

# INTERLAKE

## MASTER PLAN EXECUTIVE SUMMARY



Prepared for:



Indiana Department of Natural Resources  
Division of Engineering  
Division of Outdoor Recreation

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## Interlake Master Plan Executive Summary



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## Interlake Master Plan Executive Summary



### Section 1: Introduction

- A. History and Introduction
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## SECTION 1.A: HISTORY AND INTRODUCTION

Coal mining in Pike and Warrick Counties goes back over 150 years. In the 1920's, with the advent of larger equipment for extracting coal, a transition took place to surface mining from underground mining. Most of Interlake was surface mined prior to 1978 using large 'draglines' or mobile shovels to remove the overburden and extract the coal. At one point, during this time one of the largest draglines in the world operated at Interlake. The dragline, manufactured by the Marion Power Shovel Company was called the 'Marion Dragline.' This is how the Marion Staging Management Area received its name.

Interlake was purchased by IDNR in 1999 as part of a larger 5593-acre land purchase from the Interlake Foundation. This land was initially managed as part of Sugar Ridge Fish and Wildlife Area. An additional land purchase was made by IDNR of 220 acres in 2007 using state funds available from the Indiana Heritage Trust Program and the Off-Road Vehicle Fund. Currently, Interlake contains approximately 3500 acres.

The vast majority of Interlake is former surface coal mine land that has been used extensively for several decades by a variety of users including hunters, fishermen, horseback riders, dirt bike motorcycle riders and other trail users. This type of use is common in

the area on abandoned coal mine land. At one point in the 1960's and 1970's one could ride off road vehicles continuously through several southwestern Indiana counties including Interlake. Interlake was once part of the larger area known locally as the Spurgeon Riding Area.

Interlake was closed to public use in February, 2006. The purpose of this closure was to enable:

- Property assessment
- Resource assessment
- Identification of environmental concerns
- Development of a management and operation plan.

In 2006, the IDNR Division of Reclamation completed a major reclamation project that included an 8 acre constructed wetland that straddles the east boundary with Sugar Ridge Fish and Wildlife Area (FWA). This wetland is at the headwaters of the South Fork of the Patoka River. The South Fork of the Patoka River is listed by the Indiana Department of Environmental Management as an 'impaired biotic waterway.' This project provided significant enhancement to watershed quality.

IDNR initiated the process to prepare a master plan for Interlake with the CBA Planning Team in July, 2008, following a selection process with other poten-

tial consulting firms. In August 2008 Interlake was reopened to primitive day use. Approximately 200 people visited the property the first day of the opening.

The CBA Planning Team has assembled a document that will enable IDNR and other officials to make informed decisions relative to future growth, development and enhancement of opportunities available at Interlake. The remainder of this section describes in more detail the plan purpose, the planning process, and plan priorities.

The Interlake landscape provides a vastly different picture than one might expect with abandoned mine lands. The general overall impression is one of large expanses of grassland interspersed with lake and wooded areas. Visible remnants of coal mining history are primarily evident in the lakes and wooded areas.

This overall picture of Interlake is what impressed the planning team on their first site visit. Given the history of surface mining on the site and the existing unique landscape character, Interlake has a story that needs to be told. The 'Interlake Story' is one of the underlying themes that was considered during the master plan process.

## SECTION 1.B: PURPOSE

The three fold purpose of the Interlake master plan is to:

1. Provide a compelling argument for the worthiness and need to provide improvements to Interlake.
2. Provide a flexible planning tool and document to IDNR for implementation of additional activities
3. Provide a guide for management, operation and enhancement of existing uses.

The Interlake Master Plan provides a physical analysis and assessment, with recommendations for uses. This enables enhancement of the environmental character, appropriate property management, and consistent planning aligned with market potential.

The planning team's primary responsibility was to:

- Assess natural resources and environmental attributes
- Provide a market assessment of the site's potential for IDNR's management and operation
- Provide a comprehensive public and user group input process to respond to overall public desires regarding use of the site
- Identify additional uses to enhance the

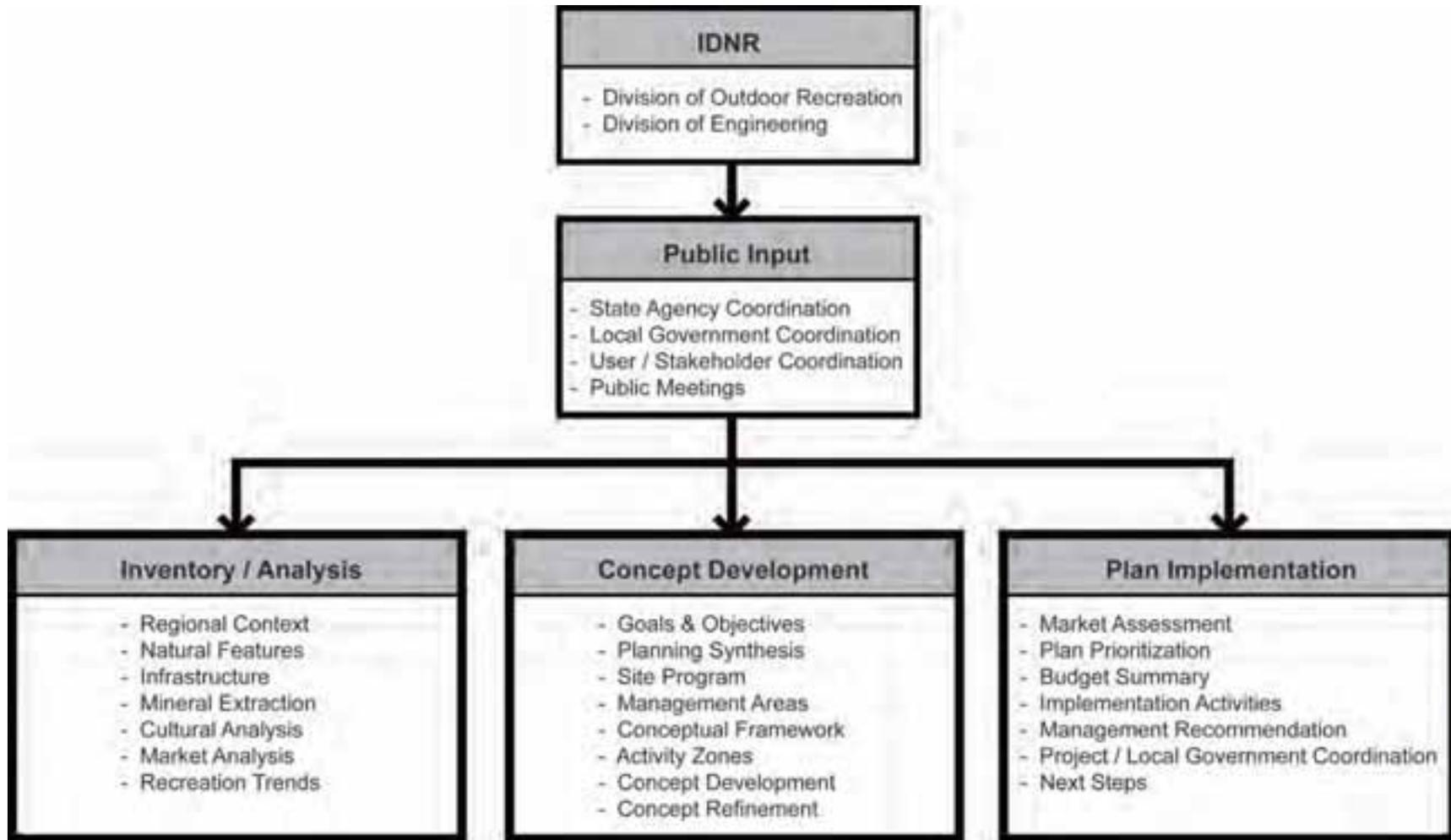


Figure. 1.1: Planning Process Diagram

property and to encourage greater regional use

- Maximize the property's potential as a multi-use recreational area consistent with current activity on the site
- Provide a plan identifying appropriate recreational uses, for IDNR to assess overall development and construction costs and potential revenue.



*Management Planning Diagram*

## SECTION 1.C: PLAN PROCESS

The CBA Planning Team has utilized a proven planning process that includes:

- information review and research
- inventory and analysis
- public and stakeholder input
- plan concept exploration and use alternatives
- preferred plan concept
- implementation recommendations

Each of these steps is based on an assessment of the overall market potential of Interlake. Figure 1.1 on page 1.8 provides a diagram of the Interlake Master Plan process.

The research and inventory phase was initiated with a site visit, a tour of an active coal mine, and extensive on-site field investigations. Focus of the inventory and analysis phase was preparation of synthesis maps identifying areas of varying sensitivity and wildlife potential. A market analysis was prepared identifying the potential financial impact of Interlake.

Inventory and analysis recommendations were presented in a public input forum. This meeting provided the planning team with information that enabled them to develop a framework for the planning recommendations.

The public forum was followed by several workshops. Two workshops were internal and included IDNR representatives and members of the planning team. Two of the workshops were held with various stakeholders and users representing trail, hunting, fishing and other outdoor interests. The workshops refined planning goals and objectives, and determined suitability of the initial site program.

Following completion of the workshops, two additional public meetings were held to provide the public opportunity to comment on the preliminary planning concepts and preferred concept. Preliminary plan activities and the framework were presented at a second public input meeting. This input was reviewed with IDNR. A preferred planning concept framework and scope of additional activities were defined.

The planning process was completed with the preparation of an implementation plan and strategy identifying potential revenue, plan priorities and budget requirements. Included with the plan implementation steps are interim short term improvements leading up to the development of permanent improvements on the property.

Basic management and operational recommendations have been made to enable IDNR to define next steps in an orderly sequence consistent with the overall physical Interlake Master Plan recommendations.



