities may add as many as 2,000 persons, and four of these municipalities -- Teaneck, Hackensack, Paramus and Englewood – are projected to add more than 3,700 persons by 2040.

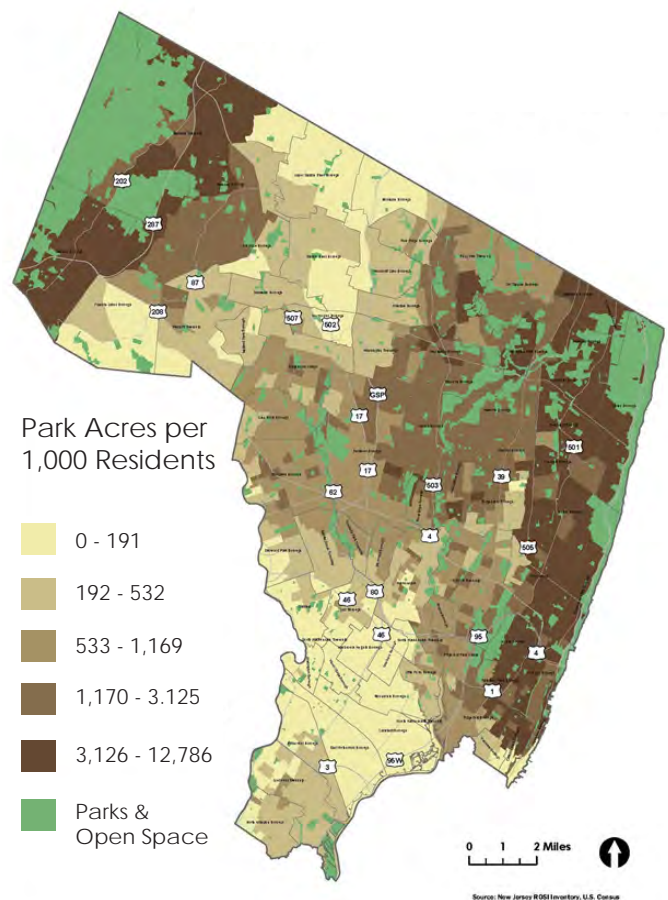


Figure 15. Parks and open space availability—acres per 1,000 residents by block group (Courtesy of VTC).



Figure 16. Future population projections suggest that Bergen County will see an 11.8% increase of residents, thus the role of parks as critical open space will become more important in future years (Courtesy of CUES).

North Jersey County	2015 Population	Projected 2040 Population	Absolute Projected Population Change	Projected Pop. Change 2015-2040 (%)	Projected Share of North Jersey Growth (%)
Bergen	921,562	1,030,442	108,880	11.8%	9.4%
Essex	810,187	916,024	105,837	13.1%	9.1%
Hudson	644,359	817,320	172,961	26.8%	14.9%
Hunterdon	131,367	147,076	15,709	12.0%	1.4%
Middlesex	842,349	1,023,085	180,736	21.5%	15.6%
Monmouth	634,162	696,920	62,758	9.9%	5.4%
Morris	494,546	530,170	35,624	7.2%	3.1%
Ocean	602,842	801,580	198,739	33.0%	17.1%
Passaic	516,143	601,325	85,182	16.5%	7.3%
Somerset	329,189	376,629	47,440	14.4%	4.1%
Sussex	160,965	199,503	38,538	23.9%	3.3%
Union	549,930	638,544	88,614	16.1%	7.6%
Warren	113,543	131,823	18,280	16.1%	1.6%
Total	6,751,143	7,910,442	1,159,298	17.2%	100.0%

Table 1. 2040 population projections for 13 counties in the North Jersey MPO region (Courtesy of North Jersey Transportation Planning Authority, 2013). We note that typically Hunterdon, Middlesex, Monmouth, Ocean, and Somerset Counties would not be considered “northern” counties.

Bergen County Municipality	2015 Population	Projected 2040 Population	Absolute Projected Population Change	Projected Pop. Change 2015-2040 (%)	Projected Share of North Jersey Growth (%)
Teaneck	40,206	45,010	4,804	11.9%	4.4%
Hackensack	43,484	48,195	4,711	10.8%	4.3%
Ridgewood	25,297	29,720	4,423	17.5%	4.1%
Paramus	26,849	30,710	3,861	14.4%	3.5%
Englewood	27,579	31,288	3,709	13.5%	3.4%
Fair Lawn	33,521	36,784	3,263	9.7%	3.0%
Mahwah	26,171	29,394	3,224	12.3%	3.0%
Fort Lee	38,608	41,813	3,205	8.3%	2.9%
Garfield	31,026	33,894	2,867	9.2%	2.6%
Lodi	24,387	27,250	2,864	11.7%	2.6%
Rutherford	18,292	21,024	2,732	14.9%	2.5%
Lyndhurst	20,878	23,241	2,363	11.3%	2.2%
Elmwood Park	19,653	21,980	2,326	11.8%	2.1%
Wyckoff	16,939	19,262	2,324	13.7%	2.1%
New Milford	16,523	18,743	2,220	13.4%	2.0%
Ramsey	14,645	16,751	2,105	14.4%	1.9%
Oakland	12,943	14,917	1,974	15.3%	1.8%
Bergenfield	27,031	28,979	1,948	7.2%	1.8%
Glen Rock	11,743	13,668	1,924	16.4%	1.8%
Franklin Lakes	10,773	12,684	1,912	17.7%	1.8%
Hillsdale	10,361	12,201	1,840	17.8%	1.7%
Saddle Brook	13,835	15,672	1,837	13.3%	1.7%
Hasbrouck Heights	11,970	13,732	1,762	14.7%	1.6%
North Arlington	15,533	17,262	1,729	11.1%	1.6%
Cliffside Park	23,772	25,491	1,719	7.2%	1.6%
Ridgefield	11,149	12,814	1,665	14.9%	1.5%
Maywood	9,688	11,318	1,629	16.8%	1.5%
Palisades Park	19,838	21,452	1,614	8.1%	1.5%
Park Ridge	8,787	10,383	1,596	18.2%	1.5%
Waldwick	9,760	11,302	1,543	15.8%	1.4%
River Edge	11,476	13,004	1,528	13.3%	1.4%
Westwood	11,032	12,450	1,418	12.9%	1.3%
Closter	8,469	9,749	1,279	15.1%	1.2%
Leonia	9,046	10,286	1,240	13.7%	1.1%
Ridgefield Park	12,859	14,073	1,214	9.4%	1.1%
Montvale	7,978	9,174	1,196	15.0%	1.1%
Edgewater	11,926	13,115	1,190	10.0%	1.1%
Dumont	17,633	18,761	1,128	6.4%	1.0%

Table 2. 2040 population projections for Bergen County municipalities, ranked by growth (Source: North Jersey Transportation Planning Authority, 2013).

Bergen County Municipality	2015 Population	Projected 2040 Population	Absolute Projected Population Change	Projected Pop. Change 2015-2040 (%)	Projected Share of North Jersey Growth (%)
Tenaflly	14,616	15,699	1,083	7.4%	1.0%
Woodcliff Lake	5,831	6,910	1,079	18.5%	1.0%
Fairview	13,971	15,047	1,076	7.7%	1.0%
Upper Saddle River	8,316	9,352	1,036	12.5%	1.0%
Allendale	6,606	7,622	1,015	15.4%	0.9%
Saddle River	3,245	4,258	1,013	31.2%	0.9%
East Rutherford	9,029	10,012	983	10.9%	0.9%
Washington Twp	9,229	10,174	944	10.2%	0.9%
Wallington	11,473	12,404	931	8.1%	0.9%
Cresskill	8,706	9,619	913	10.5%	0.8%
Wood-Ridge	9,016	9,903	887	9.8%	0.8%
Carlstadt	6,186	7,018	833	13.5%	0.8%
Norwood	5,786	6,605	819	14.2%	0.8%
Midland Park	7,210	8,012	802	11.1%	0.7%
Old Tappan	5,838	6,624	786	13.5%	0.7%
Haworth	3,437	4,222	785	22.8%	0.7%
Little Ferry	10,710	11,476	767	7.2%	0.7%
Harrington Park	4,724	5,468	744	15.8%	0.7%
Rochelle Park	5,589	6,301	712	12.7%	0.7%
Bogota	8,245	8,948	703	8.5%	0.6%
Englewood Cliffs	5,332	5,996	664	12.4%	0.6%
Demarest	4,941	5,604	663	13.4%	0.6%
Moonachie	2,749	3,386	637	23.2%	0.6%
Oradell	8,055	8,668	614	7.6%	0.6%
Northvale	4,727	5,281	553	11.7%	0.5%
Ho-Ho-Kus	4,149	4,614	466	11.2%	0.4%
River Vale	9,724	10,176	452	4.6%	0.4%
South Hackensack	2,493	2,905	413	16.6%	0.4%
Emerson	7,497	7,843	346	4.6%	0.3%
Rockleigh	552	805	253	45.9%	0.2%
Teterboro	70	92	22	31.5%	0.0%
Alpine	1,849	1,849	0	0.0%	0.0%
Bergen County	921,562	1,030,442	108,880	11.8%	100.0%

Table 2. Continued.

### Spatial Allocation of Future Population Growth

Figures 17-18 show how this projected population growth would be spatially allocated at the TAZ zone level in terms of population density. According to these projections, many of the most densely-populated areas will grow even further. Demographic patterns continue to be driven by transportation corridors (railroads, highways, and bridges) that reflect the topographic history of Bergen County.

These findings illustrate the urgency to protect and develop high quality open space for Bergen County Residents. Particular attention must be paid to the southern portion of the County, where the currently high population density is projected to grow. The analysis of existing demographic conditions has informed Goals 1, 2, and 4.

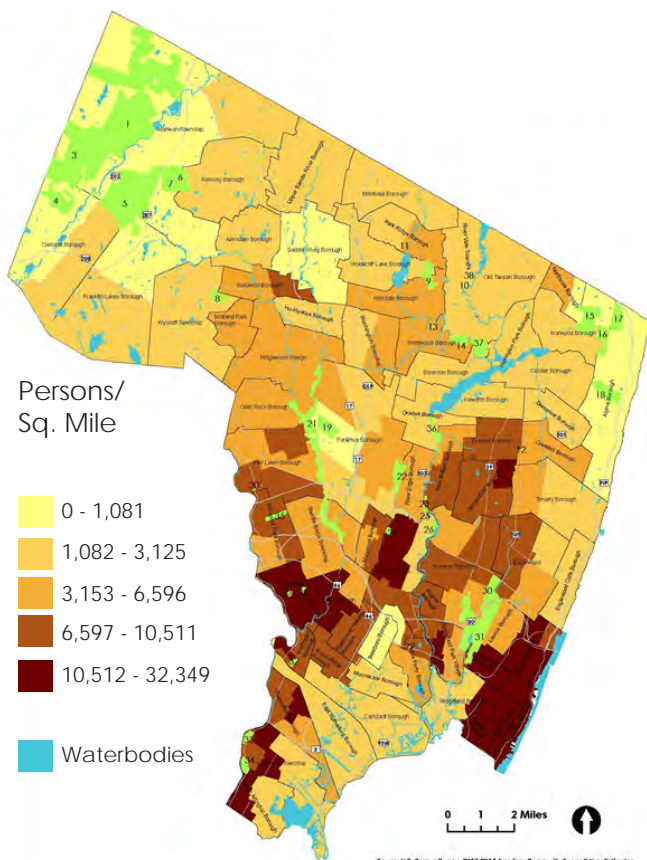


Figure 17. 2015 Population density by traffic analysis zone (Courtesy of VTC).

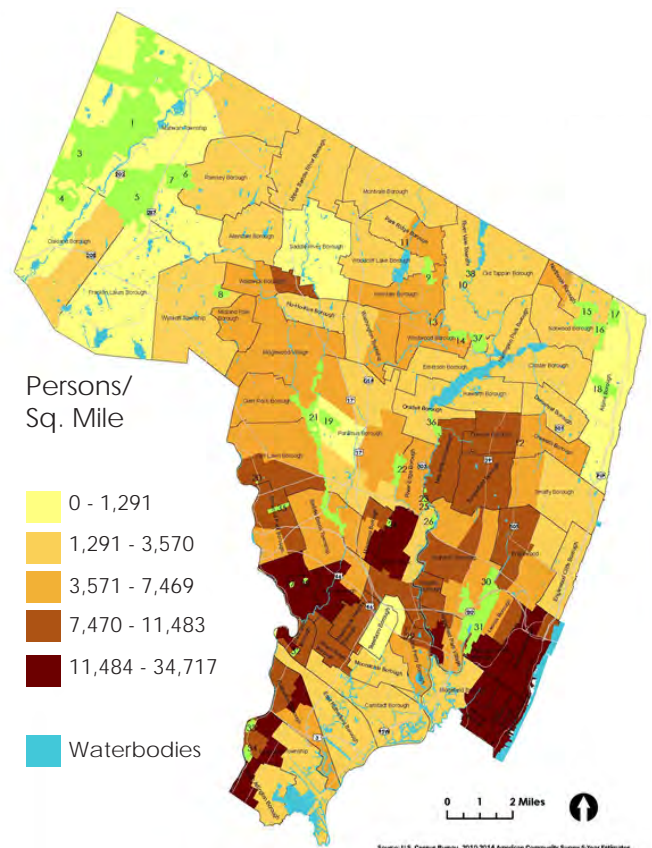


Figure 18. 2040 population density by traffic analysis zone (Courtesy of VTC).

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# 5.3 PUBLIC OUTREACH

## SUMMARY OF PUBLIC OUTREACH PROCESS & FEEDBACK

### PUBLIC OUTREACH & SURVEYS

To successfully plan for the future of the Bergen County Park system it is critically important to gain public support. Residents who are actively engaged in using and caring for the health of the County parks are more likely to provide support for future park initiatives.

In order to determine public parkland needs and gauge residents' opinion of existing conditions, eleven public meetings were held. This series of community meetings was to inform the general public and the multiple Bergen County park stakeholders and to record participant feedback. Two meetings were also held with members of the invited Technical Advisory Group (TAG), representing various park stakeholder organizations and local elected officials. When complex issues were articulated via public comments, informal conversations with community groups were subsequently held to help clarify these issues and brainstorm possible solutions.

Meeting participants had an opportunity to provide written comments and to speak publicly about the project team's findings and recommendations. Individuals and groups could also submit comments directly to the Center for Urban Environmental Sustainability (CUES) via email through the project website and sign up for digital project updates (932 individuals signed up as of 6/1/2017). Each public session was recorded in its entirety by a videographer, and video excerpts of public comments were posted on the Master Plan website for those unable to attend a meeting.

In addition to in-person meeting comments and email communications, three random surveys were conducted. An online survey open to the general public, was available through a CUES website link between 11/21/2016 and 6/1/2017; this survey was completed by 2,245 participants. The online survey was powered by Qualtrics, and the survey was set up to allow an identified computer to respond only once. Respondents were free to skip any question(s) if they wished.

An in-person park Intercept Survey (950 respondents)

was administered in five park venues by the Voorhees Transportation Center (VTC). This survey focused on questions related to transportation and park access.

In order to develop a marketing position statement, a phone survey targeting families with children (176 respondents) was conducted by a marketing firm. Elected and appointed leaders in the County (4) were also surveyed via phone about their perceptions of the County park system.

The number of online survey responses for each municipality was determined based upon self-identification of home zip codes. A significant number of responses (100 or more) came from residents of municipalities that are home to some of the larger County parks, including Mahwah (Ramapo Reservation and Campgaw), Paramus (Van Saun), and Ridgewood (Saddle River). There were no online survey responses from residents of the municipalities of Teterboro or Northvale.

Highlights of the CUES online survey results are included in Appendix 9.2. Raw data from the VTC surveys are included in Appendix 9.5A with some VTC survey data summarized in Chapter 5.4. Summaries of park-specific comments, notes from public meetings and informal conversations with community groups, and raw public feedback data are located in Appendix 9.2.



Figure 1. Dr. Wolfram Hoefer, CUES Co-Director, explaining the Parks Master Plan project to members of the public at the Teaneck public meeting (Courtesy of CUES).

## PUBLIC COMMENTS

A number of important, reoccurring topics emerged during the overall public outreach process. These topics were prioritized when developing the Master Plan for the future Bergen County Parks system. The comments below represent the predominant themes based on public comments communicated via the online survey, at public meetings, in-person conversations and via email (edited only in some cases to shorten length).

### 1. Better Connectivity for Safely Walking & Biking To The Parks

The need for safe, non-vehicular connections to parks from surrounding neighborhoods was a common thread throughout public comments:

“Please work on integrating the park into our neighborhoods.”

“We would rather walk, however most towns do not have a walking trail or path.”

“It’s great that more people are getting out to bike, but there aren’t a lot of greenways to support it. Consider rails to trails?”

“Walk or Cycle? Are you crazy? You can’t do that in Bergen County without getting run down.”

The creation of greenways, particularly along the unused CSX rail line and the old trolley line from Paterson to Suffern (now a PSE&G right-of-way), were frequently requested.

### 2. Protect Our Natural Resources

The majority of residents who shared comments cherish the open space that the Bergen County parks provide, especially given the density of Bergen County’s development. The desire to

see the last remaining “natural” areas protected was a commonly expressed desire, although opinions on the appropriate amount and type of human recreational access to parklands varied. The following are some representative comments about the issue of natural resource protection in the parks:

“Protecting and nurturing Open Space must be a priority, and then managing that space in a way that educates and engages and provides enjoyment for the public.”

“We need to put emphasis on preserving the natural areas that are left—we’re built out.” “Certain places should be left for nature. It is important to leave habitat for wildlife, too... not just consider human recreation.”

“We are concerned about increased human use of the park reducing the feeling of pristine nature.... As much as we want people to be able to enjoy the area, will this lead to more people destroying the park?”

### 3. Wildlife Management

The issue of wildlife management arose as part of the concern about protecting the health of natural resources in the parks. Geese were particularly noted as a problem at County golf courses:

“Deer are eating forest understory.... The problem is not going away & needs to be addressed.”

“Get rid of the geese.” “This is a health and safety liability.”

Nevertheless, other residents expressed a desire to see humans live harmoniously with animals. Protecting wildlife habitat, dealing humanely with problem species, and enhancing education about appropriate ways to interact with wildlife were suggested.



Figure 2-3. Residents were able to make oral comments as well as provide notes with suggestions at public meetings (Courtesy of CUES).

#### 4. Easy Access to Parks Information Is Needed

Many public meeting participants were surprised by how many park properties Bergen County owns. Providing residents with easy digital access to information about the entire park system offerings is an important component in getting more people into the parks. Interactive phone apps or other digital ways to plan park visits were requested:

“Haven’t heard of most of [the parks].”

“We need better access to information for parents to plan taking kids to parks.”

Some information specifically identified as helpful if available online included: events calendars, maps, current conditions, and even links to friends groups and concessionaires. Easy online permitting was also requested.

#### 5. Need Access To A Wider Range of Activities

With Bergen County’s changing demographics, residents are requesting access to a wider range of activities:

“Cricket.” “Kayaking.” “Pickleball!” “Mountain biking.”  
“More disc golf.”

#### 6. User Conflicts

Public comments identified a number of significant, existing user conflicts that detract from the park experience, especially: shared bike and pedestrian pathways, dog-related concerns (dogs off lead, dog refuse left on paths, etc.), and unsanctioned activities occurring where adjacent landowners have different recreation rules (e.g. whether trail biking is allowed or not).

“Lack of safety is due to BIKES. Pedestrians are NOT safe” (Saddle River County Park).

“Sometimes we find offleash dogs running in the parks where it is prohibited. We...wish that the county would ENFORCE [the rules]” (Ramapo Valley County Reservation).

Dog issues arose most prevalently in discussions about the Ramapo Reservation, where many residents requested the installation of a nearby dog park (suggesting Campgaw). However, others suggested that a dog park would not really solve the problem since many leash law offenders want to share the hiking experience with their dogs.

Shared bike/walk path issues were most commonly associated with Saddle River County Park. Cyclists riding along the paths at high speeds make some pedestrians feel unsafe, while some bikers expressed frustration that in spite of giving proper warnings, many pedestrians do not step to the side.

Unsanctioned mountain biking seems to occur chiefly in the Alpine and Ramapo properties. Representatives from several biking groups would like to cooperate with the local landowners and NY-NJ Trails Conference to develop a pilot project for building sustainable multi-use trails in these areas.

#### 7. Parking Issues

Lack of parking spaces during peak use times was cited as a significant frustration, particularly at Ramapo Reservation, Van Saun, Overpeck, and Darlington County Parks. For some, the challenge of trying to find a parking spot is enough to discourage residents from using the parks:



Figure 5-6. Public comments helped to raise important issues and inform recommendations found in Chapter 3 (Courtesy of CUES).

“Parking at Overpeck is migraine inducing.”

“Van Saun can be overcrowded in the spring and summer - with significant NY plates in the parking lot - annoying!”

“Ramapo is usually filled to capacity and you can not get in on the weekend unless you arrive before noon.”

## 8. Traffic & Large Events

According to public comments, parking and traffic-related issues are especially problematic during large events, particularly at Overpeck. These traffic concerns often contributed to a negative association with the idea of having events in the parks:

“I prefer big events stay out of the parks because there is too much traffic which the local roads cannot handle.”

“Events at Overpeck gridlock Leonia.”

## 9. What Kinds of Events & Concessions Would You Like To See In The Parks?

The entire topic of events elicited a wide range of responses from very positive to very negative as the comments below reflect:

“As many as possible.” “Ragata.” “Food festival.” “Townwide barbeque, vender craft and art market.” “Historic reenactments.” “Movie nights.”

“Nothing with loud over-amplified music that intrudes upon the peace of neighboring residential areas.”

“Small events, such as craft fairs, art shows, antique flea markets and farmer’s markets are welcome.”

“Not a big fan of organized events in the parks which result in a lot of crowding, traffic, and trash.” “They take over the place and other visitors are pushed out.”

Similarly, views on food amenities and other concessions varied widely:

“Food trucks.” “Nice restaurant.”

“I would like to see more suitable food/restaurant options at golf course properties.”

“Don’t commercialize our parks.”

Although some respondents saw no need for concessions in the parks, many others were not aware of the range of amenities County parks offer that are concessions (e.g. kayak rentals). The majority of respondents seemed to feel that concessions could have a place in the park system if they were appropriate to the site and contributed to the overall park ambiance.



Figure 7. Residents reviewing Master Plan concepts (Courtesy of CUES).



Figure 8. Q&A at McFaul Environmental Center (Courtesy of CUES).

### 10. Amenities For Special Needs & Seniors

In addition to desired park amenities like clean bathroom facilities, many public outreach participants asked that amenities for residents with special needs and seniors be considered so that everyone in the community can enjoy the parks:

“Master Plan needs to accommodate seniors, as well as other age groups.”

“Bergen County doesn’t have a park for kids...and adults with special needs. We need more than just handicapped parking accommodation.”

### 11. Socialization Opportunities

While many residents enjoy active and passive recreation in the parks, they also requested enhanced opportunities for socialization:

“I would like to see a piazza like in Italy, with fountains and vendors, so people can enjoy food, coffee & time with family, get to know neighbors, socialize with community members, and sit outside and enjoy the evening.”

### 12. Require Non-County Visitors To Pay For Amenities To Help Sustain The Parks

The Bergen County parks are not only popular with County residents, but also draw visitors from other counties and States. Since these visitors do not pay County taxes to help support park upkeep, a number of residents felt it was appropriate to charge non-County park users for parking and use of park amenities.

### 13. Incorporate Sustainable Features

Public comments often supported features that enhance the sustainability of the County parks, ranging from incorporating more recycling to using solar power to generate energy used in the parks.

### 14. Community Partnerships

As Chapter 7 illustrates, Bergen County has a plethora of community groups that have an interest in and support the parks. Many members of these groups indicated a desire for the County to “reach out to a broader spectrum of the non-profit community as partners.” Appropriate ways to involve these groups in the care and life of the parks should be explored.

Residents, stakeholders and the non-profit community at large provided strong evidence for their overwhelming public support for Bergen County Parks. The community outreach process created a very positive and supportive atmosphere that informed Goals 1-7.

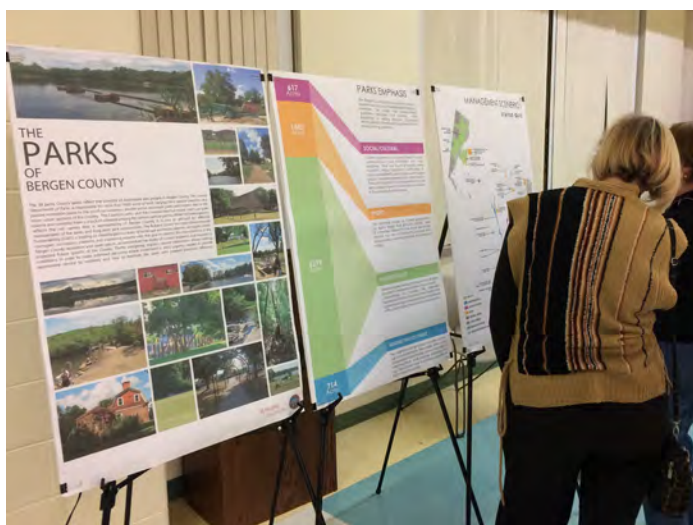


Figure 9-10. Public meetings provided a key venue for Bergen County residents to discuss parks together and with the CUES team (Courtesy of CUES).

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# 5.4 TRANSPORTATION

## TRANSPORTATION EXISTING CONDITIONS

As part of the comprehensive Bergen County Parks Master Planning process, the Alan M. Voorhees Transportation Center (VTC) at Rutgers University conducted a transportation assessment that examined linkages between parks at the regional scale, as well as multimodal access to parks at the local level. The park-specific analysis also looked at pedestrian, bicycle and vehicular circulation and parking issues within thirteen parks identified as potential locations for future park events. This chapter summarizes the findings from that assessment.

### ASSESSMENT APPROACH

The transportation assessment included the following four components:

#### *Park User Intercept Survey*

To better understand how park visitors access and use the park system, the research team conducted a park user intercept survey at five diverse parks: Hackensack River County Park, Overpeck County Park, Riverside County Park, Saddle River County Park, and Van Saun County Park. In total, 929 park users completed surveys which offered participants the opportunity to share their experiences and opinions related to park access, getting around inside parks and their perceptions of safety while using the County parks. Appendix 9.5A provides details on the survey methodology and findings.



Figure 1. Vehicular circulation elements in Van Saun County Park (Courtesy of CUES).

### *Regional Connectivity Analysis*

An issue highlighted by Bergen County residents at public outreach events was a perceived lack of linkages between communities and County parks. To explore this perceived deficiency, the research team conducted a regional connectivity analysis. The analysis overlaid the park system with the existing transportation network and looked for opportunities to better connect County parks using State, County, and municipal roads; utility and railroad rights-of-ways; existing parklands; multi-use paths; and bicycle lanes. Appendix 9.5B provides a more detailed explanation of the analysis recommendations.

### *Multimodal Access and Circulation Studies*

To address issues related to park access and circulation within County parks, the research team used publically available mapping resources and field investigations to analyze existing transportation conditions around and within thirteen parks: Belmont Hill, Campgaw Mountain, Darlington, Hackensack River, Overpeck, Pascack Brook, Riverside-North, Riverside-South, Saddle River, Samuel Nelkin, Van Saun, Wood Dale, and Wortendyke Barn. The parks were analyzed in the context of the surrounding neighborhood taking into consideration the function of the

park (i.e., regional vs. local-serving) in order to identify access issues and highlight ways to improve conditions for vehicles, pedestrians, bicyclists, and public transit users. Appendix 9.5C provides specific findings and recommendations for each of the individual parks analyzed by the research team.

### *Event Planning Analysis*

An important component of the park Master Planning process was considering the feasibility and benefits associated with programming park activities such as movie nights, cultural festivals and even multi-day music events. To help the County parks department understand how various park venues might accommodate events of different types and sizes, the research team explored potential access needs and parking demands for a range of event sizes at various park locations.



Figure 2. Walking in the street Wood Dale County Park (Courtesy of CUES).

## EXISTING CONDITIONS

The Bergen County parks system is comprised of 9,335 acres, serving 921,562 Bergen County residents. The park system is highly accessible by car (Fig. 1), many individual parks are accessible by public transit, and many parks are located within walking distance of residential areas, public schools and community institutions.

### *Park User Behavior, Experiences, and Perceptions*

According to the park user intercept survey conducted as part of the Master Planning process:

- The majority of Bergen County park users surveyed (70%) live within five miles of the park they commonly use. One in three users travels less than one mile to access a park. Of the parks surveyed, Van Saun had the highest percentage of visitors travelling more than 5 miles (44%), while Riverside had the highest percentage travelling less than half a mile (34%).
- Nearly 80% of park users drive to the parks they use (Fig. 3), while only 17% walk (Fig. 2), 3% bicycle and fewer than 1% utilize public transportation.
- An overwhelming majority of intercept respondents (83%) said park entrances and exits were clearly marked, although Hackensack River Park visitors said they were not.
- While responses varied between parks, overall, more than 60% of survey respondents ranked the walking paths within the park they were using as very good or good (Fig. 4). Only 1% stated that walking paths were in poor condition.
- A majority of survey respondents (53%), stated that they were not at all concerned about conflicts between bicyclists, joggers, and walkers on the paths. Only 7.4% said they were extremely concerned.
- Almost two-thirds (62%) of survey respondents said they had no safety concerns in the neighborhood surrounding the park they were visiting. Common responses included poor lighting and heavy traffic as neighborhood concerns. Of those that had concerns, 12% reported lack of lighting and not liking darkness (7%) as the reason they felt unsafe, followed by a lack of police presence (9%). This ranking was consistent among all parks.



Figure 3. Nearly 80% of Bergen County park users drive to the parks they use (Courtesy of CUES).

## Regional Connections

The regional connectivity analysis revealed the following:

- Bergen County parks do not function as an interconnected system of green spaces. While each individual park offers a variety of amenities and attractions, the idea of connecting the parks has not been a significant focus of park planning or management activities.
- There appear to be a number of opportunities to connect open spaces and parks across the County via existing streets, utility and railroad right of ways, walkways and trails within individual parks and with other trail systems. These opportunities exist for both North to South and East to West connections.
- There have been limited Countywide efforts at studying and planning for bicycle and pedestrian movement among and between parks. Some municipalities have undertaken steps to facilitate non-motorized transportation, but efforts vary widely from jurisdiction to jurisdiction.

### Motor Vehicle Access & Circulation

The analyses of individual parks found a number of common conditions related to vehicle access and circulation:

- Wayfinding signage directing drivers to parks and parking areas varies in design and consistency. In most cases, signage installed along major routes (such as before a highway off-ramp) does not meet Manual on Uniform Traffic Control Devices (MUTCD) standards, is not visible to both directions of traffic, and is sometimes placed too late for drivers to take action. Signage at park entrances is also not consistent in design, size, or placement (see Chapter 5.5, Park Signage).
- Parking is mostly well-placed near activity generators, such as playing fields, but rarely exists in the quantity appropriate for larger venues. Additionally, a lack of traffic management has caused congestion before and after events.
- There is very limited use of modern traffic calming strategies to slow vehicles driving within the parks and to discourage cut-through traffic.



Figure 4. Overall, most survey respondents indicated that they considered park paths as in good or very good condition (Courtesy of CUES).

- Parking lots are generally in good condition, but lack landscaping and beautification, both at the parking entrances and within the parking areas.
- Parking lots and interior roadways lack the lighting needed to support the use of parks after dark.
- Parking areas lack charging stations for electric vehicles.

### Pedestrian and Bicycle Access & Circulation

The analyses of individual parks revealed the following related to pedestrian and bicycle access and circulation:

- Interior park paths are in good or excellent condition, and link parking areas to the various amenities within the park. However, most parks lack sufficient pedestrian access points from the neighboring communities, limiting local residents' ability to access the parks without having to drive.
- While many neighborhoods adjacent to the parks were highly walkable with sidewalks, limited traffic, and a



Figure 5. Improving linkages between neighborhoods and nearby parks could facilitate bike and pedestrian access to some parks. In this case, the sidewalk ends at Dunker Hook Road without crosswalks to facilitate easy access to Saddle River County Park (Courtesy of CUES).

tight street grid, there are multiple instances where sidewalks do not link the neighborhood street network to the park itself (Fig. 5). Additionally, many parks are bordered by a major arterial roadway, but there are no crosswalks at intersections near park entrances.

- Many sidewalks into and around the parks are not ADA compliant, with missing or inadequate ramps.
- While bicyclists are invited to share internal trails with pedestrians, there are almost no bicycle-specific amenities within the parks, such as bicycle parking. Additionally, there is almost no bicycle infrastructure connecting nearby residents to the parks.
- Some conflicts have been reported between pedestrians and bicyclists sharing popular trails.
- In the larger parks, it can be difficult or impossible to safely walk from one area to another, due to barriers such as major roadways, waterbodies, and other obstacles.
- Internal pedestrian paths lack lighting and lighting is inadequate where pedestrian paths cross internal park roadways.

### *Public Transit Access*

In terms of public transit access to the individual parks analyses found:

- Most parks can be reached by multiple bus routes, but frequently the sidewalks between the park and the nearest bus stop are disconnected or in poor condition. Additionally, there are many situations where a bus stop is directly adjacent to a park entrance, but it is difficult and dangerous to cross the road to reach the bus stop on the other side.
- Very few bus stops near the parks feature amenities for bus riders, such as shelters, benches, and trash cans. There is also no signage at bus stops providing directions to the parks, or in the parks informing visitors of the nearest bus routes.

The transportation analysis revealed that all Bergen County Parks are easily reached by car. However, bicycle and pedestrian access showed significant deficits at many parks. These findings have informed Goal 2.

