

# Management Plan for the Integrated Habitat Network Lease Nos. 3963 and 3995

Bureau of Mine Reclamation



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# Summary

In the early 1990's, the Bureau of Mine Reclamation ("BMR") developed the Integrated Habitat Network ("IHN") plan as a guide for the reclamation of mined lands and the enhancement of unmined lands within the southern phosphate district. With appropriate management, the IHN lands are expected to improve wildlife habitat, benefit water quality and quantity, and serve as connections between river systems in the mining region and significant environmental features outside the mining district. To date, approximately 7,650 acres in nine parcels within the IHN have been acquired by the State through settlement agreements or donations and leased by the Division of State Lands to the BMR for management and protection. Another 21 parcels included in the IHN management plan are lands on which conservation easements or agreements are undergoing development or for which leases are not yet completed; these lands within the realm of the IHN may eventually be managed or monitored by the BMR.

The BMR consulted with several agencies regarding the leased parcels during the development of the IHN management plan. The Division of Historical Resources reported that several potential archaeologically sensitive areas on the leased lands were probably not significant sites. Kissingen Spring on the Peace River ceased flow several years ago but may qualify as a historical site. The Florida Natural Areas Inventory database review revealed environmental occurrence records and potential natural areas on or near the BMR leases, but the data were collected up to 30 years ago and may not reflect existing conditions. A Florida Fish and Wildlife Conservation Commission database review revealed no records of state or federal listed species on the BMR-leased tracts. No outstanding or unique natural features or Outstanding Florida Waters have yet been discovered on these leases.

The IHN is linear and diffuse in nature, covering primarily undisturbed lands within the floodplains of the Peace and Alafia river systems and the adjacent reclaimed buffer lands. The BMR-leased parcels are a complex mixture of diverse habitats and wildlife, different lease and agreement requirements, and assorted management and monitoring needs. However, the parcels have similar problems and needs, including: property boundaries that have not been delineated or marked; access that is nonexistent or restricted; uncertainty regarding the extent and location of existing natural resources; and, continuing infringements for unauthorized uses. These factors make management of the IHN incompatible with the current philosophies and strategies of other land management agencies.

The complexity and diversity of the IHN lands, along with the lack of detailed information for the individual parcels, necessitate that the initial management activities to be undertaken will be to access and identify the properties, secure and protect the lands, and identify and locate the existing resources. A \$200,000 appropriation approved by the Legislature and Governor for fiscal year 2001/2002 will allow BMR's 12-person management staff of highly educated and experienced individuals to begin these basic management activities on the leased portions of the IHN. Only after these initial tasks are completed can the BMR staff determine the appropriate uses and long-term management needs for each leased parcel. The BMR's regulatory presence and familiarity with the central Florida phosphate mining district, as well as the commitment and

experience of its staff, render it extremely qualified to provide, develop, and conduct basic management activities for long-term protection of greenways/wildlife corridors, wildlife habitat, and riparian buffers within the IHN lands.

## Introduction

The BMR became active in land management in the late 1980's through the statutory charge of the Florida Department of Natural Resources, Division of Resource Management ("Division") to which it was assigned. One of the powers and duties of the Division as set forth in Section 370.02(3)(g), Florida Statutes is that "...the division shall also perform functions including, but not limited to, preservation, management, and protection of lands held by the State other than parks and recreational and wilderness areas..." The Attorney General and the Florida Department of Natural Resources, now the Florida Department of Environmental Protection ("Department"), identified the Division, now the Division of Water Resource Management as the entity to manage the lands transferred to the State that had not been leased to another agency.