ITEM
<b>Phase 1: High Priority (0 - 5 years)</b>
Phase 1, South Loop Road, SR 68 Access, Trail Crossing
Emergency Access Roads and Helipads
Gate Entry A.Z. Gatehouse/Maintenance Facility
Gate Entry A.Z. Water Access/Boat Launch
Modern Camp Complex A.Z. Trailhead/Trail Support
North Loop A.Z. Trailhead/Support area
North Loop A.Z. Rock Garden/Mud Bog Development
North Loop Utilities
Gate Entry/Modern Camp Complex A.Z. Utility Service
Habitat Enhancement
<b>Phase 2: Intermediate Priority (5 - 15 years)</b>
Gate Entry A.Z. Roadway Pavement
Gate Entry A.Z., 3-Season Shelter Area
Modern Camp Complex A.Z. Water Access/Boat Launch
Log Creek Road A.Z. Trailhead/Support Area
North Loop A.Z. North Loop Road
North Loop A.Z. Camping
Habitat Enhancement/Lake Clean Up
<b>Phase 3: Low Priority (over 15 years)</b>
Phase 3, South Loop Road,
Clutter Road A.Z., Water Access/Boat Launch
Clutter Road A.Z. Trail Support Area
Modern Camp Trailhead, Corral
Modern Camp Complex A.Z., Camping Development
Log Creek Road A.Z., Interpretive Station
Log Creek Road A.Z., Camping Pods
Clutter Road A.Z., Interpretive Station
Clutter Road Utilities
North Loop A.Z. Training Facility
North Loop A.Z. Competition Area
North Loop A.Z. Water Access/Boat Launch
North Loop A.Z., Outdoor Gathering/Amphitheater
Habitat Enhancement
<b>COST SUMMARY</b>

AZ = Activity Zone

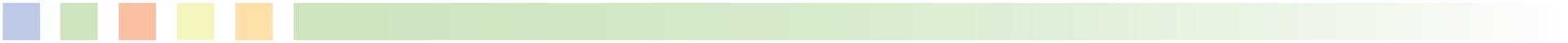
Figure 1.2: Master Plan Priorities

## SECTION 1.D: PLAN PRIORITIES

The highest priority at Interlake is development of the basic infrastructure required for safe public use. This need was stated on numerous occasions by the public and IDNR officials. The master plan is organized based on the various plan priorities.

A second priority, is providing the necessary access controls required for management and operation of the property. Other criteria used for designating plan priorities were the identified need, and the relative cost or difficulty of constructing facilities. Each of these are indicated in Figure 1.2, Master Plan Priorities.

The Interlake Master Plan is divided into overall infrastructure recommendation items relating to property development and specific plan elements, these are indicated in the chart on this page. All projects undertaken at Interlake need to consider accessibility and comply with American Disabilities Act (ADA) standards and guidelines.



## Interlake Master Plan Executive Summary



## Section 2: Master Plan Summary

- A. Management Areas
- B. Preliminary Concepts
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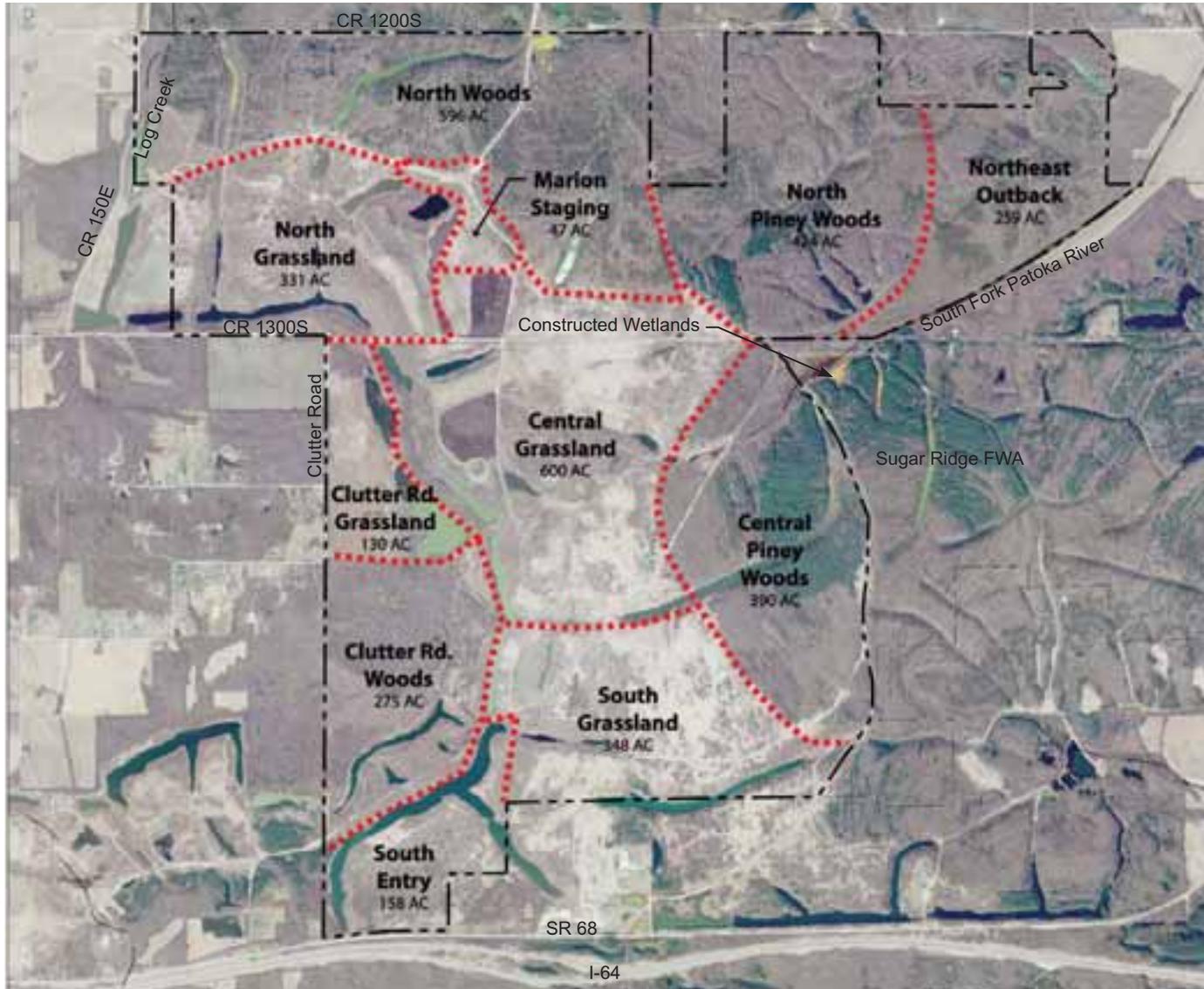


Figure 2.1: Management Areas Map



## 2.A MANAGEMENT AREAS

A wide variety of factors were considered in determining the suitability and sensitivity of Interlake for additional activity and increased use. These factors include environmental features (water, watershed, wetlands, slope, land cover), cultural features (land use, vistas, views), mining activity, infrastructure and utilities. Synthesis graphics and tables identified wildlife sensitivity, general suitability, use compatibility, and impact potential.

To provide generalized suitability and assist the CBA Planning Team in determining optimum locations for various facilities and activities, Interlake was divided into eleven different management areas shown in Figure 2.1 on page 2.2. The management areas were based on the overall landscape attributes, analysis provided in the inventory and analysis process, and existing use. The list of the management areas with a brief description follows.

### **South Entry**

This area consists of the southern portion of Interlake that fronts SR 68. It is primarily grassland with strong terrain attributes and lakes providing strong edge definition.

### **Clutter Road Woods**

This area is along the west edge of the property and

north of the South Entry Management Area. It is unmined and dominated by high quality deciduous upland woodlands. The highest point of the property, approximately 650 feet above sea level, is in this area. There are many steep side slopes and excellent wildlife habitat.

The north edge of the Clutter Road Woods Management Area is defined by an existing dirt roadway extending from Clutter Road to lakes at the northeast corner of the area; this roadway is nearly impassable.

### **Clutter Road Grassland**

This area lies north of the Clutter Road Woods Management Area and is unmined. Clutter Road lies on the west. Several lakes with steep highwalls and wet areas form the east edge. The dominant landscape in this area is native prairie grass with some areas of invasive species. Much of this area is low and somewhat poorly drained.

### **North Grassland**

This area is located north of CR 1300S (Log Creek Road) and along the west boundary of Interlake. The dominant land cover in the North Grassland Management Area is Chinese Bushclover (*Lespedeza*) planted as part of the mining reclamation. This species is considered to be an invasive species in some states.

The dominant landscape features are lakes along the

south edge with fingers extending north and forming a strong tableland. Soils are generally flat and poorly drained.

### **North Woods**

This area lies north of the North Grassland Management Area and forms the north boundary of Interlake along CR 1200S. Older unreclaimed mined lands with a mix of deciduous and coniferous woodlands and many lines of steep spoil banks dominate the North Woods Management Area. A small area at the northwest corner of the property has not been mined. Log Creek flows to the north through a culvert under CR 1200S.

There are several pockets of surface water with water quality problems in this area. The North Woods Management Area is heavily crisscrossed with motorized trails.

### **Marion Staging**

This area is located between the North Grassland, North Woods and Central Grassland Management Areas. It serves as central gathering, staging and parking for many users and for special events, such as the 'Toys for Tots'.

This area is dominated by reclaimed mined land with grassland cover; is relatively flat and has poorly drained wet areas.

### **Central Grassland**

This area is dominated by older reclaimed mined land with Chinese Bushclover land cover. This is a rolling landscape with highpoints and expansive vistas. Water features dominate the west and south edges. Some of the lakes are especially scenic with tall high-walls.

### **South Grassland**

This management area is very similar to the Central Grassland Management Area and is dominated by older reclaimed mined land with Chinese Bushclover land cover. It has especially good views from high points on the northeast and southeast. Lakes dominate the south edge.

### **Central Piney Woods**

This area is east of the Central and South Grassland Management Areas and adjacent to the Sugar Ridge Fish and Wildlife Area. This part of the site is characterized by unreclaimed mined land with many lines of steep spoil banks covered by mixed deciduous and coniferous woods. There is a dominant stand of pinewoods in the central section.

A large marsh feeds into the constructed wetland in Sugar Ridge FWA. These waters flow into the headwaters of the South Fork of the Patoka River.

### **North Piney Woods**

This area is characterized by many steep spoil banks, from older unreclaimed mined land, covered with high quality deciduous and coniferous woods. The terrain in this area is more extreme than that in the Central Piney Woods Management Area.

Portions of this area drain into the South Fork of the Patoka River. Access to this section is limited.

### **Northeast Outback**

This area is the most inaccessible of Interlake. Privately owned land abuts to the east and to the north. The South Fork of the Patoka River forms the south boundary. Most of this area consists of older mined unreclaimed land with extensive areas of high quality, climax succession deciduous woodland and scattered pinewoods.