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# 5.5 PARK INVENTORY SUMMARY

## SUMMARY OF BERGEN COUNTY PARKS INVENTORY (2016)

This chapter summarizes existing conditions in the Bergen County park system. Data for each park were sourced from Bergen County and the New Jersey Office of GIS Open Data (NJOGIS). These data were then ground-truthed during visits to each park (for full inventory of each park see Section I: Inventory & Analysis). Amenities or improvements added after 2016 are not reflected in this Chapter.

### TOTALS OF BERGEN COUNTY PARKS

The following is a list of counts and calculations (Fig. 1), based on the research conducted in the inventory phase (2016) of the Master Planning project. While all numbers represent what was found either at the parks, aerial imagery, or NJDEP LULC data, they are subject to errors of omission or approximation.



Figure 1. Bergen County park system totals from the 2016 park inventory (Courtesy of CUES).

 <b>6</b> Golf Courses*	 <b>26</b> Baseball Fields	 <b>35</b> Tennis Courts	 <b>9</b> Basketball Courts
 <b>8</b> Soccer Fields	 <b>16</b> Playgrounds	 <b>2</b> Hockey Rinks	 <b>2</b> Football Fields
 <b>2</b> Volleyball Courts	 <b>6</b> Track and Field Areas	 <b>2</b> Lawn Bowling Courts	 <b>7</b> Boat Docks/ Storages
 <b>7</b> Dog Parks	 <b>12</b> Fishing Areas	 <b>4</b> Swimming Areas	 <b>2</b> Remote Flying Areas
 <b>16</b> Hiking Areas	 <b>2</b> Skiing Areas	 <b>3</b> Camping Areas	 <b>1</b> Disc Golf Course
 <b>1</b> Archery Range	 <b>10</b> Gardens	 <b>29</b> Relics and Memorials	 <b>3</b> Amphi-theaters
 <b>3</b> Horse Riding Areas	 <b>2</b> Zoos/Animal Exhibits	 <b>3</b> Fitness Stations	 <b>1</b> Chess Area
 <b>2</b> Cemeteries	 <b>20</b> Information Signs	 <b>1</b> Carousel	 <b>1</b> Shuffle Board Court

\* Denotes the only values adjusted in 2018 following the acquisition of Emerson Golf Club in December 2017. All other values are from the 2016 Bergen County Parks Inventory and do not reflect amenities or conditions added or changed since that time, or conditions at the Emerson Golf Club.

## ACTIVE RECREATIONAL FACILITIES

County park sports fields include tennis courts, track and field areas, baseball diamonds, hockey rinks, basketball courts, soccer fields, lawn bowling courts, exercise stations, volleyball courts, shuffle board stations, swimming pools, horseback riding complexes, ski runs, and playgrounds. Some active recreational facilities have fencing and require permits and/or fees to use their infrastructure (Figs. 2-6). For complete recreational infrastructure in the Bergen County park system (as of 2016), see Section I: Inventory & Analysis.



Figure 4. Tennis courts at Wood Dale County Park (Courtesy of CUES).



Figure 2. Fitness station at Wood Dale County Park (Courtesy of CUES).



Figure 5. The parks system offers many playgrounds (Courtesy of CUES).



Figure 3. Football/soccer/track facilities (Courtesy of CUES).



Figure 6. Horseback riding at Bergen Equestrian Center (Courtesy of CUES).

# BERGEN COUNTY PARKS

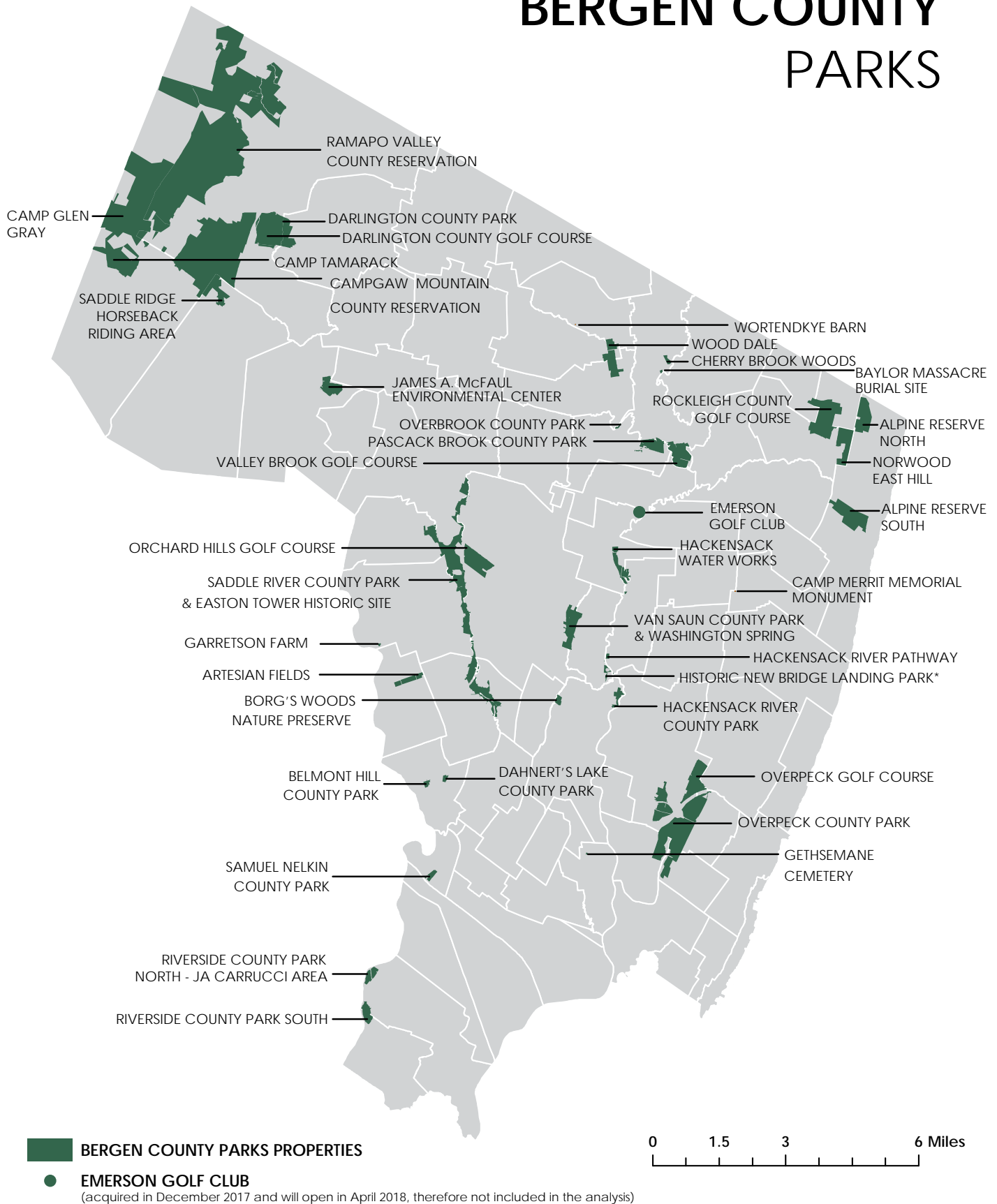


Figure 7. (Courtesy of CUES).



Figure 8. Fountain and walking path at Samuel Nelkin County Park (Courtesy of CUES).

## INDIVIDUAL PARKS INVENTORY

A wide diversity of landscapes (Fig. 8), amenities, and recreational opportunities comprise the Bergen County

park system. The 2016 inventory reveals opportunities for enhancements and provides a baseline of existing conditions in each individual park for future comparisons.



Figure 9. Alpine Reserve North trail (Courtesy of CUES).

### ALPINE RESERVE NORTH (135 ACRES)

Forested land in Alpine, NJ adjacent to Palisades Interstate Park and the Palisades Parkway. Alpine North is not formally maintained and has limited park trails; parking is very limited. This site is contiguous to other large forested areas, some of which are publically owned.



Figure 10. Alpine Reserve South (Courtesy of CUES).

### ALPINE RESERVE SOUTH (188 ACRES)

Forested land in Alpine, NJ adjacent to Palisades Interstate Park and the Palisades Parkway. The park contains approximately 40 acres of wetland. Alpine South is not formally maintained; parking is very limited.



Figure 11. Artesian Fields path (Courtesy of CUES).

### ARTESIAN FIELDS (44 ACRES)

Forested wetland site contains baseball fields and a walking pathway in Elmwood Park, NJ. There are overgrown buildings and rusted fencing on site. A Porta Potty serves the adjacent baseball fields.



Figure 13. Belmont Hill (Courtesy of CUES).

### BELMONT HILL (10 ACRES)

Located in Garfield, NJ, this park once contained a formal rose garden that is now replaced with a paver pathway and mown lawn. There is graffiti and parking lots in need of repair. Invasive species are present and there is no pedestrian access to enter the park.



Figure 12. Baylor Massacre Burial Site (Courtesy of CUES).

### BAYLOR MASSACRE BURIAL SITE (2 ACRES)

Site of Revolutionary War battle contains loop walking path, interpretive signage, and seating. Invasive plant species should be removed.



Figure 14. Borg's Woods (Courtesy of CUES).

### BORG'S WOODS NATURE PRESERVE (15.5 ACRES)

A local neighborhood park, primarily forested wetlands with a simple trail system. No parking area, signage or designated entrance. Site contains litter.



Figure 15. Lake at Camp Glen Gray (Courtesy of CUES).

### CAMP GLEN GRAY (981 ACRES)

An overnight campground facility in the Ramapo Mountains, Mahwah, NJ. Onsite cabins and tent platforms are available for rent. Friends of Glen Gray (FOGG), a non-profit organization, manages Camp Glen Gray for the County. It is critical that the County consider future management of this property in the event that the relationship with FOGG changes or ends. Some structures need maintenance; broken structures should be removed or repaired. There is a lake near the entrance, marked trails, and significant forested areas. The hand drawn online trail maps need updating.



Figure 17. Lake at Camp Tamarack (Courtesy of CUES).

### CAMP TAMARACK (249 ACRES)

This property in Oakland, NJ is open to be public, but the entrance has “no trespassing” signs and is closed to vehicles. Demolition of the former Scout Camp has not been completed and onsite infrastructure is in disrepair. Two lakes are onsite and there are unmaintained hiking trails. The park is indistinguishable from the surrounding State forest.



Figure 16. Camp Merritt Memorial Monument (Courtesy of CUES).

### CAMP MERRITT MEMORIAL MONUMENT (0.1 ACRE)

A historic monument to embarking World War I servicemen in Cresskill, NJ. The monument lacks park amenities and sits in the middle of a busy traffic circle that connects two heavily used County roads. The monument is difficult for a pedestrian to read from a distance and crossing the circle to visit the monument is unsafe. The site lacks signage informing the public that this is a historic monument.



Figure 18. Ski lift at Campgaw Mountain Reservation (Courtesy of CUES).

### CAMPGAW MOUNTAIN RESERVATION (1194 ACRES)

Contains a ski area with two ski lifts, ski patrol building, ski school, and seasonal concessions in Mahwah, NJ. A Frisbee golf course is adjacent to the ski slope and maintained hiking trails. The park has a campground that is not well maintained. The Mahwah Environmental Volunteer Organization (MEVO) runs a sustainable community garden adjacent to the campsite area. Rundown infrastructure is in need of repair, replacement, or removal in low usage areas of the park.



Figure 19. Cherry Brook Woods (Courtesy of CUES).

### CHERRY BROOK WOODS (10 ACRES)

A forested preserve adjacent to the Suez, NJ Water Company reservoir in River Vale, NJ. There is one access point at the end of a residential street, which has a chain connected to wood planks and old signs that say “No Trespassing”. There are no trails or park amenities.



Figure 21. Darlington swimming area (Courtesy of CUES).

### DARLINGTON COUNTY PARK (127 ACRES)

Contains lakes used for swimming and fishing, picnic and barbeque areas, basketball and volleyball courts, and pavilion areas in Mahwah, NJ. Additionally, the YMCA operates a summer camp in the park. This active recreation park is surrounded by a diverse array of open space about one mile from Ramapo College. This is the only Bergen County park that requires an entrance fee in the summer months – the property is fenced with one vehicular entrance point. The park, formerly a County Club, has aging infrastructure that needs repair or replacement.



Figure 20. Gazebo at Dahnert's Lake (Courtesy of CUES).

### DAHNER'T'S LAKE (9 ACRES)

The well maintained park contains a lake, roller hockey rink, playground, pavilion, and restrooms in Garfield, NJ. A bridge over the lake connects to the pavilion. There is no parking lot, so vehicular parking is on the street.



Figure 22. Darlington Golf Course (Courtesy of CUES).

### DARLINGTON GOLF COURSE (232 ACRES)

Adjacent to the police training site in Mahwah, NJ. Cart paths need maintenance and invasive species need to be removed. Water bodies suffer from eutrophication.



Figure 23. Emerson Golf Club (Courtesy of E-na P./Yelp.com).

### EMERSON GOLF CLUB (135 ACRES)

Acquired by Bergen County Improvement Authority in December 2017 and will open as a County course in April 2018. Was not part of the inventory assessment included in the Master Plan.



Figure 25. Gethsemane Cemetery (Courtesy of CUES).

### GETHSEMANE CEMETERY (1 ACRE)

A historic cemetery that was the “burial ground for the colored population of the Village of Hackensack” in the 1800s located in Little Ferry, NJ. Gates were locked and there was no sign. Parking is limited. The cemetery needs maintenance - grass is dead and some of the infrastructure needs general maintenance.



Figure 24. Garretson Farm (Courtesy of CUES).

### GARRETSON FARM (2 ACRES)

Contains colonial house, farm buildings, and storage barn in Fair Lawn, NJ. The site is listed on the National, State, and Bergen County historic registers. Master Gardener volunteers maintain the property. There is a gift shop, butterfly waystation, and historic education onsite.



Figure 26. Hackensack River Park (Courtesy of CUES).

### HACKENSACK RIVER COUNTY PARK (28.5 ACRES)

Existing entrance is located at the back of the Riverside Mall parking deck, adjacent to Rt. 4, Hackensack, NJ. The gated northern section and the southern section are overgrown with invasive common reed. Loop trails surrounding a graffiti degraded pavilion are constructed of various materials, and need maintenance. River overlooks and signage are in need of repair and maintenance; a burned bench indicates vandalism is occurring.



Figure 27. Hackensack River Pathway (Courtesy of CUES).

### HACKENSACK RIVER PATHWAY (15.5 ACRES)

A strip of unmaintained land along the Hackensack River adjacent to Historic New Bridge Landing in River Edge, NJ. The site is overgrown with invasive species and littered with trash. Views of the river are accessible by walking on a very small sidewalk along New Bridge Road. The park is not maintained.



Figure 29. Historic New Bridge Landing (Courtesy of CUES).

### HISTORIC NEW BRIDGE LANDING PARK (2 ACRES)

Bergen County is one of nine members of the New Bridge Landing Park Commission established by the State of New Jersey. This Commission manages the historic site. Bergen County is responsible for maintenance of the Campbell Christie House, which is leased to the Bergen County Historical Society. The County owns and is also responsible for the Swing Truss Bridge onsite.



Figure 28. Hackensack Waterworks (Courtesy of Michelle Lederer).

### HACKENSACK WATERWORKS & VAN BUSKIRK ISLAND PARK (70 ACRES)

Historically designated buildings located on an island in the Hackensack River in Oradell, NJ. Aging infrastructure is in need of major and expensive repairs. Site is subject to flooding during storm events and is currently closed to the public. There is a lack of consensus on future uses of this property.



Figure 30. Enclosure at McFaul Environmental Center (Courtesy of CUES).

### JAMES A. MCFaul ENVIRONMENTAL CENTER (83 ACRES)

Contains a nature education facility in Wyckoff, NJ. The center includes wildlife exhibits, meeting rooms and bathrooms. Outside there is a pond and animal enclosures, a two-story observation platform, walking trails and arboretum-style plantings. Invasive plant species need to be removed.



Figure 31. Norwood East Hill (Courtesy of CUES).

### **NORWOOD EAST HILL (124 ACRES)**

A forest located in Norwood, NJ. The park is not maintained, there are no defined trails or amenities. There is a structure in the southern portion of the forest and old structural remnants in the center. This property is adjacent to other publicly-owned forested lands.



Figure 33. Overbrook Park stream (Courtesy of CUES).

### **OVERBROOK COUNTY PARK (3 ACRES)**

A mowed grass strip between Westwood Avenue and the Pascack Brook with newly planted trees in the center area and old growth trees throughout the area. The stream bank is heavily vegetated with invasive species and vines. Several neighboring houses have fences with openings into the park. There is no parking area and parking on the grass is prohibited.



Figure 32. Orchard Hills Golf Course (Courtesy of CUES).

### **ORCHARD HILLS GOLF COURSE (66 ACRES)**

9 hole course in Paramus, NJ. Entrance parking lot is through a maintenance yard surrounded by a fence. Cart paths need repair and drainage conditions need to be improved.



Figure 34. Relaxing at Overpeck County Park (Courtesy of CUES).

### OVERPECK COUNTY PARK (834 ACRES)

Originally envisioned as the “Central Park of New Jersey,” Overpeck Park is a regional destination for a wide range of passive and active recreation, as well as large events. Overpeck is the existing anchor park in closest proximity to the densely populated southern portion of Bergen County. It fills the role of an urban-style heavily used diverse park, with vibrant social interactions, large events, sport attractions, and nature recreation opportunities.

The largest urban Bergen County park, divided into eight activity areas spanning almost three miles, bisected by Overpeck Creek. Located less than four miles from northern Manhattan, it is easily accessible from the George Washington Bridge. Regional access is supported by the proximity of two interstate highways, I-95 (New Jersey Turnpike) and I-80. Given its location, the park attracts visitors from both New Jersey and New York. Overpeck boasts a wide range of attractions and amenities, including walking trails, golf course, equestrian center, 3,000-person amphitheater, boat launch, and multiple sports fields and courts.

Although Overpeck has the potential to achieve the vision of a Central Park-like institution, much work remains to be completed. The landfills in Areas I, II, and IV must be permanently closed. Connectivity for pedestrians, cyclists, and vehicles between the four areas and the surrounding communities remains a large issue to be resolved in a Conceptual Master Plan. Transportation connections and linkages to the proposed future light rail stops need to be constructed. Naming conventions for the various areas must focus on unifying the park into one cohesive unit.

- Area I – Teaneck Creek: a forested wetland area that contains passive walking trails, EcoArt installations, and butterfly garden. Programming, the trail system and butterfly garden maintenance are provided by the non-profit Teaneck Creek Conservancy in collaboration with Bergen County. The park is heavily overgrown with a number of invasive species. Signage within this area needs replacement or repair. This landfill has not yet been closed, but a restoration plan has been developed and a permit application has been approved by NJDEP.
- Area II – Unclosed landfill: covered by dense vegetation, many invasive species.
- Area III – Closed landfill redeveloped for active recreation: contains sports fields, tennis courts, pickleball courts, playgrounds, snack bars, rest rooms, amphitheater, boat launches and fishing docks. Common reed needs to be removed from the shoreline of Overpeck Lake and new landscaping requires maintenance. Additional top soil and seeding is needed where the great lawn area has settled.
- Area IV – Unclosed landfill: This section is currently accepting waste material and will eventually be capped and closed.
- Palisades Park Sportsplex: contains a football/track field with large stadium and press boxes, 4 baseball diamonds, concession stand and playground. Currently cut off from the rest of the park due to the inaccessibility of Area IV.
- Bergen Equestrian Center: contains corrals and riding arenas for horses. The Center is a concession.
- Henry Hoebel Area: contains a dog park, football field, baseball diamond, soccer field, volleyball and tennis courts, track and field complex, cricket field, an event space, exercise park, and aerodrome launch. The 9/11 World Trade Center Memorial is in this section, near a pavilion and picnic tables, rest rooms, and water fountain.



Figure 35. Overpeck Golf Course (Courtesy of CUES).

### OVERPECK GOLF COURSE (152 ACRES)

Contains a number of streams and ponds in Teaneck, NJ. Bridges over surface waters require maintenance and invasive species need to be addressed.



Figure 37. Reservoir at Ramapo Valley Reservation (Courtesy of CUES).

### RAMAPO VALLEY COUNTY RESERVATION (3268 ACRES)

The largest park in the County park system contains twenty two miles of maintained trails, a river, lake and reservoir in Mahwah, NJ. Swimming is prohibited, but this rule is ignored by park users. The park is adjacent to other forested lands owned by the States of New Jersey, New York, and Passaic County. Parking in the one paved lot adjacent to Rt. 202 is insufficient on high use weekend days. Contrary to park rules, dogs run off leash and trail bikes are used on trails, potentially creating user conflicts. There is evidence that off road motorized vehicles are active in certain areas of the park (Stagg Hill section). There is a local Native American community with historic ties to this section of the Ramapo Mts.



Figure 36. Fishing at Pascack Brook County Park (Courtesy of CUES).

### PASCACK BROOK COUNTY PARK (82 ACRES)

Contains a pond, baseball fields, playground, picnic area, basketball and tennis courts in Westwood, NJ.



Figure 38. Courts at Riverside County Park North (Courtesy of CUES).

### RIVERSIDE COUNTY PARK NORTH (37 ACRES)

Contains new sports field, picnic areas, concession stands, bocce fields, exercise station, and dog run in Lyndhurst, NJ. Sports field and concession were locked and inaccessible during site visits. Paths along the Passaic River need maintenance and invasive species removal. Some parking lots and the dog run need maintenance. Dying trees need to be replaced. The main park circulation is for vehicular traffic.



Figure 39. Riverside County Park South sports field (Courtesy of CUES).

### RIVERSIDE COUNTY PARK SOUTH (49 ACRES)

Contains track field, baseball and soccer fields, tennis courts, playground and picnic areas adjacent to the Passaic River in Lyndhurst/North Arlington, NJ. Maintenance is needed to remove invasive species and replace dead plants. Tennis courts also need maintenance. There are multiple desire paths, indicating that more pedestrian access points are needed.



Figure 41. Saddle Ridge Riding Center (Courtesy of CUES).

### SADDLE RIDGE RIDING CENTER (100 ACRES)

Contains corrals and forested riding arenas for horses in Franklin Lakes, NJ. The Center is a concession. The riding areas are open to the public for walking or hiking.



Figure 40. Rockleigh Golf Course (Courtesy of CUES).

### ROCKLEIGH GOLF COURSE (263 ACRES)

The oldest (built 1958) and largest (27 holes) County golf course located in Rockleigh, NJ. The club house facility is aged and rundown. Cart paths need maintenance as does the course infrastructure. Invasive species are present throughout the course and water bodies have eutrophication.



Figure 42. Path through Saddle River County Park (Courtesy of CUES).

### **SADDLE RIVER COUNTY PARK (587 ACRES)**

A Greenway park system with distinct areas and a historic monument connected by 10.5 miles of multi-use pathway.

- Glen Rock Area: contains a playground, three picnic areas, two pavilions, rest room, two tennis courts, and Glen Rock Pond. The pond is experiencing eutrophication, possibly related to the Canada goose population.
- Wild Duck Pond Area: contains a pond, picnic area, no-leash dog park, and playground. Water levels were low and the pond needs maintenance, as do some picnic tables and pathways. A summer recreational program for disabled children and young adults takes place here.
- Dunkerhook Area: contains clusters of picnic tables, a playground, and rest rooms. Maintenance is needed on the pathway, around the pavilion, and on the turf grass.
- Maple Glen Area: contains tennis courts. A streambank stabilization project is occurring in this section.
- Fair Lawn Area: contains a football field and parking. Easton Tower historic site is in this section. There is limited historic signage. The courtyard adjacent to the monument needs repairs and maintenance.
- Otto C. Pehle Area: contains a lake with sand beach, basketball court, baseball diamond, and a children's playground. Turf grass around lake requires maintenance.
- Rochelle Park Area: contains three baseball diamonds, a playground, picnic tables, basketball court, two tennis courts, and a hockey rink that doubles as basketball courts.



Figure 43. Samuel Nelkin County Park playground (Courtesy of CUES).

### **SAMUEL NELKIN COUNTY PARK (18 ACRES)**

Contains a lake, dog run, playground, tennis and basketball courts, and baseball diamond in Wallington, NJ. The tennis courts have faded markings. Comfort stations were locked during site visits and had graffiti.



Figure 44. Valley Brook Golf Course (Courtesy of CUES).

### **VALLEY BROOK GOLF COURSE (132 ACRES)**

A course acquired 12 years ago located in River Vale, NJ. Surface water bodies are experiencing eutrophication, the infrastructure needs maintenance, and the cart paths need repairs. The course has a modern clubhouse and grill facility that could support community and private events.



Figure 45. Van Saun County park playground (Courtesy of CUES).

### VAN SAUN COUNTY PARK (139 ACRES)

Provides a diverse range of activities in Paramus, NJ. The northern half of the park offers primarily for-fee activities, including the Bergen County Zoological Park, tennis courts, carousel, and pony rides. The southern half is primarily a passive recreation area, with dog park, lake, and ecological areas. Washington Spring formal gardens are located within Van Saun. Parking lots need maintenance and invasive species (common reed) at the lake shoreline need to be removed. Properties immediately surrounding the park are all residential, primarily single-family homes.



Figure 47. Wortendyke Barn (Courtesy of CUES).

### WORTENDYKE BARN (0.4 ACRES)

New world Dutch barn contains Wortendyke Barn Museum in Park Ridge, NJ. The site has an apple orchard and is listed on the National Historic Register. Summer concerts and public events are held in this park.



Figure 46. Gazebo near Wood Dale County Park lake (Courtesy of CUES).

### WOOD DALE COUNTY PARK (118 ACRES)

Contains a lake, dog park, tennis courts, playground, picnic area, baseball field, forested and wetlands areas in Hillsdale, NJ. There are no sidewalk connections to this park, so visitors walk along the roadway.








































Park Name	Park Emphasis	Park Type
Alpine Reserve North		Anchor (Potential)
Alpine Reserve South		Anchor (Potential)
Artesian Fields County Park		Local
Baylor Massacre Burial Site		Local
Belmont Hill		Local
Borg's Woods Nature Preserve		Local
Camp Glen Gray		Anchor (Proposed)
Camp Merritt Memorial Monument		Local
Camp Tamarack		Anchor (Proposed)
Campgaw Mountain Reservation		Anchor (Proposed)
Cherry Brook Woods		Local
Dahnert's Lake		Local
Darlington County Park		Anchor (Proposed)
Darlington Golf Course		Golf
Emerson Golf Course		Golf
Garretson Farm		Local
Gethsemane Cemetery		Local
Hackensack River County Park		Linear (Potential)
Hackensack River Pathway		Linear (Potential)
Hackensack Waterworks & Van Buskirk Island Park		Linear (Potential)
Historic New Bridge Landing		Linear (Potential)
James A. McFaul Environmental Center		Local
Norwood East Hill		Anchor (Potential)
Orchard Hills Golf Course		Golf
Overbrook County Park		Local
Overpeck County Park		Anchor
Overpeck Golf Course		Golf
Pascack Brook County Park		Local
Ramapo Valley County Reservation		Anchor
Riverside County Park North		Local
Riverside County Park South		Local
Rockleigh Golf Course		Golf
Saddle Ridge Riding Center		Local
Saddle River County Park & Easton Tower		Linear
Samuel Nelkin County Park		Local
Valley Brook Golf Course		Golf
Van Saun County Park		Anchor
Wood Dale County Park		Local
Wortendyke Barn		Local

Table 1. Bergen County parks categorized by Park Emphasis and Park Type two complimentary environmental planning designations further explained in Chapter 6.1 that help inform planning guidelines (Courtesy of CUES).

## PARK SIGNAGE

One observation made during the park inventory was the need for consistency in park signage. The array of shapes, sizes, colors, typefaces, and materials was as diverse as the parks themselves (Fig. 48). The age and condition of signs across different locations varied tremendously also (Fig 49). Some parks could benefit from more wayfinding, while others have an overabundance of signs (Fig. 50). Chapter 6.8 provides recommendations regarding park branding and signage for a more consistent brand image and greater user recognition of Bergen County park properties.

## SUMMARY

The 9,335 acres of Bergen County Parkland shows a rich variety of Open Spaces that reflect the diversity of the County. Noteworthy are the three existing parks with regional importance: Ramapo, Van Saun, and Overpeck. Saddle River is a highly successful linear park that can serve as a model for new park development. Many of Bergen County parks are of smaller size and serve local communities. Six golf courses provide affordable recreational opportunities for residents. An analysis of the distribution of the parks in relationship to population density is addressed in the following Chapter 5.6.

The overall maintenance of the park system is adequate, but not excellent. A thorough analysis of existing park conditions has informed Goals 1-7.



Figure 48. Collage of diverse signage in the Bergen County parks (Courtesy of CUES).



Figure 49. Existing sign at Easton Tower dates from the pre-1987 Bergen County Park Commission era (Courtesy of CUES).



Figure 50. Some parks could benefit from additional wayfinding signs while others have excessive signage (Courtesy of CUES).

## 5.6 OPEN SPACE AVAILABILITY

## ASSESSMENT OF EXISTING OPEN SPACE

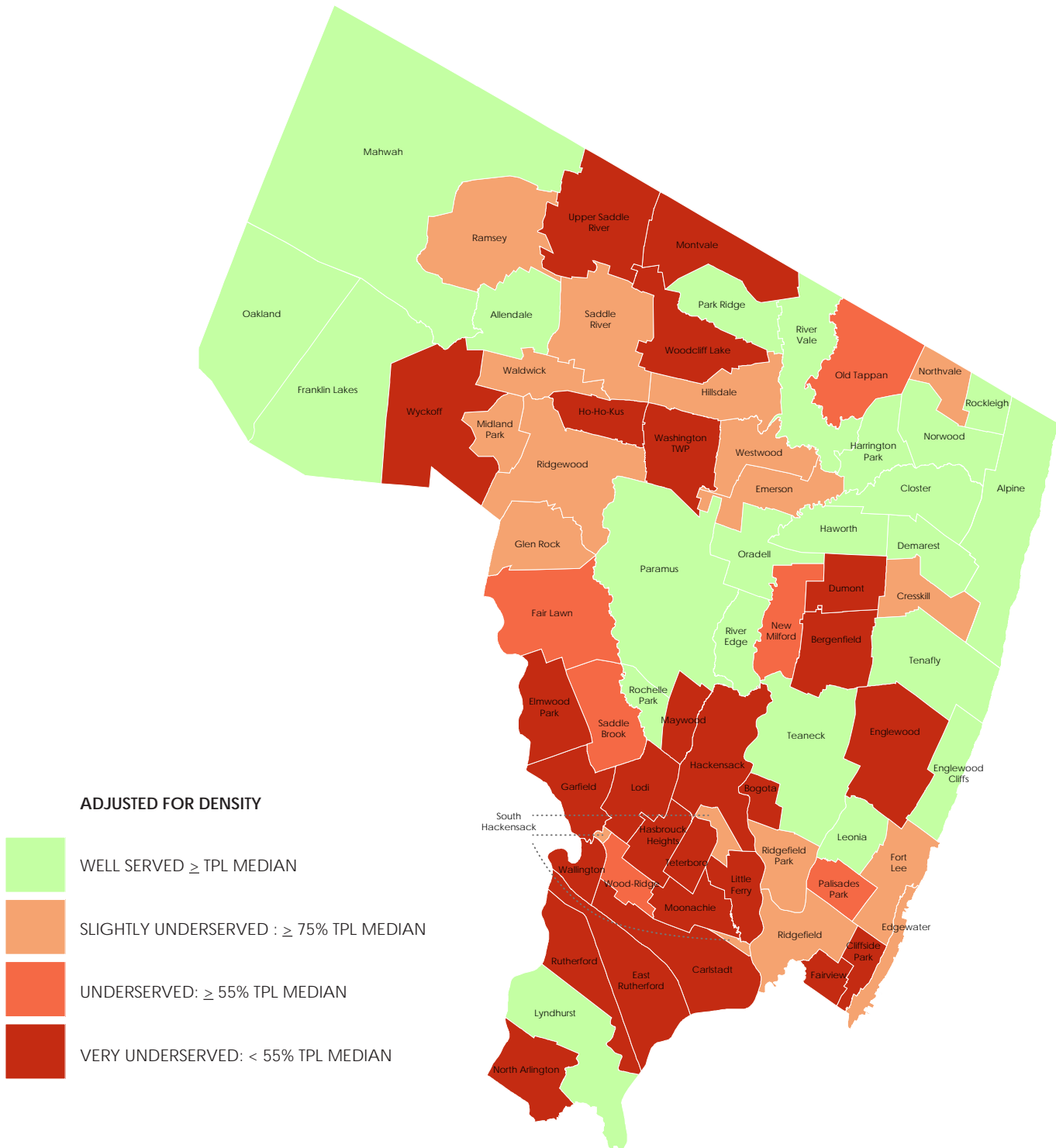


Figure 1. Evaluation of existing open space per 1,000 residents based upon Trust for Public Land criteria (Courtesy of CUES).

An evaluation of the amount of Bergen County parkland must include all public open space, regardless of the property owner. The total acreage is then compared to the population density of the area being evaluated to calculate the amount of open space per resident. Based on the NJDEP Green Acres ROSI data (2016), open space property in the County totals approximately 18,817 acres. Fifty percent of this acreage is owned by Bergen County (9,335 acres). The balance is owned by municipalities (6,453 acres), Palisades Interstate Parks Commission (2,251 acres), Non-Profit entities (867 acres), State of NJ (32 acres), and private (8 acres). These numbers do not reflect privately owned golf courses or any other properties not included in the ROSI database.

The approximately 19,000 acres compares favorably with the original 1947 BCPC projected need of 15,000 acres parkland, of which 5,000 acres were projected to be County-owned. Although

County owned parkland is almost double the Open Space BCPC thought would be needed, the County's increasing population density was not predicted by these visionary planners (Fig. 2).