The Coastal Petroleum Litigation Settlement Agreement ("Coastal Settlement"), finalized on November 3, 1987, set up a matrix whereby five phosphate mining companies were required to deed approximately 6,250 acres in various sized tracts along the Peace and Alafia floodplains to the State of Florida for alterations made by the companies in the State-owned natural channels of these rivers. The five companies - Agrico Chemical Company; American Cyanamid Company; Estech, Inc.; International Minerals & Chemical Corporation; and Mobil Mining and Minerals Company - were to conduct these transfers over a period of 12 years, with the agreement mandating that the transfers be accomplished on either a date or event positive. Through an elaborate procedure, the settlement lands were to be transferred in fee to the Board of Trustees of the Internal Improvement Trust Fund ("BOT") through normal Division of State Lands ("DSL") procedures and then leased by the DSL to an appropriate managing agency.

Approximately 800 acres of Coastal Settlement lands in the Homeland tract west of the Peace River were transferred to the State in April 1989 and the BMR was informally assigned management responsibilities. This tract was formally leased to the Division for management via Lease No. 3963 in October 1992. In October 1993, approximately 930 acres in the Bowlegs Creek tract were leased to the Division in Lease No. 3995 and assigned to the BMR for management.

The BMR developed the concept for the IHN plan and published "A Regional Conceptual Reclamation Plan for the Southern Phosphate District" in 1992. The BMR designed the IHN plan to be a guide for the reclamation of mined phosphate lands throughout the southern phosphate district. The largely undisturbed lands in the riverine floodplains that were transferred to the State pursuant to the Coastal Settlement were to become the "core" lands of the IHN. The adjacent reclaimed "buffer" lands were to compliment and enhance the habitat value of the core lands, benefit the water quality and quantity in the area, and serve as upland habitat connections between the mining region's rivers and significant environmental features outside the mining region.

The IHN was developed to be compatible with and is part of the Florida Statewide Greenways Plan. In keeping with the tenets of the Greenways System Implementation Plan and its enabling legislation, participation in the IHN concept is strictly voluntary. The BMR has been the leading force behind the presentation of the IHN concept to the public, industry, and other agencies to foster understanding, cooperation, and participation in the program. Through the BMR's efforts, the concept has gained wide acceptance and virtually unanimous implementation in the industry. The Department's endorsement of the BMR's efforts regarding the IHN plan provides further support of the role of the BMR in active land management.

In July 1997, Lease No. 3995 was amended to include the floodplains on both sides of the Peace River north of Ft. Meade that are adjacent to the existing Homeland tract. The lease was amended again in February 1998 to include the Coastal Settlement portion of the South Prong Alafia River tract. Amendment No. 3 added the North Prong Alafia River tract, the South Peace River tract, and the southern portion of the Alafia River State Recreation Area tract (formerly part of the Brewster Lonesome Mine) to the lease in October 1999. This third lease amendment (including Coastal Settlement and other donated lands) involved approximately 1,400 acres of the total 6,600 acres of land donated by Cytec Brewster Phosphates, Inc. that has become the Alafia River State Recreation Area. The 1,400 acres will revert to management by the Department's Division of Recreation and Parks after reclamation. A fourth amendment to Lease No. 3995 in April 2001 added tracts along the upper Peace River north of Homeland and along the upper reaches of Little Payne Creek.

Existing BMR land management activities fall into two categories: (a) management of State-owned lands, which are leased directly to the Division of Water Resource Management (BMR parent division) and (b) the development and supervision of the management of lands committed to habitat management through conservation easements or deed restrictions. With the acquisition on October 25, 2001 of lands within the Jahna Ranch Sand Mine, there currently are six conservation easements/agreements that have been completed and are included in the IHN. As part of permitting negotiations and other activities, the BMR is involved in the development of easement agreements, management plans, and documentation reports in cooperation with the landowners and the DSL. The BMR is also responsible for monitoring and inspecting landowner activities in compliance with the easements and management plans.