Management area identification was used to inform the general locations of various support activities and uses. These are described in more detail in section 2.D, Activity Zones. The activity zone relationships are shown in Figure 2.2 on page 2.6.



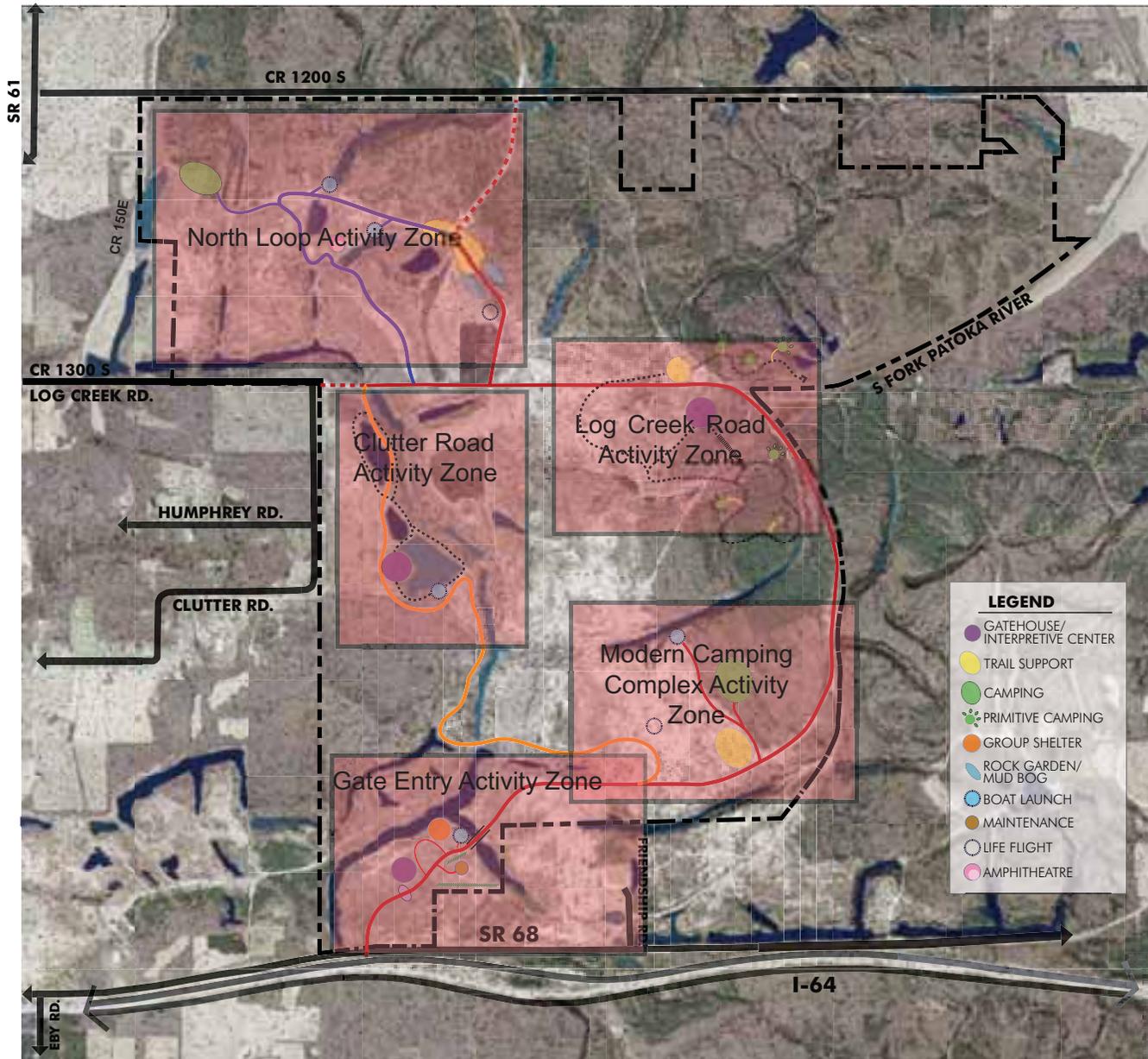


Figure 2.2: Activity Zone Key Plan



## 2.B PRELIMINARY CONCEPT DEVELOPMENT

Preliminary concepts were prepared following the management areas definition described in the previous section. These concepts were organized on different roadway models that could be applied to Interlake. Placement of these roadways follow existing roadways, with some sections following existing trails.

The roadway sections in each concept provide access to existing trails and facilities organized within activity zones. These facilities and activities reflect comments and direction derived from the public meetings, workshops and meetings with IDNR. A site program was developed for the facilities. Each of the activity zones, with a description of the facilities and programmatic requirements, is provided in Section 2.D Activity Zones, starting on page 2.13. A map that illustrates the relationship of the activity zones is shown in Figure 2.2 on page 2.6.

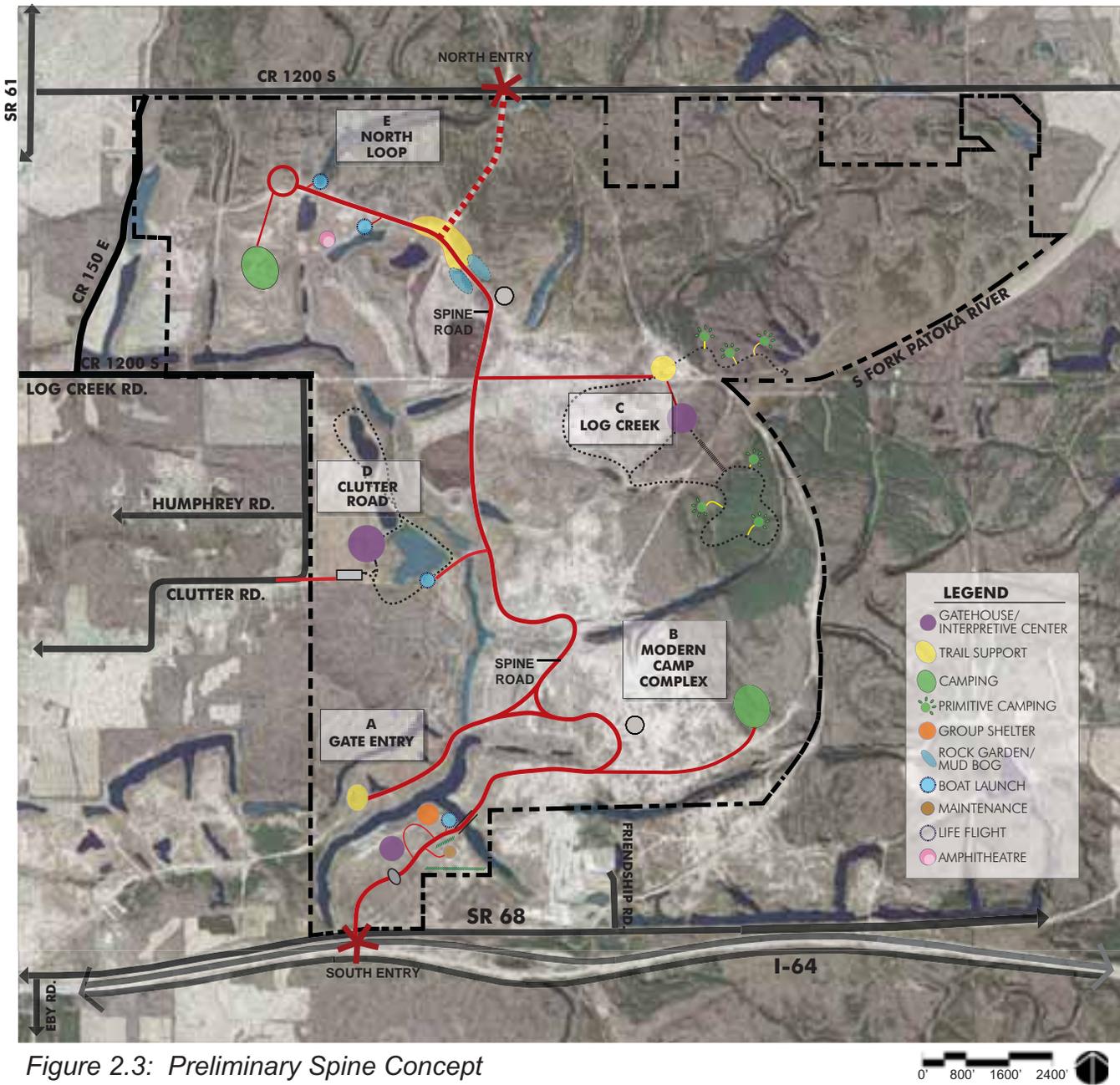
The Preliminary Spine Concept shown in Figure 2.3 on page 2.8 provides a roadway extending from south to north through the center of the site with spurs connecting to various activity zones. The Preliminary Loop Concept in Figure 2.4 on page 2.9 utilizes existing roadway sections and new roadway to provide a continuous loop around the perimeter of Interlake. Activity zones are located along the 'Loop' road or on short spurs. The activity zones are optimally located

in the same general location in each concept.

Figures 2.6 - 2.10 identify activity zones with focused activity for Interlake organized around the road system and previously discussed management areas. This has been done to minimize overall cost and maximize the activity potential. All facilities and activities developed at Interlake should consider accessibility and comply with ADA standards and guidelines.

A map of each of the activity zones is provided along with a narrative description of the different facilities. Each map identifies the phase for each activity zone element.