In order to quantify the totality of existing Bergen County open space, municipal data provided through the ROSI data set was mapped for each municipality (data available for sixty five of the seventy Bergen County municipalities). In addition, a desktop aerial survey was conducted to identify municipal parcels not included in the current ROSI data (schools, sport facilities, etc.). An individual map was created for each Bergen County municipality (see Appendix 9.6 for individual municipal maps). These maps were sent to the seventy municipalities for vetting (fourteen municipalities responded with comments). The total parkland for each municipality was then calculated, mapped, and compared to standards established by the Trust for Public Land (TPL) to determine municipalities that are currently well served or underserved with respect to their amount of available open space (Fig. 1).

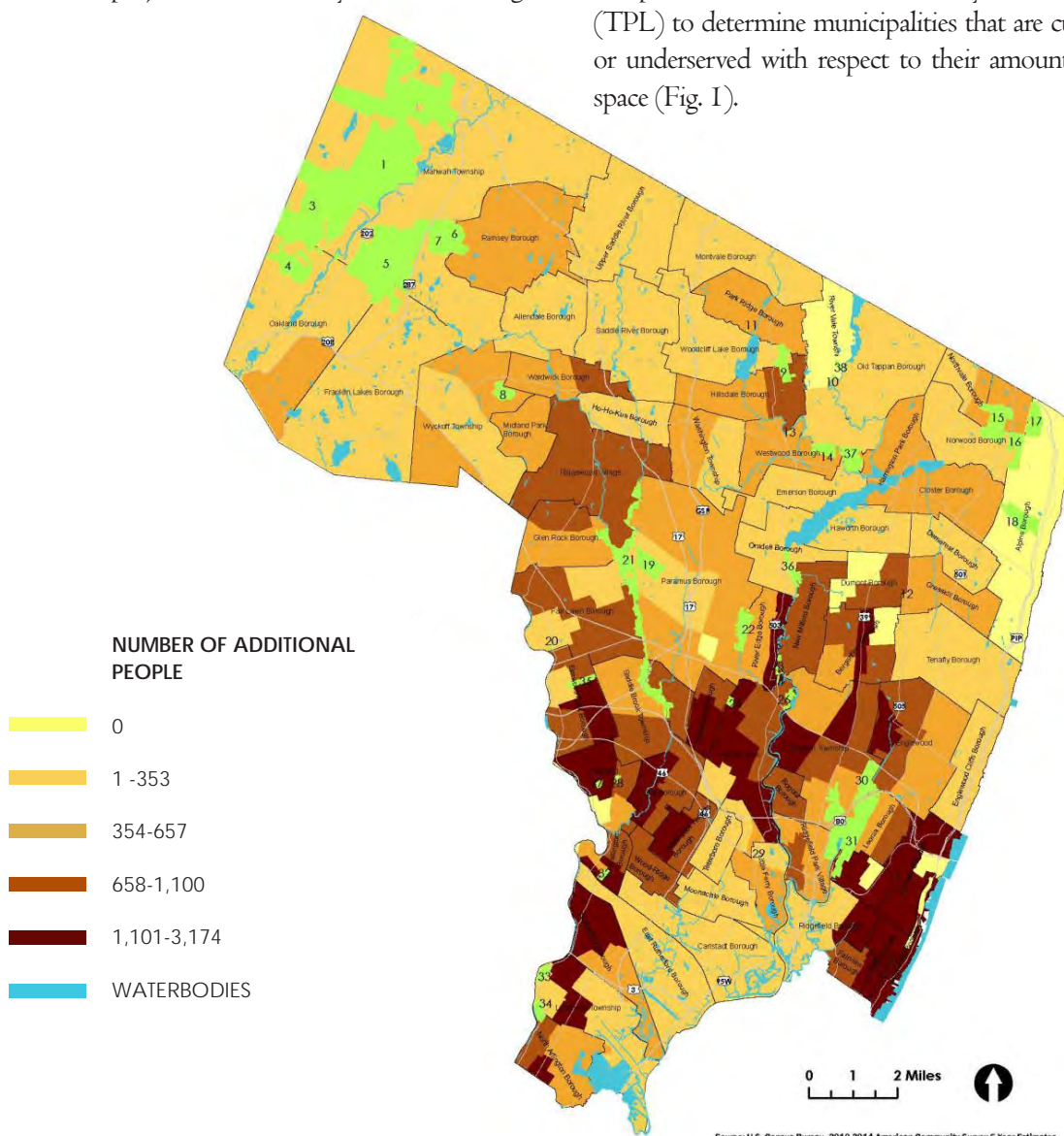


Figure 2. Projected additional people (2040) by traffic analysis zone (Courtesy of VTC).

Based on the TPL standards (Table 1) for parkland per 1,000 residents, there are currently 20 Bergen County municipalities (out of 70 total) that have an adequate amount of publicly available open space from a combination of all landowners. There are currently 50 municipalities that are slightly underserved (75% or more of the TPL median) to very underserved (less than 55% of the TPL median). The current shortfall of open space is compounded by an increasing number of new high density developments within Bergen County, driven in part to meet affordable housing obligations, as well as the financial model needed to offset the cost of acquiring expensive parcels of land for development.

The TPL standards describing the acreage of public open space needed for a designated entity are determined based on population density. Bergen County is one of the most densely populated counties situated within the most densely populated state in the U.S. As discussed in Chapter 5.2, the County's population is projected to continue to increase by mid-21st Century (Fig. 2).

A comparison of the two maps shows that growth projections are highest in municipalities already underserved with respect to their amount of Open Space. Based on current development trends and demographic projections through 2040, this parkland deficit will continue to grow unless new lands are added to public park system. Particularly critical areas are the most densely populated southern, western, and central northern portions of the county. Based upon this analysis, it is imperative that all opportunities to acquire additional parklands be explored.

This analysis informed Goals I and 2.



Figure 3. An increasing Bergen County population will place higher pressures on natural resources in existing parklands. Additional lands are needed to help address current parkland deficits in the southern, eastern and western sections of the County (Courtesy of CUES).

## OPEN SPACE ASSESSMENT METHODOLOGY

Open space acreage by municipality was compared to Trust for Public Land's (TPL) "Parkland per 1,000 Residents by City" from the 2016 City Park Facts Report. Determination of whether a municipality is underserved or adequately served is based on municipal density compared to all available public space acreage within the municipality (Table 1).

Adequacy of the amount of existing Open Space in each municipality was categorized as follows:

- Well Served  $\geq$  TPL median
- Slightly Underserved  $\geq$  75% TPL median
- Underserved  $\geq$  55% TPL median
- Very Underserved  $<$  55% TPL median

	RANGE (people per acre)	MEDIAN (people per acre)	PARKLAND % OF CITY AREA (acres)	ACRES PARKLAND PER 1,000 RESIDENTS	ACRES PARKLAND PER RESIDENT
High Density	45.2 – 12.1	18.8	12.5%	6.8 acres	0.0068 acres
Medium High Density	12.0 – 7.8	9.0	8.6%	9.7 acres	0.0097 acres
Medium Low Density	7.7 – 4.6	5.8	8.2%	13.7 acres	0.0137 acres
Low Density	4.5 – 0.3	3.5	7.3%	23.3 acres	0.0233 acres

Table 1. Municipal density compared to available public parkland (Courtesy of TPL 2016 City Park Facts Report).



# CHAPTER 6:

## Future – Master Plan Recommendations

The following recommendations are organized according to the Bergen County Parks Department structure, which is beneficial in supporting execution of the suggested actions. Members of the public might be most interested in recommendations for “their” park, which are provided in Appendix 9.7.

# 6.1 PARKS SYSTEM ELEMENTS

## A CONCEPTUAL FRAMEWORK FOR ORGANIZING THE PARK SYSTEM

The implementation of the vision **From Marshes to Mountains** requires a masterplan concept that addresses both the geographic diversity offered by the Bergen County Park system and the diversity of park emotional experiences.

The Bergen County Parks Master Plan is based on a two layer concept, in which each park property is described both by the range of experiences (Park Emphasis) and by the geographic category that supports strategies for spatial development (Park Type). This means each property is characterized by two environmental planning designations that complement each other.

A third major element of the Parks Master Plan is the connectivity between the parks, outlining opportunities for connectors, some of which may not be under the jurisdiction of the County. Considerations in this Master Plan that are outside County control are provided as suggestions to improve overall environmental conditions and healthy lifestyle choices for County residents.

The dual typology of Park Emphasis and Park Type reflects the distinction between emotions related to perception of place and the functionality of specific properties. Connectivity completes the overall structure of the future Bergen County Parks System. These key elements of the Master Plan vision form an integrated system:

- **Park Emphasis** – All parks are grouped into one of four Emphasis categories: Nature Parks, Social/Cultural Parks, Neighborhood Parks, and Golf courses. These categories build on observed qualities and include consideration of interests and expectations expressed by residents and key stakeholders.
- **Park Type** – Parks are also grouped into four distinct kinds based on size, geographic reach, and potential for expansion of acreage, amenities,

or programming. The large Anchor Parks serve as the backbone of the Bergen County Park System and offer activities, programming, and events on a regional scale. Long and narrow Linear Parks follow river corridors and extend through multiple municipalities offering smaller scale amenities. Small Local Parks supplement municipal open spaces, serving primarily community residents. Golf courses are a stand-alone feature of the County park system with very distinct management requirements.

- **Connectivity** – Developing safe convenient multi-modal connectivity between the various Bergen County parklands and Open Spaces will increase resident accessibility to parks and support healthy lifestyle choices.

### PARK EMPHASIS

Bergen County Parks offer a rich variety of experiences because of their diverse settings and amenities. Park Emphases consider the overall role and function of each park in relation to its surrounding community and within the system as a whole. Thus, while each individual park will have specific goals and guidelines, organizing parks by experiential emphasis and associating goals for each Emphasis category informs planning guidelines for appropriate management, development, events/concessions, and maintenance of the future overall system.

It is challenging to distill a park into only one category. Most parks have a combination of features that could fit multiple categories. Perceptions of the park experience may vary, depending on a visitor's interests and park uses. For example, someone who visits a park for birdwatching is likely to think of it as a nature park, whereas someone who uses the same park for playing tennis is likely to categorize it as social/cultural.

However, there is a benefit in having a limited number of park emphases to help managers focus on overall management goals and strategies by category (e.g. for all neighborhood parks).

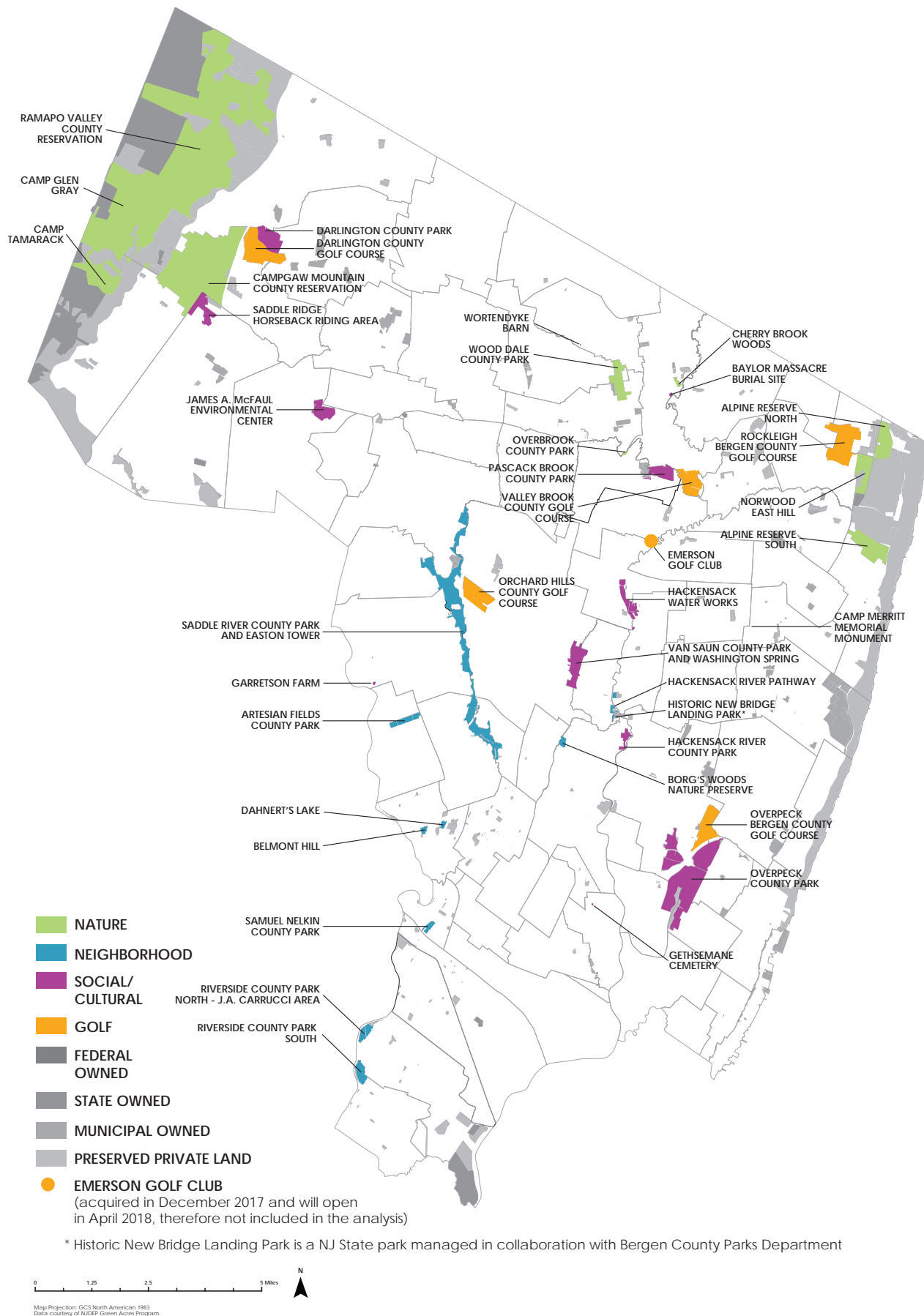


Figure 1. Map of Bergen County parks by Park Emphasis: Nature, Neighborhood, Social/Cultural and Golf (Courtesy of CUES).

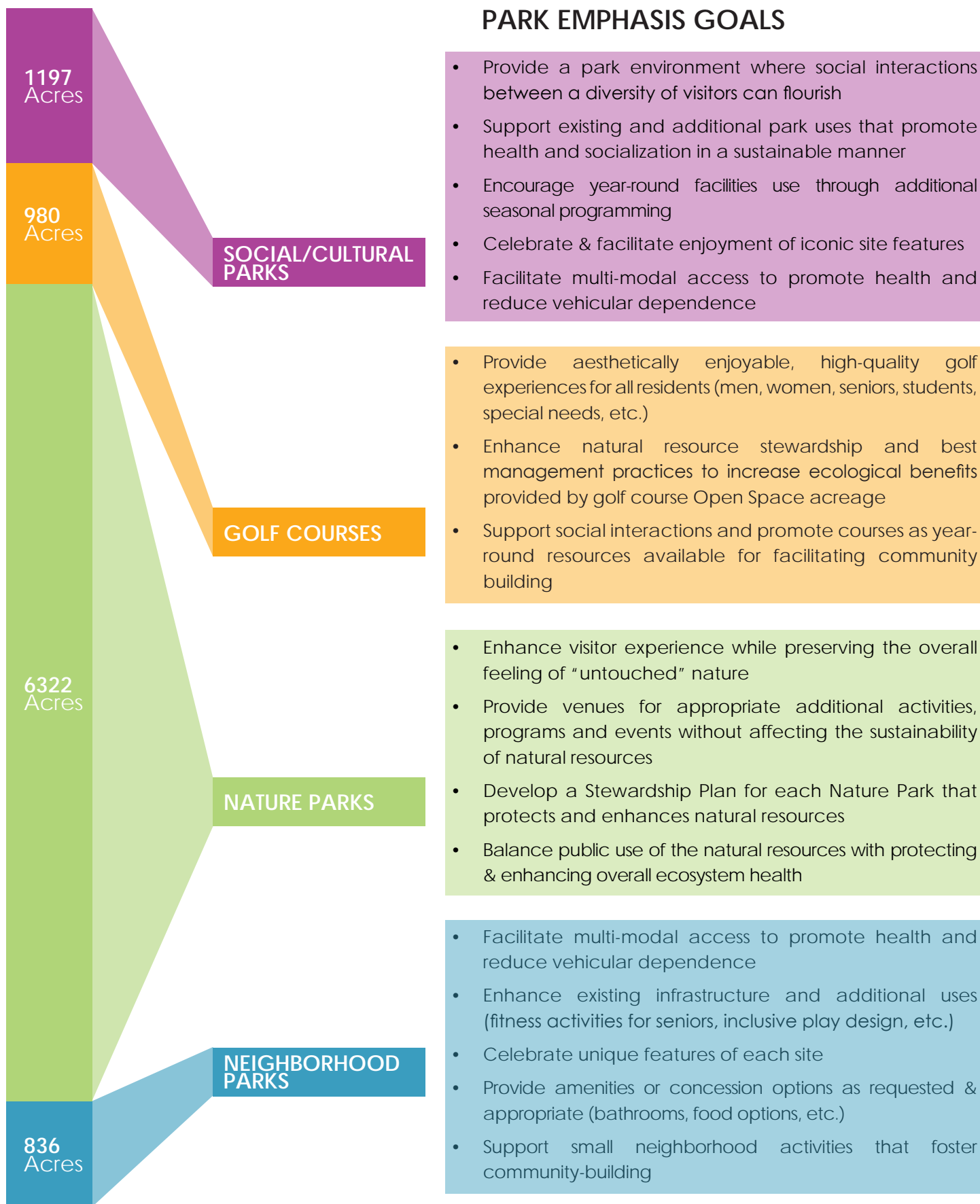


Figure 2. Goals associated with each Park Emphasis and current acreage of each Park Emphasis in the Bergen County Park System (Courtesy of CUES).

## Nature Parks



Figure 3. Ramapo County Reservation (Courtesy of CUES).

The Master Plan recommends that natural resources in all parks should be protected and enhanced, and there is certainly no park without nature. However, parks grouped in Nature Emphasis provide the greatest experience of the physical world undeveloped by humans (a feeling of “pristine” nature). These parks serve as essential places for residents to de-stress and feel rejuvenated. The ambiance of nature-dominated areas also makes them sought after venues for certain types of community gatherings, such as outdoor sports or concerts. In addition, nature-oriented parks provide many valuable ecosystem services, contain critical habitats for plant and animal communities, and often feature essential water resources. Given the relative scarcity of these habitats in Bergen County, Nature Parks require a careful, on-going balance between facilitating programs for visitors, while ensuring that human uses do not jeopardize the health of these critical ecosystems.

## Social/Cultural Parks



Figure 4. Van Saun County Park (Courtesy of CUES).

Social/Cultural Park Emphasis is closely linked to human communication and interactions with local narratives. These parks are places where small or large groups can share experiences at cultural events, contributing to local cultural identity. Examples range from playground playdates, football games and regattas to historical reenactments, ethnic festivals and Zumba classes. Parks with significant historic elements or large event infrastructure are included in this category.

## Neighborhood Parks



Figure 5. Saddle River County Park (Courtesy of CUES).

Neighborhood Parks are interwoven into the community and used primarily by local residents. In the park they meet neighbors, take casual walks and jog, often accessing the park by foot or bicycle. Because of the close link to the adjacent neighborhood, these parks have the potential for better pedestrian and bicycle access. Neighborhood Parks can serve as nodes on future greenways.

## Golf Courses



Figure 6. Orchard Hills County Golf Course (Courtesy of CUES).

County golf courses provide affordable golf recreation to the public. However, the enjoyment of golf goes far beyond the mechanics of the sport. Golf can provide relaxation and aesthetic enjoyment of the outdoors, and supports social interaction and relationship building. The Bergen County courses, which have historically hosted distinguished national cultural icons, provide enjoyment of nature and outdoor recreation to Bergen County residents of all ages.

In view of contemporary and projected development pressures, the County's golf courses constitute large tracts of critical open space with tremendous potential for offering greater aesthetic enjoyment, socialization opportunities, ecological benefits, and potentially, year-round community use.

## PARK TYPE

Each Park Type (Anchor Park, Linear Park, Local Park, or Golf Course) reflects its structural role within the Bergen County parks system. Anchor and Linear Parks and Golf courses potentially offer opportunities to expand the existing park system. Existing and potential expansion of Park Types are shown on the map in Fig. 7.

### Existing Anchor Parks

Anchor Parks play a distinct role within the overall system, serving as regional destinations that provide a wide range of amenities and recreational opportunities supporting visitors from beyond a local community. Anchor Parks tend to be larger properties with multiple uses that require County resources and management expertise. They also have the space needed to host larger events. Anchor Parks may be County-owned, but can also be created through County collaborations and agreements with adjacent land owners.

Existing Bergen County Anchor Parks include Overpeck County Park, Ramapo Valley County Reservation, and Van Saun County Park:

- Overpeck County Park: is a (sub)urban, heavily-used Social/Cultural Park, with vibrant and diverse social interactions, large events, sport and cultural attractions, and nature recreation opportunities.
- Ramapo Valley County Reservation: the diverse Ramapo parklands offer a wide range of active and passive Nature Park experiences.
- Van Saun County Park: a much-loved family-oriented, child-friendly Social/Cultural Park.

### Potential Anchor Parks

Opportunities to expand existing County-owned parklands into new regional Anchor Park destinations exist in the northwestern Ramapos, the northeastern Palisades, and in the southern Meadowlands. For detailed descriptions of proposed Anchor Parks see Chapter 7.

- Ramapo Mountain County Park: consolidating, branding, and managing the Ramapo properties as one Regional Anchor Park offers a wide range of unique amenities and programs that position the Ramapos to become the regional mountain recreation destination.

- Palisades Anchor Park: create a Nature Anchor Park adjacent to the iconic Palisades Interstate Parklands through collaboration with adjacent landowners.
- Meadowlands Anchor Park: create a unique marshland-based recreational Nature Park in underserved southern Bergen County in cooperation with multiple landowners.

### Linear Parks

Linear parks make use of river connectors to establish long interconnected pathways that provide parklands for multiple municipalities. These parks follow the original vision of the Bergen County Park Commission, and highlight the waterways that are a feature of Bergen County.

- Saddle River County Park: This highly successful suburban linear park connects eight municipalities along six miles of the Saddle River.

### Potential Linear Parks

Building on the success of Saddle River County Park, opportunities exist to expand linear parks along other river connectors. For detailed descriptions of potential Linear Parks see Chapter 7.

- Hackensack River Linear Park: The potential for creating a Hackensack River Linear Park is explored in Chapter 7. Three existing County park properties could form the basis of this park, which would expand via acquisitions of connecting properties. In addition to new properties and/or rights of way, collaborations or pathway connections with other landholders should be considered.
- Passaic River Linear Park: The feasibility of connecting Riverside North and South and establishing a linear park along the Passaic River should be explored. Existing property owners, open spaces, and potential connectors need to be identified and evaluated.

### Local Parks

These are small parks primarily used by the host community. For Local Park descriptions and recommendations see Appendix 9.7; for detailed Local Park transportation recommendations see Appendix 9.5C.



## Golf Courses

The County owns a variety of golf courses that range in age from a new 2018 acquisition (Emerson) to the original Rockleigh course that will be sixty years old on April 1, 2018. These properties need to be evaluated to determine the possibility of offering more varied golf experiences. Renovations of courses could include a Championship-caliber, Scottish Links, Pitch and Putt Par 3, or an Executive course. Upgrades and a diversity of course types would justify a range of greens fee options. Opportunities to acquire additional golf course properties should also be considered if private courses become available.

## CONNECTIVITY

Multi-modal connections for County residents to access parks are a key component in realizing the Bergen County Parks Master Plan vision. Non-vehicular access to parks reduces parking pressures and promotes physical fitness. Important aspects of connecting the parks and users include supporting multiple transportation options (walk, bike, bus, train, car), increasing linear park pathways, greenways, blueways, and adaptive re-use of rail lines, easements, etc. The key is making these transportation corridors and linkages safe, convenient and appealing, so travel to a park is the beginning of an enjoyable park experience (Fig. 9).

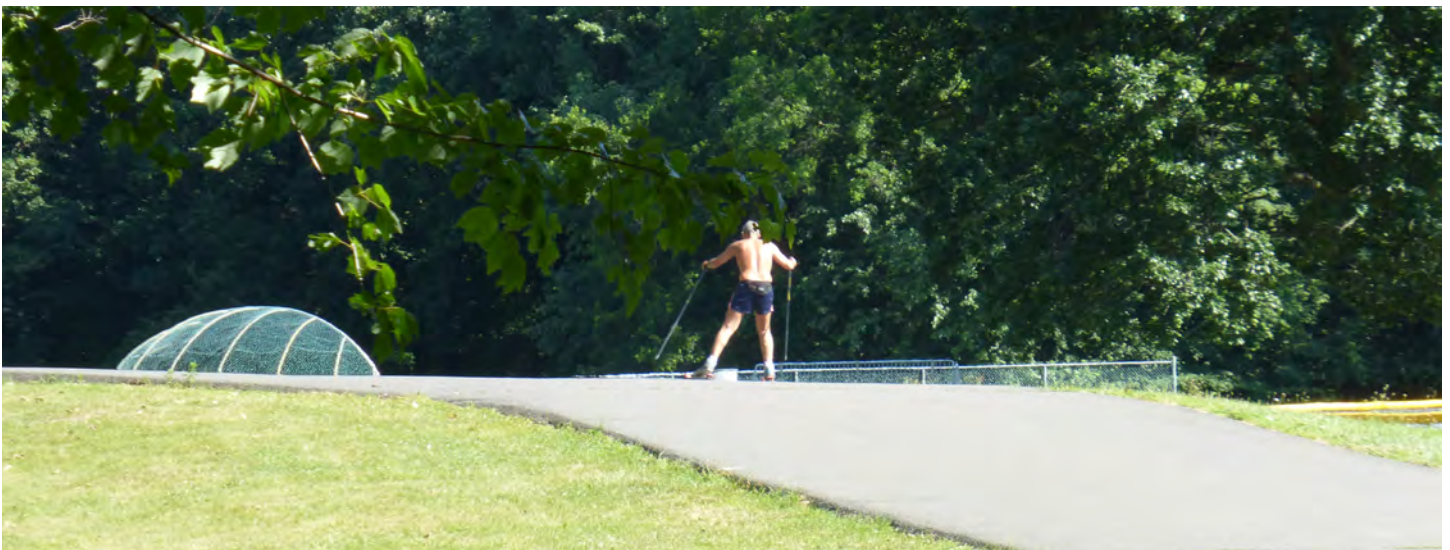


Figure 9. Enhancing physical connections between parklands provides myriad transportation, environmental, and health benefits (Courtesy of CUES).

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## 6.2 STEWARDSHIP & SUSTAINABILITY

### ECOLOGIC RECOMMENDATIONS

The forests, wetlands, and surface waters found within the County's 9,335 acres of parkland provide some of the last remaining areas of critical habitat required by vulnerable species. Therefore, stewardship and the use of Best Management Practices on County parklands are critically important. Recommendations to protect sensitive species and their habitats are presented in the sections below.

#### PROTECT AND ENHANCE FORESTED HABITATS

Existing forest habitat should be conserved, particularly large areas of interior forest and contiguous riparian forest that contains mature forest buffers. Forest regeneration can be supported through restoration, enhancement, support of native species, avoidance of deforestation and protection of mature tree canopies. Forests should be restored with native trees, with a focus on reconnecting habitat corridors. Fragmentation of existing forest patches should be avoided and where forests have been fragmented they should be restored.

Biodiversity should be enhanced using appropriate native plants and non-native invasive species need to be controlled. Use of non-native species should be avoided, and existing invasives should either be removed or control measures enacted. Known pathogens should be eradicated when possible. Domestic pets should be excluded from natural areas that contain sensitive wildlife species or critical habitats. A Forest Stewardship Plan should be developed for all County-owned forests.

#### SOFTEN THE EDGES

Edges around parks and park waterbodies (Fig. I-2) need to be softened by planting buffers of native species. Areas need to be identified where limited mowing (once or twice a year) can reestablish grasslands and meadowlands, ensuring that mowing does not occur during breeding seasons. Native shrubs should be planted along roadways and park paths. In appropriate areas, turf should be replaced with native meadow to improve water infiltration and create habitat that is not conducive to supporting Canada geese (Fig. I).



Figure 1. Restored shoreline of Demarest duck pond using native vegetation to soften the edge (Courtesy of Stephanie/www.foursquare.com).



Figure 2. Replace lawns mowed down to the water's edge with native plant buffers around water bodies. Native shrubs should also be planted along roadways and paths (Courtesy of Biohabitats).



Figure 3. Common reed (*Phragmites australis*) monoculture (Courtesy of Biohabitats).

## INVASIVE SPECIES & WILDLIFE MANAGEMENT

Invasive species need to be managed and/or removed. Common reed (*Phragmites*) is particularly problematic in the Meadowlands, areas of Overpeck Park, along the shorelines of the Hackensack River and on golf courses (Fig. 3). Other predominant invasive species include Japanese knotweed (*Fallopia japonica*), mile-a-minute vine (*Polygonum perfoliatum*), Japanese stilt grass (*Microstegium vimineum*), porcelain berry (*Ampelopsis brevipedunculata*), barberry (*Berberis vulgaris*), and multiflora rose (*Rosa multiflora*).

Although a controversial issue, predatory animal populations need to be reduced and controlled to diminish threats to birds and to allow forest understories to regenerate. Particularly destructive populations include white tailed deer, the largest wild herbivore in New Jersey, and feral cats (Fig. 4).

Deer are an edge species, and thrive in habitats that are found within the parks. There are no natural predators in New Jersey that control the deer population, which is destroying the understory of Bergen County forests (Fig. 5). This understory must be preserved in order to provide habitats required for birds and small mammals and to provide seedlings that replace maturing trees. Regenerating forest tree species and the understory should be addressed in a County-wide Forest Stewardship Plan.



Figure 4. Feral cat colonies pose a threat to native bird populations (Courtesy of Dimitris Vetsikas/Pixabay).



Figure 5. Native forest understory (left) in contrast to understory destroyed by deer grazing (right) (Courtesy of Charles Smith<sup>1</sup>).



# The Soil: Foundation of the Forest

**S**oils are living ecosystems made up of inorganic material, organic matter, nutrients, air, water, and a vast community of plants, insects, vertebrates, fungi, bacteria and other micro-organisms. Some organisms break down dead plant and animal material which releases nutrients for plants. Organic matter that builds up in soil holds up to 300 tons of carbon per acre of old-growth forest in the Pacific Northwest.

The soil also filters and traps water in tiny air pockets, similar to a sponge. The top one foot of soil in the Island Center Forest can hold an estimated 45,000 gallons per acre. This storage capacity lessens flooding during storms and allows plants to grow well into the dry summer months.

**Litter:** leaves, other organic material

**A Horizon:** topsoil, decaying organic matter

**A & B Horizons:** subsoil, a mix of weathered, inorganic parent material and broken-down organic matter.

**C Horizon:** underlying parent material, rock, sand, silt or clay.

**A cross-section of forest soil**

**S**ome organisms form symbiotic partnerships with roots of plants. Most trees and many shrubs depend on mycorrhizal fungi in their root systems to help them extract nutrients from the soil. In return, fungi receive sugars from the plants. Bacteria that live in the root systems of red alder fix nitrogen from air in the soil. This process can pump up to 180 pounds of nitrogen per acre into the soil each year.

**Mycorrhizal fungi** covering the outside of a tree root.

**King County** **Department of Natural Resources**

Illustration: Christopher G. Moore

[illegible]

A person with dark hair, seen from behind, is walking away on a dirt path through a dense forest. They are wearing a light-colored t-shirt and a dark backpack with green accents. The path is lined with tall, slender trees with green foliage, and sunlight filters through the canopy, creating dappled light on the ground.

**RUTGERS**  
CUES — Center for Urban  
Environmental Sustainability



Figure 10. Implementing stormwater best management practices, like the parking lot rain gardens above, can protect and enhance the ecological health of natural resources in the parks, as well as improve user experience (Courtesy of Biohabitats).

## GREEN INFRASTRUCTURE (GI) RECOMMENDATIONS

The County's parks of the future require a management and maintenance approach that saves time and money by minimizing areas of mowed lawn. Where possible, in every park, non-used areas should be managed less to improve overall ecosystem resiliency, and water and soil quality (Fig. 10). The use of green infrastructure rather than pipes to slow water down should be the standard, and no non-native plants should be used as part of these green infrastructure technologies. Public access to and interaction with surface water features in a safe and educational manner coupled with interpretive signage should be employed.