Approvals of conceptual easements for the Hookers Prairie, South Fort Green, South Fort Meade, and South Pasture phosphate mines and the Florida Power Buffer have either been completed or are pending in reclamation plans and permits. The exact boundaries of the lands to be included in these easements will be defined and codified upon a date or event certain. Lands within other properties (Four Corners, Hardee County, Ona, and Pine Level phosphate mines) are currently undergoing permit negotiations and it is anticipated that portions of these lands will eventually be included in easements.

The BMR is also working with the Division of State Lands (Bureau of Land Acquisition and the Office of General Counsel) on pending donations of 655 acres from U.S. Agri-Chemicals Corporation and approximately 500 acres from the Florida Power Corporation. As with other State-acquired lands, these donated lands will be transferred to the BOT through normal DSL procedures and then leased by the DSL to an appropriate managing agency.

The BMR and the Division of State Lands-Bureau of Public Land Administration are involved in other activities, including proposed subleases of Lease No. 3963 to the Polk County Division of Recreation and Parks for a Peace River canoe launch/take-out and to an individual for a cattle grazing lease. Both bureaus are also working with the Deputy Secretary for Land and Recreation on a proposed land exchange with the current owners of the former Clear Springs Mine.

Lands in the IHN are predominantly streams and rivers with adjacent floodplains and some isolated reclaimed uplands. As the public seeks additional venues for recreation, the BMR will work with other land-management agencies or branches within the Department to ensure compatibility and may relinquish intensive management for human activity to other agencies as appropriate. However, with the BMR's long history of land management and planning, the integral nature of the IHN conceptual reclamation plan for the southern phosphate district, and legislative authorization for the BMR to provide basic management of lands included in the IHN, the BMR is committed to providing long-term "basic management" for the protection of greenways and corridors, wildlife habitat, and riparian buffers as critical functions of the IHN.

## Property

### **Description**

The aggregation of properties comprising the IHN is located in the southern phosphate district in west central Florida. Large portions of the IHN have been or are anticipated to be acquired by the State through settlement, donation, conservation easement/agreement, purchase, or regulatory action. Following acquisition by the State, it is likely that some of these lands will be leased to the BMR for management or otherwise become the management and/or monitoring responsibility of the BMR. Other lands considered a significant part of the IHN are owned and managed by private entities whose voluntary cooperation is essential to attaining the concept's goals. Details of the lands included in this IHN management plan are described below.

### **Coastal Settlement Lands**

1. The North Prong Alafia River tract, part of the Mobil Mining and Minerals Company ("Mobil") portion of the Coastal Settlement, consists of approximately 234 acres. This tract is currently patrolled by BMR personnel, with boundary delineation and marking expected to be completed within the next two years.
2. The Alafia River State Recreation Area tract contains 960 acres of Coastal Settlement lands that were originally owned by American Cyanamid Company and later by Brewster Phosphates, Inc. ("Cytec"). Only the floodplains along the South Prong Alafia River that are inside this tract were transferred to the State as part of the Coastal Settlement and are currently managed by the Division of Recreation and Parks ("DRP").
3. The South Prong Alafia River tract, another portion of the Coastal Settlement lands that was owned by Cytec, is approximately 135 acres in size and is currently patrolled by

BMR personnel. Boundary delineation and marking are anticipated within the next two years.