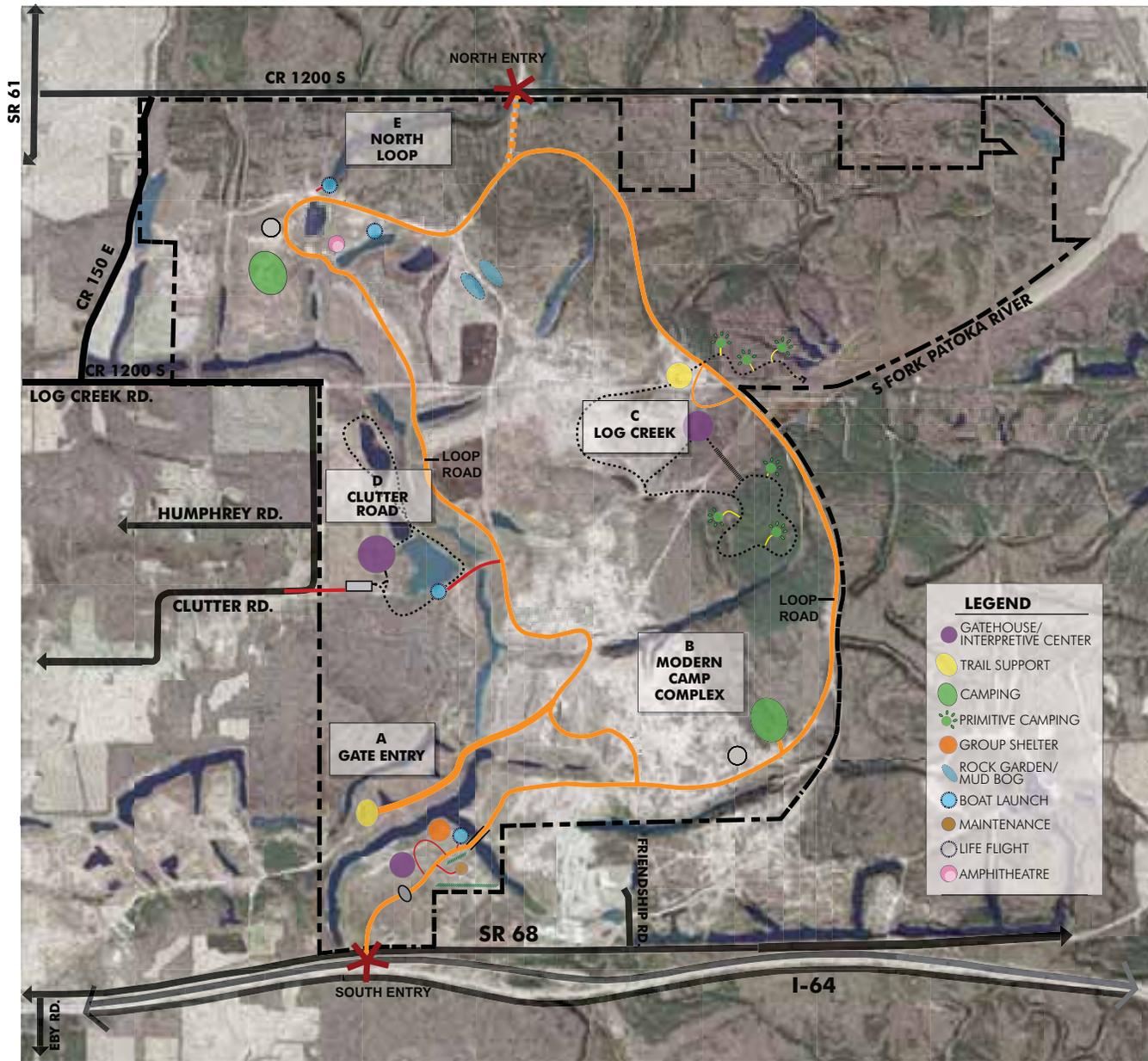


Figure 2.4: Preliminary Loop Concept



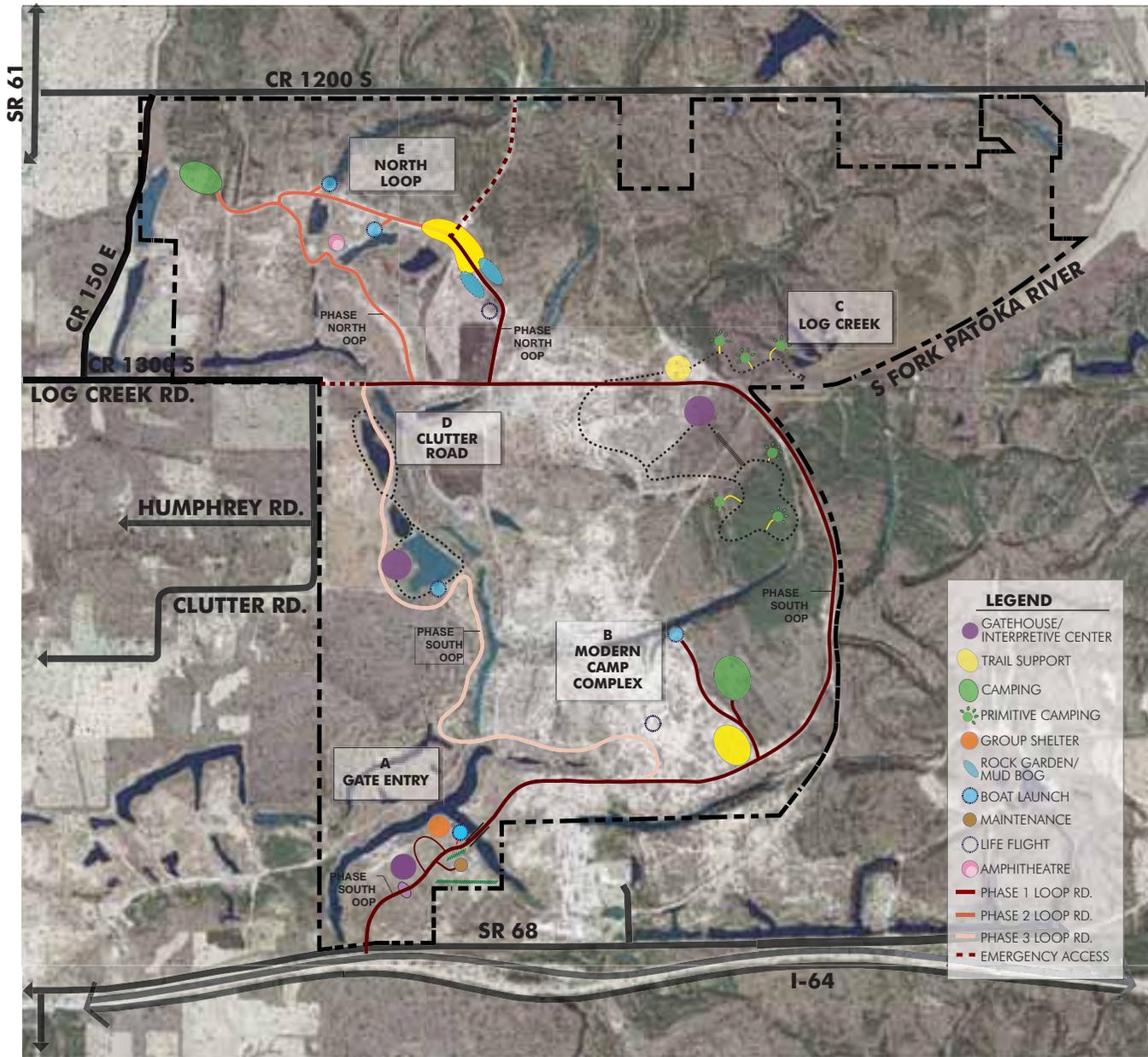
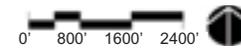


Figure 2.5: Preferred Concept



## SECTION 2.C: PREFERRED CONCEPT

The Preliminary Loop System concept shown in Figure 2.4, page 2.9, was then modified as the preferred concept at Interlake. This was decided in consultation with IDNR, utilizing input received at the public meetings, and an evaluation of the preliminary concepts merits. The evaluation considered overall cost, implementation, impacts to existing trails, environmental resources and wayfinding.

The Preferred Concept indicated in Figure 2.5 on page 2.10 was based on the following rationale:

1. The west leg of the South Loop Road is shifted west to minimize cost. This segment is the most expensive to construct as much of it will require new roadway. Because of the cost and low concentration of activities along the roadway this has been identified as a Phase 3 element.
2. The North Loop Road was realigned to use existing roadways
3. A second loop road was identified as a high priority item. The initial segment of the North Loop Road will occur in Phase 1. Cost of these segments is minimal by utilizing existing roadway surfaces.

4. The completion of the North Loop Road would occur in Phase 2.
5. The access points on the west at CR 1300S and north at CR 1200S are shown as emergency access only. This will enable IDNR to control access consistent with their management requirements, and provide emergency access to areas of intense use on the property.