However, to undertake GI practices, a paradigm shift is needed that integrates parklands into stormwater management under New Jersey's Green Acres program. Current practices in most US cities and counties include using park lands for treating and storing stormwater as a means to improve water quality, as well as increasing ecological function, habitat diversity and user experience. The U.S. Environmental Protection Agency (USEPA) has recently endorsed the use of green infrastructure in parklands<sup>5</sup> to help in the management of urban stormwater.<sup>6</sup>

However, NJDEP Green Acres regulations that govern existing parks have traditionally been interpreted to not allow park modifications that include stormwater management, including green infrastructure. Nevertheless, existing parks can be modified to improve "watershed protection" (which is not defined) through a change in use process (N.J.A.C. 7:36-25.6).<sup>7</sup> Stormwater management in new park projects should include the capture and retention (with no discharge) of the Stormwater Quality Design Volume (defined as the runoff

from the first one and one quarter inch of rainfall) from all connected impervious areas within the Limit of Disturbance of the project. Guidelines state that additional stormwater management should be the goal, but the first one and one quarter inch is the minimum baseline. To ensure compliance with Green Acres requirements, when planning and designing stormwater management and GI projects for Bergen County parks, the following guidelines should be met:

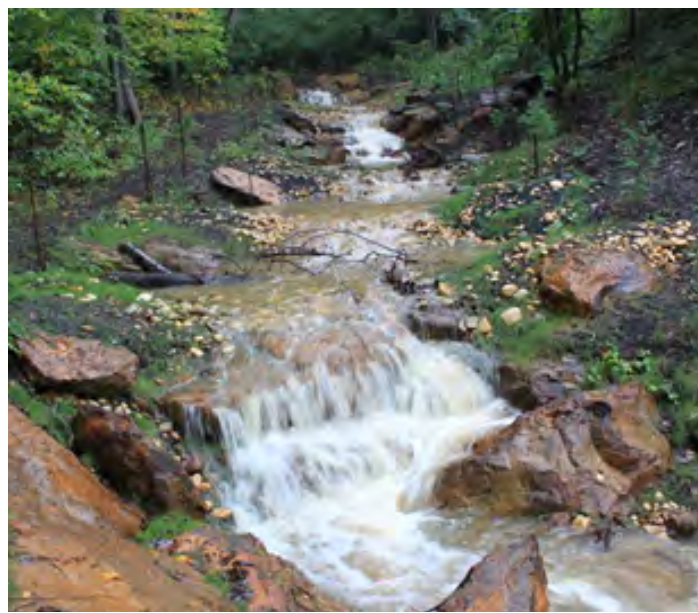
- GI practice should be in accordance with future County policies and planning.
- The GI practice should provide a clear case for solving a problem and place the proposed park-based GI in context with the rest of the park improvement.
- The GI design should minimize impacts to the park.
- The GI practice should maintain or enhance the public functions of the park.
- The GI practice should be for public purposes, not private purposes, and management of the GI should remain the responsibility of the County.



Figure 11. Converting existing curb cuts would help reduce the impact of stormwater on adjacent water bodies (Courtesy of Biohabitats).



Figure 12. Bioswales help collect, treat and infiltrate stormwater while providing new planted amenities (Courtesy of Biohabitats).



Figures 13 & 14. Existing erosion gullies can be restored using regenerative stormwater conveyance techniques to slow and retain stormwater (Courtesy of Biohabitats).

Point and non-point sources of pollution within the parks need to be managed and mitigated where possible through Best Management Practices (BMPs) and green infrastructure. There are a number of opportunities to improve the current conditions in various County parks, including:

- Existing curb cuts or drain inlets could be converted to reduce the impact of stormwater on adjacent water bodies (Fig. 11).
- Parking lots, playing fields, courts, and underutilized sidewalks and paths could be converted to permeable surfaces.
- Bioretention features and bioswales could be designed to treat stormwater while providing new planted amenities (Fig. 12).
- Existing erosion gullies could be restored using regenerative stormwater conveyance techniques to slow and retain stormwater (Fig. 13 & 14).
- Robustly vegetated and appropriately graded shorelines could be restored to create more resilient edge conditions.
- Native forest, meadow and wetland habitats should be expanded to increase water infiltration and carbon sequestration.

# STORMWATER MANAGEMENT STRATEGY FOR BERGEN COUNTY PARKS

It is critical that the County undertake an integrated and sustainable stormwater strategy that meets stormwater management regulatory requirements, and provides functional and integrated landscapes in the parks. Creating green infrastructure systems provides multiple benefits and a focus on GI practices can be integrated into the County parks.

Creating a Stormwater Management Plan will help the parks transition from practices that degrade the environment to creating working landscapes that perform important ecological functions. Key aspects of the County's recommended stormwater management strategy should focus on the following actions:

- Codifying a stormwater management strategy for each individual park
- Disconnecting and reducing impervious surfaces (Fig. 15)
- Creating new opportunities for multi-functional landscapes
- Treating stormwater runoff close to the source
- Balancing initial costs with long-term benefits.



Figure 15. Parking lots, courts and other existing impervious surfaces could be converted to permeable surface (Courtesy of Biohabitats).

GI practices recommended as New Jersey Stormwater Best Management Practices<sup>8</sup> that are also applicable for a Parks stormwater management strategy include:

- Protecting areas that are susceptible to erosion and sediment loss
- Providing vegetated open-channel conveyance systems discharging into and through stable vegetated areas
- Low maintenance landscaping that encourages retention and planting of native vegetation and minimizes the use of lawns, fertilizers, and pesticides (Fig. 16)
- Use GI components to provide different water depths (i.e. ephemeral pools, micro-topography)
- Provide interpretive signage and information regarding GI
- Include a variety of GI systems or variety of planting types
- Design trails and pathways to connect users to stormwater features



Figure 16. Low maintenance plantings in stormwater interventions can reduce chemical inputs and boost biodiversity (Courtesy of Biohabitats).

## SUSTAINABILITY RECOMMENDATIONS

The Bergen County Parks Department has a unique opportunity to publicly showcase practices that contribute to future sustainability. Incorporating sustainable practices into the County parks will give large numbers of residents personal experience with the benefits of sustainable approaches.

### RENEWABLE ENERGY

The County has shown leadership in placing solar panels on public facilities (parking deck at One Bergen County Plaza, Fig. 17). Similar panels should be installed as appropriate in County Park parking lots, where they will generate energy while providing shade in the summer that can help mitigate the heat island effect related to parking lot blacktop (Fig. 19). The energy generated could be available to park visitors via charging stations added for electric cars (Fig. 18), which are growing in popularity. Where possible, the energy should be used to power park infrastructure.



Figure 17. Solar panels on Bergen County facility (Courtesy of Solar Energy Directory<sup>9</sup>).



Figure 18. Car charging station (Courtesy of [www.GRIDbot.net](http://www.GRIDbot.net)<sup>10</sup>).



Figure 19. Solar panels over parking lot (Courtesy of Heather Clancy<sup>11</sup>).

## WASTE STREAM REDUCTION

All efforts should be made to first reduce, and secondly recycle, current waste streams (Fig. 20-23). This means restricting the sale of non-degradable products (particularly plastic), composting organic waste (animal, food and landscaping), and installing recycling bins. Chapter 6.6 includes recommendations for waste reduction strategies at park concessions and events.

Signage should be considered that encourages park visitors to “Carry In – Carry Out” (Fig. 21) in properties where placement of recycling bins is not feasible. Bottled water should be replaced with water bottle refill stations (Fig. 22) and water bottle use should be encouraged by offering them for sale where appropriate and with signage.



Figure 20. The National Parks water stations initiative aims to raise awareness and reduce waste streams in parks (Courtesy of Grand Canyon National Park<sup>12</sup>).



Figure 22. Water bottle refill stations can help reduce plastic litter and help conserve resources (Courtesy of Mary Bakija<sup>14</sup>).



Figure 21. Carry in - carry out signage where recycling bins are not feasible (Courtesy of Matt Fagan<sup>13</sup>).



Figure 23. Recycling bin in park to reduce waste stream (Courtesy of St. Anthony Village<sup>15</sup>).

## WATER MANAGEMENT AND CONSERVATION

Sustainably managing and conserving water resources is the responsibility of all. Opportunities to remove paved surfaces or replace impervious pavement with pervious surfaces should be encouraged. Best Management Practices (BMPs) need to be implemented to manage stormwater runoff (Fig. 24). Nutrient management is urgently needed to improve degraded water quality on the golf course properties. Many paved park roadways and parking lots are adjacent to waterbodies. Methods of decreasing the use of road salt during winter storms, such as brines, should be explored. When environmentally friendlier options are available at comparable or reduced cost, they should be adopted for use in County Parks.

## ECOLOGICAL RESOURCE CONSERVATION

The ecological resources of the Bergen County Park system are under pressure from a changing climate, fragmentation, invasive species, and emerging pathogens. Stewardship Plans for threatened habits should be developed for County parkland resources, including a Forest Stewardship Plan (Fig. 26).

## NEW INFRASTRUCTURE

Any new parks infrastructure should be built according to the U.S. Green Building Council® (USGBC)'s Leadership in Energy and Environmental Design™ (LEED) standards.



Figure 25. LEED logo (Courtesy of USGBC<sup>17</sup>).



Figure 24. Educational signage can help park visitors understand the benefits of enhancements (Courtesy of A. Richard Miller<sup>16</sup>).



Figure 26. Given the pressures facing ecological resources in the Bergen County parks system, stewardship plans should be developed for threatened and sensitive habitats (Courtesy of D. Fleenor<sup>18</sup>).

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# 6.3 GOLF FACILITIES & PROGRAMS

## GOLF COURSE RECOMMENDATIONS

Bergen County golf courses comprise over ten percent of the County's parkland acreage (933 of 9,335 acres). A sixth golf course (Emerson) was acquired by Bergen County in December, 2017, and so was not included in the following analysis. Five golf courses contribute the majority of annual revenues earned by the County Parks (~\$7,000,000 of \$9,000,000; 78%), and so these properties form a critically important component of the current and future park system.

In view of contemporary and projected development pressures and the closure of private golf courses in Bergen County, these courses constitute large tracks of essential Open Space with tremendous potential for providing affordable golfing amenities, while offering broader service to the community and an opportunity for creative natural resource stewardship.

However, golf course surface waterbodies are experiencing water quality issues due to excess nutrient inputs causing eutrophication (Fig. 1). Algal growth may be the result of over-fertilization and nutrient runoff, as well as the presence of significant numbers of Canada Geese (Fig. 2). Stream banks are mowed up to the edge and are eroding (Fig. 3). Invasive species such as common reed (*Phragmites australis*) and Japanese knotweed (*Fallopia japonica*) have invaded wetland and riparian corridors (Fig. 4).

### GOLF PORTFOLIO DIVERSITY

The current portfolio of golf courses ranges from the newly acquired Emerson property to the Rockleigh course that will be sixty years old on April 1, 2018. These properties are in various states of decline. The clubhouse facilities are outdated and in need of repair, maintenance and/or refurbishment. The Valley Brook golf course, acquired twelve years ago, appears to be in



Figure 1. Rockleigh Golf Course algae in stream in March, 2017 (Courtesy of CUES).



Figure 3. Rockleigh Golf Course streambank erosion in March, 2017 (Courtesy of Biohabitats).



Figure 2. Darlington Golf Course geese in July, 2016 (Courtesy of CUES).



Figure 4. Valley Brook Golf Course *Phragmites* in March, 2017 (Courtesy of CUES).

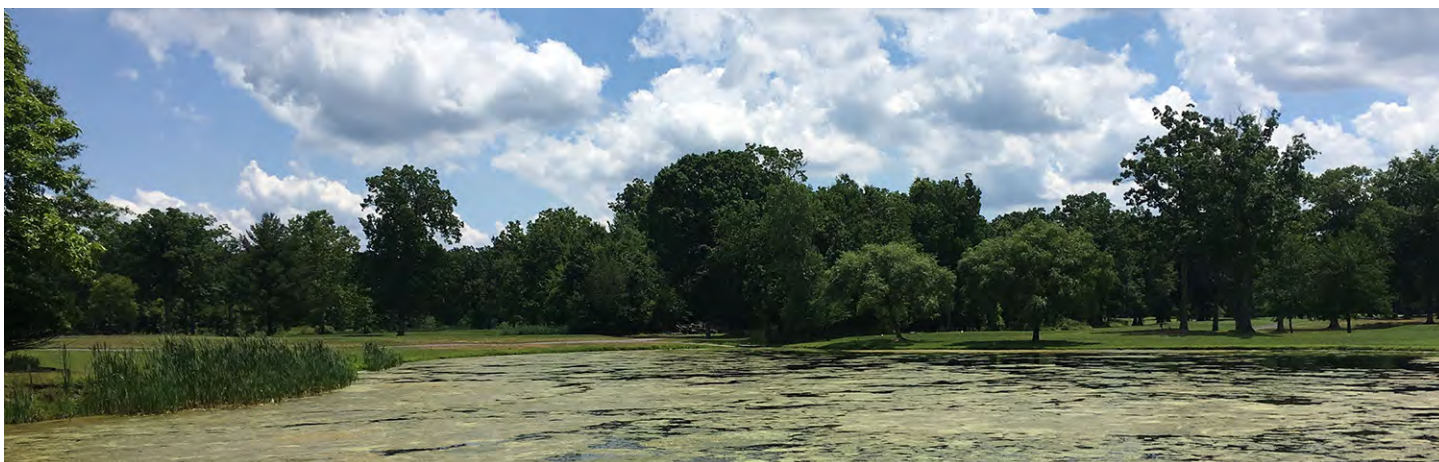


Figure 5. Eutrophication and invasive *Phragmites* at Valley Brook (Courtesy of CUES).

better condition than other Bergen County courses/clubhouses. However, Valley Brook is aging, and if not maintained at the level required, will soon be in a condition similar to the other venues (Fig. 5).

A greater variety of course types is needed to offer a wider variety of golf experiences that accommodate the needs of all County golfers. The possibility should be explored of converting existing courses to new types, including a Championship-caliber course, a Scottish-links type course, a Par 3 Executive course, or a Pitch and Putt course.

## USER-FRIENDLY WEBSITE

As with the courses themselves, the condition of the Bergen County Golf website needs serious updates to make it more functional, user-friendly, and an enticing “public face” of Bergen County Golf. Instead of relying heavily on players phoning the County to obtain information, a newly designed website should feature information regarding events, clinics, instruction, and specific course calendars in a modern interactive format. Selection of tee times should be efficient (Fig. 6). A forgotten login should be sent automatically via email and not require a phone call to Bergen County.

## UPDATED FEE STRUCTURE

The greens fee structure also (Fig. 6) needs to be updated. Bergen County fees are the same for all courses, regardless of size or condition, and lower than some fees on Somerset and Morris County public courses (Table I). Other counties adjust greens fees depending on the course itself and the time of day, with high demand timeslots and upscale courses contributing higher revenues than older smaller courses and twilight timeslots (Table I, Fig. 7).

Green Fees - Resident	Weekday	Weekday Twilight	Weekend	Weekend Twilight
Adult Registered Resident 18 Holes	\$30	\$22	\$35	\$27
Adult Reg. Res. 9 Holes *	\$22	NA	\$27	NA
Adult Reg. Res. 2nd 9 *	\$8	NA	\$8	NA
Sr/Jr Reg. Res 18 Holes	\$22	\$16	\$32	\$23
Sr/Jr Reg. Res 9 Holes *	\$16	NA	\$23	NA
Sr/Jr Reg. Res 2nd 9 *	\$6	NA	\$9	NA
Fully Disabled Reg. Res. (All Ages)+	\$22	\$16	\$32	\$23
Not Registered 18 Holes (All Ages)	\$50	\$35	\$60	\$40
Not Registered 9 Holes* (All Ages)	\$35	NA	\$40	NA

Green Fees - Non-County Residents (All Ages)	Weekday	Weekday Twilight	Weekend	Weekend Twilight
Not Registered	\$50	\$50	\$60	\$60
Registered - 18 Hole	\$37	\$25	\$42	\$30
Registered - 9 Hole *	\$30	NA	\$35	NA

Figure 6. Bergen County golf course website (Courtesy of Bergen County Golf).

Figure 7. User-friendly online tee time booking interface for Morris County golf course (Courtesy of EZLinks Golf LLC<sup>2</sup>).

COUNTY	COURSE	GREENS FEE STRUCTURE RANGES
Bergen	All	\$6-\$35
Essex	Byrne	\$19-\$35 (\$2 dedicated to golf beautification fund)
Essex	Weequahic, Hendrix	\$16-\$22 (\$2 dedicated to golf beautification fund)
Somerset	Neshanic Valley	\$30-\$65 (rates include use of cart)
Somerset	Warrenbrook, Green Knoll, Quail Brook, Spooky Brook	\$13-\$54
Morris	Berkshire Valley	\$32-\$72 (rates include use of cart)
Morris	Flanders, Sunset	\$20-\$49
Morris	Pinch Brook	\$20-\$48

Table 1. County public golf course greens fees for registered resident golfers (Courtesy of CUES).

It should also be noted that a Non-Registered Bergen County Resident pays the same fee as a Non-Registered Non-County Resident (Fig. 6). The Non-Resident fee should be higher than the fee paid by a resident of Bergen County.

### ENHANCED AMENITIES & AESTHETICS

To command the higher greens fees charged on the best Morris and Somerset County courses, the amenities and aesthetics of Bergen County courses need to improve in order to be competitive (Fig. 8-10). If higher standards for amenities and landscaping are met the Bergen County golf courses offer an untapped opportunity as event venues for use by residents of the County. The Clubhouse (Valley Brook) and the viewsheds on all the courses could become desirable venues for residents to hold life cycle events, such as weddings (Fig 11).



Figure 9. Rockleigh Golf Course summer 2016 (Courtesy of CUES).



Figure 10. Rockleigh Golf Course summer 2016 (Courtesy of CUES).



Figure 8. Darlington Golf Course summer 2016 (Courtesy of CUES).



Figure 11. Neshanic Valley golf course (Morris County) as a wedding venue (Courtesy of theknot.com).

## MASTER PLAN GOALS FOR BERGEN COUNTY GOLF COURSES

- Addition of landscaping and vegetative color to golf course entrances, tee boxes, bridge crossings (Fig. 12-13, 16)
- Repair physical infrastructure (buildings, roadways, pathways, entrances).
- Add amenities such as unique food concessions, upgraded restrooms, modern, golf-related concessions where financially feasible.
- Utilize native plantings to control erosion along stream banks. (Fig. 14-15)
- Promote courses as a community-friendly resource. This can be achieved by reaching out to and accommodating the needs of all golfers (men, women, students, handicapped, seniors), as well as other community groups and programs, and by offering the courses as potential venues for events, tournaments, leagues, and non-golf community experiences.
- Encourage year-round use of the facilities for non-golf events (e.g. renting out the clubhouses for private and public events, cross-country skiing on snow covered fairways in winter).
- Practice natural resource stewardship by openly embracing sustainable maintenance practices and features, including the use of renewable energy sources (e.g. solar on maintenance sheds) and composting food wastes.



Figure 12. Rockleigh Golf Course summer 2016 (Courtesy of CUES).



Figure 13. Native plants added to delineate tee box (Courtesy of CUES).



Figure 14. Rockleigh Course Summer 2016 (Courtesy of CUES).

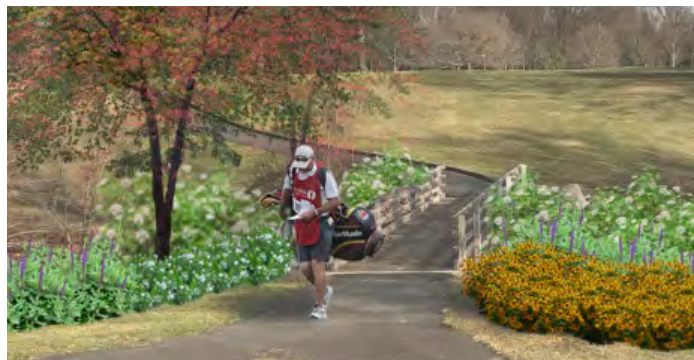


Figure 15. Addition of vegetative buffer to intercept surface runoff and reduce streambank erosion (Courtesy of CUES).



Figure 16. Addition of color to the entrance of a Somerset County public course (Courtesy of Spooky Brook Golf<sup>®</sup>).

## RECOMMENDED MANAGEMENT PRACTICES FOR BERGEN COUNTY GOLF COURSES

Recommendations below are general Best Practices developed by Audubon International (see Other Planning Documents, Appendix 9.3) and the United States Golf Association. For course-specific public feedback, see Appendix 9.2. The first step the County should undertake in order to minimize the overuse of fertilizers and herbicides is a site-specific assessment, including soil type and properties to determine the most suitable plant species for each course. Other actions include:

- Develop a map of each course (Fig. 17) that highlights existing habitats and water resources, identification of core habitats, such as mature woodlands, wetlands and stream corridors, and special habitat concerns, such as endangered or threatened species, on the property.
- Identify the dominant native plant communities.

- Identify potential threats to existing habitats (i.e., warming climate, pathogens such as the Emerald Ash borer); develop plans to address these threats.
- Maintain natural wildlife habitat in at least fifty percent of all minimally used portions of the property.
- Maintain or plant varying heights and types of plants (Fig. 18), from ground cover to shrub and tree layers in habitat areas such as woods (e.g. leave understory in woodlands; maintain grasses and herbaceous plants in tall grass areas).
- Maintain a water source for wildlife with aquatic plants and shrubbery or native landscaping along the shoreline (Fig. 18).
- Naturalize at least fifty percent of out-of-play shorelines with emergent aquatic and shoreline plants. Choose flowers for gardens or container plants that will provide nectar for hummingbirds or butterflies.



Figure 17. Map of Rockleigh Golf Course showing habitats, water resources and flow paths (Courtesy of CUES).



Figure 18. Baywood Greens public golf course, Delaware (Courtesy of Baywood Greens<sup>4</sup>).



Figure 19. Pollinator protection Best Management Practices on golf courses. Rockville Centre, NY (Courtesy of New York State BMPs for Golf Courses<sup>5</sup>).

- Where appropriate in out of play areas protect wildlife habitats, and endangered or threatened wildlife or plant species, from disturbance by golfers and maintenance activities. Use buffers, mounted signs, fencing, or designated “environmentally-sensitive zones” (per USGA rules) as needed (Fig. 19).
- Maintain nesting boxes or other structures, where appropriate in out of play areas, to enhance nesting sites for birds (Fig. 20), bats or pollinators (Fig. 21). This step might be taken in collaboration with local Scout troops.
- Establish and maintain at least eighty percent of the landscaped trees, shrubs, and flowers (excluding turfgrass) with plants that are indigenous to the native plant community of the ecological region and that are well suited to existing soils on site (Fig. 22).
- Avoid disturbing known bird nests or den sites until after young have dispersed (Fig. 23). Stake or flag such areas when needed (e.g. avoid removing shrubs or trees during bird nesting season if nests are present; do not mow fields until after bird nesting season).
- Restore degraded habitats, such as eroded slopes, compacted soils, polluted water sources, or areas overrun with invasive species.
- Confine roads, cart paths, trails, and necessary vegetation removal to the edges of existing habitats to minimize habitat disturbance and fragmentation.
- Manage invasive species, including Canada geese populations



Figure 20. Enhancing habitat for native birds (Courtesy of Brian Beckner<sup>6</sup>).



Figure 21. Enhancing habitat for pollinators with low-to-no maintenance areas (Courtesy of NYS BMP for Golf Courses<sup>7</sup>).



Figure 22. Baywood Greens public golf course, Delaware (Courtesy USGA (Courtesy of Brian Beckner<sup>9</sup> of Baywood Greens<sup>8</sup>).



Figure 23. Golf is for the Birds. (Courtesy USGA (Courtesy of Brian Beckner<sup>9</sup> of Baywood Greens<sup>8</sup>).

## WATER QUALITY

Changes in water management strategies are needed in order to address the widespread eutrophication issues in the golf course water bodies.

- Reduce potential nutrient loading to water bodies by employing BMPs, such as: using slow-release fertilizers, spoonfeeding, and filtering drainage through vegetative or mechanical filters prior to entering water bodies.
- Employ environmentally sensitive plant management techniques within 25 feet of all water bodies to minimize nutrient and chemical inputs.
- Eliminate potential chemical runoff and drift near water bodies by designating “no spray” zones, using spot treatments, increasing thresholds for pest problems, using covered booms, and taking the weather into account prior to application.
- Visually monitor water bodies for water quality problems, such as erosion, algae, aquatic “weed” growth, fish kills, sediment buildup, etc., as part of regular integrated pest management (IPM) activities.
- Reduce/eliminate the need for chemical algae control in ponds through proper aeration, nutrient reduction, bio- filters, vegetation management, or bio-controls.
- Calibrate and adjust fertilizer and pesticide equipment to prevent misapplication.
- When aquatic weed management is required, seek a physical solution (e.g., hand removal of plants) first, and then seek the least toxic method of chemical weed control. Address any underlying causes of the problem.
- Avoid running the irrigation system at peak evapotranspiration times. Set sprinklers to run during the dew period.
- Water “hot spots” to target needed areas only, rather than running the entire irrigation system (Fig. 24).
- Maintain soils and turfgrass to maximize water absorption and reduce runoff and evaporation, including: maintain soil cover, improve soil structure, add or maintain natural organic matter in the soil, and improve drainage).
- Reduce or eliminate irrigation on all unused or minimal used portions of the property.
- On a slight slope, a 25- foot buffer of 3-inch turf provides filtering benefits. Raise mowing heights along in-play shorelines to slow and filter runoff.
- Monitor daily water use, tally monthly usage, and set targets for yearly improvement (Fig. 25).



Figure 24. Watering “hot spots” to target areas only rather than deploying the full irrigation system during the peak of the day (Courtesy of USGA<sup>10</sup>).



Figure 25. Moisture meters as part of an integrated irrigation management system (Courtesy of John J. Genovesi/Maidstone Club<sup>11</sup>).

## CHEMICAL USE REDUCTION AND SAFETY

It is understood that the County will need to continue to use IPM. To ensure safe storage, application and handling of chemicals and to reduce actual and potential environmental contamination, the following Best Management Practices are recommended:

- Maintain green, tee, and fairway mowing heights at levels that can be reasonably maintained on a day-to-day basis without continually stressing turf or maximizing chemical inputs.
- Inventory soil types for all playing surfaces and assess conditions such as soil structure, nutrient levels, organic content, compaction, and water infiltration. Base fertilizer applications on soil test information.
- Regularly work to improve soil health by amending organic content, aerating and improving water infiltration to cultivate a diverse, living biotic soil community.
- Base fertilizer applications on soil test information.
- Plant pest-resistant or stress-tolerant cultivars on playing surfaces and in landscaping. Select plant species/cultivars best suited for climate, soils, and growing conditions.

- Identify and record turf “hot spots” (Fig. 26) where disease or insect outbreaks first occur. Identify other areas where poor growing conditions often lead to problems.
- Establish aesthetic and functional thresholds for insects, fungal diseases, and weeds for all managed areas.
- Evaluate potential control measures, including alterations in cultural management, biological, physical, and mechanical controls, and chemical methods. Apply pesticides only when and where scouting indicates that pest threshold levels have been exceeded (Fig. 27).
- Eliminate potential chemical runoff and drift by avoiding applications during high winds or prior to heavy rains.
- Prevent gasoline, motor oil, brake and transmission fluid, solvents, and other chemicals used to operate and maintain equipment and vehicles from contaminating soils, surface waters, or ground water.
- Maintain records of treatments employed and their effectiveness and use them to guide future pest control decisions (Fig. 28).



Figure 26. Identifying the underlying issues behind pest problems can reduce use of chemical interventions. Rochester, NY (Courtesy of NYS BMP for Golf Courses<sup>12</sup>).



Figure 27. Identifying and treating for specific pests that are present, such as Dollar Spot, saves resources and reduces unnecessary chemical inputs to the environment. Horseheads, NY (Courtesy of Jennifer Grant<sup>13</sup>).

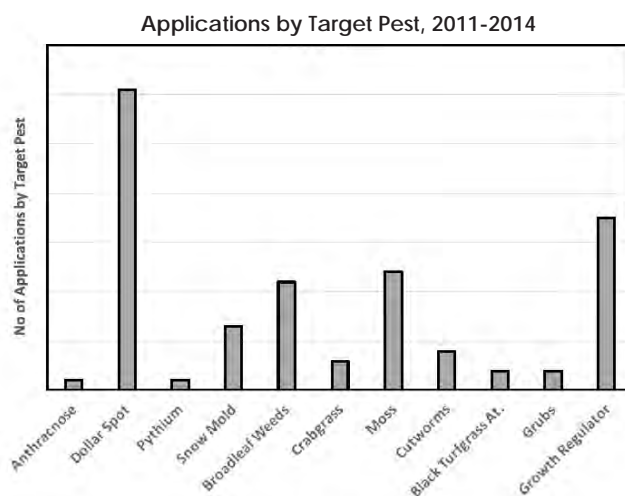


Figure 28. Maintaining records of pesticide treatments and their effectiveness can inform future pest control decisions. Horseheads, NY (Courtesy of NYS BMP for Golf Courses<sup>14</sup>).

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# 6.4 OPERATIONS & MAINTENANCE

## RECOMMENDATIONS

IN PREPARATION

IN PREPARATION

IN PREPARATION

IN PREPARATION

IN PREPARATION

IN PREPARATION

# 6.5 TRANSPORTATION

## TRANSPORTATION RECOMMENDATIONS

The transportation analyses highlighted several regional and local deficiencies in terms of access to, and circulation within, Bergen County parks. These conditions provide an important opportunity to re-imagine the physical connections among, between and within County parks, as well as the conditions and amenities at each park that can enhance user experiences in terms of access and circulation. The following recommendations apply generally across the park system. Additional park specific recommendations can be found in Appendix 9.5C.

### Potential Regional Greenway

A Bergen County Greenway could be created by taking advantage of opportunities to physically link County parks. Figure 1 provides a Conceptual Greenway Plan that includes potential opportunities to connect open spaces and parks across the County. This conceptual regional network consists of existing streets, utility right of ways, parks, trails and roads that could be used by bicyclists and pedestrians. Five main routes exist in this proposed greenway, three of which connect the county from North to South and two which span East to West. These potential routes were chosen based on directness and access to County parks.



Figure 1. Potential Bergen County regional greenway (Courtesy of VTC).



Figure 2. Atlanta BeltLine before and after construction (Courtesy of BeltLine.org).

Best practices in greenway development around the U.S. were used as references for successful greenway implementation in Bergen County. The Atlanta BeltLine (Fig. 2) in Atlanta, Georgia is one of the largest greenway initiatives in the United States,<sup>1</sup> with about 33 miles of multi-use trails and 22 miles of pedestrian friendly rail transit. The program has created jobs, transformed neighborhoods, and provided areas with an economic boost. Although already created, the BeltLine is still transforming and expanding.

Similarly, the Bergen County Greenway network could be phased in over time and eventually connect to the partially-realized East Coast Greenway (ECG), a network of trails that will potentially connect 3,000 miles from Calais, Maine to Key West, Florida.<sup>2</sup> The ECG comes into New Jersey via the George Washington Bridge and continues south along the Hudson River. A Bergen County Greenway would be an excellent extension of the ECG into northern New Jersey. Appendix 9.5B includes an overview of a proposed greenway network, including classifications of the types of connections (i.e. right of way, residential street, park, etc.). The map overview is followed by a key that references twenty inset maps, which provide a closer look at the proposed routes, and is accompanied by a spreadsheet detailing these routes.

### Signage

Create a unified identity and help brand the park system by adopting sign guidelines that ensure visibility for all users, promote uniformity throughout the parks system and provide necessary, relevant and/or interesting information. See Chapter 6.8 for signage recommendations.

### Lighting

Lack of lighting was cited by park users as a reason parks felt unsafe. Lack of lighting limits the time available for park use.



Figure 3. Park lighting directed only where needed (Courtesy of Dallas Park and Recreation Department).

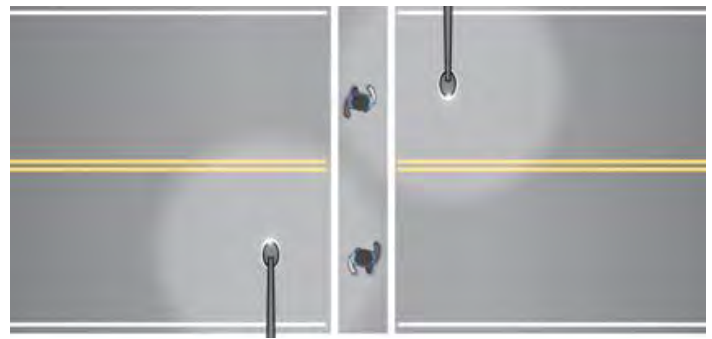


Figure 4. Design for mid-block crossing lighting layout (Courtesy of VTC).

Lighting could be installed to make pedestrians and bicyclists visible at intersections and to highlight areas that are safe for users after dark. To limit light pollution into natural areas and neighboring properties, overhead lighting fixtures should be designed with either full cutoff fixtures or be fully shielded. This ensures that the light is directed only where it is needed – such as on the trail or parking area (Fig. 3).

Consideration should be given to deploying adaptive lighting that helps to ensure the park is not overlit when not in use. Modern LED fixtures allow the operator to set the brightness amount (in lumens) based on the time of day or the expected use of the park. For example, light levels can be at their highest from 5pm to 9pm during the winter, and at their lowest in the overnight hours. This limits light pollution and can save money.

Modern LED installations also allow control over the color of the lighting. The color selected affects how visitors perceive their safety and how animals regulate their daily cycle. Higher kelvin ratings (above 4000k) mimic daylight, and can confuse and disrupt wildlife. Ratings below 2500k do not disrupt wildlife, but can appear “eerie” to visitors due to the red hue. An adaptable system allows the color of the lighting to change as the evening progresses.

The Lighting Handbook, 10th Edition, by the Illuminating Engineering Society of North America provides guidelines on the level of illumination appropriate. Particularly for locations where a trail crosses a roadway, the FHWA has developed the “Informational Report on Lighting Design for Midblock Crosswalks,” which addresses the design and quantity of lighting needed so that drivers can see pedestrians in crosswalks (Fig. 4). In regards to specific lighting fixtures, the National Park Service created the “Yosemite National Park Lighting Guidelines,” with a series of recommendations on equipment suitable for a park setting.

## Potential Pedestrian Improvements

Bergen County parks should prioritize pedestrian amenities, including the improvement of ADA accessibility, so that all park users, including those with strollers, wheelchairs and other mobility devices, are able to easily enter and move about the parks. This would require utilizing ADA-compliant ramps at park and trail entrances. Figure 5A depicts a trail that connects to the street in Pascack Brook Park, but it lacks the ADA-compliant ramps that are present at Riverside Park South in Figure 5B. Figure 5B lacks a connection from the sidewalk to the trail, however. If the two were to be combined, they would create a fully accessible park entrance for those requiring ADA accommodations.