4. The Clear Springs tract, originally part of the IMC Phosphates Company ("IMC") portion of the Coastal Settlement, is approximately 1,439 acres in size and is currently patrolled by BMR personnel. Boundary delineation and marking are scheduled to occur within the next two years.
5. The 1,923-acre Homeland tract, part of the Mobil portion of the Coastal Settlement is the site of the Department's Homeland Field Office for personnel of the BMR and the Division of State Lands-Bureau of Invasive Plant Management ("BIPM"). Structures and improvements on this parcel include an office building, an enclosed storage building for vehicles, boats, and maintenance equipment, and a paved entrance road and parking area. The BMR staff has also constructed a nursery at Homeland to grow and study native plants to be used in reclamation activities in the IHN.
6. The Bowlegs Creek tract, the Estech, Inc. portion of the Coastal Settlement, is approximately 921 acres in size and is patrolled by BMR personnel. Boundary delineation and marking are anticipated within the next two years. The Florida Rangers, Inc., a church youth group in Ft. Meade, aid management activities through a formalized volunteer organization agreement.
7. The 366-acre South Peace River tract, part of the Mobil portion of the Coastal Settlement, is surrounded by the active South Ft. Meade Mine owned by Cargill Fertilizer, Inc. ("Cargill"). BMR personnel currently patrol this tract; boundary delineation and marking are scheduled to occur within the next two years.
8. The Little Payne Creek tract was originally part of the Coastal Settlement lands owned by Agrico Chemical Company (now part of IMC). This tract, approximately 272 acres in size, is patrolled by BMR staff. Delineating and marking the boundary are anticipated within the next two years.

## **Donations**

9. The DRP-managed portion of the donated Alafia River State Recreation Area tract contains lands that were given to the State by Cytec. This 5,200-acre parcel is currently in use as a public park and recreation area with restrictive covenants to ensure these uses.
10. The BMR-managed portion of the donated Alafia River State Recreation Area tract is a 1,400-acre area containing unreclaimed phosphate-mined lands. A 16-year mining lease in favor of IMC encumbers the land with royalties payable to Cytec. A \$30.5 million bond held by Hillsborough County secures the reclamation obligations of IMC and Cytec. The BMR is currently administering this lease. When the reclamation requirements are satisfied, the land will revert to the DRP for management. Reclamation planning meetings are underway between IMC, Hillsborough County, and the DRP.

11. The McCullough Creek Headwaters tract is a 655-acre proposed donation from U.S. Agri-Chemicals Corporation. Completion of the provisions of the donation is imminent. The BMR has been designated as the managing agency for this tract.
12. The Tiger Bay tract is a 500-acre proposed donation from Florida Power Corporation (“FPC”). Finalization of the donation conditions is imminent, with the BMR scheduled to serve as the managing agency for this tract.
13. By settlement agreement with the BOT, IMC was allowed to mine the dry lakebed of the former Polk Lake. In return, 395 acres of reclaimed lake and surrounding uplands will be returned as the Polk Lake tract to the BOT via Special Warranty Deed from IMC. Active reclamation has been completed and the area is in the establishment phase; upon release of further reclamation obligation by the BMR, IMC will execute the Special Warranty Deed. A managing agency for this tract has not yet been designated.

### **Conservation Easements**

14. IMC’s West Fork of Horse Creek Headwaters tract is a two-phased Perpetual Conservation Easement (“PCE”) that consists of not less than 521 acres. The first phase consists of not less than 182 acres of preserved floodplain and surrounding uplands of the West Fork of Horse Creek. This portion of the easement has been executed and filed. The second phase will consist of not less than 339 acres of “created wetlands and encompassed stream associated with the West Fork of Horse Creek”. The legal description of the second phase shall be incorporated as an amendment to the existing PCE within time certain of BMR’s approval of final reclamation/mitigation contours. IMC will manage and the BMR will monitor the land through the release of reclamation and mitigation. Following release, the BMR will provide basic management of the protected property.
15. IMC’s Hardee Lakes tract is located in northwestern Hardee County along the west side of Payne Creek. In June 2000, IMC donated the 1,261-acre Hardee Lakes Park to the county. The floodplain and reclaimed wetland portions of the park (approximately 40 percent of the total) are also included in an executed PCE to the Department. Hardee County will manage the entire park; the BMR is monitoring the PCE.
16. The Hooker’s Prairie Connection tract is approximately 443 acres in size. FPC gave this executed PCE to the Department as an environmental consideration for its Hines Power Facility Site Certification. Land management, the responsibility of the landowner, is monitored by the BMR.
17. Reclamation of the approximately 1,115-acre Power Plant Buffer tract is nearing completion. Finalization of the PCE by the FPC and DSL is imminent, with the BMR designated as the managing/monitoring agency.