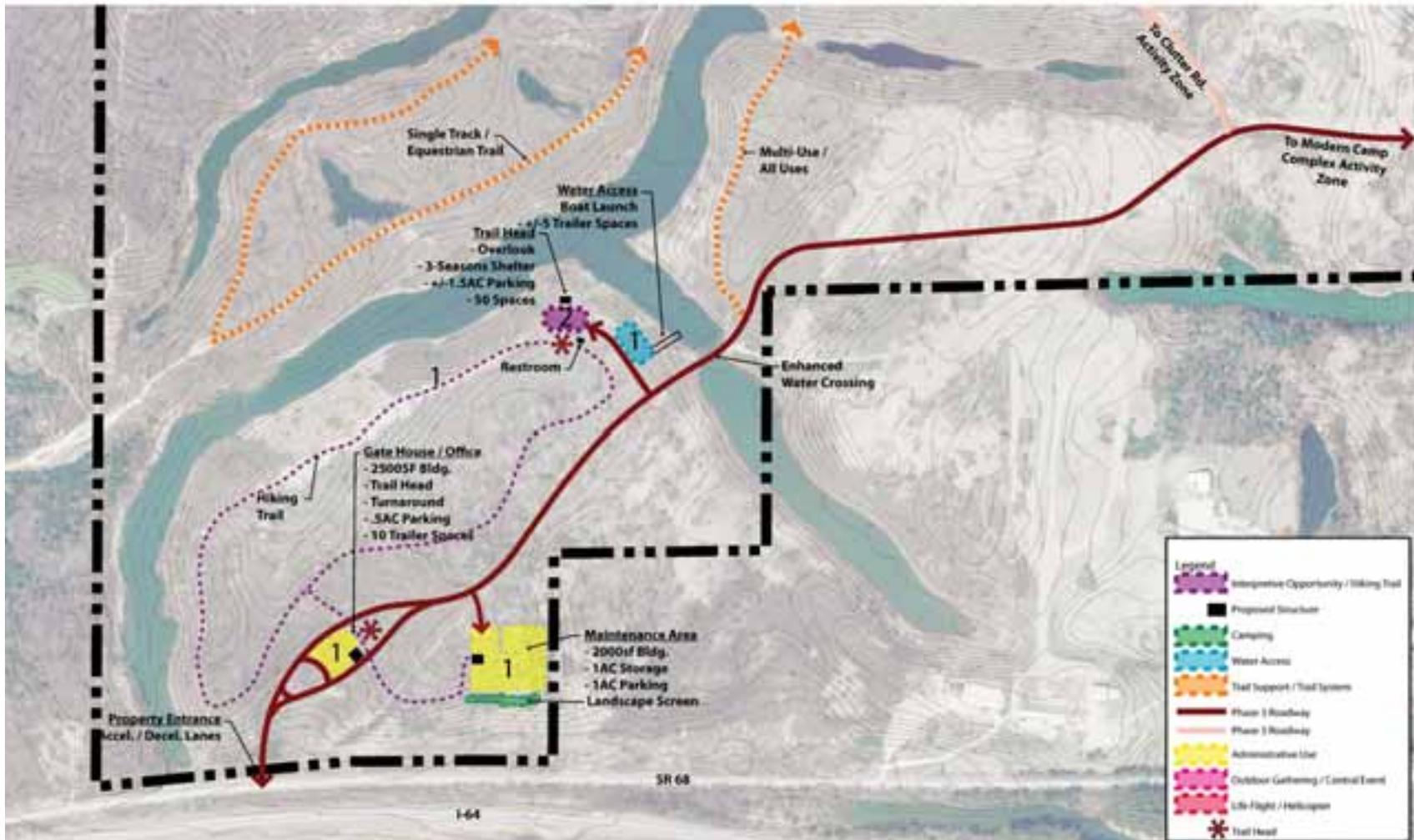


Figure 2.6: Gate Entry Activity Zone

## SECTION 2.D: ACTIVITY ZONES

### Gate Entry Activity Zone

The Gate Entry Activity Zone consists of facilities that are dependent on utility services and need to be near the property entry. Primary electrical feeds and water service are planned along the South Loop Road from existing SR 68 utilities.

The existing entrance road, constructed during one of the reclamation projects, is not conducive to public use due to steep grades on the roadway. The entrance road and SR 68 entry is shown shifted to the west where gentler grades can be achieved. The existing lake crossing is too narrow and needs to be widened. This crossing also provides significant views of the property. The proposed roadway improvements are a high priority and should be constructed at the same level of quality as the gatehouse and water access. To improve the overall 'front door' image of Interlake, paving of the entrance road between SR 68 and the water crossing is suggested.

#### *Gatehouse / Office*

This facility will serve as the front door to Interlake from eastbound Interstate 64 and will be the first amenity one sees. A high level of quality should be constructed in this facility. Building elements should include the following:

- Ticketing / gate window
- 2 to 3 offices
- Restrooms
- Central lobby and visitor area
- Break room
- Meeting space

An overall building footprint of approximately 2,500 square feet is recommended.

Gatehouse / Office site improvements include a vehicle turnaround area, short term parking for approximately 10 vehicles with trailers and connections to a short loop hiking trail, overlook and 3-season shelter. Temporary trailers and facilities are suggested until a permanent gatehouse is constructed.

#### *Maintenance Facility*

The short term construction of a maintenance facility is critical to enable IDNR to adequately maintain the property. A high quality, prefabricated metal maintenance building of approximately 2000 square feet is planned. This would include overhead doors in a setting screened from public view. Recommended site improvements include a gravel storage and parking area, and perimeter security fencing. An area of 2 acres is shown on the activity zone graphic in Figure 2.6 on page 2.12.

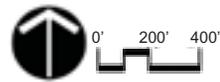
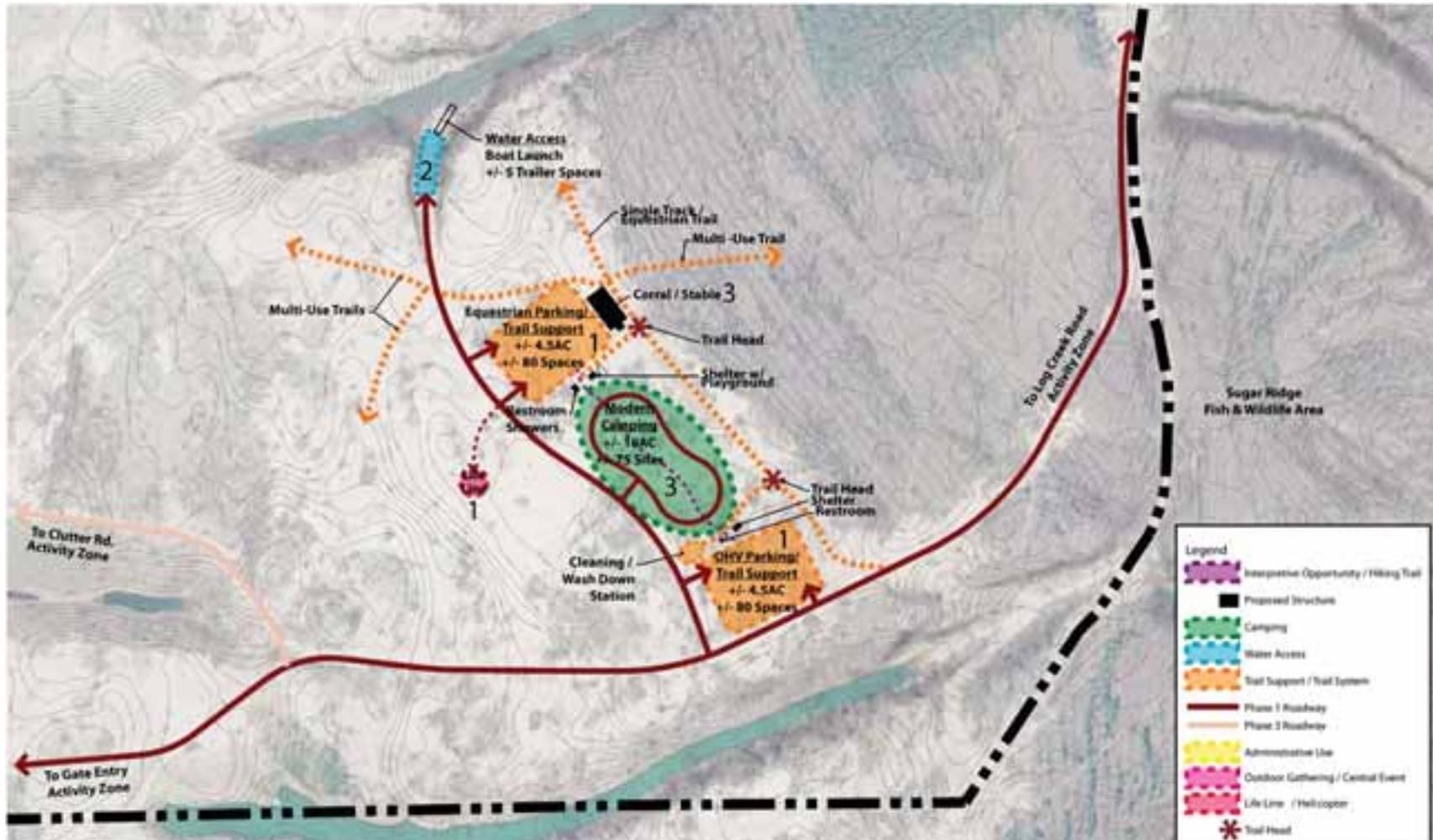


Figure 2.7: Modern Camping Complex Activity Zone

### *Water Access*

Boat launch facilities are shown west of the existing road crossing. This is a popular location for many fishermen. Parking for 5-6 vehicle with trailers is provided. Restrooms will be located nearby at the trailhead area.

### *Trailhead / 3-Seasons Shelter*

A major shelter suitable for hosting larger gatherings is proposed at a prominent location near the gatehouse overlooking the adjacent lake and a majority of Interlake to the north and east. This location will provide an opportunity for large groups to congregate for special events. A one-mile hiking trail links to the gatehouse. Parking for approximately 50 vehicles is planned and can be combined with water access parking. The 3-season shelter should be sized to accommodate groups of approximately 100 to 200 people, with kitchen facilities suited for warming and limited food preparation, and restrooms nearby. This facility should be developed in conjunction with other facilities on the property.

### **Modern Camping Complex Activity Zone**

As with facilities in the Gate Entry Activity Zone, activities in this zone are dependent on electric and water utilities. This activity zone is located on the South Loop Road in proximity to available utilities and areas of active use. Figure 2.7 on page 2.14 shows the map of the modern camp complex at the edge of

the South Grassland Management Area, next to the Central Piney Woods Management Area. A helicopter landing area for 'Lifeline' flights, is shown next to the trail support areas and is a critical safety component.

This area provides a moderate amount of shade and shelter for camping and trail support, which are the primary activities in the Modern Camp Complex Activity Zone. Facilities contained in this activity zone include a modern campground, trail support and water access. Each of these are described in the following paragraphs.

### *Water Access*

A water access point is shown on the lake, between the Central Grassland and South Grassland Management Areas. Parking for 5-10 vehicles with trailers is provided.