Figures 5A and 5B also display a need for crosswalks connecting visitors from the opposite side of the street to the park entrance. Crosswalks should be installed regardless of whether or not a park entrance is located at an intersection. Crosswalks should be designed according to the characteristics of the road network surrounding each park entrance and could include simple striping, raised crosswalks or High-intensity Activated crossWALK (HAWK) beacon (Fig. 6). HAWK beacons, also called Pedestrian Hybrid Beacons, are designed to allow safe pedestrian crossing while pausing vehicular flow only as needed, particularly at mid-block crossings where

traffic speeds are high or gaps in traffic are few<sup>3</sup>. A 2010 Federal Highway Administration study found that installing HAWK beacons reduced pedestrian crashes by 69% and total crashes by 29%<sup>4</sup>.

## Bicycle Improvements

**Bicycle Lanes** – Bergen County Parks Department should work with municipalities to improve conditions for bicyclists wishing to access the County park system. This should include designating a network of dedicated bicycle paths and bicycle lanes where appropriate in communities surrounding the parks.

**Bicycle Parking** – Providing secure bicycle parking facilities is essential in encouraging park users to arrive at the parks on a bicycle. The presence of bicycle racks sends a message that bicyclists are expected and welcomed. Bicycle parking should be located near park features that attract visitors. This includes playgrounds, sports fields, and trail access points. The individual park reports found in Appendix 9.5C include recommendations for specific installation locations.

To be successful, bicycle parking must be visible from the road or trail where the bicyclists arrive, with appropriate signage directing bicyclists to the parking area. Additionally, the racks should be conveniently located, with many guides suggesting that the parking area be no more than 50-feet away from the entrance. Attention must be placed on how visible the bicycle parking is from the nearby amenity. Unfortunately, bicycles are a common target for theft, and racks located in a secluded or hidden area allow thieves free reign to steal the bicycles. Cyclists will always seek out visible parking, and may choose to ignore a rack if a pole or tree appears to offer more security.



Figure 5 A & B. Pascack Brook County Park trail without ADA ramps (top); Riverside County Park South ADA ramps (bottom) without sidewalk connection (Courtesy of VTC and Google Maps, respectively).



Figure 6. HAWK beacon (Courtesy of BPRC).



Figure 7. Linwood Avenue trail entrance into Saddle River County Park (Courtesy of Google Maps).

Bicycle racks should be installed in a way that allows full use of the installation, without blocking adjacent sidewalks, curb ramps, or other pedestrian egress. Additionally, in areas where a large amount of bicycle racks are installed, an attractive amenity for bicycle riders is a bicycle maintenance station (Fig. 8). These installations allow bicycle riders to add air, adjust their breaks, and make other quick fixes to their bicycle using tools that are chained to the support post.

#### *Safe Connections for Transit Users*

Some bus stops and rail stations located in the County do not provide safe pedestrian access to the parks. Ensuring that sidewalks and crosswalks are installed along these routes will help to ensure the safe arrival of visitors utilizing public transit. Bicycle share programs at local train stations, modeled after New York City's CitiBike and Hoboken's Hudson Bike, could provide an opportunity for transit users to access parks more easily, especially if marked bicycle trails are provided along the route. Including transit directions, in addition to the driving directions provided on the County website, could help encourage more park visitors to utilize public transportation.

#### *Vehicular Improvements*

Several County parks, such as Overpeck Park, experience problems with cut-through traffic. These conditions can be improved by installing traffic calming devices such as 15 miles per hour speed limits, single-direction traffic, roundabouts, speed humps and other strategies (Fig. 9). Raised crosswalks could serve the dual purpose of slowing down traffic and keeping pedestrians safe and visible. At the time of this writing, the Borough of Leonia has issued regulations to discourage use of local streets for commuter traffic to the George Washington Bridge.



Figure 8. Bicycle tune-up station (Courtesy of Pedal Minnesota).



Figure 9. Raised crosswalk for safe passage (Courtesy of NACTO).

## Pathway Design

Many Bergen County parks include internal pathway systems. The design of paths should be reviewed to ensure they are adequately sized to meet user demand. The American Association of State Highway and Transportation Officials (AASHTO) recommends that heavily used shared-use pathways be a minimum of 10 feet wide with two feet of grading on either side (Fig. 10). However, if more than thirty percent of the pathway's total traffic is pedestrian, a wider path of 11 to 14 feet is suggested. Ensuring these standards are met can help to alleviate trail congestion, particularly in Saddle River Park. Path design should also keep in mind the importance of smooth surfaces for longevity as well as ease of use for bicycle riders and those utilizing mobility assistance devices. In areas where paving is not possible, natural (dirt or gravel) pedestrian paths could be installed alongside paved pathways for added width.

## Complete Streets in a Broader Context

Increasing the share of visitors that access County parks by walking and bicycling should be a goal of the County. One way to achieve this end is to adopt and implement a County Complete Streets policy and work with municipalities to do the same. The NJDOT's 2017 State of New Jersey Complete Streets Design Guide<sup>5</sup> defines Complete Streets as those that are “designed for all users, all modes of transportation, and all ability levels,” balancing “the needs of drivers, pedestrians, bicyclists, transit riders, emergency responders, and goods movement based on local context.” The County should consider this goal in the context of a broader effort to encourage more walking and biking that supports a healthier life style. See Chapter 8 for further discussion of Complete Streets and Appendix 9.3 for the full NJDOT Design Guide.

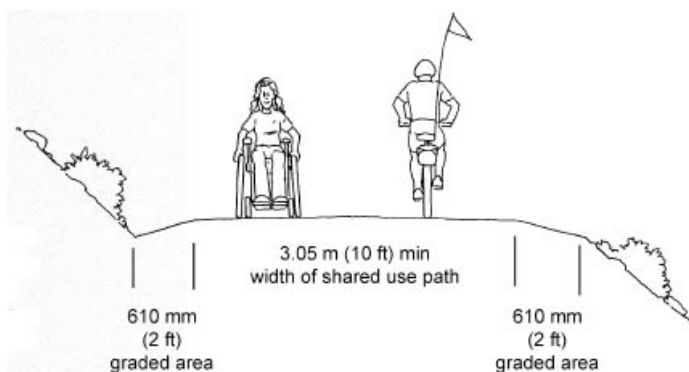


Figure 10. AASHTO trail design guidelines (Courtesy of AASHTO).

Creating a Countywide bicycle and pedestrian master plan coupled with an actionable Complete Streets policy would help to encourage the expansion of sidewalk and bicycle lane networks. Guidelines, assistance, and model policies are available in NJDOT's 2016 New Jersey Bicycle and Pedestrian Master Plan (Fig. 11) as well as the Complete Street Design Guide, released in 2017.

## Planning for the Future

The Master Planning process is an excellent opportunity to plan for a changing future including the growth of electric vehicles, car sharing services, and changing energy needs. Chapter 6.2 discusses recommendations regarding charging stations for electric vehicles and solar panel use in parking lot design.

With the growth of car hailing services, designating “Drop Off Zones” is becoming more common. The designated drop off eliminates the challenge of communicating your location, which can be particularly daunting in some of Bergen County's larger parks that span multiple municipalities. These zones are particularly helpful during large events.



Figure 11. NJDOT bicycle and pedestrian master plan (Courtesy of NJDOT).



Figure 12. Walking and biking should be encouraged for regular park use as well as events (Courtesy of CUES).

## RECOMMENDATIONS PERTAINING TO EVENTS

The park Master Planning process considered the feasibility and benefits associated with programming park activities such as movie nights, cultural festivals and multi-day events at various park locations. The following recommendations apply to event planning of any size at any park location.

### *Estimating & Accommodating Parking Demand*

Each event and each park has unique characteristics. The hypothetical event program used to inform the park Master Planning process imagined proposed events that could attract a volume of visitors larger than usual park attendance. Park managers and event planners can use the parking demand table included in Appendix 9.5D to consider what types of future events might be most appropriate in different park locations. In instances where access and parking demand is likely to exceed capacity, County officials should require event planners to provide access and traffic management plans.

### *Satellite Parking & Shuttle Buses*

Many of the Bergen County parks do not have the parking capacity to support large events. One way to address this issue is to coordinate with nearby businesses or community organizations to create satellite parking. For example, Darlington Park struggles to keep up with parking demand even on weekends when events are not planned. Several large corporate campuses are located near Darlington Park that have parking garages and are likely to have excess capacity on weekends. Developing a shared-use agreement with the nearby properties could address the parking shortfall. While

Darlington is situated close to alternative parking, other parks may require satellite parking that is connected to the event via shuttle bus service. For park-specific recommendations and more information on shared use agreements and proposed shuttle services see Appendix 9.5D.

## CONCLUSION

This overview highlights the main themes of the recommendations made throughout the individual park transportation assessments (Appendix 9.5C). Utilizing the detailed analyses and park-specific recommendations provided in Appendix 9.5C coupled with the Parking Demand Table in Appendix 9.5D, County officials can increase the accessibility and mobility within the parks for all visitors.

## RELATED APPENDICES

Appendix 9.5A: Survey methodology and findings

Appendix 9.5B: Detailed maps of proposed regional connections

Appendix 9.5C: Individual park transportation analyses

Appendix 9.5D: Parking demand table

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# 6.6 EVENTS, AMENITIES & CONCESSIONS

## EVALUATION OF POTENTIAL FOR PARK ENHANCEMENTS

The Bergen County Parks Department (BCPD) has the potential to increase its diversity of offerings for Bergen County residents (Fig.1). Permits issued in 2017 for camping, athletics, and events totaled 1,681 (Table I). Planned 2018 events are primarily organized by the Division of Cultural & Historic Affairs (19), the Golf courses (38), the Parks Department (19, primarily movie nights), the Health Dept. (9), and the Van Saun zoo (29). These events are primarily focused on eight park venues (Table I). Opportunities to increase park programming and support maintenance and infrastructure improvements can be enhanced by expanding park system revenues from special events permits, sports fees, and concessionaires.

### EVENTS

Events of all sizes and types can enrich the park experience, provide new opportunities for recreation and socialization, and activate underutilized spaces (Figs. 2-3). To maximize benefits to the community, it is critical for events to occur at venues that have the appropriate size, level of accessibility, infrastructure, and ecology to sustainably and successfully accommodate participants. The project team assessed Bergen County parks regarding their potential for increasing the number of large- and small-scale events.

Park	PERMITS ISSUED IN 2017			
	Camping	Athletic	Event	Total
Campgaw Mountain Reservation	140		28	168
Overpeck County Park		157	144	301
Van Saun County Park		55	444	499
Darlington County Park		11	234	245
Riverside County Park		85	36	121
Pascack Brook County Park		16	35	51
Ramapo Valley County Reservation	32		16	48
Saddle River County Park		33	194	227
Dahnert's Lake			3	3
Samuel Nelkin County Park		6	9	15
Artesian Fields County Park		3		3
<b>TOTAL in 2017</b>	<b>172</b>	<b>366</b>	<b>1,143</b>	<b>1,681</b>

Table 1. Permits issued for use of various Bergen County Parks in 2017 (Courtesy of Bergen County Parks Department).



Figure 1. Good concessions at the appropriate location can enhance the park experience, encourage social interaction, and help support the spaces residents love (Courtesy of Jerome Barth).

## Appropriate Scale of Events for Specific Parks

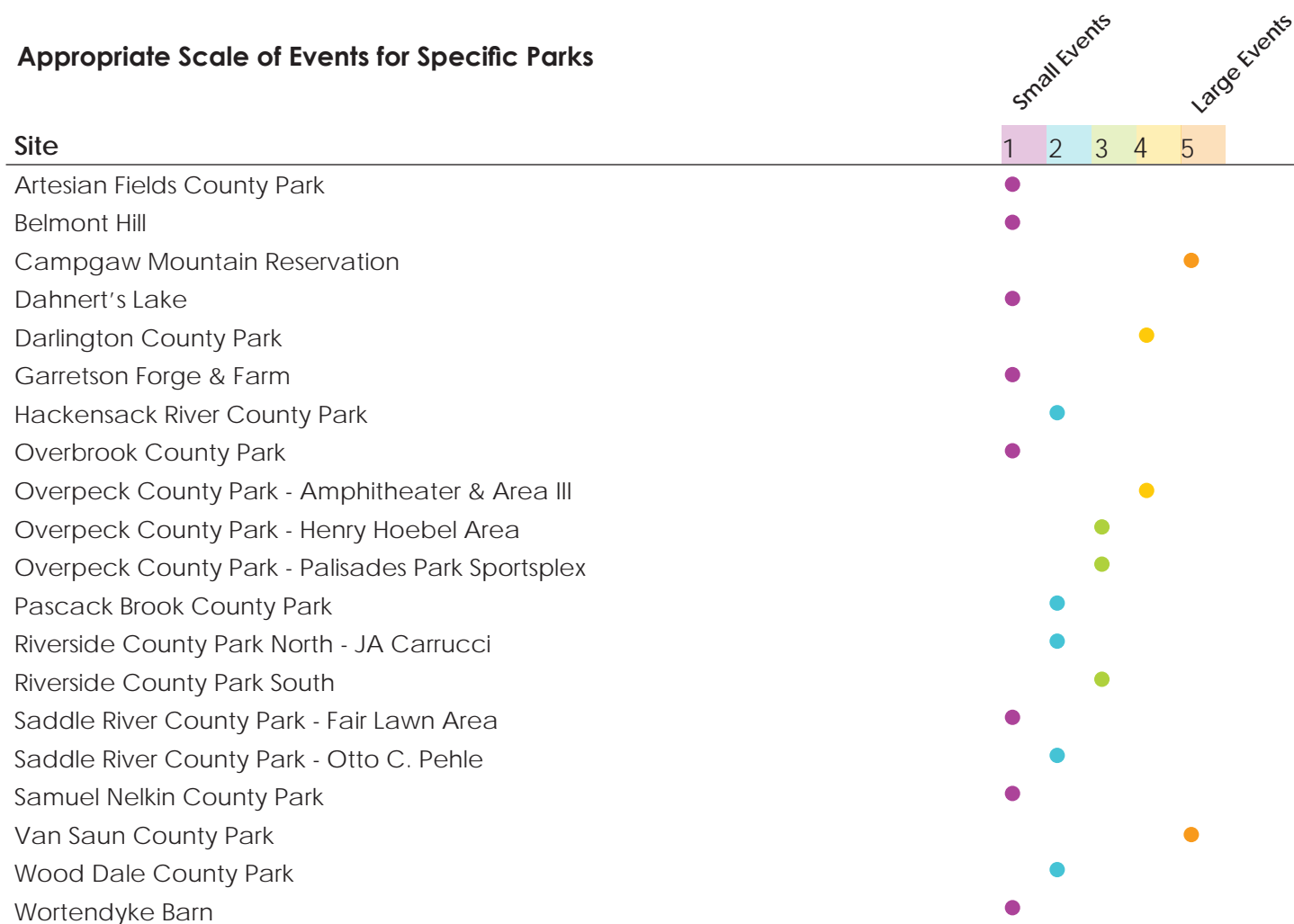


Table 2. County parks have diverse sizes and amenities that determine their suitability for various types of events (Courtesy of Eventage and CUES).

### PARKS CONDUCTIVE TO LARGE EVENTS

As Table 2 illustrates, a small number of Bergen County parks – Campgaw Mountain Reservation Ski Area, Overpeck County Park Amphitheater and Great Lawn, Van Saun County Park, and Darlington County Park—may be very or fairly conducive to large events.

### PROPOSALS FOR SMALLER SCOPE EVENTS

Large scale events would only be appropriate at the larger regional parks, but many of the smaller parks can host local events and series that benefit their local communities. Limited parking options and proximity to residential neighborhoods are factors determining event venues. There are some smaller locations where appropriate programming and events could be accommodated successfully. These programs could energize smaller scale parks throughout the system, making them a destination that provides social benefits to park users.

Existing movie nights, public art exhibitions, and fitness activities, can be expanded. Smaller-scope music events, dance events, storytelling, fundraiser run/walks and community celebrations could also be expanded or added at a number of the smaller venues.

Many of these events can be planned in partnership with local civic and cultural organizations able to help with programming, management, and cost. There is also the potential for sponsorships to offset event costs, and in some cases produce revenue for the Parks System. For example, a movie series has non-intrusive possibilities for sponsorship that are easy to implement and have the potential to offset event production costs. Examples of this type of sponsorship range from marketing and advertising the series as being “presented by Company A”, to banners along the screen sides, to preshow content and “trailers”.

A smaller-scope music series programmed throughout the Bergen County Park system could also be an attractive sponsorship that provides many locations and performances. Production costs could be kept manageable by utilizing existing pavilions, gazebos, and platforms and investment in a basic sound system that travels with the series to the park venues. A sponsorship of the series could offset associated production costs.

The sample schedule of a summer event series in Table 3 illustrates how events can be tailored to be appropriate for parks of different sizes and experiential emphases.

## EVENT PARTNERSHIPS

Expanding the current Health Department fitness/wellness series could incorporate local gyms, yoga, martial arts studios or other similar organizations. These businesses might be amenable to providing an instructor to lead a class in exchange for the opportunity to get in front of more people and the possibility of distributing marketing materials.

Expanding the Historic & Cultural Affairs series recognizes the value of the arts, history and civic pride. These partnerships could include local libraries for storytelling,

community groups to assist in presenting art, dance and crafts shows, and education and environment partners for programs like bird watching, ecological tours, fall foliage tours, historical tours and other appropriate programming (Figs. 2 - 6).

Activation of volunteers for park clean up, mulching, weeding and other activities that provide residents a way to “give back” to their park could be programs in active recreation parks, passive parks, nature preserves and historical parks. Community volunteers could augment the current activities of the Master Gardeners and the Bergen County Environmental Commission. Community activities that promote volunteerism, while also preserving the well-being of the park system are also highly attractive initiatives for corporate sponsorship that can offset the cost of the tools and equipment needed for stewardship activities.

For a discussion of potential collaborators see Chapter 7.

## Example of a Potential Bergen County Summer Event Series Schedule

EVENT	DAY OF WEEK	VENUE	ESTIMATED ATTENDANCE
<i>Week of July 10</i>			
Movie Series	Wednesday pm	Van Saun Park	1,000
Small-Scale Music Series (Jazz/Blues/Bluegrass)	Friday pm	Wood Dale County Park	300
Exercise Series (Yoga/Tai Chi/Boot Camp)	Tuesday/Thursday (am or pm)	Hackensack River County	100
Kids Movie Series	Friday pm	Samuel Nelkin County Park	750
Overpeck Amphitheater Summer Festival	TBD (Thurs. pm, Sat. pm)	Overpeck Amphitheater	1,500
Storytelling Series (Library Partner)	Sunday (am/early pm)	Pascack Brook County Park	150
Dance Series (Salsa, Tango, Swing)	Sunday	Darlington County Park	1,000
<i>Week of July 17</i>			
Movie Series	Wednesday pm	Riverside County Park South	1,000
Small-Scale Music Series (Jazz/Blues/Bluegrass)	Friday pm	Van Saun Park	300
Exercise Series (Yoga/Tai Chi/Boot Camp)	Tuesday/Thursday (am or pm)	Darlington County Park	100
Kids Movie Series	Friday pm	Belmont Hill	750
Overpeck Amphitheater Summer Festival	TBD (Thurs. pm, Sat. pm)	Overpeck Amphitheater	1,500
Storytelling Series (Library Partner)	Sunday (am/early pm)	Wood Dale County Park	150
Dance Series (Salsa, Tango, Swing)	Sunday	Overpeck Park - Henry Hoebel Area	1,000
<i>Week of July 24</i>			
Movie Series	Wednesday pm	Saddle River County Park - Otto C. Pehle Area	1,000
Small-Scale Music Series (Jazz/Blues/Bluegrass)	Friday pm	Samuel Nelkin County Park	300
Exercise Series (Yoga/Tai Chi/Boot Camp)	Tuesday/Thursday (am or pm)	Overpeck Park - Henry Hoebel Area	100
Kids Movie Series	Friday pm	Van Saun Park	750
Overpeck Amphitheater Summer Festival	TBD (Thurs. pm, Sat. pm)	Overpeck Amphitheater	1,500
Storytelling Series (Library Partner)	Sunday (am/early pm)	James A. McFaul Environmental Center	150
Dance Series (Salsa, Tango, Swing)	Sunday	Pascack Brook County Park	1,000

Table 3. Events come in all sizes and varieties. This sample summer events schedule illustrates how appropriate events can be tailored to parks of different sizes and emphasis types. Based upon estimated attendance, parking and traffic plans may be required (Courtesy of Eventage).



Fig. 2-6. In collaboration with community groups, Bergen County parks have the opportunity to support a wider range of events that celebrate the arts, environment, history, culture, and healthy lifestyles (Courtesy of Eventage).

## AMENITIES AND CONCESSIONS

To meet requests from park users asking for additional amenities, including clean and well-maintained bathroom facilities, sufficient parking, efficient website programming information and communications, and on-site food options, various amenities and concession options are recommended. New amenities and concessions that integrate with, and enhance, existing park facilities can be developed that enhance park uses and meet users' requests. Many models for the proposed amenities and concessions exist throughout U.S. public parks.

### RESTROOM FACILITIES

The amenity most often requested by the public was well-maintained, accessible working bathrooms. An inventory of restroom facilities in the Master Plan Section I: Inventory includes the type and condition of each existing bathroom installation. A system-wide evaluation that explores locations where new restroom facilities are needed and where existing facilities require ongoing maintenance should be completed by the BCPD.

It is important to recognize that maintaining restrooms in good working condition requires funds to pay for this amenity. The County must determine the best approach for covering this cost – either from general revenues, a small fee for use, or a combination of free and fee-based use at certain high traffic locations.

## PARKING FACILITIES

The one amenity that park users specifically offered to pay for was access to parking in heavily used parks such as Van Saun, Ramapo, and Overpeck, where on busy days, securing a parking space is challenging. We recommend exploring various parking management options to address the current issues in these heavily parks.

There are examples of other state and county park systems charging annual or daily parking fees, particularly at regional parks<sup>1,2</sup>. Typically pedestrians and cyclists would not pay a fee, which encourages physical activity in getting to the park (Fig. 7). A valet parking system should also be evaluated for parks with parking availability issues. This service could be instituted to support high traffic events (Overpeck), high use days (Van Saun) where the overall number of parking spaces is adequate, but these spaces may not be adjacent to the visitor destination location, or where the total number of parking spaces cannot meet demand (Ramapo).



Figure 7. Traffic management options should encourage local bike and pedestrian transportation to the parks to help alleviate parking demand and encourage healthy activity (Courtesy of Jerome Barth).

## FOOD OPTIONS

Slightly over 50% of the public survey respondents asked for new food options in Bergen County Parks. While not every park is an appropriate venue for adding a food concession, there are opportunities at some County parks to enhance the park experience by expanding food offerings. Food options should be considered as part of the overall park experience. For example, child-oriented food offerings at Van Saun that complement the farm, zoo, carousel, and pony ride experiences (Fig. 8).

Portable or temporary options, such as food trucks or pop-up huts, would provide opportunities to test various food offerings without incurring the large investment required for permanent restaurant facilities (Fig. 9). Temporary options can range from a complicated gourmet experience to a simple ice cream cart, depending on the specific park.

The possibility of adding restaurant infrastructure should also be explored, especially in properties that have a high numbers of visitors (Van Saun), underutilized facilities (Darlington), or the space to add new amenities (Overpeck).

Bergen County Parks should exhibit the highest commitment to sustainability. Therefore, we recommend that concessions be required to follow environmentally sound practices - such as recycling of glass, plastic and metal, provision of water refill



Figure 9. Temporary concessions provide opportunities to test food offerings before investing in permanent structures (Courtesy of Jerome Barth).

stations rather than plastic bottled water, using compostable utensils and composting where feasible - as the standard for the park system. A long-term Sustainability Plan should be developed to facilitate converting existing park practices and concession requirements into sustainable practices.



Figure 8. Appropriate food concessions can enhance the park experience (Courtesy of Jerome Barth).

## OPPORTUNITIES FOR NEW AMENITIES & REVENUES

Many models for proposed amenities and concessions exist throughout U.S. public parks. We recommend consideration of the following opportunities at parks in the Bergen County system. Recommendations for park-specific amenities are available in Appendix 9.7.

### Potential Athletic Amenities

- Bike/Surrey/Pedal Car Concession that gives visitors a chance to explore a park (Fig. 12)
- A Bike Repair Facility that also provides a hot and cold beverage station
- Summer outdoor rock climbing/repelling concession (Fig. 10)
- A Trapeze School



Figure 10. Rock climbing and repelling for outdoor fun (Courtesy of Pixabay).



Figure 11. Ziplines can be a fun way to enjoy nature from a different perspective (Courtesy of Pixabay).

- A Zipline/Treetop Adventure Concession which would include repelling, tree climbing and tree top adventures, rope trails, ziplines, and slides (Fig. 11).
- Explore adding a Winter Bubble to cover existing tennis court facilities, creating a year-round amenity
- Winter Recreation paired with a hot beverage vendor
- Additional paddleboat, canoe, and kayak rentals in parks with appropriate waterbodies (Fig. 13)

We also propose exploring the opportunity for adding a world-class, year-round athletic facility to the Bergen County Park System. This amenity would provide additional support for healthy lifestyles and encourage participation in recreational sports/events.



Figure 12. Bike rental concession (Courtesy of Pixabay).



Figure 13. Activities like paddleboarding would expand water-based recreational opportunities (Courtesy of Pixabay).

## Potential Social Amenities

- Expand Family Drive-In Movie Nights during the summer months that extend the hours a park is open (Fig. 16)
- Artisan Market that attracts craftsmen, Etsy-based sellers, and artists (Fig. 14)
- Seasonal events such as summer dances, Halloween events, Winter and Spring Festivals (Fig. 15)
- Giant Maze for groups of all ages (Fig. 17)
- Glamping Concession run by an outside vendor providing an “upscale” camping adventure, with permanent tent cabins, a communal firepit/cooking area and evening activities (Fig. 18)



Figure 16. Outdoor movie night in the park (Courtesy of CUES).



Figure 14. Artisan market (Courtesy of Eventage).



Figure 17. Mazes are fun, require limited staff, and have potential for a diversity of experiences throughout the seasons (Courtesy of CUES).



Figure 15. Seasonal festival (Courtesy of Jerome Barth).



Figure 18. Glamping can encourage people to spend more time out in nature (Courtesy of Pixabay).

## GOLF COURSE AMENITIES

Golf courses currently provide the majority of Bergen County Park system revenues, but there is significant room for improvement (Fig. 19). After speaking to Bergen County golfers and reviewing online survey comments, it is apparent that residents expect County golf courses to meet a higher standard. Modern clubhouse facilities, ease of securing tee times online, mid-course snack, bathroom, and food options, and improved course aesthetics are all amenities that golfers requested.

Three of the Bergen County courses have concessions that are scheduled for Request for Proposals (RFPs) to identify new operators. This is an opportunity to set higher standards for County golf course service and amenities. New restaurants should strive to become destination restaurants that can accommodate “life cycle events” and offer high quality food and service in a relaxed atmosphere.

County golf course restaurants should be a public amenity reaching a broader clientele in addition to the golfers using the course. The Lakeside Grill & Bar at the private Ramsey Golf & Country Club is an example of a local golf course food operation open to the general public. A “kid-friendly” Sunday brunch receives high recommendations<sup>3</sup>. This type of restaurant operation could increase visitors during slower time periods when golfers are out on the links and during the off season.

The courses themselves could become focal points for other community-based events, such as local golf opens and competitions, and life cycle events such as parties or weddings. Fee structures should be established for public use of the course facilities at times when this use would not conflict with Bergen County golfers.

## HISTORIC PROPERTIES

Historic property infrastructure offers potentially unique public event venues.

### *Hackensack River Waterworks*

This park and its historic buildings (Fig. 20) offer one of the greatest untapped opportunities in the Bergen County Park system. The Waterworks is an exceptional asset that could be converted to modern productive use. The following principles should guide the BCPD as they seek to open this historic site for public use:

- The built infrastructure of the Waterworks and the outdoor spaces of Van Buskirk Island Park offer opportunities for a variety of reuses.
- The architecture and layout of the Waterworks are spectacular and have tremendous reuse potential if used in appropriate ways.
- Competing visions for renovation and reuse of the Waterworks exist, but no public entity has agreed to commit the large financial resources needed to execute any of these visions.

Our recommendation is to develop a proposal for a long-term lease through an RFP process that would include the incorporation of various elements that stakeholders are looking for in this historic restoration. The CUES recommendations developed for the Waterworks and Van Buskirk Island Park<sup>4</sup> should be revisited and updated as needed.



Figure 19. The Bergen County golf courses have potential for more amenities that enhance user experience, such as food concessions (Courtesy of CUES).



Figure 20. The Hackensack River Waterworks has national historic significance and great potential for vibrant re-use (Courtesy of CUES).

A park, featuring nature walks, biking trails, use of the waterways and other amenities can connect this unique property to a proposed future Hackensack River linear park (see Chapter 7). To support redevelopment of this site, public support is needed from the local community and interested stakeholders. Limited access to the site and buildings should be allowed (see previous CUES recommendations<sup>5</sup>).

### Other Historic Properties

Unique historic properties, such as Wortendyke Barn and Garretson Forge and Farm (Figs. 21 - 22), offer venues with great potential to provide public amenities. These properties should be evaluated as event spaces that could be rented for weddings and other life cycle events. They may also be appropriate for local Farm to Table events open to the public, hosting Farmer's Markets, or providing a venue for local produce growers.



Figure 21. Wortendyke Barn has wonderful potential as an event space with unique character (Courtesy of CUES).



Figure 22 Garretson Forge and Farm is well-suited to a wide range of activities and could serve as an event space for private and community gatherings (Courtesy of CUES).

## ADVERTISING, SPONSORSHIP AND VOLUNTARY CONTRIBUTIONS

Other revenue streams that might contribute funds for County parks are outdoor advertising and sponsorships. Implementation of these types of programs would need to comply with applicable State of New Jersey Green Acres rules.

Advertising and Sponsorship programs should be based on matching products and services to needs of park users. There are obvious qualities to the County Park system that would attract such opportunities: (a) the fact that there is an active population of park users, and (b) the fact that Bergen County is one of the most densely populated counties in the nation. Staff in the BCPD Business Office would be trained in how to offer advertising and sponsorship opportunities that would bring in revenue and support requested park amenities with minimal impact of the commercial messages on the parks themselves (see Chapter 6.7). There is an art to this blending so there are no jarring visual presentations that would alienate park users.

Two initial programs could be considered in the short term: an umbrella signage program and a sponsorship initiative.

### *Outdoor Advertising*

The umbrella and table signage program could be explored at parks that have a food concession, whether that food concession is a kiosk, food truck area, or indoor/outdoor restaurant. The umbrellas would be part of a movable furniture program in parks with food concessions. After taking an inventory to determine how many table and umbrella units could be placed, the system-wide package would be sold as one (yearly) advertising opportunity.

### *Sponsorships*

Advertising and sponsorship opportunities may exist in the park system and could be an addition to the overall revenue streams that support County parks. Sponsorship can come in many forms, from promoting a specific one-time event, to “pouring rights” for a particular beverage at food concessions (Fig. 23), to sponsoring the equipment rental program related to a specific activity, such as biking or tennis.

A sponsorship program could focus on infrastructure within the County park system, such as stadia, performing arts stages, etc. Sponsorship could also apply to specific outdoor seasonal environments such as Wortendyke Barn, the Water Works, and Campgaw Mountain.

### *Donations*

Bergen County Parks can explore asking park users for donations to be used for specific amenities and events. While the public expects the use of parks to be free, by providing information about the real cost of certain activities and asking for public support, managers may recoup part of the costs of quality programming or public events. For example, Essex County golf courses add a \$2 beautification fee to every tee time reservation. If integrated in plans for events and activities, donations could help generate new income for the parks.

The Bergen County Parks Department currently has Trust Funds to specifically support the Zoo, the Environmental Center, and a Golf Scholarship. Donations can be made to these funds to expand programming and amenities at these specific facilities and to support County students in golf course-related studies.



Figure 23. Sponsorship of an event or particular amenity can help generate funds for re-investment into the parks (Courtesy of Jerome Barth).



Figure 24. Simple advertising on movable furniture can help bring in revenues to help support the parks (Courtesy of Jerome Barth).

## REFERENCES CITED

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- 5 Ibid.

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# 6.7 ADMINISTRATION & BUSINESS PRACTICES

## ADMINISTRATIVE RECOMMENDATIONS

To maximize the benefits to residents provided by Bergen County Parks, the existing Bergen County Parks Department (BCPD) organizational structure, competencies, and management practices need to be reviewed, and if necessary, realigned to support the Master Plan objectives. There are various options the County could consider to increase the efficiency and effectiveness of the BCPD in delivering park services and programming to the public.

### PARKS FINANCIAL STRUCTURE

The original Bergen County Parks Commission (BCPC) was dedicated to meeting the demands for publicly managed open space in Bergen County (Chapter 4.2). To support their objectives, the BCPC had access to significant funding from County budget appropriations and Freeholder bonding

initiatives. Beginning with the opening of Rockleigh Golf Course in 1958, various amenities in County parks began generating fee revenues. By 1970, funds available to the BCPC approached \$40,000,000 (in 2017 dollars), more than triple the annual expenses of the County Parks Department in 2016 (Fig. 1).

The Bergen County Parks Department (BCPD) now cares for 9,335 acres of parklands. This park system operates on roughly one-third the funds (in 2017 dollars) of fifty years ago when total parkland acreage was approximately 4,000 acres. We note that current expenses charged to BCPD do not include park department employee fringe benefits, debt service on bonds that fund park capital projects and land acquisition, or trade services (carpenter, electrician, etc.)