18. The Camp Meeting Ground Branch tract is approximately 10 acres in size. The property subject to this easement is managed by a private landowner whose activities are monitored by the BMR.

### **Lands with Approved Plan**

19. IMC's South Ft. Green Mine includes a portion of the East Fork of Horse Creek which is intended to be protected by an approximately 1,700-acre PCE negotiated during the mine-wide permit approval process. Development of the draft PCE by IMC and the BMR is underway.
20. Cargill's Hookers Prairie Mine tract is approximately 2,500 acres in size and consists of the majority of the mine's wetlands. Procedures for determining the time schedule, final acreage, disposition, managing entity, and monitoring agency for this tract are contained within the approved conceptual reclamation plan and mine-wide permit for this mine. The BMR and Florida Fish and Wildlife Conservation Commission ("FFWCC") will assume coordinated responsibility with Cargill in these aspects.
21. CF Industries' South Pasture Mine tract is approximately 8,130 acres in size. The company's conceptual mine plan and mine-wide permit have been completed and approved. As part of these approvals, a conservation agreement was promulgated with the exact boundaries and acreages to be determined as reclamation is completed.
22. Cargill's South Ft. Meade Mine tract is approximately 5,168 acres in size. Procedures for determining the time schedule, final acreage, disposition, managing entity, and monitoring agency for this tract are contained within the approved conceptual reclamation plan and mine-wide permit for this mine.
23. The Jahna Ranch Sand Mine, owned by E.R. Jahna Industries, Inc. ("Jahna"), is located in the core area of the Green Swamp Area of Critical State Concern. As a result of lengthy negotiations between Jahna, the Department, The Nature Conservancy, and the Florida Department of Community Affairs, approximately 5,757 acres of natural habitat are protected through a PCE. Jahna will actively manage the protected property; the BMR is the designated managing agency with monitoring responsibility. Following BOT approval of the overall land transaction, finalization of the life-of-the-mine permit issuance and land acquisition were completed on October 25, 2001.
24. The Old Florida Plantation tract is a housing/commercial development planned by Old Florida Plantation, Ltd. for construction on reclaimed lands along the southeastern shore of Lake Hancock. A Development Order ("DO") approved by the city of Bartow calls for the conservation of approximately 2,480 acres of wildlife habitat through various levels of protection and management. The BMR and landowner, working through the BMR's Nonmandatory Reclamation Program, designed the wildlife habitat plan reflected in the DO. The BMR is now working with the landowner on a wildlife habitat management plan that will be presented to the city for review and approval.

25. The Williams Company tract is a housing/commercial development planned for construction on reclaimed lands between Interstate 4 and the Tenoroc Fish Management Area. Through a DO approved by the city of Lakeland, a significant percentage of the development will be designated as wildlife habitat/greenspace. The BMR and landowner, working through the Nonmandatory Reclamation Program and the Saddle Creek Restoration Project, are cooperating on drainage and habitat improvements that will benefit Saddle Creek and a greenway/wildlife corridor connection from the upper Peace River (Saddle Creek) to the Green Swamp.