### *Trail Support*

Trail support elements for the Modern Camping Complex Activity Zone is a high priority. This is the first opportunity users have to unload at Interlake. Separate trail support facilities are provided for equestrian and motorized trail users. The trail support areas will provide restrooms, shelters, gravel pull-through parking for vehicles with trailers, and cleaning and wash down facilities. A corral and stable are recommended at the equestrian area. Because of the proximity of trail

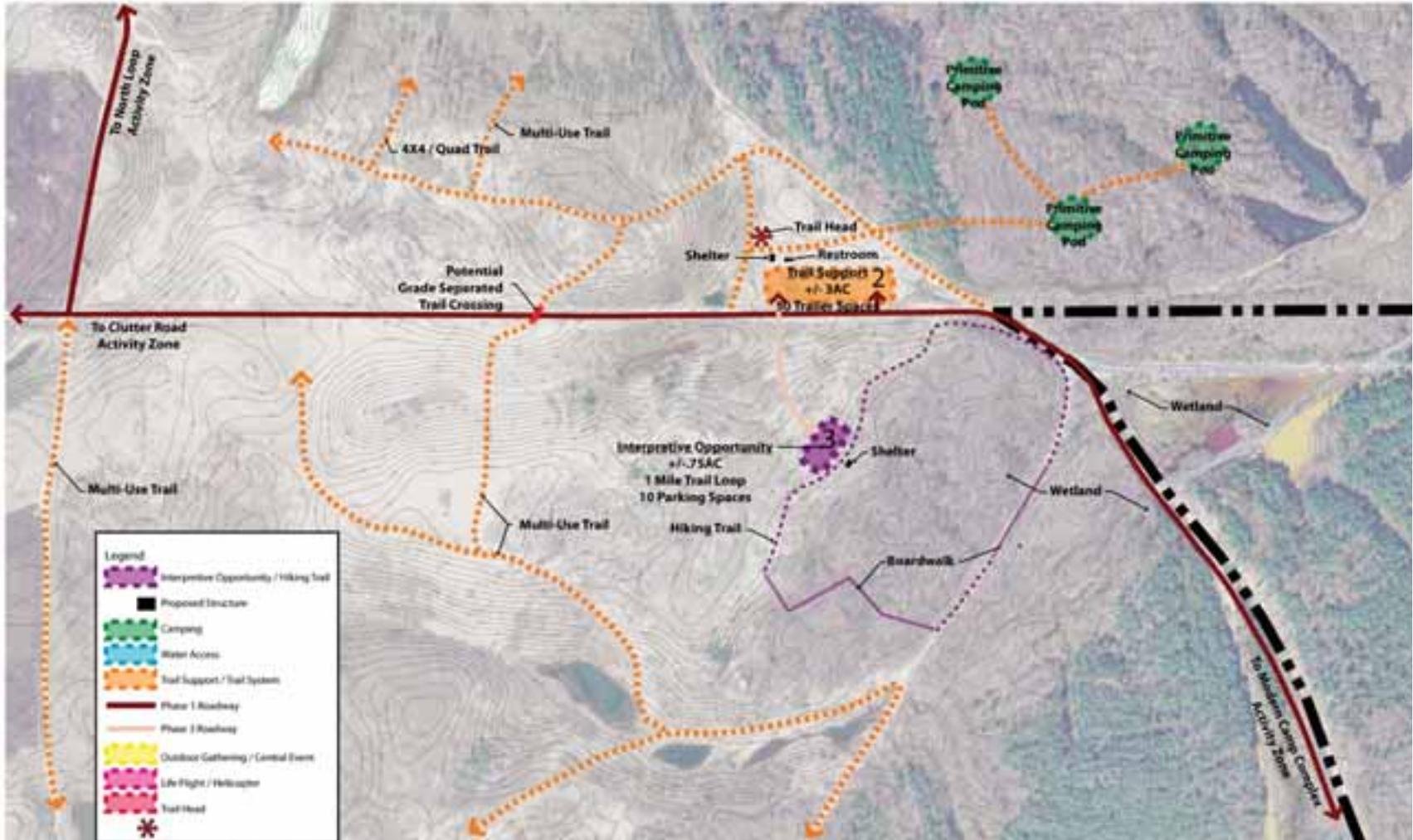
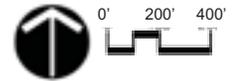


Figure 2.8: Log Creek Road Activity Zone



support loading and unloading to the camping area, separation of loading areas and time of day restrictions will need to be considered.

#### *Modern Camping Area*

This facility adjacent to the trail support areas will include electrical hook-ups, potable water, modern restrooms and showers. These facilities are utility dependent and are intended to be developed in conjunction with development of other facilities appealing to the regional user. The modern camping area should be configured to take advantage of available shade from the transitional forested areas.

#### **Log Creek Road Activity Zone**

These facilities are located at the junction of the Central Grassland, North Woods and North Piney Woods Management Areas.

Because of the difficulty in providing electric and water service to this area any water requirements should be provided by well water. If electricity is required, alternative power sources such as solar cells and alternative energy sources should be investigated.

#### *Trail Support*

This facility is intended to serve emerging areas of Interlake currently without extensive trails. This includes the North Piney Woods and Northeast Outback Management Areas. This facility should be developed

in conjunction with trail development in the North Piney Woods and Northeast Outback Management Areas. Trails in these management areas should be developed as a low priority, after careful consideration of potential impacts. A trail support area is optimally located at the junction of several management areas and trails. Facilities will include parking for approximately 50 vehicles with trailers, a shelter and self contained restroom. Construction may require remediation as these improvements are on abandoned mine land (AML).

#### *Interpretive Station*

This item while not critical to primary use at Interlake, is important in telling the 'Interlake Story'. The location for the interpretive station is near a large wetland, and near the constructed wetland in Sugar Ridge FWA. The interpretive station is near unreclaimed mined lands of the Central Piney Woods and the Central Grassland Management Areas.

Features recommended for the interpretive station include gravel parking for approximately 10 vehicles, a shelter and interpretive signs. A short hiking path and boardwalks traverse the wetland at the edge of the woods and grassland.

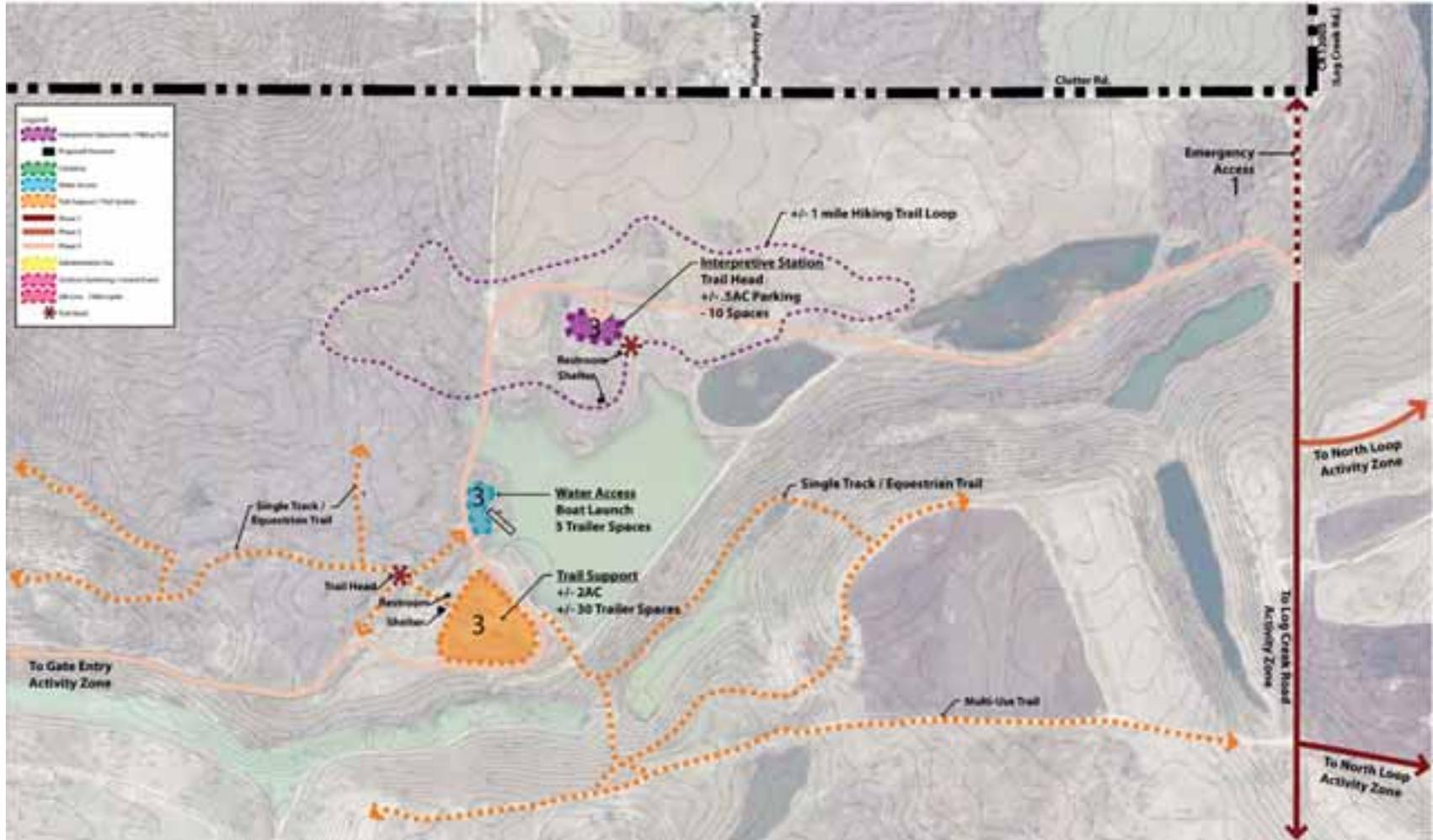


Figure 2.9: Clutter Road Activity Zone



### **Clutter Road Activity Zone**

Elements of this activity zone will be constructed following completion of the South Loop Road in Phase 3. These include an interpretive station, similar to the Log Creek Road Activity Zone, water access, and trail support adjacent to the high concentration of equestrian and single track trails in the Clutter Road Woods Management Area.

Utility access is also limited, and facilities have low utility requirements. This portion of the South Loop Road consists of new roadway. Portions of the roadway south of this activity zone may require extensive work due to steep embankments.

#### *Interpretive Station*

This element will provide parking, a shelter, a self contained restroom, interpretive signs and a hiking trail. Access is provided to nearby wetlands, prairie and the hardwood forest in Clutter Road Woods Management Area. The interpretive station shows the edge between mined and unmined areas at Interlake.

#### *Water Access*

This element provides access for fishing in the lake located above the existing levee. It includes parking for approximately five vehicles with trailers.

#### *Trail Support*

This area has parking for approximately 30 vehicles with trailers, a shelter, and self contained restroom. Access to trails in Clutter Road Woods and Central Grassland Management Areas is provided.