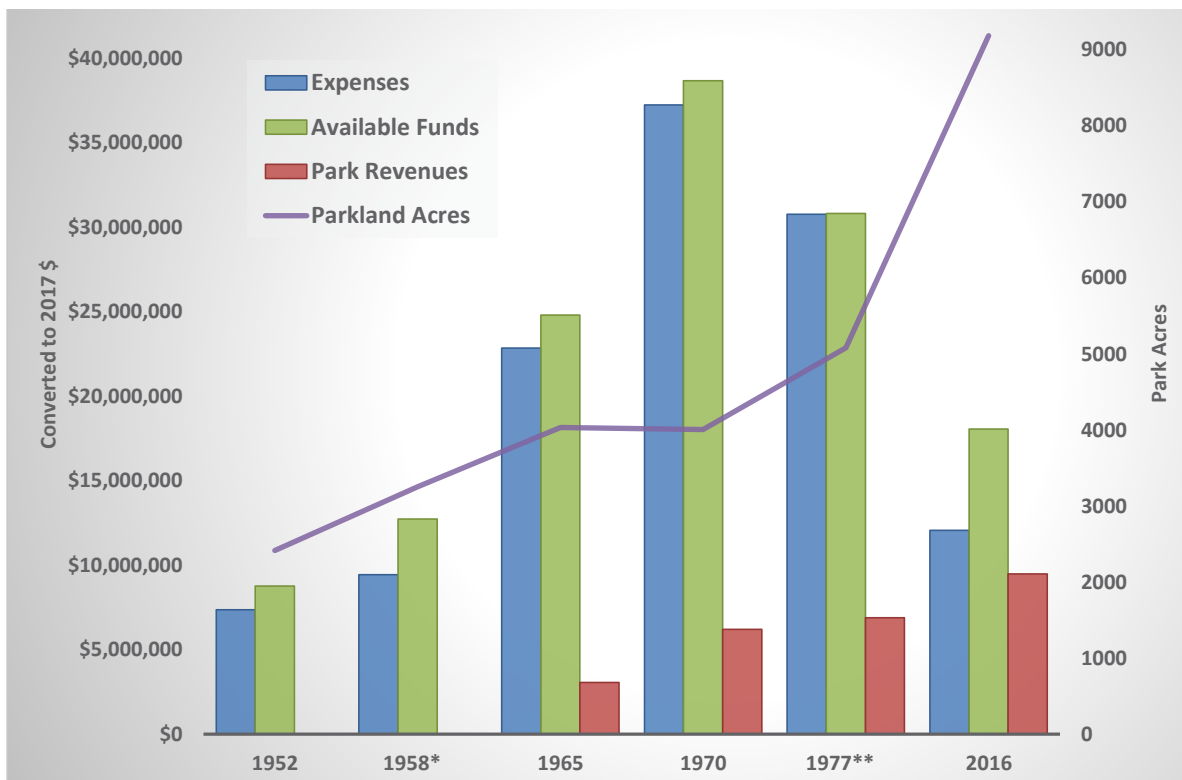


Figure 1. Bergen County park expenses, available funds (budget appropriations and bonds), park-generated revenues, and parkland acreage 1952 – 2016. \*Rockleigh golf course opens; \*\*NJ State-mandated budget caps.

obtained from other County departments. At the time of this draft, there is approximately \$6,000,000 in unspent Capital Appropriations/Grants available to BCPD.

Bergen County is currently investing less in park operations than other northern New Jersey and out of State counties with similar populations (Table 1). The Morris County 2017 parks budget (appropriations and bonds) totals \$15,995,721 to support 18,800 parkland acres<sup>1</sup>. The Essex County 2017 budget dedicated to parks (appropriations, capital improvements, Green Acres funds) totals \$26,171,771 in support of 6,000 parkland acres, including the Essex County Zoo<sup>2</sup>. The Essex County parks generated audited revenues in 2014 of \$12,856,984, approximately 30% greater than the Bergen County 2016 revenues, primarily from Turtle Back Zoo.

The Bergen County Parks Department spending per resident is approximately \$13, versus a Trust for Public Land (TPL) survey of cities across the country, where spending per resident ranges from \$19 (Jersey City) to \$478 (St. Louis)<sup>3</sup>. Total 2017 park spending per resident in Morris County was \$51<sup>4</sup>. Thus, without increased park funding support, BCPD cannot keep up with the financial demands of maintaining,

enhancing, and expanding its role in providing premier parklands and programming. Considering that Bergen County residents already pay some of the highest property taxes in the country, raising taxes to augment park budget funds does not present a viable option.

The Bergen County Parks system currently generates significant revenues from a limited number of sources, including (2016 income): golf courses (\$7.3 million); Van Saun Zoo, carousel, train and pony rides (\$985,000); permits and rentals (\$880,000); Bergen Equestrian Center and Saddle Ridge Riding Center (\$200,000); food (\$34,000); and tennis (\$21,000). However, these proceeds are not dedicated for reinvestment in the parks system. Instead, they are placed into the County's General Fund, which supports a wide variety of programs. The Parks Department operates on an annual budget and capital project appropriations approved by the County Freeholders. This process makes park project planning and securing funds for long-term initiatives, capital improvements, or land acquisition challenging.

	BERGEN COUNTY (2015)	BERGEN COUNTY (2040)*	MORRIS COUNTY (2016)	ESSEX COUNTY (2016)	MECKLENBURG COUNTY (2016)	FAIRFAX COUNTY (2016)
Population	921,562	1,030,442*	499,509	810,187	862,069	1,113,529
Total Acres	157,888	157,888	308,480	83,200	349,440	250,240
Density (people/acre)	5.8	6.5	1.6	9.7	2.5	4.5
Parkland Acres	9,335	15,000	18,700	6,000	21,122	23,360
Spending (Operations)	\$11,900,517	\$19,125,000**	\$13,675,000	\$15,297,954	\$22,270,318	\$22,900,000
Ops Spending/ Acre	\$1,275	\$1,275	\$731	\$2,550	\$1,054	\$980
Ops Spending/ Res	\$12.91	\$18.56	\$27.38	\$18.88	\$25.83	\$20.56
FTEs	143	360	159	N/A	270	358
FTE/10,000 residents	1.55	3.5	3.2	N/A	3.1	3.2

\*Estimate based on VTC projected population

\*\*Operations spending estimate assuming spending per parkland acre remains \$1,275.

Note: Essex County Department of Parks Revenues (2016) = \$14,400,000

Table 1. Comparison of Park Department spending and staffing levels. FTE = Full-time equivalent. Data Sources: TPL 2017, VTC, North Jersey Transportation Authority, BC 2016 financial reports, US Census data, Budget Appropriations enacted 2017 in Morris and Essex Counties (Courtesy of CUES).

## OTHER FUNDING OPTIONS

### 1. Open Space Revenue Dedication by Rider

A common practice, the Open Space Revenue Dedication by Rider, dedicates funds raised by the open space tax to be spent on permitted park purposes in the jurisdiction under the open space tax law. Certain funds collected under the Bergen County Open Space tax could thus be dedicated specifically to the County Parks Department.

### 2. Outside Funding - Donations

Many county park commissions use outside funding to generate funds for recreation programs. In this case, a distinct entity legally separate from the County conducts fund raising for the parks programs and then turns the money over to the park commission/department for specific purposes or purchases that the County then installs (e.g. zoo improvements, park trails/benches). A variation on this option includes donations made directly to the County for specific parks-related projects managed by the County (e.g. Essex County golf course beautification donation - \$2 of every greens fee).

### 3. Bergen County Open Space Trust Fund

Established in 1998, the Trust Fund supports two programs:

- Projects involving land acquisition, recreation facilities, historic and farmland preservation (70% of funds)
- Municipal park improvements, requiring a 1:1 match of municipal funding (30% of funds)

#### Recommendations:

- Digitize and simplify the grant requirements. Currently 17 hard copies are required; there are 5 grant applications (Fig. 2).
- Create one digital application with common fields for all projects (municipality, lot, block, etc.) and other sections to fill in only if applying for a specific type of funding.
- Include as a priority consideration an applicant discussion of how requested funding/project supports County Parks Master Plan objectives.
- Prioritize projects that in the view of the County Parks Department support the Master Plan priorities.
- Dedicate a specific amount of open space tax revenues to support of County parklands

### 4. Other Bergen County Trust Funds

The Bergen County Parks Department currently has Trust Funds established to specifically support the Zoo (Fig. 3), the Environmental Center, and a Golf Scholarship. A campaign can be undertaken to add to these funds to expand programming and amenities at these specific facilities and to support County students in golf course-related studies.

### 5. State of New Jersey Green Acres Funds

The Open Space Trust Fund tax rate must be equal to or greater than \$0.005 in order for the County to be eligible for the maximum amount allowable State of New Jersey Green Acres funds. A lower tax rate caps the amount of State funding to 25% of fair market value for property acquisition. The tax rate is subject to annual review by the Board of Chosen Freeholders.

#### Recommendations:

- Set a minimum for the Open Space tax rate that cannot be less than the State requirement to receive maximum Green Acres funding.

#### Application Simplified



Simplified application



Application Online



Guide for Type of Grant

Figure 2. The Open Space Trust Fund application should be simplified and digitized (Courtesy of CUES).

## CAPITAL FACILITIES AND INFRASTRUCTURE

The Bergen County Parks Department should refer to the Parks Master Plan to ensure capital improvements, acquisition projects, programs and services are consistent with the Plan. Spending on park resources should be based on criterion developed to support Plan implementation goals:

- Meets Master Plan needs: Projects should be prioritized based on their ability to meet park and facility needs as identified in this Plan (i.e., their ability to meet Master Plan goals, fill existing geographic gaps, or satisfy relevant design guidelines).
- Improves existing resources: Priority should be determined based on the ability of proposed projects to maintain or enhance the condition of existing County resources, or to generate additional revenue.
- Expands recreation opportunities: Priority should be determined based on the projects' capacity to expand the County's recreation opportunities (i.e., their ability to accommodate new high demand activities or leverage potential for additional recreational funding).
- Enhances partnerships: Projects should be prioritized on their capacity to create or strengthen existing partnerships (i.e., their ability to support programmatic, joint development, or cost-sharing collaborations).
- Strengthens the community: Proposed projects should be prioritized based on their ability to serve a diverse cross-section of the County's population.
- Maximize available resources – Secure potential funding sources through grants, donations, or partnerships.
- Improve maintenance and efficiency – Give priority to projects that improve upkeep efficiency or that will reduce life-cycle costs.
- Resources for Parks Staff – Provide Park staff with the materials, technologies, and education they need to do their jobs effectively.



Figure 3. Campaigns to add funds to existing trust funds for specific park offerings, such as the Bergen County Zoo, could help expand programming (Courtesy of CUES).

## BUSINESS PRACTICES

The BCDP generates revenues from golf course fees, fees associated with amenities (zoo, train, carousel (Fig. 4), pony rides), and park use permit fees generated by a wide variety of events. All applications and fees are submitted to the Events and Permits staff of the parks department. Permit fees are currently determined based on the projected number of people attending an event; fees for use of athletic fields are based on the type of field and the time the field will be used.

Information about park events is listed on the Bergen County website calendar. Three groups (Van Saun Zoo, County Golf, and Division of Cultural and Historic Affairs) currently maintain email contact lists to inform residents of programming and events.

Behind every great event there is a lot of organization and behind-the-scenes work. The BCDP Business Office of the future would track the events, programs, and income of each park and set permit and concessions fees. This office would work with outside vendors, concessionaires, and event planners providing amenities to the Bergen County park system.

Based on other public park systems, significantly more revenue that could cover costs related to maintaining, improving, and increasing current park resources, programs, and infrastructure could be generated. However, to increase the visibility of the parks system, communicate park programs and amenities to Bergen County residents, support activities that would add amenities to the park system, and generate increases in park-related revenues, business office functions need to be expanded.

The Parks Department business office should provide:

- Tracking and revenue reporting for all parks, including concessions, programs, and for-fee activities; projections of future park revenues.
- A simple financial tracking and reporting system that generates monthly and annual revenues, accounts receivables, projections, and historic financial reports.
- Tracking all accounts payable and receivable to make sure vendors report revenues and revenue payments in a timely manner.
- Simplified documents, RFPs, manuals, and contracts related to permitting and concession operations.
- A digital platform for all Parks Department permit applications, grant applications, and fees to be submitted online.
- New concessions that enhance amenities for Bergen County Park users, while generating revenue to support park programs.
- Developing RFPs for vendors and concessionaires and responding efficiently to RFP applications.



Figure 4. Carousel concession at Van Saun County Park (Courtesy of CUES).

## Permitting & Special Events Department

The BCDP manages smaller scale events and has recently instituted an internal Special Events Department with an event management staff. The Events Manager is responsible for seeking out opportunities for events and promotions and effectively vetting and managing client produced events, while protecting the public enjoyment of the park, its environmental and physical assets. Additionally, the Manager coordinates with other relevant Bergen County departments, including the Health Department if food is served; the Fire Marshall if temporary structures are erected; and the Sheriff if security is provided, to ensure clear communication and the successful production of events.

## PERMITTING & EVENTS RECOMMENDATIONS

### Digital Permitting

Although events are internally scheduled and tracked digitally, paper applications and checks are still used to apply and pay for permits. The County should move to an online application and payment system that could accept credit cards. This would save paper and make applying for permits easier and more convenient for residents and schools. The Event Department recommends that permit applications be accepted on a rolling basis, rather than annually.

The long-term goal should be to integrate an all-in-one service platform for the intake, payment, processing, review, reporting, and internal communication of permits. The service platform should be as simple as possible and allow staff to quickly assess the proposed activity, feasibility, and permit fees. The final permit package would include the main permit language and, as addendums, all site plans, operations timelines, required insurance certificates, vehicle lists, security plans, and any other required permits. This system requires the permittee to sign off on their own production plans. This would provide the Parks Department with the ability to oversee and enforce the permit parameters on an event-by-event basis.

## Event Application Process

### Simplified Application Document

The current array of special event applications is complex and should be consolidated into one or two documents that gather required event information and allow staff to quickly assess the proposed activity, feasibility, and permit fees (Fig. 5). These online applications should be in a format that allows forms to be completed electronically. Additional information to determine the event feasibility should be gathered via follow-up conversation and potential subsequent site visits.

An easy-to-understand “Event Guide” that gives event managers the information they need to understand the BCDP system as a venue should be available. This guide should have photos and data about recent events in the parks or pertinent information that would help event producers determine if a venue is a good fit.

### Application Simplified

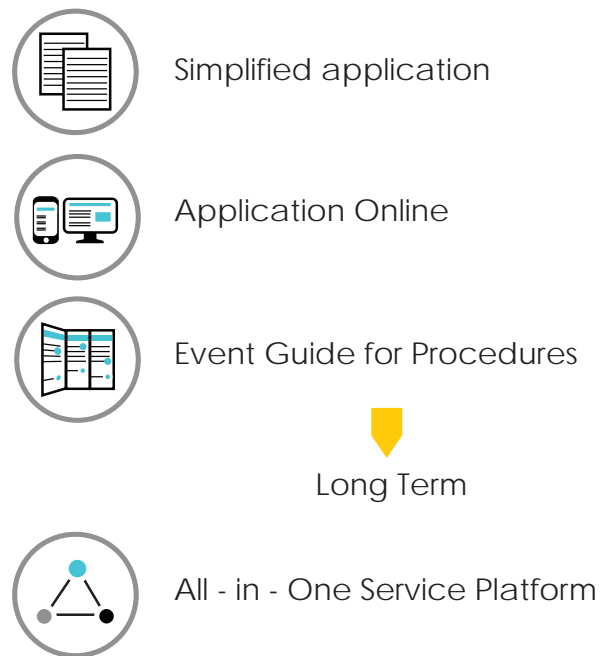


Figure 5. The existing special event applications are complex. They should be simplified into a basic, application available online along with an Events Guide which gives potential permittees the information they need (Courtesy of CUES).

## Positive, Efficient Communication with Producers

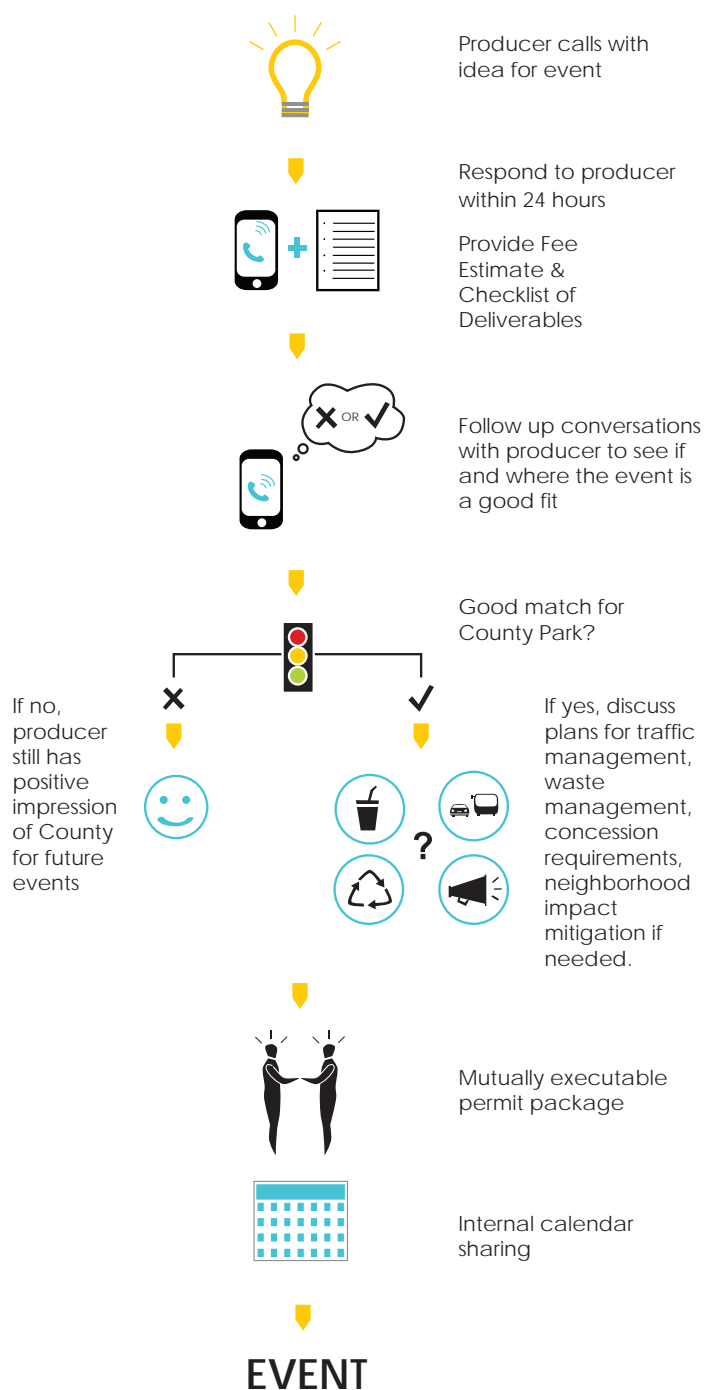


Figure 6. Communication with event producers needs to be positive, efficient, and solution-oriented from the time a producer with an event idea first initiates contact with BCDP to the conclusion of the event (Courtesy of CUES).

## Communication with Producers

There should be three overall guiding principles when interacting with individuals and groups who wish to host an event in a County park:

- We value events in the park system.
- Event producers are collaborators.
- The BCPD is here to help.

Initial staff contact with potential event producers should be information rich and provide a general estimate of usage fees and a checklist of deliverables that would be required in order to issue a permit (Fig. 6). If producers know that they can contact BCDP and get a quick response about a potential event they will keep in contact and consider the parks system as an event venue.

Follow-up discussions would determine if the proposed event is a good fit for BCPD, and if not, the personal connection will leave a positive impression. Event producers like venues for two primary reasons: one, they have foot traffic or exposure levels appropriate for an event; and two, they are responsive and solution oriented.

## Event Production Function

### Pre-Production Process

Once an initial event agreement is in place, it is vital to continue ongoing communication with event producers throughout the pre-production process. Production meetings and site visits that include relevant staff members from parks and other County departments are important to the event planning process. The amount and frequency of meetings and site visits should be based on the overall scope of the event, but at least one in-person production meeting should take place for any event that will have an impact on park operations and maintenance.

### Stewardship and Sustainability

As part of the pre-production process, event producers should be required to develop a formal plan to minimize the event's environmental footprint and increase social impact.

The Special Events Department should encourage producers to choose event sites/facilities that minimize environmental impacts and allow participation of people with all abilities. When appropriate, larger scale events should develop a waste diversion plan and strive towards "zero waste." Events

should also attempt to use alternative or renewable energy sources and offset the carbon footprint of event operations, while also implementing initiatives that conserve water and reduce the environmental impact of water runoff, wastewater and litter, particularly plastic litter.

### Internal Information Sharing

Although different entities, such as the Zoo, Golf Courses, and Division of Cultural Affairs publicize their own events, there is currently no unified marketing plan for all of the events that take place in Bergen County parks. The creation of an overall internal and sharable special events calendar is vital to ensuring all staff is up to date on events and programming throughout the system.

This calendar should be editable only by the Events Department, but viewable by the entire BCDP system staff. Event calendar entries should consist of not only top-line event information (date, time, event description & location), but also be updated throughout the event pre-production process to include all relevant event documents (site plans, operations timelines, vehicle lists, security plans). Access to the calendar should be given to other divisions or departments to add information that could impact event operations. For example, the Operations Division could enter information regarding scheduled maintenance to facilities that could impact availability for events. This information would be accessible by events staff and could be discussed with a potential event producer at the initial point of contact.

### Updated Fee Schedule

The current BCDP fee schedule is not consistent with current park system operations and industry standards. The fee schedule for events is based on the expected number of participants and does not place sufficient weight on the scope or type of event activities. This system can lead to event producers misstating potential attendance to keep permit fees low. The current system limits accurate forecasts of event operations and leads to the inability to accurately project internal event needs and requirements.

The fee schedule should be amended to be based on the designated area or venue within the park system in which the event is to take place. Secondly, it should be based on the type of event activity and on the expected event revenue. A potential permit fee system is depicted in Fig. 7, which is modeled on current industry structures, categories and definitions.

BCDP should divide venues into four categories: A-level, B-level, C-level & D-level. A-level venues would be the most event-attractive, well-used and operationally suitable for special events. Special Event permit activity types should be split into the following categories:

- Promotional/Commercial/Private: These events would include exclusive use of a venue for any purpose via ticket or events that promote or advertise a production, company, or corporation to the general public. Examples could include regional scale concerts or festivals, public sampling events, or product launches.

## Amended Fee Structure

Fees Based on:

1	Venue Level	2	Activity Type
	<ul style="list-style-type: none"> <li>• A - most attractive</li> <li>• B - very attractive</li> <li>• C &amp; D - attractive</li> </ul>		<ul style="list-style-type: none"> <li>• Commercial/Private</li> <li>• Athletic, Non-Charitable</li> <li>• Charitable</li> </ul>
			<ul style="list-style-type: none"> <li>• Community</li> <li>• Picnics/Parties</li> <li>• Camp/School</li> <li>• Film/Photo Shoot</li> </ul>
3	Expected Revenue		
	<ul style="list-style-type: none"> <li>• A - high</li> <li>• B - low</li> <li>• C - none</li> </ul>		

Figure 7. Current fee structure for BCDP event venues is not current with park system operations and industry standards. An updated fee structure would take into account the venue’s level of event attractiveness, event activity type and expected revenue (Courtesy of CUES).

- **Athletic Non-Charitable:** These recreational or sporting events are designed for public participation that are not associated with not-for-profit charitable fundraising.
- **Charitable:** These events are directly associated with not-for-profit fundraising. Examples might include walks, runs, tournaments, dinners, or other events that raise funds for charity.
- **General/Community:** These events include, but are not limited to, dance recitals, music, community group activities, artistic and cultural performances and other non-commercial programming open to the public (Fig. 8).
- **School/Camp Events:** These events would have reduced or no charge for use of park areas for groups of less than 200 people, but would still require reservations.

Expected level of revenue from an event could also be considered in determining an appropriate venue fee. Protection of the resources and integrity of the park system is a priority for every event. Permits for large events should minimally include a “clean up” fee to cover the cost of any post-event repairs or staff clean up required. Larger events should provide a funding mechanism to cover major repairs incurred due to an event. All events and activities, regardless of permit fee (or fee waiver), should be required to submit a permit application to the Events Department.

Other permit categories should include:

- **Commercial Film/Photo Permits**
- **Picnic, Party and Gatherings:** These events are not commercial or promotional in nature and where the space requested is not reserved for exclusive use. Gatherings that exceed 100 people could be categorized as a General/Community Event, unless there are additional elements that would classify the activity as Promotional or Commercial.

## PERSONNEL STRUCTURE

There are various options for a parks department organizational structure responsible for delivering Master Plan recommended services and amenities. However, there are a number of functional staff positions that need to be added under the direct control of the Director of Parks. The organizational structure in Figure 9 provides an example of how these functions could fit within the current Parks Department structure. Should a different type of parks organization emerge, these functional categories would still need to be filled.



Figure 8. Improving event pre-production collaboration with producers and updating the event fee schedule to take into account venue location, expected revenue and type of event could improve the sustainability of events in the parks (Courtesy of Eventage).

The Director of Parks interfaces indirectly with Countywide purchasing and legal functions, as well as the Board of Chosen Freeholders that approves annual budgets and bonding for capital improvements. The Division of Open Space has recently moved into the Parks Department, which is also the home for Historic and Cultural Affairs.

There is currently a staff of 143 Full-Time Equivalents (FTEs) responsible for park operations and maintenance, or 1.55 FTEs per 10,000 residents. This number is comparable to the FTEs in the Las Vegas Department of Parks & Recreation, one of the lowest FTE rankings in a 2017 Trust for Public Land (TPL) survey<sup>5</sup>. Morris County Park Commission FTEs are 3.2 per 10,000 residents. Bergen County FTEs dedicated to park operations and maintenance need to increase to 275 in order to equal 2.99 FTEs per 10,000 residents, which would still place the County at the low end of the TPL scale. We note that the number of permanent employees recorded

in the last year of the BCPC annual reports (1984) were 270, augmented by additional summer seasonal staff.

New positions (Fig. 9) needed to support public communication, stewardship and sustainability, and fund raising initiatives recommended in this Master Plan include: a Business Office, a Department of Marketing and Public Outreach, and a Division responsible for Environmental Stewardship and Educational initiatives. There needs to an individual(s) capable of providing digital support (website, constant contact, social media) to Parks and a financial analyst capable of functioning as a CFO supporting the Parks Director in strategic and financial planning initiatives. Establishing a modern structure for the parks department and providing the staffing needed to maintain the parks system is a critical element in achieving the objectives set forth in this Master Plan.

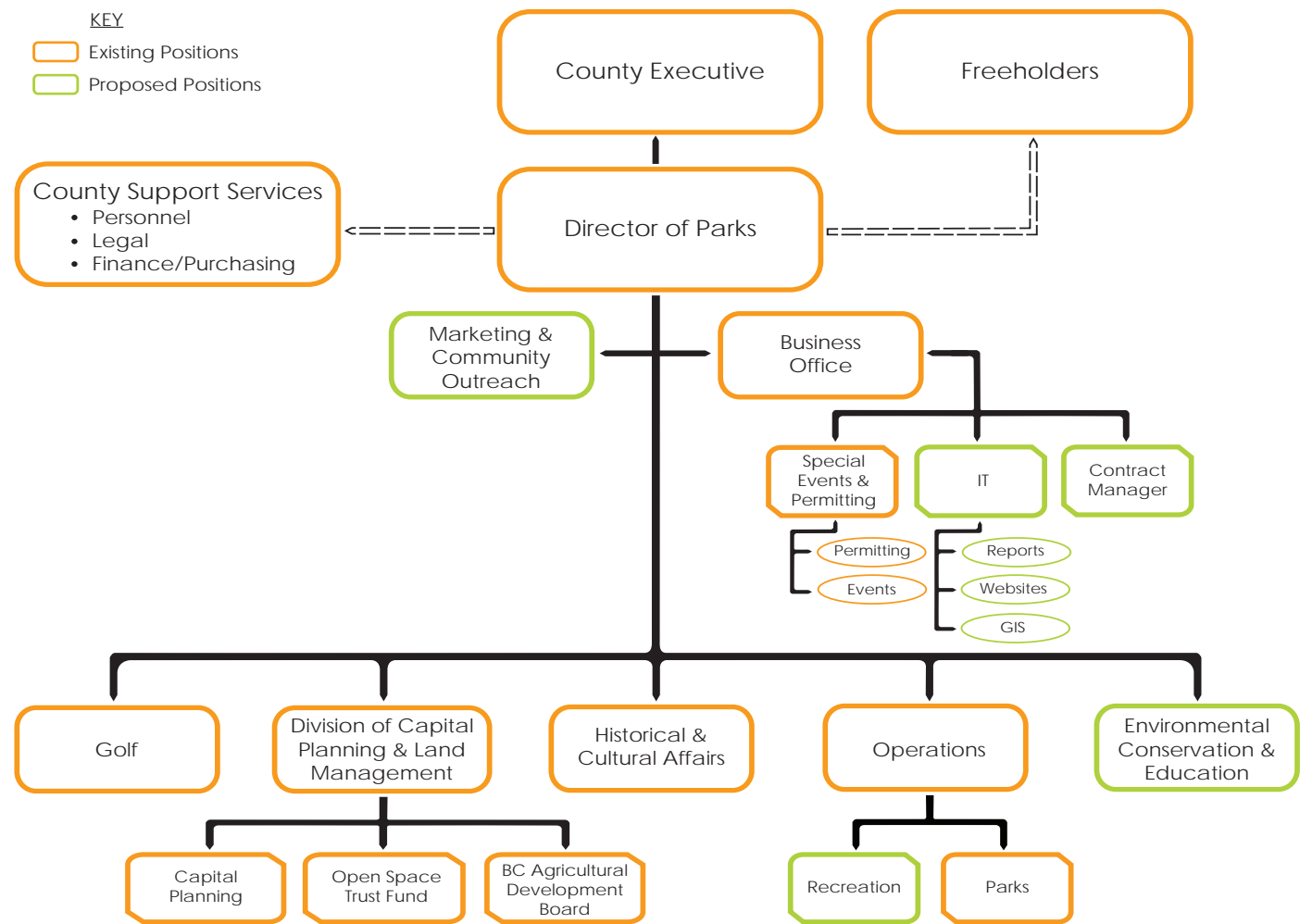


Figure 9. Example of possible reorganization of the Parks Department structure (Courtesy of CUES).

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# 6.8 BRANDING, MARKETING & COMMUNICATIONS

## BRAND STRATEGY RECOMMENDATIONS

During multiple public meetings it became clear that many of the residents who attended these meetings lacked knowledge about the number of parks owned by Bergen County or the multiple programs/amenities available in these parklands. Young families were especially vocal about wanting to know more about family and child-friendly County Park options. While familiar with parks in their own municipalities, residents who responded to the online survey had trouble actually discriminating municipal from County parks.

These findings suggest that Bergen County residents do not perceive the Bergen County parks as a valued system of diverse experiences, amenities, and programs. We believe the County needs to develop a Brand Strategy that communicates both the diversity of the County-owned parklands, as well as the positive value these parks provide to enhance resident quality of life.

Through online and stakeholder interviews, three marketing issues (Fig. 1) emerged about the Bergen County Parks:

- Awareness: the public needs to be able to easily identify which parks are Bergen County Parks
- Distinction: the public needs to know the variety of unique and distinct experiences that Bergen County Parks offer

- Benefits: the department needs to do a more effective job communicating the contribution parks make to Bergen County quality of life

To address these needs, brand strategy recommendations, including brand positioning, brand drivers, perspectives and experience traits are recommended in this Chapter.

### POSITIONING

Positioning is a single statement of whom the brand is for, the value the brand delivers, what sets the brand apart from the “competition”, and why the brand is important. After analyzing comments from multiple park users, we proposed the following Brand Positioning for the Bergen County Parks system:

#### ***Bergen County Parks Are For:***

Bergen County residents who feel the stressors of modern life;

#### ***Bergen County Parks Provide:***

An experience that leaves residents feeling more energized.

#### ***Because Of:***

Today’s constantly plugged in reality,

#### ***We Believe:***

A day spent in the park has never been more essential for healthy lives.

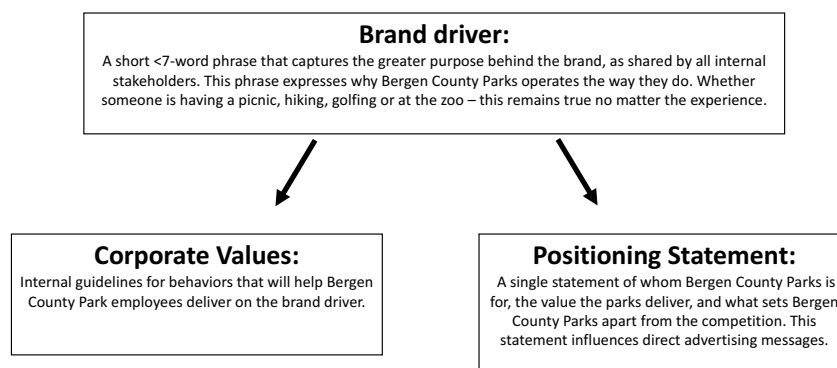


Figure 1. A strong brand driver captures the purpose behind the brand and expresses the rationale for the Bergen County Parks system (Courtesy of DNA).

## BRAND DRIVER

A Brand Driver is a short, less than seven word phrase that captures the purpose behind the brand. We recommend the following brand driver phrase for the Bergen County Parks Department:

“UNPLUG to RECHARGE”

Time spent outdoors offers one of the most reliable boosts to mind and body wellness. Yet today’s digital landscape has made it easier than ever to stay inside. We’ve become more connected to technology and less connected to ourselves and our communities. As a result, stress and anxiety levels have reached an all-time high.

The Bergen County Parks Department knows that happy and healthy residents are the foundation of a strong community. That is why we exist – to provide opportunities for residents to reconnect with themselves, each other, and the larger community. “Unplug to recharge” drives us to create an experience that leaves residents feeling more energized and engaged. Spaces are designed to give residents permission to escape daily stresses. Activities are available to energize residents as they breathe in fresh air.

We believe every resident deserves a place to easily unplug to recharge (Fig. 2). That is why we make reaping the benefits of the outdoors simple. No membership required. No app needed. Just simple solutions that encourage residents to get outside and invest in themselves.

## BRAND PERSPECTIVES

The Brand Point of Views (POVs) are the top three items that represent Bergen County Parks perspective and are relevant to our residents:

### *Humans recharge in nature*

While technology depends on outlets, people need fresh air to feel energized.

### *Strong communities don’t exist when residents stay indoors*

When residents venture outside of their home or office, they are more likely to interact with those around them.

### *There is no such thing as outdoor overload*

In a culture that constantly tells us to cut back on vices, going to a park is a guaranteed guilt-free decision.

## THE ROLE OF BERGEN COUNTY PARKS IN THE COMMUNITY

### Bergen County Parks enrich my quality of life

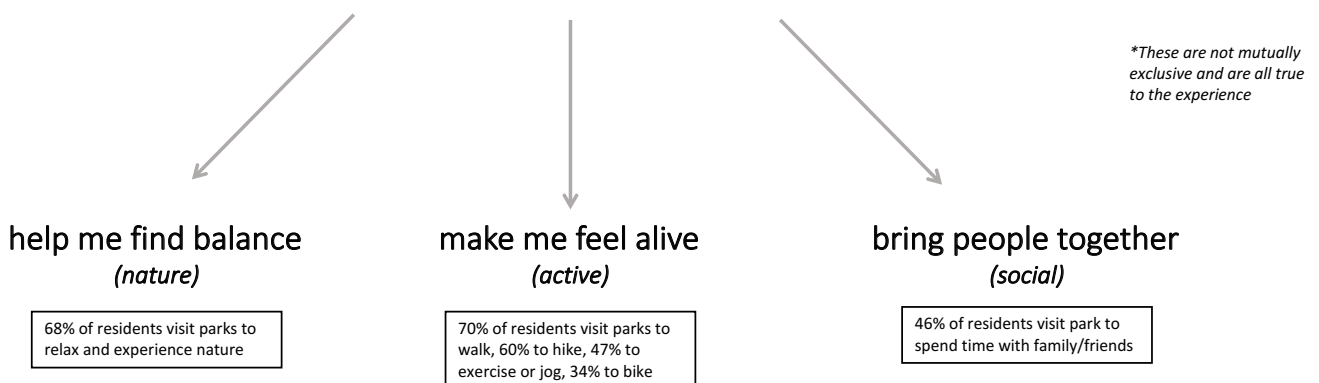


Figure 2. The role of Bergen County Parks in the community (Courtesy of DNA).



Figure 3. Recommended Bergen County Parks experience traits: energizing, inviting, uncomplicated (Courtesy of DNA).

## EXPERIENCE TRAITS

Experience Traits are high-level guides that consistently express the brand across multiple categories, to different markets, and in all forms of marketing communication. In other words, these factors help us create, and help our audiences recognize, the brand no matter where it's encountered. Suggested experience traits (Fig. 3) for Bergen County Parks include:

- Energizing
- Inviting
- Uncomplicated

## GETTING FROM TODAY TO THE FUTURE

The steps required to get from where we are today to the recommended future, includes creating a log that reflects the Bergen County brand positioning. This logo identity must work for the integrated park system, as well as for each park location and wayfinding signage.

## CURRENT BERGEN COUNTY PARKS DEPARTMENT LOGO

At present, the Bergen County Parks Department logo, along with logos of other County entities, are based on the Bergen County seal, as illustrated in Figure 4.



Figure 4. The current Bergen County logo system is based on the County seal (Courtesy of Bergen County).

## BRAND IDENTITY & LOGO

A strong, easily identifiable logo is a key element in visually communicating the Bergen County Parks Department brand – what the Department represents and offers to the community.

## WHAT MAKES A GREAT LOGO?

Six key elements of a great logo include:

- Simple
- Relevant
- Versatile
- Memorable
- Distinct
- Timeless

## NEW LOGO OPTIONS

Although the current logo supports the overall Bergen County brand, this logo does not speak to the reasons residents visit parks. We believe that Bergen County Parks need an easily identifiable logo that represents the parks Brand – similar to the green maple leaf sign placed on all New York City parks. With the recommended Brand Driver and Experience Traits in mind, five initial logo options were developed for the Bergen County Parks Department to consider (Fig. 5).

Of all of the logo options developed, we believe the suggestion presented in Figures 6 and 7 best captures the Master Plan Vision **From Marshes to Mountains**. However, the County should engage the services of a brand consultant to determine the final logo.

Brand Driver: *Unplug to Recharge*  
Experience Traits: *Energizing, Inviting, Uncomplicated*



Figure 5. Detailed descriptions of these five initial logo options are found in Appendix 9.10 (Courtesy of DNA).



Figure 6. Additional logo option that supports the Master Plan Vision **From Marshes to Mountains** (Courtesy of CUES).



Figure 7. Example of additional option logo on Riverside County Park sign (Courtesy of CUES).

## MARKETING PLAN

Identify annual marketing objectives and develop a marketing plan to determine strategies and tactics for accomplishing those objectives. Consider a seasonal approach to reach audiences in relevant and targeted ways based on what parks offer during different times of the year.

## PUBLIC AWARENESS CAMPAIGN

Implement the new identity system across the park system, emphasizing signage and website modernization. Create a public campaign that communicates the Bergen County Parks brand position and driver. Consider advertising, public relations, social media and experiential events.

## MARKETING + COMMUNITY OUTREACH DEPARTMENT

The Bergen County Parks Department needs the ability to communicate with County residents. The Marketing + Community Outreach group could be the liaison between the County staff, the general public, and park supporters (Figs. 8-9). This department would be responsible for:

- Working with non-profit groups and municipalities to develop local-scale programming and event opportunities
- Coordinating with the Special Events and Permitting Department to conceptualize, plan, and execute festivals and events
- Dealing with for-profit companies to obtain sponsorships for certain events
- Managing, updating, and disseminating the Events Calendar and maintaining digital communication with County residents

This group would also be responsible for collecting demographic data describing park visitors. How many people use each park? What are their ages, income level, gender, and areas of interest? The greater the level of data specificity, the greater the opportunity to meet the needs of park users and to coordinate potential programs, events, and amenities with a wide range of partners.



Figures 8 & 9. A Marketing and Community Outreach Department could collect demographic data about park visitors and work with a range of local organizations to develop programs, event, and amenities that better meet the needs of County residents (*Courtesy of Eventage*).

## DIGITAL INFRASTRUCTURE

A common frustration voiced at the public meetings was the lack of public knowledge of the diversity, amenities, and programs provided by the Bergen County Park system, especially among younger families. We believe this is partially due to the lack of a user-friendly web interface and a lack of a digital communication strategy. The park website needs to be redeveloped to support the needs of both park and golf course visitors, to highlight weekly programs and events (Fig. 10), and to allow ease of filling out permits, applications, memberships, submitting park proposals, and Open Space Trust grant applications. In short, park-related communications need to be digitized. In addition, a Constant Contact-type email system is needed to notify residents about special events and programs. An interactive app that allows park visitors to easily find parks that offer their desired amenities and experiences would also help residents plan their visits and explore new opportunities within the parks system.

The proposed changes in business procedures and processing of events and concessions detailed in Chapter 6.7 must also be supported by a digital infrastructure that allows the Parks Department to set financial goals, access financial results easily, and analyze these results on a timely basis in order to make decisions that are in the best financial interests of the park system. Currently the Bergen County Parks Department must reach out to other departments (purchasing, finance) to obtain financial data. This is cumbersome at best, and separates sound financial analysis and decision making from the Park Department's operational structure.

## USER-FRIENDLY GOLF WEBSITE

Chapter 6.3 provides detailed recommendations regarding necessary updates to make the Bergen County Golf website more functional, user-friendly, and an enticing “public face” of Bergen County Golf.



Figure 10. Improving the digital infrastructure would allow more residents to discover the rich diversity of park experiences and upcoming events the parks system provides (Courtesy of Eventage).



# CHAPTER 7:

## Visionary Considerations

Developing visionary considerations follows the spirit of the founders of the Bergen County Park system: Not everything will be achieved tomorrow; nevertheless, we have to start today.

# 7 VISIONARY CONSIDERATIONS

## POTENTIAL PARK EXPANSION OPPORTUNITIES

### THE ROLE OF BERGEN COUNTY PARKS

The Bergen County Parks Department (BCPD) has an integral role to play in leading initiatives to increase public Open Space (Fig. 1), generally defined as undeveloped land or water area, although specific definitions vary by jurisdiction. This responsibility can be met in a number of ways: as an acquirer of properties; an advisor or coordinator assisting municipal planning initiatives; a funding support for municipal property acquisition through the Open Space Trust Fund; or requesting funds from the State Green Acres program. The County needs to identify and support acquisition of parcels in order to create parks that can potentially cross municipal boundaries where appropriate and/or when land becomes available.

A model for this approach is the highly successful Saddle River Park. Parcels adjacent to other linear connectors (Passaic and Hackensack Rivers) should be explored to determine their potential to link parcels along these rivers that would create new linear parks. New parkland acquisitions associated with the rivers would address the currently significant parkland deficits in the southern and western sections of the County.

Other opportunities to include public parks in brownfield redevelopment projects, particularly in the very underserved southern municipalities, should also be explored. While smaller, local parcels might be more appropriately managed as municipal parklands, the County could play a helpful role as an advisor or as a potential source of funding for property acquisition.

Northern municipalities near the NY border are also currently experiencing a parkland deficit. An in-depth examination of parkland acquisition opportunities in this region is needed. Future redevelopment of large corporate campuses could provide additional opportunities to create connected linear parklands. While municipalities must make land use decisions on individual projects at the local level, the County can assess the possibility of linear parks that link parcels carved out of larger redevelopment projects. The County could fulfill this role as a “planning consultant” to the municipalities, a property acquirer, a potential funding source, or some combination of these important roles. Visions for expansion of Anchor Parks, Linear Park, and open space Connectors are described in this chapter.



Figure 1. Bergen County should play a pivotal role in leading initiatives to increase public space for residents in the region (*Courtesy of CUES*).

## ANCHOR PARKS EXANSION VISION

Anchor Parks offer an opportunity to creatively expand the County Park system. These opportunities are supported by linking or coordinating with adjacent properties to provide parklands and programming that serves a regional audience.

### RAMAPO VALLEY ANCHOR PARK

Several County Park properties are situated in the Ramapo Mountains. The visionary Ramapo Mountain Anchor Park would include all these existing County parklands: Ramapo Valley Reservation, Campgaw, Camps Glen Gray, Tamarack, and Todd, the Saddle Ridge Riding Center, and Darlington County Park. These venues would be branded as one regional park destination that offers mountain sports recreation for the region. The various properties should be connected via a multiuse Ramapo Mountain Parks Trail and marketed as a single entity.

In addition to consolidating existing parks under one brand, this Anchor Park requires strong collaborations with the State of New Jersey, State of New York, and Passaic park systems. The ultimate goal is to create a unified nature experience for visitors to all adjacent County and State properties in the Ramapo Mountains. In achieving this connected Anchor Park, the different landowner regulations about recreational use raise challenges regarding coordination of park rules.

### POTENTIAL PALISADES ANCHOR PARK

The Palisades Anchor Park is a visionary recommendation that would link multiple property owners in forming an Anchor Park (Fig.2). Although the park does not currently exist, adjacent parkland properties form the structure of such

a future park. Planning for these parklands takes on added urgency with the opening of the new Mario Cuomo (Tappan Zee) Bridge, and proposed upgrades to existing walking and cycling paths on the George Washington Bridge. Port Authority improvements of these two important New Jersey-New York connectors will expand opportunities for cycling and pedestrian travel through the iconic Palisades region.

The County-owned Alpine Reserves and Norwood East Hill have tremendous potential for connections to nearby open spaces to create an extensive greenway in the northeastern portion of the County (for a detailed description of the Palisades Nature Preserves, see Section I, Chapter 3.4.2-4). Situated along the Palisades formation, a dominant Bergen County icon mentioned by large numbers of survey respondents, the Alpine Reserves and Norwood East Hill provide unique passive recreational opportunities. The opportunity exists to connect these properties with adjacent, non-County owned Open Space, creating an Anchor Park with enhanced access and passive nature recreational opportunities along the breathtaking Palisades. This would serve as a case study for using an iconographic element to develop cross-collaboration between landowners for coordinated parkland management.

In designing this connected Anchor Park, the different landowner rules about recreational use raise challenges regarding how to ensure appropriate protection and enjoyment of natural resources. The County should initiate discussions with representatives of landowners and local trail stakeholders in an effort to coordinate Federal, State, County, municipal, and non-profit lands. The Borough of Rockleigh,



Figure 2. Hiking in Norwood East Hill. Differing landowner rules across adjacent properties present a challenge to visitors (Courtesy of CUES).

Palisades Interstate Park Commission, and the Boy Scouts of America should be included to represent landowners. The NY-NJ Trail Conference, Jersey Off Road Bike Association (JORBA), and Palisades Mountain Biking (MTB), and Port Authority of NY-NJ represent stakeholders. This joint effort would ensure a shared objective: to develop a cohesive approach to land management and sustainable nature-based public recreation.

This group should also consider the possibility of a collaboration with the Trail Conference, Palisades MTB, and JORBA to develop a multi-use trail pilot project within the Alpine Reserves that would allow the design and building of sustainable hiking and non-motorized biking trails. This pilot project would allow the County to assess the current ban on mountain biking (prohibited on County-owned property, but legal on adjacent lands). Representatives of the three trail clubs have expressed to CUES their willingness to work together with the landowners to develop such a pilot project in these Palisade properties (Fig. 3).

Trail riding is currently not allowed in Bergen County parks. However, this is a popular and growing recreational activity. In the Alpine Reserves there are visitors riding trail bikes, in part because trail riding is allowed in adjacent Open Space properties (Rockleigh Woods Sanctuary). When in the woods, there is no way to know where one property ends and the next begins. In some areas, trail riders have constructed their own trails. Bergen County representatives of trail riding organizations report that there is substantial public interest in trail riding as an alternative sport for youth (especially middle and high school age) and as a healthy outdoor recreational family activity. There are currently 170 children in the NJ Interscholastic Cycling League on two active teams. Some coaches suggested that Alpine South would be an excellent pilot project location for a sustainably designed beginner's trail, particularly suitable for children. (See Appendix 9.7 for more details regarding potential strategies for sustainable, legalized trail biking in select Bergen County parks.)

Trail riding advocates point out that they have a large volunteer force, professional trail designers, insurance coverage, and ample financial backing to help the County construct and maintain sustainable trails. Therefore, the trails would require little resource inputs from land managers. They also point to successful case studies (Blauvelt State Forest, NY) where encouraging trail riding actually decreased the amount



Figure 3. Representatives from NGO groups are interested in collaborating with land owners to develop a sustainable hiking and non-motorized mountain biking trails pilot project along the Palisades (Courtesy of Palisades MTB).

of illegal ATV use damaging the woods. Furthermore, given the small size and character of the Alpine tracts, they do not anticipate the area becoming a cycling “destination” overrun with additional cyclists from NYC if sustainable trails are added. The majority of Manhattan cyclists would most likely spend the travel time going to a larger, more desirable cycling location. Thus, testing trail riding legally at Alpine would probably not significantly increase the number of cyclists using this parkland — it would just legitimize the current illegal shadow users and make current activities more sustainable.

### Recommendations

Activities that will increase, enhance, and protect the ecological health of the Alpine properties include:

- Encouraging habitat-friendly paths for biking and hiking. Proper placement and trail construction techniques are important factors.
- Developing an Adaptive Forestry Management Plan. This would require conducting a survey of existing species and ensuring that management efforts focus on enhancing forest stands, health, and native species

diversity, removing invasive plants, and adaptations for a changing climate. Forest Stewardship Plans have been completed for Bergen County private properties adjacent to the Palisades properties (Flat Rock Brook, Closter Nature Center).

There are more than 400 acres of forest that could be a nature-based attraction connecting to the viewshed of the Palisades. During the winter, cross-country skiing could be offered on selected trails. However, this option would require a transportation analysis related to traffic and parking options that are currently extremely limited.

### POTENTIAL MEADOWLANDS ANCHOR PARK

This conceptual Bergen County Anchor Park is visionary in nature and does not currently exist, although adjacent parkland properties with multiple owners form the structure of a future park. Located in the southern portion of Bergen County, which has been historically underserved in terms of parkland acreage, the conceptual Meadowlands Anchor Park would draw on its estuarine location to provide a water-boating and nature-based marshland recreational experience found nowhere else in the County (Figs. 4-5). Integrating the Meadowlands area into the rest of the County Parks system completes the open space connections from the marshes to the mountains.

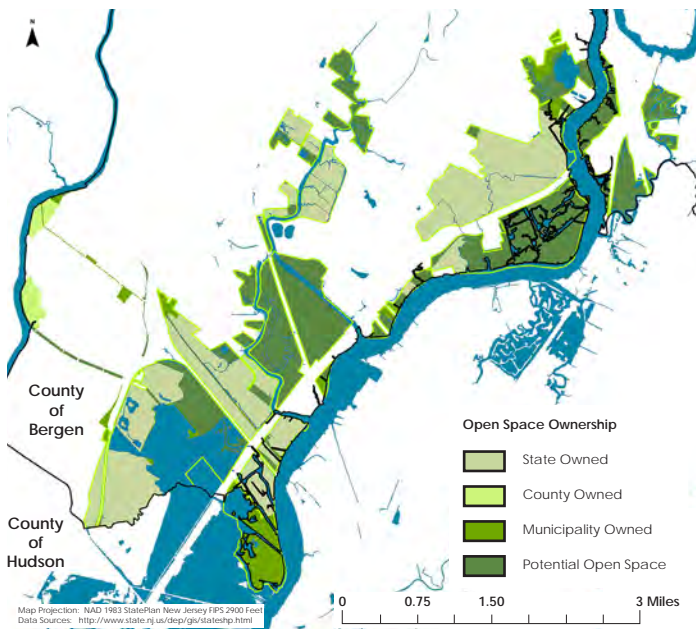


Figure 4. A Meadowlands Anchor Park could help improve public access to much-needed open space in Southern Bergen County, but would require cooperation among open space landowner to develop a cohesive identity and management approach (Courtesy of CUES).

Developing a cohesive identity and coordinating with the various landowners involved are important factors. The important landowner in the Meadowlands is the New Jersey Sports & Exposition Authority (NJSEA). This entity replaced the New Jersey Meadowlands Commission in 2015. Former Commission staff now working at NJSEA are valuable resources because their previous experience included responsibility for zoning in the Meadowlands District for forty-five years. This professional expertise can provide insight with respect to ecologic connectivity, site



Figures 5A-C. The conceptual Meadowlands Anchor Park would draw on its estuarine location to provide a boating and nature-based marshland recreational experience found nowhere else in the County. (Courtesy of CUES).

histories and potential availability, and local community leaders. Bergen County should continue conversations with NJSEA to determine how best to integrate the expertise of Bergen County Parks Department with the land ownership and local knowledge of NJSEA. Combining these skill sets can ultimately support increased parkland acreage, connectivity, and programming in southern Bergen County parklands, and lay the foundation for a regional Anchor Park in the southern portion of the County.

A conceptual master plan for a Meadowlands Anchor Park is needed to identify potential acquisitions, develop trail connections between properties, evaluate events and concessions appropriate for Meadowlands venues, and protect or enhance natural resources. Large scale (estimated 8,000 attendees) community festivals (Meadowfest 2008) have been held on NJSEA property, and the potential exists to expand these successful events. The future opening of the American Dream entertainment complex may also provide a significant opportunity to enhance eco-tourism in the Meadowlands.

### LINEAR PARKS EXANSION VISION

Rivers provide unique opportunities for recreation and connection opportunities. Based on the success of Saddle River County Park, the potential for expanding the County parklands with additional Linear Parks was explored.

### POTENTIAL HACKENSACK RIVER LINEAR PARK

The concept of a Linear Park along the Hackensack River is visionary in nature—although there are three Bergen County-owned properties adjacent to the Hackensack River, a

continuous greenway like Saddle River County Park does not yet exist. Drawing on the successful example of Saddle River County Park, we recommend the County explore the creation of a new linear park along the Hackensack River (Figs. 6-7). The Hackensack River Linear Park would combine existing parklands, including Hackensack River Park, the Hackensack River Pathway, Historic New Bridge Landing, and the Hackensack Waterworks on Van Buskirk Island with future acquisitions and new partnerships. The Hackensack Waterworks, a site of historic significance listed on the National Register of Historic Places, has tremendous potential for adaptive re-use, and would serve as the vibrant iconic core element of the Hackensack River Linear Park.

Like the Saddle River Park, the Hackensack River Linear Park should have connections that allow users to access the pathway from both sides of the river. There are moderately dense residential neighborhoods located in Teaneck Township. Although these residents are only 0.5 miles from the existing Hackensack River County Park, easy and safe access to the park across the river is lacking. Another potential connection is Teaneck Township's Andres Park and the Teaneck Greenway. Both are located immediately across the river on the eastern shore along River Road. The co-location of these two park facilities in such close proximity offers a potential future opportunity to reorient the entrance to Hackensack River County Park through Andreas Park via a footbridge across the river. We recommend that a bridge be constructed across the river that would connect the Teaneck Greenway and allow users to enter the existing Hackensack River County Park from the eastern side, potentially



Figure 6. The Hackensack River has potential for a linear park modeled after the already successful Saddle River County Park (Courtesy of CUES).



Residential



Utility



Rail line



Business

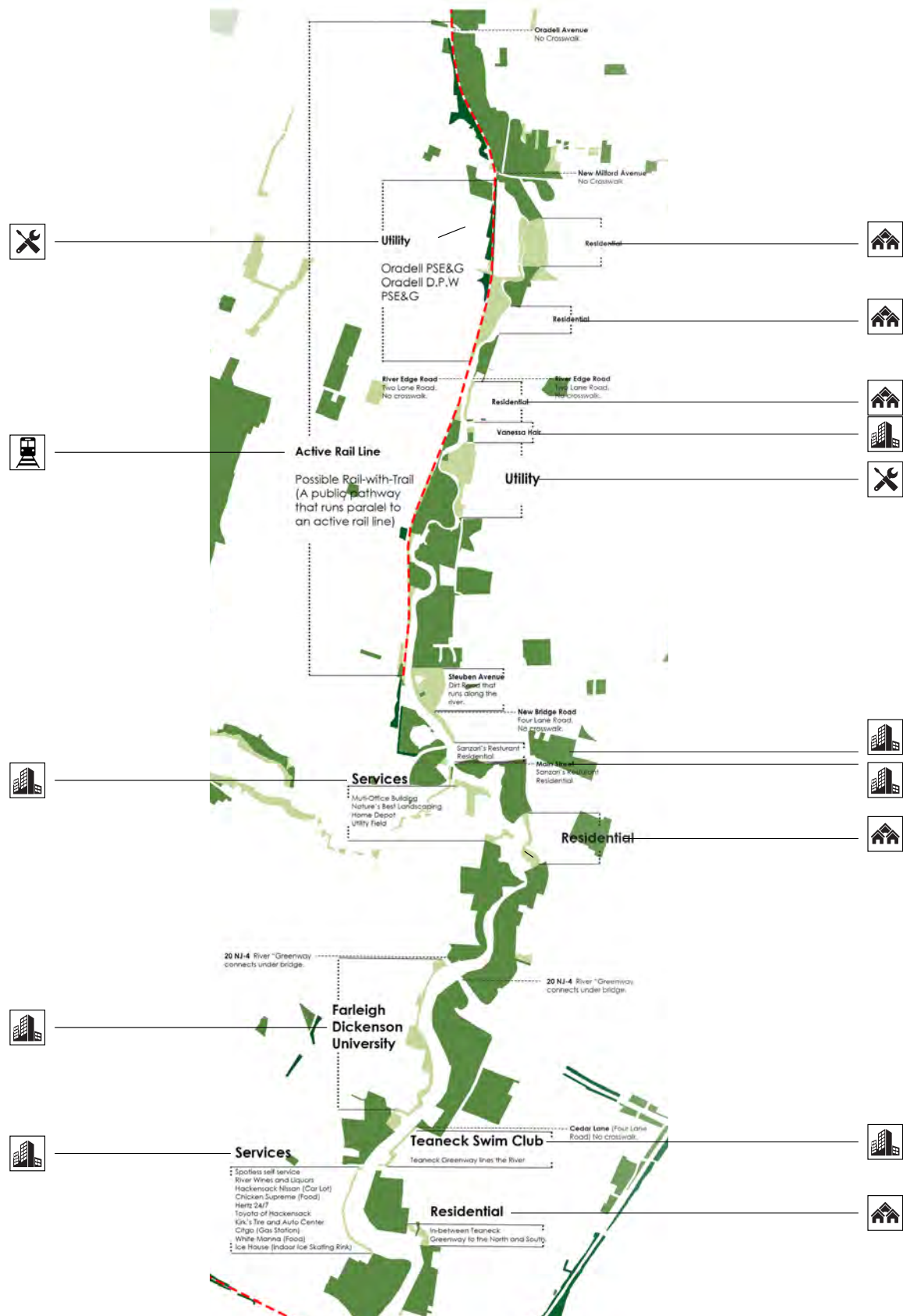


Figure 7. Exploration: Hackensack River Park (Courtesy of CUES).

becoming a gateway to the Linear Park and expanding the use of existing venues to a greater number of park users.

The Hackensack River runs from the Bergen County-NY border to the Meadowlands marshes. This exploration examined the opportunities for connections along the river below the reservoir system from Oradell Avenue, Oradell in the north to West Main Street, Hackensack in the south.

The Hackensack River below the Oradell Dam is considered a Category 2 river under the New Jersey Department of Environmental Protection's Riparian zone Model Ordinance. Category 2 rivers are required to have a 150-foot buffer on each side of the river. The buffer does not allow development, but does allow passive activities such as walking.

Along the Hackensack River there are parcels of land owned by municipalities, utilities, businesses, and residents (Fig. 8). If a greenway is to be realized, the County must first determine the most critical parcels required for connections and the possibility of converting these parcels to a pathway.

Railroads may provide an opportunity to improve connectivity, especially in locations where riverfront connection gaps cannot be overcome. The western side of the Hackensack River runs parallel to the Passaic Valley Line railroad, owned and operated

by New Jersey Transit. One type of joint-use that has been applied to railroads is Rail-with-Trail. In these situations, a trail is placed parallel to the rail, utilizing the rail track's buffer for passive foot and bicycle transportation. The average distance between trail and tracks is twenty five feet, with the average width of the trail being ten feet (Rails to Trails Conservancy).

Innovative solutions to connect a greenway include the addition of trees on the side of roads, painted and more elaborate crosswalks, and way-finding systems. Due to the variety of types of spaces that are adjacent to the Hackensack River, these solutions may compliment acquisition of land needed to connect the river pathway.

A Conceptual Master Plan for the Hackensack Linear Park should include an Adaptive Habitat and Stormwater Management Plan (to be adopted with municipalities) that addresses: invasive plant removal; reducing direct discharges into the river; discouraging further development along the river; and decreasing the amount of impermeable surfaces in the floodplain.



Figure 8. Collaboration with other landowners along the river would be essential in realizing a Hackensack River Linear Park (Courtesy of CUES).



Figure 9. The Passaic River (above) and Hudson River waterfronts provide opportunities for more water-based recreation (Courtesy of CUES).

### POTENTIAL PASSAIC RIVER LINEAR PARK

The southern portion of Bergen County bounded by the Passaic River remains the most densely populated section of the County and the most underserved in terms of parkland. An exploratory approach, similar to the analysis of Hackensack River linear connectors, should be employed to evaluate a Linear Park concept appropriate for the Passaic River (Fig. 9). Identifying connection opportunities and appropriate methods to construct a linear pathway along the Passaic River should be a County priority. A conceptual Master Plan for the Passaic River County Park requires input from the County, Passaic River municipalities, local stakeholders, and outside experts.

### CONNECTIVITY EXPANSION VISION

The public consistently requested the addition of connectors to allow residents parkland access via walking or cycling. To meet this need, multiple connection opportunities need to be explored. Connectors may include sidewalks, roadways, rail lines, rights of way, easements, or waterways (Fig. 10). Due to the diverse nature of potential connections, coordination with municipalities and NGOs will be needed. Examples of some connector opportunities are illustrated below.

### POTENTIAL HUDSON RIVER CONNECTOR

A Bergen County Hudson River Waterfront Walkway plan was developed in 2010. The plan envisions a direct connection between the Palisades Interstate Park, Hudson

County's Hudson River Waterfront Walkway, the George Washington Bridge, and New York City's Westside Greenway. The Waterfront Walkway provides a transportation alternative for pedestrian and bicycle travel along the Hudson River eastern border of Bergen County (see Appendices 9.3 and 9.5). The plan is now eight years old. Since completion of the plan, new development has occurred along the Hudson River. The plan should be reevaluated, updated, and actionable steps taken that support completion of this linear connector.

### POTENTIAL RAIL CONNECTORS

The Northern Valley Greenway is a grassroots effort to establish a multi-use pathway on what is currently a little used freight railroad line. This rail line runs from Tenafly north through six municipalities to the New York State border. This project is conceptual - no planning has yet been completed, but this presents an opportunity for a potential future linear connector. Another grassroots effort in the Meadowlands involves representatives of Rutherford and East Rutherford, who are in talks with Norfolk Southern Corp. to transform 1.4 miles of a railroad property into a nature trail. Discussions to create this Rails-to-Trails project have gone on for years, and at the time of this writing, the parties were attempting to work out an acquisition price.

The County should evaluate these and other available opportunities to incorporate rail lines, easements, and sidewalks into the future parkland connectors.

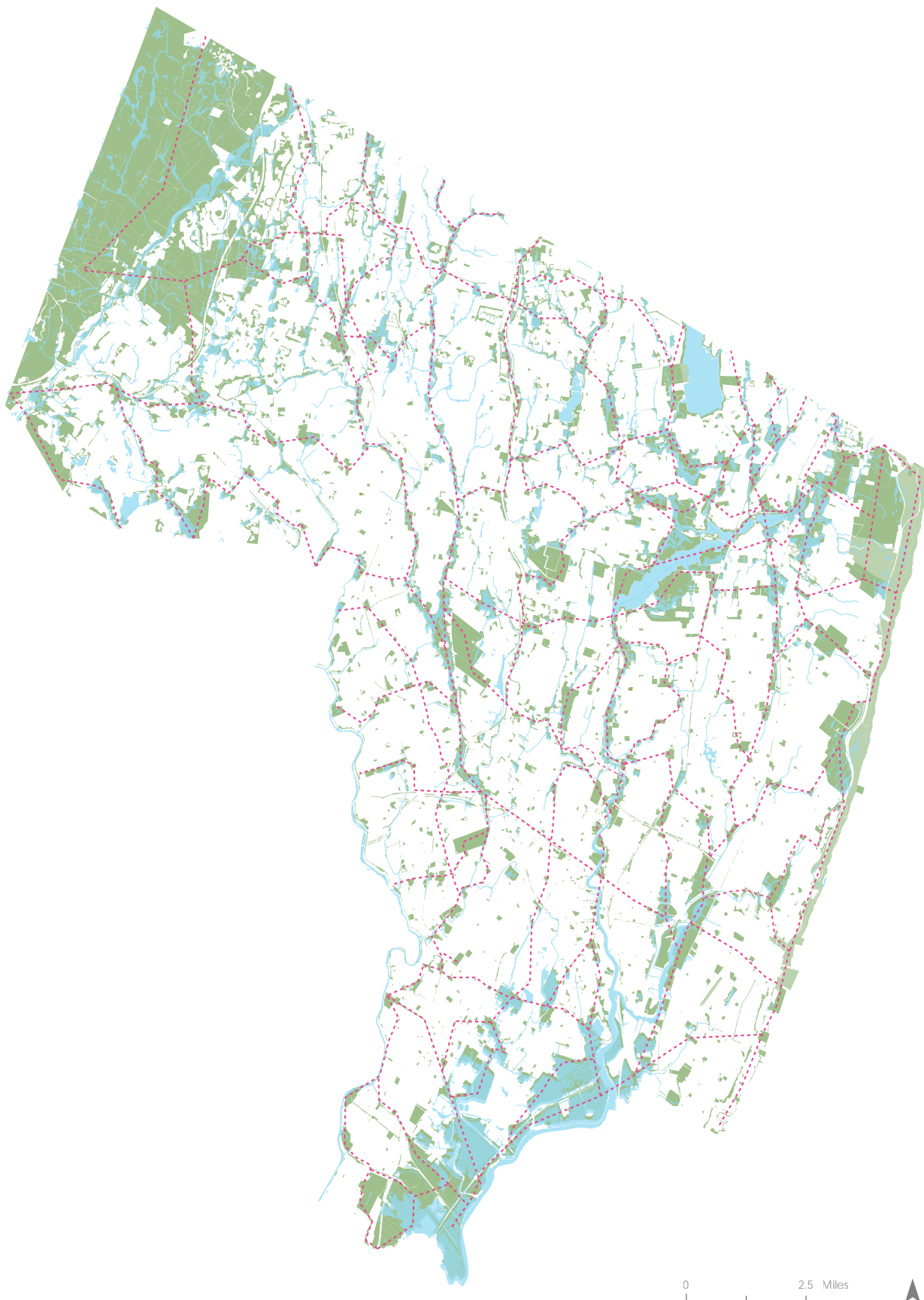


Figure 10. Conceptual map illustrating a connective network approach to facilitating multi-modal access between currently fragmented open space. Opportunities to enhance connectivity (improving sidewalk and bike networks, adaptive re-use of transportation corridors, easements, etc.) should be explored (Courtesy of CUES).