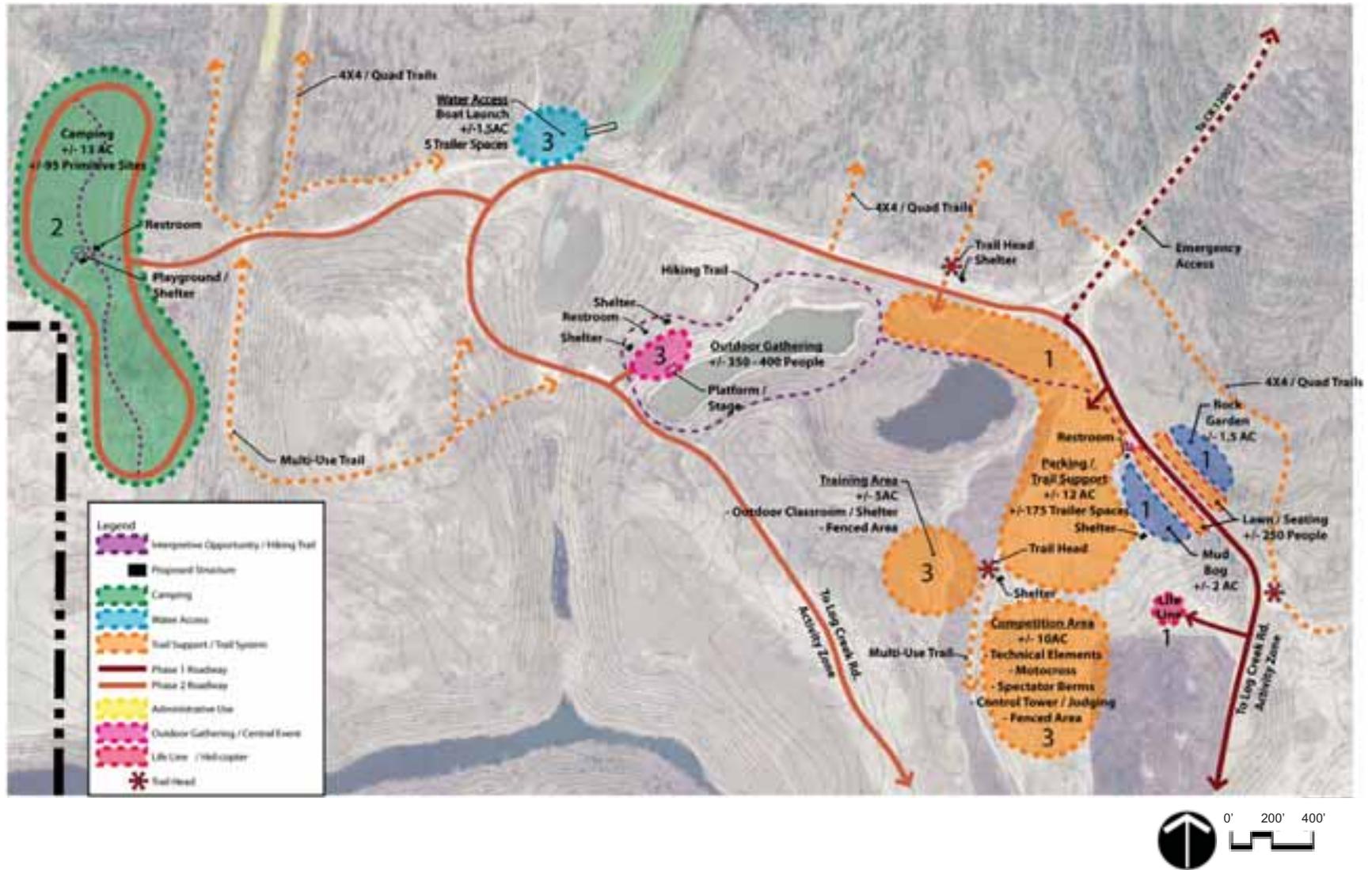


Figure 2.10: North Loop Activity Zone

## **North Loop Activity Zone**

This activity zone is a focal point for Interlake. Elements associated with this activity zone are distributed in all phases of the master plan.

The demand for utilities in this area is high and availability is limited. Potable water is not available. Required water will need to be provided from water wells. Any water wells will need to be drilled down below previous mining activity. Testing should be provided for water quality and available flow rates. Electrical service is available from CR 1200S and CR 150E at the northwest corner of Interlake. Required electrical service should be extended from CR 150E through the camping area and along the North Loop Road to the other North Loop Activity Zone elements.

Access to the North Loop Activity Zone will be by way of the North Loop Road extending from CR 1300S. A spur will be constructed to the camping area. A helicopter landing area for emergency access is shown adjacent to trail support and competition areas.

### *Trail Support*

The trail support area element is seen as the major gathering point for motorized trail users. During special events, such as Toys for Tots, several hundred vehicles with trailers park in this area. As shown on the North Loop Activity Zone plan, the trail support area will provide parking for approximately 175 ve-

hicles with trailers. Access points to two major trails with trailheads, restrooms and shelters are shown. Restrooms should be self contained. The trail support element is a Phase 1 item.

### *Rock Garden and Mud Bog*

This event area flanks the North Loop Road. These elements will provide opportunities for users to participate in a public setting with the provision of adjacent gathering areas. Boulders suited to rock garden development are available on the property. The rock garden area will replace two smaller existing rock gardens. The mud bog is shown across the road in an area of lower ground suited to this activity.

### *Training Facility*

The training facility provides for classroom training and vehicle riding in a controlled environment. Access is provided to nearby trails for a complete training experience. Access to this area should be fenced and a shelter for classroom training is recommended.

### *Competition Area*

The competition area shown next to the trail support area and the Training Area will provide for additional events and greater regional use. This 10-acre area is included in Phase 2 and accommodates motocross activities, technical elements, a control tower, and spectator berms. Perimeter controls such as fencing are recommended. The location next to the mud bog

and rock garden areas provide additional synergy and impetus for larger events.

### *Camping Area*

This facility at the northwest corner of the property provides primitive camping facilities. Many of these users will be recreational vehicles (RV) pulling trailers. Approximately 95 camping sites are shown on a spur of the North Loop Road. Facilities include a self-contained restroom, shelter and playground area. Access to nearby trails is provided.

### *Outdoor Gathering Area*

A large central events space is proposed to complete the major facilities illustrated in the North Loop Activity Zone. This space provides lawn seating overlooking a small lake for approximately 300 to 400 people. Included are shelters, a self contained restroom and stage. This facility will provide a variety of venues and group gatherings in conjunction with other events at Interlake. Electrical service will be required. A walking path will access trail support, the competition area, and other parts of the North Loop Activity Zone.

### *Water Access*

A boat launch is provided to the linear lake extending to the north property boundary from the North Loop Road between the outdoor gathering area and camping area. Facilities for the water access will be similar to other water access and boat launch facilities.

## SECTION 2.E MANAGEMENT RECOMMENDATIONS

There are a number of basic operational and management decisions and policies that IDNR will need to put into place at Interlake. Some of these management and operational concerns include:

- Local Coordination
- Access Control
- Training and Education
- Resource Management
- Utilities and Infrastructure
- Trail Management

A management and operations plan needs to be prepared to assist IDNR in the day-to-day operations and management of Interlake. This plan can be prepared in conjunction with user groups that are active at Interlake. A brief description of each of these management considerations follow.

### *Local Coordination*

Local coordination will primarily consist of coordination with Warrick and Pike County Commissioners, local law enforcement and safety officials. The most critical element is improved safety coordination with the Warrick and Pike County Sheriff and with local EMS officials. Areas are identified for two helicopter landing areas at Interlake for emergencies.

CR 1300S / Log Creek Road is a dedicated county road; improvements to this road will require County Commissioner approval. This is a necessary part of providing emergency access to Interlake. It is recommended that IDNR pursue the permanent vacation of the CR 1300S right of way. This would enable IDNR to enhance emergency access to Interlake.

Currently Pike County allows ORV use on county roadways. This enables Pike County residents and other local users to access Interlake from the north. Warrick County does not allow ORV use on county roadways. This creates difficulties for local users, as the only access is from Warrick County. IDNR is encouraged to request the Warrick County Commissioners to allow ORV use along certain county roadways.

Creation of a separate gravel ORV trail along SR 68 would provide improved access to the Gate Entry Activity Zone. This will greatly improve connectivity to other nearby areas. This trail will require careful coordination with INDOT and the acquisition of additional right of way.

Over time, additional coordination should occur with local economic development officials and community foundations. This coordination should explore options for leveraging outside economic development, as a result of increased activity at Interlake.

#### *Access Control*

Access control is critical to efficient management and operation of Interlake. Required access control and existing access is a source of conflict between IDNR's management requirements and local users.

A single point of entry is required in order to provide efficient, orderly access, manage entry fees and maintain awareness of on-site users. A single public entry will be provided at SR 68. Existing property entries at CR 1200S and CR 1300S are limited to emergency access only. Other access points along existing trails from private lands and public roadways will need to be permanently closed.

#### *Training and Education*

The establishment of training and education programs is an important element. Coordination should occur with user groups to establish some of these programs at Interlake. Many programs are offered from ORV manufacturers and other organizations. Implementation of these programs should be coordinated with the development of other facilities. Program evaluation needs to be provided periodically to gauge overall success.

#### *Resource Management*

There are two primary activities identified in the master plan report relating to resource management at Interlake. The clean up of remaining areas of acid mine drainage (AMD) will provide improved water quality.

The second component of resource management is habitat enhancement.

AMD is the most severe environmental problem related to abandoned coal mines. There are two predominant treatment methods for treating AMD:

- Active Treatment, uses alkaline chemicals such as limestone, hydrated lime, soda ash, caustic soda, and ammonia to neutralize acid-polluted waters
- Passive Treatment, uses naturally occurring chemical and biological reactions found in constructed wetlands, open limestone channels or anoxic limestone drains, and diversion wells.

The preferred treatment method at Interlake is the use of constructed wetlands and available limestone and diversion wells.

Resource management activities associated with habitat enhancement include control of invasive species and wetland construction. The preferred method to control invasive species such as Chinese bush-clover (*Lespedeza*) that is prevalent in many of the grassland areas on the property is a combination of prescribed burns, mowing and chemical treatment.

### *Utilities and Infrastructure*

There are several activities proposed for Interlake that require water and electric service. As much as possible these facilities have been concentrated near available utilities along SR 68, and at the northwest corner of the property in proximity to available service. It is important that these services be provided prior to the facility development. Existing 40 KV service is available along SR 68 and from CR 1200S west of the site.

The existing 8-inch water main along SR 68 provides the only potable water available to Interlake. A 6-inch water main should be sufficient in size to provide the necessary water and fire protection services to facilities requiring water service. For remote facilities requiring water the feasibility of providing well water should be researched. Water quality and water availability should be investigated prior to well drilling.