## POTENTIAL IMPROVEMENTS TO MAKE PARKS MORE INCLUSIVE

Currently the BCPD is following ADA standards that ensure access for all residents. However, these standards do not provide an equally rich experiences for all groups. The Parks Department is committed to serving all residents and providing inclusive facilities for children, adults and the elderly with special needs such as limited mobility or visual and hearing impairments (Fig. 11).

The sixteen existing playgrounds in County Parks currently do not address the needs of children with special needs or limited mobility - there is only one inclusive Bergen County park playground in Fair Lawn. Further explorations will be needed to identify playgrounds that are suitable for incorporating Universal Design principles and adding amenities that will cater to the needs of all, regardless of any special needs. The goal is to provide spaces where all residents can play together and enjoy appropriate physical and mental stimulation. All park visitors need spaces that fulfill their need to recreate without any physical obstacles.

Improvements for the elderly with limited mobility include safe and barrier free access, an appropriate number of designated parking spaces, benches along pathways, and short walking distances with appropriate resting areas. Offerings that provide stimulation for the senses, such as gardens that feature plants with scent, tactile sensation, and color provide enjoyment for all residents, but especially for those with special needs.



Figure 11. Inclusive playground design (Courtesy of North Carolina State Recreation Resources Service).

## **COLLABORATIVE PARTNERSHIPS**

Managing 9,335 acres of public land in one of the most densely populated and highly taxed Counties in the U.S. is challenging and complex, and public funding for parks has limitations. Therefore, the ability to leverage resources, attract volunteers, supporters, and collaborators is important for the future sustainability of the Bergen County Park system.

A defining characteristic of the original Bergen County Parks Commission was the importance of public outreach and the amount of support and cooperation given by elected leaders, civic groups, and private individuals. These collaborations facilitated acquisition of parkland properties, programming within the parks, and support for park infrastructure development.

The Public Outreach aspect of the parks Master Planning process has tapped into a tremendous reservoir of public support for Bergen County Parks. The public meetings, project website, online survey, and email communications have resulted in the participation of over 3,000 individuals and organized groups who care deeply about the County's park system. These groups and individuals are currently an under-utilized resource that could become an integral part of the park system of the future.

## **PUBLIC-PUBLIC PARTNERSHIPS**

Three of the proposed regional Anchor Parks (Ramapo, Palisades, and Meadowlands) involve collaborations between Bergen County, other public, and private landowners in order to provide a consistent (and seamless) park experience for visitors. Smaller local County parks are often adjacent to, or in close proximity to, municipally-owned parklands. Many municipalities apply to the County for Open Space Trust funding to support their parks and to acquire new open space. When out in the woods, traveling on a water connector, or biking on a pathway, park visitors do not know (or necessarily care) who the various landowners might be.

There are currently conflicting land use policies and rules among the various public landowners in Bergen County. We recommend the County explore options to increase collaboration among property owners in order to coordinate public planning and policies wherever possible. These collaborations would enhance the visitor experience and align conflicting rules.

Another avenue of Public-Public partnerships is the opportunity for the County to establish close planning relationships with municipalities in locations where lands may become available for future parkland acquisition. This approach could be particularly advantageous in the central northern portion of the County, where large corporate campuses are in the process of converting to new uses and potentially high density housing. This area is already underserved in parkland acreage and increasing the future population density will exacerbate this problem. While redevelopment land use decisions are made at the local level, the County could play an important role envisioning a future linear park created from portions of various redeveloped parcels that crosses municipal boundaries. The County could act as a "planning consultant" to municipalities, a potential funding source through the Open Space Trust program, or a property owner within a multiple landholder linked parkland system.

Public partnerships might also support park infrastructure needs without requiring the building of additional facilities. One suggestion from the public outreach was to collaborate with Bergen Community College to determine if access to the college's indoor sports venues might support County or regional athletic tournaments/events. Opportunities to partner with other County departments, such as the Health Department, on programming and events should be explored.

## **PUBLIC-PRIVATE PARTNERSHIPS**

Athletic, artistic, educational, environmental, historic, and social organizations have provided input into the Master Planning process (Fig. 12). There should be an ongoing and institutionalized Bergen County program to engage these various groups in order to develop new programming, increase volunteer activities within the parks, and encourage public use of, and support for, the Bergen County park system. Opportunities to partner with other organizations on mutually beneficial initiatives, such as the Meadowlands Chamber of Commerce, should also be explored.

The County currently has ad hoc collaborations with non-profit groups, such as with the Bergen County Historical Society at New Bridge Landing, the Teaneck Creek Conservancy and Bergen County Audubon at Area I of Overpeck Park, and the Friends of the Bergen County Zoo in Van Saun Park. These collaborations provide amenities and programming that enhances the park experience.

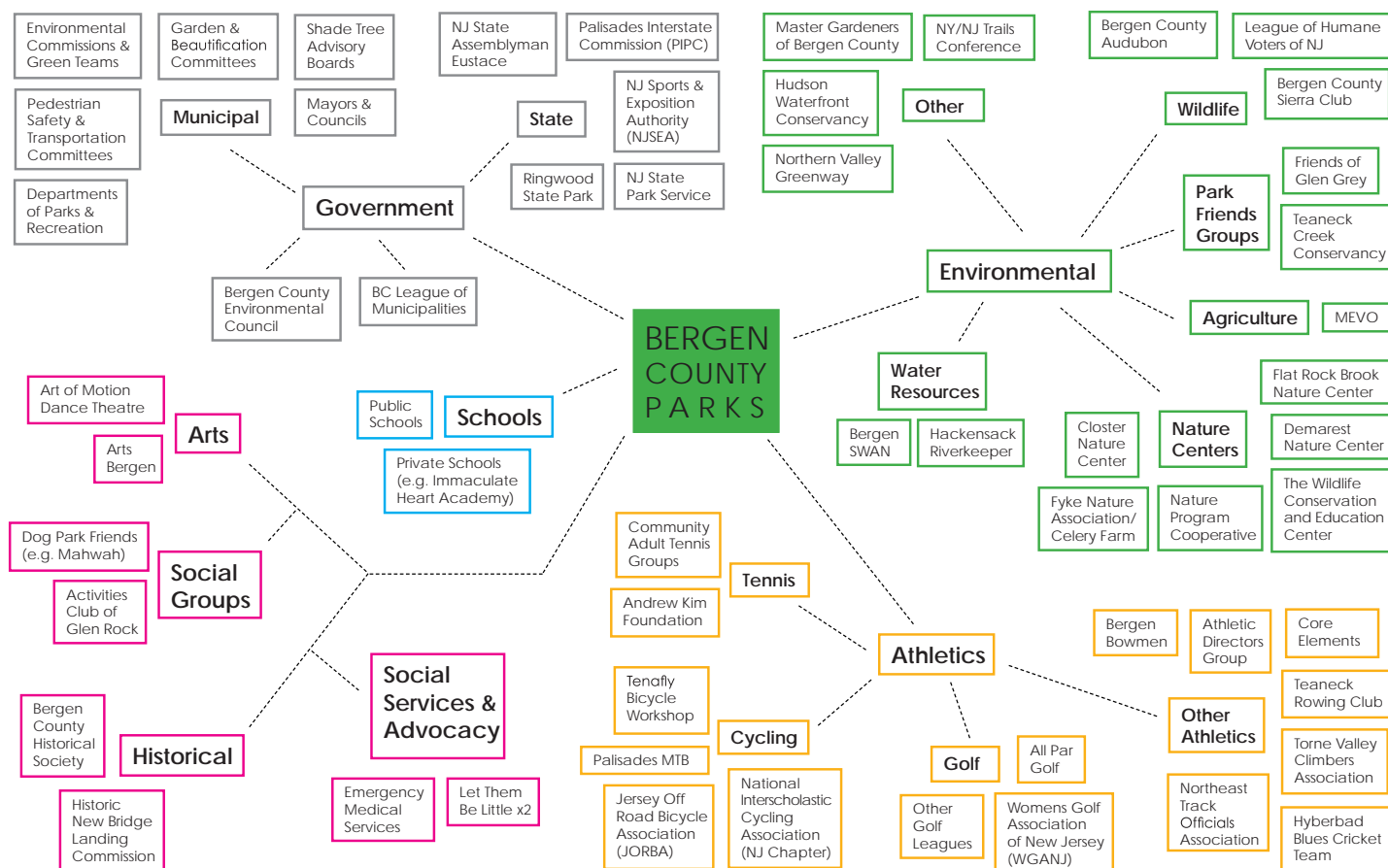


Figure 12. Community groups that provided input during the Parks Master Planning process. These groups offer the opportunity for an ongoing and institutionalized Bergen County program to engage the public to develop new programming, increase volunteer activities in the parks, and encourage public use and support for the Bergen County park system (Courtesy of CUES).

We recommend the County prioritize the expansion of these types of volunteer opportunities. The County should also consider the possibility of establishing a Bergen County Parks Conservancy that could provide support for the system as a whole.

The expertise and focus of many non-profit groups should be engaged when considering various types of events within the parks, particularly smaller events that are targeted to local neighborhoods. The County should partner with and support these groups when they are organizing, marketing, and managing events within the parks. The County should establish a mechanism, with input from the public and County representatives, to consider new programming and athletic offerings in the parks and to improve existing park programming.

One example of such a collaboration arose out of a meeting that CUES had with trail users and advocates. Representatives of the NY-NJ Trail Conference, Palisades

MTB, and JORBA met to discuss the issues related to multi-use trails, and their desire to see safe and sustainable multi-use trails allowed in the Bergen County Park system. These groups have collaborated in various NY State Parks (Sterling Forest) to develop hiking and non-motorized biking trails. If the landowners (including Bergen County) are willing to allow a pilot test project, these groups will voluntarily design, build, and maintain multi-use trails in the Alpine parks in the Palisades. If such a pilot collaboration is successful, this approach could be extended to the northwestern lands of the Ramapo complex.

The pilot project approach would test the addition of an amenity to a publicly underutilized section of the County park system and engage volunteers in activities that enhance the park system. Community outreach and partnership collaborations should be developed and managed by the proposed Parks Department marketing manager.

## FUTURE FUNDING OPTIONS

In order to acquire parklands for the future, to build, repair, and replace park infrastructure, add new programming and maintain existing parklands, the Parks Department must be structured to secure the necessary funding needed to protect and support land acquisitions, expand park programs, and fund ongoing operations and necessary park maintenance.

As illustrated in Chapter 6.3, enhancing the existing golf course experiences and clubhouses could result in higher revenues. Food concession opportunities in certain parks seem particularly underdeveloped at present. Parking management options at high use venues where adequate parking is a problem could generate additional revenues, while encouraging the use of bikes or walking, and reducing parking stresses on high usage days. Large scale events should include a “clean up” fee that is dedicated to the repair/clean up of any residual effects from an event. In addition, the Parks Department should consider adding appropriate amenities to the parks that visitors are willing to pay for that simultaneously improve the park experience and contribute towards park maintenance costs (zipline in Campgaw, paddleboat rental in Darlington, others as appropriate to the venue).

However, efforts to increase park revenues can only address the problem of underfinancing if park-generated income can be used by the Parks Department for reinvestment in County parks. For this reason, it makes sense to explore administrative structures that would allow the BCPD to retain park-generated revenues for the benefit of the County park system. A review of other New Jersey county park structures, shows that some operate in a semi-autonomous capacity. Their donations and internally generated revenues are reinvested for the benefit of parks. Table 2 illustrates four options Bergen County could explore that might potentially be adopted to maximize the park system’s fiscal sustainability and increase its funding capacity in order to enhance park services to the public.

## DESCRIPTION OF FUTURE FUNDING OPTIONS & ADDITIONAL REVENUE SOURCES

*Contributed by Rutgers University Bloustein School of Planning & Public Policy*

### FUNDING OPTIONS (TABLE 1):

#### 1. Dedicated Parks Utility

Although no other counties in New Jersey currently have this structure, Bergen County could theoretically create a dedicated parks utility that operates as part of the County government, overseen by the County Executive and Board of Freeholders. This option would require the passing of an ordinance that sets out the purposes of the utility and revenues that would be pledged towards meeting those purposes, and approval is required by the State Division of Local Government Services. The challenge of creating a parks utility would lie in segregating a part or all of the parks programs and having sufficient revenue to support them, although the County budget could subsidize the utility in the event of expenses exceeding revenues.

#### 2. County Parks Commission

Dating back to the 1940s, the original laws allowing the creation of a County Parks Commission have changed very little, and are still compatible with the County Executive form of government. When Bergen County voted to move to a County Executive form of government in 1987, the original Bergen County Parks Commission was merged into County government as the Parks Department. A public referendum at a general election would be required to authorize the re-creation of a Bergen County Parks Commission. Other Counties that currently have a Parks Commission include Mercer, Morris, and Somerset.

A commission would operate as a semi-autonomous body appointed by the Freeholders, and would technically be part of the County government. Some Commissions (and Parks Departments, i.e. Essex, Cape May) cooperate with an affiliated, but not County-supervised, non-profit foundation established for fund-raising purposes. This relationship is not required by law and appears to have developed spontaneously over time.

To avoid any potential issues related to debt, the County first should consult with leaders and legal counsels of existing County Park Commissions to better understand the limits and operating procedures associated with a Commission financial structure before pursuing this option.

	DEDICATED PARKS UTILITY	COUNTY PARKS COMMISSION	RECREATION AUTHORITY	RECREATION TRUST FUND
FEASIBILITY	Feasible in theory, but no NJ counties currently have this structure	Viable under the County Executive form of government	Viable per “First Class County Recreation Authority Law” (NJSA 40:37B)	Commonly used by municipal recreation programs
STRUCTURE	Utility is part of the County government, overseen by the County Executive & Freeholders	Semi-autonomous body, appointed by Freeholders and technically part of County government	Authority Commissioners appointed by Freeholders, but Authority is an autonomous body & generally operates independently of County government	Creates separate fund (in the County budget) managed by County Parks/Recreation Department
LEGAL REQUIREMENTS	Requires passing an ordinance (setting out purposes & pledged revenue) and approval by NJ Division of Local Government Services	Requires public referendum at general election to authorize creation		Requires passing an ordinance (setting out purposes & pledged revenue) and approval by NJ Division of Local Government Services
FINANCIAL IMPLICATIONS	Segregating the Parks program & having sufficient revenue to support it in a challenge  Can be subsidized through County budget if revenues do not cover expenses	Several Commissions have supervised a non-profit foundation that collaborates for fund-raising purposes  Need to consult with leaders & lawyers of existing County Park Commission(s) to grasp limits and operational procedures	Authority responsible for setting own rates and fees; can issue debt if debt is backed by reliable revenue source  Expected to operate without subsidy from the County	Revenue charged for specific programs pays bills for those programs  Intended for programs where expenses are tied to the number of participants and participation levels cannot be anticipated in advance

Table 1. Organizational options to finance County park services that would be legally permissible under N.J. Statutes (*Courtesy of the Rutgers Bloustein School*).

### 3. Recreation Authority

The little known “First Class County Recreation Authority Law” (NJSA 40:37B), enacted in 1967, allows for the creation of an autonomous recreation authority. Although only one was created—in Hudson County—it was dissolved in 1976 when the county adopted a County Executive form of government. Bergen, along with Essex and Hudson, is one of only three counties that could create a Recreation Authority.

Although the Board of Freeholders would appoint Authority Commissioners, the Recreation Authority would operate generally independently of County government, setting its own rates and fees, and (unlike a Parks Utility) function without subsidy from the County budget. The Recreation Authority could also issue debt, as long as the debt was

backed by a reliable revenue source. In this model, parks and recreation facilities would theoretically be owned by the authority; however, long-term leases might be possible.

### 4. Recreation Trust Fund

This commonly utilized financial option creates a separate fund in the County budget to use revenue charged for specific programs to pay the bills for those programs. Managed by the County parks/recreation department, a recreation trust fund is intended to support programs in which expenses are tied to the number of participants, but the program participation cannot be anticipated or budgeted in advance. Many municipal recreation programs find the fund a useful tool for planning outside the routine budget appropriation process.

## SUMMARY

Realizing the full potential of the Bergen County Park system requires collaboration with public and private partners (Fig. I3), supported by adequate and sustainable funding sources.



Figure 13. Developing stronger community collaborations and sustainable funding sources are critical to helping the Bergen County Parks system more fully meet the needs of County residents (*Courtesy of CUES*).

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# CHAPTER 8:

## Implementation Strategies

This chapter provides a visual depiction of the Bergen County Parks Master Plan recommendations and visionary considerations.

# 8 Implementation Strategies

## FROM MARSHES TO MOUNTAINS

The Bergen County Park Master Plan Vision – **From Marshes to Mountains** – seeks to support Bergen County quality of life by connecting every resident with a premier County park system (Fig. 1). The Master Plan Vision is described by the map in Figure 3. This plan is structured around five critical elements:

- Enhancing/Developing five regional “Anchor Parks” (Overpeck, Van Saun, Ramapo, Meadowlands, Palisades)
- Enhancing/Developing “Linear Parks” focused on the County’s waterways (Saddle River, Hackensack River, and Passaic River)
- Developing Countywide connectors to safely link every resident to a County Park
- Developing a 21st Century digital platform to support communication with residents and the daily operations of the Bergen County Parks Department
- Organizing the Bergen County Parks Department to support the operation, maintenance, and capital improvements required by a premier County Park system

To achieve the goal of developing new Anchor and Linear Parks, individual park Master Plans are needed that identify proposed park boundaries that are coordinated with adjacent landholders. These plans should include connector pathways, amenities, programming, coordinated rules and regulations with input from landowners, municipalities, stakeholder groups, and the general public. The maintenance and amenity needs of the smaller Local County Parks must be met, and golf courses must be brought up to standards found in competing public courses. Specific recommendations for all parks are detailed in Appendix 9.7. Developing a Complete Streets Plan requires collaboration with Bergen County municipalities to coordinate decision making at the County and municipal levels.

Initiatives that increase parkland sustainability should be implemented wherever possible, and sustainability should be a core element of environmental education and policy directives. The McFaul Environmental Center should become a showcase for pilot demonstration projects related to environmentally sustainable practices.



Figure 1. Maintaining, enhancing, and increasing public access to County parklands are key components of the Parks Master Plan (Courtesy of CUES).



Figure 2. Continuing efforts to improve the Parks Department digital interface could help residents plan park visits and discover the diversity of recreational programming available in Bergen County (Courtesy of CUES).

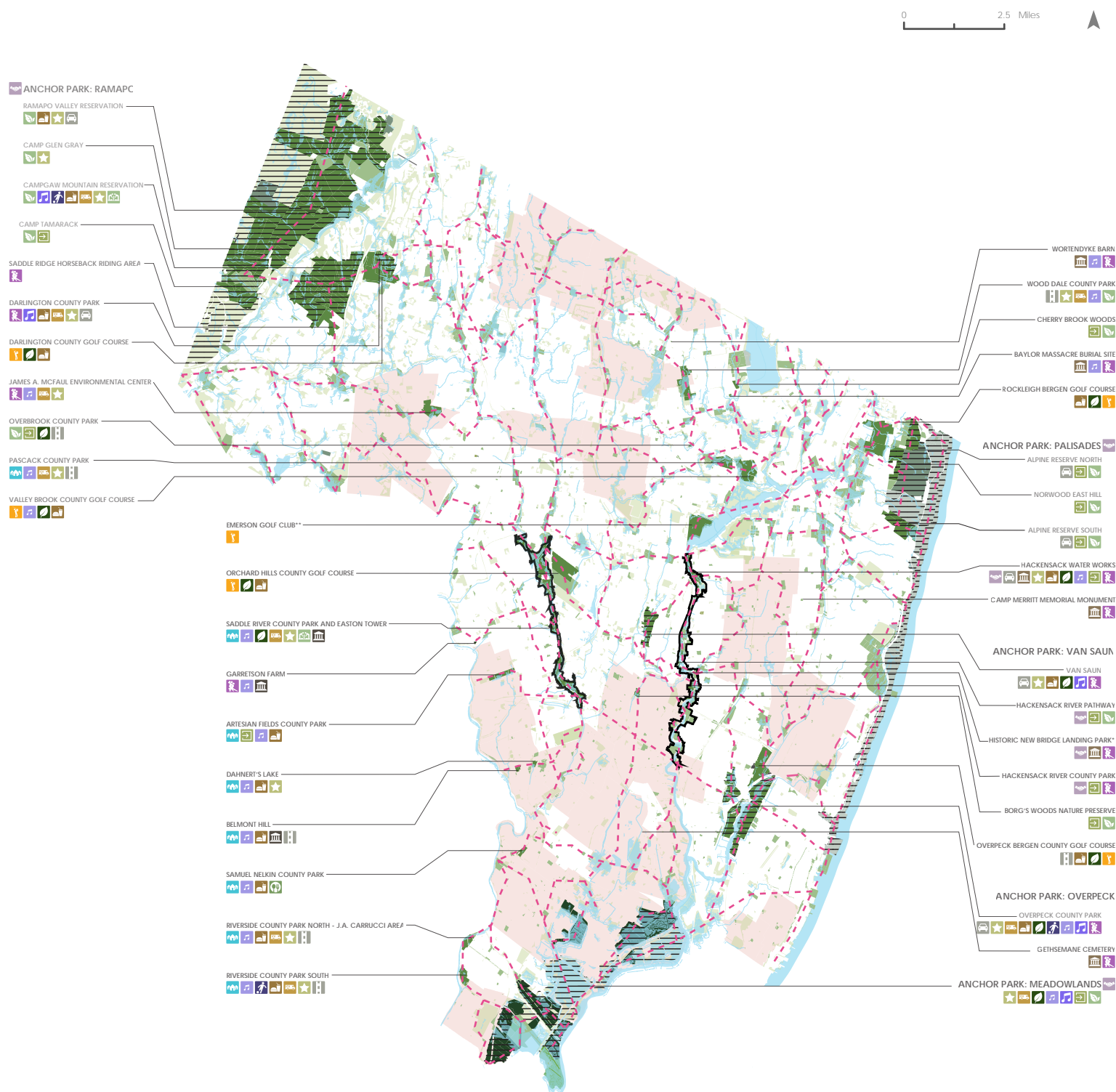
This visionary park system cannot become a reality, or once a reality be maintained, without predictable funding sources, a dedicated parks department staff, and support from volunteers and the public. Based on historic Bergen County Park Commission reports, comparison with other park systems, and Trust for Public Land (TPL) benchmarks, the County park system is currently understaffed. Based on TPL comparisons, the approximately 120 park department Full Time Equivalents (FTEs) are far short of the number of employees needed to maintain the parks system. Implementing this Master Plan requires Bergen County Parks Department hire personnel with expertise in finance and business, marketing, digital technology and environmental stewardship. Obtaining these services from other Bergen County departments does not provide the support desperately needed to maintain and grow the County park system.

The current technology applications and parks department website need to be modernized to communicate with County residents and to support the operational and financial functioning of the department (Fig. 2). Park users and business partners require a modern digital interface that communicates park programs, amenities, and events, while supporting seamless transactions related to permitting, fee associated activities,

contracts and grant funding applications and requirements. Specific examples of the technology needs are described in Chapters 6.3 and 6.8.

Resident awareness of County park properties, programs, and events is low, although a large number of residents believe the parks enhance Bergen County quality of life. In addition to modern digital communications, the County park system requires a strong brand identity. A distinctive logo is needed that supports the park brand position as a place to experience nature, connect with family and friends, and incorporate recreation into a healthy lifestyle.

In order to realize the goals set forth in the Master Plan, park funding must be enhanced. Revenues can be significantly increased by adding park amenities, including for-fee concessions and events in appropriate locations. However, a modern business office and marketing support is needed to realize this additional income, which should be dedicated to supporting the parks system. The park department administrative organization and County policies need to support retention of park revenues for enhancement of park facilities and awarding of Open Space funds to projects that support the goals of the County Park Master Plan.






\* Historic New Bridge Landing is a NJ State park managed in cooperation with the Bergen County Parks Department.





\*\* Emerson Golf Club was not included in the analysis because it was not acquired until December 2017. For this reason, recommendations specific to the property are not included in this document.

Figure 3. Bergen County Parks Master Plan summary (Courtesy of CUES).







## OWNERSHIP

-  STATE
-  COUNTY
-  MUNICIPAL
-  NON-PROFIT
-  PRIVATE
-  PALISADES INTERSTATE PARKS COMMISSION

## EMPHASIS

-  **NATURE**  
While there is no park without nature, parks with a Nature Emphasis provide an experience of the physical world undeveloped by humans. Nature Parks have the potential to provide human access without damaging their current ecological value.
-  **SOCIAL/CULTURAL**  
These parks are destinations that provide a variety of social and cultural experiences. Parks with significant historic elements or large event infrastructure are included in the Social/Cultural Emphasis.
-  **NEIGHBORHOOD**  
Interwoven into the local community, neighborhood parks often act as an extension of backyards, where residents meet neighbors, walk, barbecue, jog, etc. These parks have particular potential for expanding pedestrian and bicycle access, increasing connectivity to the local community.
-  **GOLF**  
County golf courses provide affordable golf recreation to the public, as well as the majority of Bergen County Parks fee-generated revenues. These important open spaces have the potential for greater aesthetic enjoyment, socialization opportunities, ecological uplift, and year-round community use.

## EXPLORATIONS

-  **ANCHOR PARKS**  
Parks that hold extreme value for the region. The Ramapo Mountain Anchor Park, Palisades Anchor Park and Meadowlands Anchor Park need landholder collaborations, political will, and public support to maximize parkland amenities and sustainable public use.
-  **LINEAR PARKS**  
Parks that are a network of linked parcels forming a greenway path that follows a river.
-  **CONNECTION OPPORTUNITIES**  
Ways to connect Bergen County Park venues to each other and to local communities via pathways through converted railroads, waterways, trolley lines, utility easements, and roadways.
-  **WATERBODIES AS CONNECTION OPPORTUNITIES**  
The utilization of buffers adjacent to rivers to connect pieces of parkland, expanding foot and bike connections for residents.
-  **OPEN SPACE OPPORTUNITIES**  
Potential for open space use based on aerial imaging analysis.
-  **UNDERSERVED AREAS**  
Municipalities that are very underserved by parkland based on TPL standards per 1,000 residents.

## ACTION ITEMS



### ENTRANCES

Parks that need the addition and/or improvement of the entrance(s).



### LARGE EVENT SPACE

Parks that are suitable for regional events such as concerts.



### SMALL EVENT SPACE

Parks that are suitable for local events such as plays.



### SPORTS

Potential for improvement or addition of active recreation.



### ECOLOGICAL IMPROVEMENT

Substantial maintenance adjustments to improve habitat quality and/or stormwater management.



### PERMANENT FOOD CONCESSIONS

Potential for the addition or upgrade of permanent food concession structures.



### TEMPORARY FOOD CONCESSIONS

Parks where food trucks are more suitable rather than structural concession stands.



### ACTIVITY CONCESSIONS

The potential for concessions that involve for-fee services.



### FARMERS MARKET

Potential for farmers markets.



### COMMUNITY GARDEN

Potential for Community Gardens.



### HISTORICAL SIGNIFICANCE

Parkland containing historical structures that preserve and communicate Bergen County history.



### EXCESSIVE PAVED ROAD

Potential for reclaiming road pavement for parkland uses and reduction of impervious surfaces.



### PARTNERSHIP

Anchor and Linear Parks that need the coordination and political support of State, County, and/or Municipal governments to expand coordinated parklands from open space held by multiple land owners.

## ADDITIONAL PLANNING DOCUMENTS

There are a number of additional planning documents that will provide the direction needed to implement recommendations in this Master Plan. These additional plans include a(n): Conceptual Master Plan for each Anchor and Linear Park and Golf Course; Historic Property Plan; Forest Stewardship Plan, Habitat Management Plan; Complete Streets Plan; Financial Plan that includes long-term Capital needs and ongoing Operation & Maintenance costs; and a Marketing Plan. These plans should be completed as soon as possible.

## HISTORIC PROPERTIES

With roots that extend from Native Americans of the Lenape Nation through pivotal roles in the Revolutionary War and the growth of our country, Bergen County reflects the rich heritage of our Nation in nine County-owned historic sites (Fig. 4-5). Through educational and celebratory events, the Parks Department's Division of Cultural & Historic Affairs serves as the major source of historic preservation information for County residents. The Division also supports efforts by municipalities, individuals, and non-profit organizations to preserve and represent our cultural heritage.

The Master Plan focuses on County parklands and the many recreational activities those locations provide. However, it is also critical that the plan address the cultural opportunities that are possible in these parks and at the notable historic sites owned by Bergen County and managed through the Parks Department's Division of Cultural & Historic Affairs.

Arts and cultural opportunities can help to define and strengthen our parks and our communities through shared experiences and shared spaces in the park system. The Division,



Figure 5. Easton Tower (Courtesy of CUES).

through musical, artistic, and cultural offerings that highlight the work of local artists, and permanent or short-term installations of significant artwork enhance the individual parks and the communities they serve. These opportunities can broaden the audience currently using our parks and also serve as economic stimulators for the County.

Although there are Preservation Plans for the individual historic properties, the current draft of the Master Plan does not address the existing cultural and historic elements in depth. A future planning document, created through the Division of Cultural & Historic Affairs, will provide more detailed current conditions and long-term goals.



Figure 4. Celebrating New Jersey's agricultural narrative at Historic New Bridge Landing Park (Courtesy of CUES).

## FORESTS & HABITAT

Protecting forest lands and critical habitats requires a documentation of baseline conditions and recommendations to sustainably manage these natural resources on a Countywide basis. These plans should include an inventory of existing forests, waterways, and habitats critical for the survival of Threatened & Endangered Species and Species of Concern and recommendations to protect and enhance these habitat resources. The Forest Stewardship Plan (Fig. 7) should also address Green Infrastructure options and sustainable practices that will improve the ecological health of parkland habitats.

## COMPLETE STREETS

Providing pedestrian and cycling access to Bergen County parklands is challenging due to the multiple public entities that control the roadways, high density of development, and dependence on the automobile for transportation. However, there is a growing public demand for walking and cycling options, which contribute to the support of a healthy lifestyle (Fig. 6). “Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street.”<sup>1</sup> Development and implementation of a Complete Streets Plan for Bergen County requires the cooperation of multiple stakeholders, including each municipality, NJDOT, and County engineers. However, there are numerous guides and information sources available to inform and support a Complete Streets initiative (see Appendix 9.3 Other Planning Documents).



Figure 6. Adopting Complete Streets policies could help reduce vehicular dependence and increase healthy activity for residents accessing County parks (Courtesy of NJDOT).

## FINANCIAL PLANNING

The parks department currently generates revenues in excess of \$9 million annually. Annual operational and maintenance expenses exceed \$12 million, and capital needs vary depending on properties available for acquisition and infrastructure needs. Additionally, the Open Space Trust Fund, is currently receiving an estimated \$16 million annually from Open Space tax revenue, and is managed by the Parks Department. In order to deploy available funds to support Master Plan goals, improve existing properties, acquire additional parklands, repair and build required infrastructure, the Bergen County Parks Department needs to be able to match financial resources with Master Plan goals and objectives over both the short and long term. We recommend that the County develop and the present to the Freeholders for approval, a ten year Financial Management Plan that encompasses anticipated expenses and revenues through 2030.

## TEST BEFORE YOU INVEST

Implementing the proposals in this Master Plan requires time, effort, and potentially multiple funding sources. We strongly recommend that where appropriate, a process that utilizes demonstration and pilot projects be used to test new ideas and concepts before significant effort and funding is expended for full implementation. These test projects can be conducted with for-profit or non-profit partners that provide volunteers and/or municipalities, thus minimizing costs and increasing the ability to judge public acceptance and demand for new amenities and programs. Resident talent and support for the parks in the County is substantial, and is currently an untapped Parks Department resource (Fig. 8).

In addition to the above planning documents, the Bergen County Parks Department and CUES are developing a separate Implementation Matrix document that describes specific priorities, activities, and timelines to begin the long-term process of implementing the recommendations contained in the Bergen County Parks Master Plan.

## REFERENCES CITED

- I NJDOT. 2017 State of New Jersey Complete Streets Design Guide. Prepared for NJDOT and FHWA by WSP/Parsons Brinkerhoff. [http://www.state.nj.us/transportation/eng/completestreets/pdf/NJCS\\_DesignGuide.pdf](http://www.state.nj.us/transportation/eng/completestreets/pdf/NJCS_DesignGuide.pdf). Accessed 26 March, 2018.



Figure 7. Stewardship plans are needed to protect and enhance natural resources in County Parks for future generations (*Courtesy of CUES*).



Figure 8. Collaborations with NGO volunteers provide opportunities to test new park amenities (*Courtesy of CUES*).

# Project Team

## **The Bergen County Department of Parks, Recreation, Historic and Cultural Affairs**

James Koth  
Adam Strobel  
Peter Both  
Matthew Shin  
Kenneth Aloisio

## **Rutgers Center for Urban Environmental Sustainability (CUES)**

Dr. Wolfram Hofer  
Dr. Beth Ravit  
Angela Johnsen  
Graduate Students: Kevin Chung, Anna Erickson, Devin Fields, Edwin Gano, Christian Manning,  
Kathy Rodriguez; Undergraduate Students: Meghan Collins, Dean Janulis, Michael Young, Thomas Young

## **Rutgers Voorhees Transportation Center (VTC)**

Jon Carnegie  
Charles Brown  
David Aimen  
James Sinclair

## **Biohabitats, Inc.**

Teresa Doss  
Michael Spina

## **Eventage Event Productions, Inc.**

David Katz  
Matt Glass

## **DNA**

Alan Brown  
Erin Jarrett

## **Town Square**

Jerome Barth  
Sara Nordmann