Sanitary sewer service is not available at Interlake. Wastewater treatment options include:

- Self-contained vaults or pits with regular emptying
- Septic tanks and field beds
- Sustainable treatment approach utilizing filtering, constructed wetlands and bioretention

The latter approach above is suggested as the preferred treatment option.

### *Trail Management*

There are a wide variety of existing trails at Interlake, each trail has trail standards and best management practices that are unique for that particular trail type. The following trail users are accommodated at Interlake:

- Equestrian
- ATV (Narrow, Double Track ORV)
- Mountain Bike
- 4X4 (Wide, Double Track ORV)
- Dirt Bike (Single Track Motorcycle)

There are a wide variety of resources available for trail design, construction and maintenance. Considerations such as trail standards, drainage and erosion control will vary for each trail type.

Overall trail management needs to address the following:

- Application of specific trail standards and criteria
- Construction needs
- Access control at entry points
- Intersection control

Application of these trail management techniques will enhance trail use and will better enable specified use trails to remain specified use.

## **SECTION 2.F: MARKET ASSESSMENT**

Overall implementation of the capital improvements necessary to realize this master plan can occur over time. Careful planning of additional activities and uses allows for present and future development as funds become available and use / demands increase.

Surveys should be used to track user demand. This can include feedback from pass sales, user surveys, on-site monitoring and other means. As demand increases, amenities and features included in the master plan, can be added.

A variety of marketing and promotional activities should be initiated immediately, upon completion of initial infrastructure and facilities. Suggested marketing includes:

- Signage on Interstate 64 and the planned Interstate 69.
- Direct marketing to user groups and association members to announce the site's expanded function.
- Advertising in local association publications, and membership directories.
- Expansion of advertising to nearby metropolitan areas.

- Design of site signage, wayfinding and other physical features to follow a coordinated branding plan. Lessons learned from ski resorts, national and state parks might be applied to creating a strong “brand” image for Interlake.
- Organize and advertise special events to increase usage and market awareness.
- Widen reach of marketing activities to include regional and national associations, media and other channels.
- Foster awareness of user group suppliers and dealers; including on-site try-and-ride events to encourage additional sales and Interlake usage.
- Encourage education with on-site training opportunities with user groups, dealers and other interested parties.
- Create a website for Interlake with space available for advertising.
- Consider sponsorship of certain amenities.

### Revenue Potential

A preliminary assessment of Interlake earning opportunity based on the implementation of controlled access and annual usage fees suggests that direct revenue from operations could range between \$57,000 and \$280,000. Figure 2.11, Revenue / Demand Model on page 2.27 illustrates the revenue potential. This does not include revenue from other sources

such as shelter rental, training revenue, concessions, advertising or sponsorships.

The permit fees and daily pass costs identified in the table are slightly higher than those quoted in the IDNR 2008 Recreation Guide because of the specialized nature of Interlake. The daily pass of \$10 a day is consistent with fees currently charged by IDNR at Redbird State Riding Area.

In addition to the permit revenue stated above, portions of revenue generated from ORV registration, bridle tags, and hunting and fishing licenses need to be designated for use at Interlake.

### Revenue Modeling

Specific use data for Interlake is not known. It is estimated that initial usage will be approximately 10,000 visits per year. This includes day use from local and regional ORV, equestrian, hunters and other users. The Revenue Demand Model in Figure 2.11 on page 2.27 is based on this initial use assumption. Special events, such as group rides, Toys for Tots and others, represent an important classification of use. Several hundred people visited Interlake for the 2008 Toys for Tots event in November 2008.

By comparison, St. Joe State Park in Missouri, south of St. Louis, has 2,000 acres available for motorized use. The park also includes other recreational amenities such as camping, equestrian trails, swimming, boating, RC Aircraft, mountain biking and hiking. 2002 data reports that the park received over 750,000 visits - including nearly 7,500 camping units, 23,000 campers and nearly 50,000 ORV permits. Comparison of Interlake with a developed and mature state park, such as St. Joe State Park, assists in establishing a quantitative comparison for a fully developed Interlake.

Data available from the Hatfield-McCoy Trail system in West Virginia reports their 500 mile trail system received 100,000 visits in 2007 and generated \$800,000 in revenues. A recent economic impact study completed by Marshall University Center for Business and Economic Research reported the following conclusions:

- “The Hatfield-McCoy Trail System is and will continue to be an important component of the economic development of West Virginia and of the southern part of the State. It will be a catalyst for further development and expansion.”

#### Revenue / Demand Model

Based on the illustrative pricing, revenue derived from various usage rates is shown below:

	<i>Low*</i>	<i>Medium*</i>	<i>High*</i>
In-State Passes Sold @ \$50 / year	1,000	3,000	5,000
Annual Pass Revenue	\$50,000	\$150,000	\$250,000
Out-of-State Passes Sold @ \$75 / year	250	500	1,000
Annual Pass Revenue	\$18,750	\$37,500	\$75,000
Special Event Passes @ \$10 / day	750	1,500	3,000
Special Event Revenue	\$7,500	\$15,000	\$30,000
<b>Annual Revenue Estimate</b>	<b>\$57,500</b>	<b>\$165,000</b>	<b>\$280,000</b>

\*Low, Medium and High use are estimates based on regional ATV registrations, comparative data from other facilities and subjective assessments.

Figure 2.11: Revenue Demand Model

- “Since the first trails were opened, users have increased by more than six fold”
- Impact analysis pre- and post-development showed increase in adjacent retail sales of 12-percent and a 25-percent increase in sales per establishment. Local payroll had increased by nearly 10 -percent.

As the Interlake fee structure is established and more specific revenue streams are defined, the revenue demand model should be updated. The model identified is conservative, actual revenue generated is expected to be higher and should increase each year as use increases. Stable, outside revenue sources can be added to the revenue demand model.

The comparisons drawn to the Hatfield-McCoy trail system and St. Joe State Park are for fully functioning systems that will be more accurate for Interlake as use matures and facilities are constructed.

### SECTION 2.G: BUDGET SUMMARY

Figure 2.12, Master Plan Phasing and Construction Cost Estimate on page 2.29 provides a summary, by phase, of anticipated construction costs for each facility exclusive of design, environmental mitigation, permitting and other 'soft' costs. The cost figures reflect approximate construction costs as of 2008. The costs indicated are subject to change based on project design, inflation and unforeseen factors.

The approximate time frame identified for full build out of Interlake is 20 to 25 years, with active participation of users and outside funding sources.

It is appropriate to add an inflation factor to the budgets and costs identified in this document as different parts of the plan are implemented. To assist in the definition of more accurate construction costs, further refinement of design plans for each facility is encouraged as implementation projects are finalized.

The cost of temporary improvements has not been included. This would include items such as temporary toilets, temporary offices and similar facilities.

In addition to construction costs, management and operational costs will need to be identified to provide a complete picture of overall management cost. Comparing similar IDNR facilities and other out-of-state facilities will assist in developing an accurate management and operation model for Interlake.

ITEM	AMOUNT	REMARKS
<b>Phase 1: High Priority (0 - 5 years)</b>	<b>\$ 6,435,000</b>	
Phase 1, South Loop Road, SR 68 Access, Trail Crossing	\$ 1,065,000.00	SR 68 R/W Improvements - North Loop A.Z., east leg
Emergency Access Roads and Helipads	\$ 178,000.00	North Loop & Modern Camp Complex AZ
Gate Entry A.Z. Gatehouse/Maintenance Facility	\$ 884,000.00	
Gate Entry A.Z. Water Access/Boat Launch	\$ 158,000.00	
Modern Camp Complex A.Z. Trailhead/Trail Support	\$ 1,115,000.00	
North Loop A.Z. Trailhead/Support area	\$ 1,503,000.00	
North Loop A.Z. Rock Garden/Mud Bog Development	\$ 200,000.00	
North Loop Utilities	\$ 265,000.00	
Gate Entry/Modern Camp Complex A.Z. Utility Service	\$ 440,000.00	Electric & Water Service to Modern Camp Complex
Habitat Enhancement	\$ 627,000.00	Invasive Species/Water Quality
<b>Phase 2: Intermediate Priority (5 - 15 years)</b>	<b>\$ 3,291,500</b>	
Gate Entry A.Z. Roadway Pavement	\$ 188,000.00	Bituminous Surface/Base
Gate Entry A.Z., 3-Season Shelter Area	\$ 480,000.00	
Modern Camp Complex A.Z. Water Access/Boat Launch	\$ 184,000.00	
Log Creek Road A.Z. Trailhead/Support Area	\$ 103,000.00	
North Loop A.Z. North Loop Road	\$ 203,500.00	Trail Support to Camping & CR 1300S
North Loop A.Z. Camping	\$ 1,156,000.00	
Habitat Enhancement/Lake Clean Up	\$ 977,000.00	Includes water quality
<b>Phase 3: Low Priority (over 15 years)</b>	<b>\$ 4,657,000</b>	
Phase 3, South Loop Road,	\$ 334,000.00	West Leg, CR 1300S to Gate Entry AZ
Clutter Road A.Z., Water Access/Boat Launch	\$ 158,000.00	
Clutter Road A.Z. Trail Support Area	\$ 270,000.00	
Modern Camp Trailhead, Corral	\$ 150,000.00	
Modern Camp Complex A.Z., Camping Development	\$ 1,002,000.00	
Log Creek Road A.Z., Interpretive Station	\$ 528,000.00	
Log Creek Road A.Z., Camping Pods	\$ 15,000.00	Primitive on new trail in North Piney Woods MA
Clutter Road A.Z., Interpretive Station	\$ 231,000.00	
Clutter Road Utilities	\$ 20,000.00	
North Loop A.Z. Training Facility	\$ 324,000.00	
North Loop A.Z. Competition Area	\$ 604,000.00	
North Loop A.Z. Water Access/Boat Launch	\$ 158,000.00	
North Loop A.Z., Outdoor Gathering/Amphitheater	\$ 236,000.00	
Habitat Enhancement	\$ 627,000.00	Invasive Species/Water Quality
<b>COST SUMMARY</b>	<b>\$ 14,383,500</b>	
	<b>\$ 3,595,875</b>	
	<b>\$ 17,979,375</b>	

A.Z. = Activity Zone

Figure 2.12: Master Plan Phasing and Construction Cost Summary