### **Lands Under Plan Development**

26. Pursuant to a proposal made by IMC and accepted by Hillsborough County, approximately 7,500 acres of natural floodplain and reclaimed buffer along the Little Manatee River in the Four Corners Mine tract will be donated to the county in three phases. The BMR may assume interim protection responsibilities through the life of mining and reclamation release.
27. IMC's Ona Mine tract is currently undergoing team permit negotiations. As a result of these negotiations, it is anticipated that portions of this mine will be protected via long-term maintenance mechanisms. The BMR has offered to be the managing agency for any landowner rights accruing to the BOT.
28. Farmland Hydro L.P.'s Hardee County Mine tract is currently undergoing team permit negotiations. It is anticipated that portions of this mine will be protected via long-term maintenance mechanisms. The BMR has offered to be the managing agency for any landowner rights accruing to the BOT.
29. IMC's Pine Level Mine tract is currently undergoing team permit negotiations; it is anticipated that as a result of these negotiations, portions of this mine will be protected via long-term maintenance mechanisms. The BMR has offered to serve as the managing agency for any landowner rights accruing to the BOT.
30. The Clear Springs Mine tract, formerly owned by IMC and currently owned by the Clear Springs Land Development Company, is undergoing planning for residential, commercial, and industrial development. (The Coastal Settlement land known as the Clear Springs tract under lease to the BMR is surrounded by this planned development.) Submittal of a formal Application for Development Approval pursuant to a Development of Regional Impact for the development has not yet occurred. The BMR and the landowner are involved in pre-application meetings on a variety of topics relevant to both ownerships.

### **Adjacent Lands**

Several significant federal, state or local land and water resources are located within the IHN, including: Tenoroc Fish Management Area, Alderman Ford Park, Alafia River State Recreation

Area, Payne Creek State Historic Site, the Polk County Saddle Creek and IMC-Peace River parks, and Southwest Florida Water Management District's Medard Park.

Nearby existing or proposed public lands with significant land and water resources include: portions of the Green Swamp Area of Critical State Concern, Choctawatchee River Water Management District Area, Myakka River State Park, Lake Wales Ridge Ecosystem, Avon Park Bombing Range, Brighthour Watershed, Babcock-Webb Wildlife Management Area, Catfish Creek State Preserve, and Disney Wilderness Preserve.

The Statewide Greenways System is expected to connect the significant land and water resources on and near the IHN lands with nearby regional hubs and linkages such as the Green Swamp, Tampa Bay, Charlotte Harbor, and the Kissimmee River. The efficacy of the IHN greenways system in the region would be greatly enhanced by these connections. Likewise, currently disjointed tracts within the IHN could be connected and enhanced by the State's acquisition of nearby parcels owned by various private or corporate landowners. The Polk County and Hillsborough County Land Acquisition Programs provide another means of preserving or protecting significant lands in the IHN. These county programs are actively acquiring lands via purchase or donation that may serve as critical connections to lands within or near the IHN.

Other tributaries to the Peace River that were historically impacted by mining operations are listed in the Nonmandatory Phosphate Reclamation Rules (Chapter 62C-17, Florida Administrative Code/Zellers-Williams Report incorporated) as areas in need of restoration. These areas are an important part of the IHN and are critical to the return of quality flows to the Peace River. Through the Nonmandatory Reclamation and Acquisition programs, the BMR is working with private landowners to improve these important tributaries and their sub-basins.

Just as there are significant areas within and near the IHN that would benefit this system, there are also adjacent properties with land uses that may conflict with the planned uses of the IHN. Land uses such as residential/industrial development, intensive recreational usage, and continuing phosphate mining operations, as well as conflicting management strategies on nearby lands for controlled burns, livestock grazing, and nuisance/exotic species control, all pose potential conflicts with the BMR-managed lands. The BMR is working with these adjacent property owners to ensure that lands within the IHN are protected and preserved for maximum public benefit.

## Resources

### **Archaeological/Historical**

Areas in the IHN that were merely clear-cut for timber or grazed by cattle may contain intact resources below the area of disturbance. High-impact activities, such as phosphate mining or power plant construction, likely had an adverse effect on any archaeological or historical resources that may have been present. The Division of Historical Resources ("DHR") reviewed its database for possible archaeologically sensitive areas in the lands managed by the BMR.

Results indicated that recorded sites along the banks of the Peace River appeared to be lithic scatters and were probably not significant sites. Because of significant mining activities in the vicinity, it is not known if any of these sites still exist.

The only currently known historical resource site within the IHN is the former Kissingen Spring, located on the west side of the Peace River south of Bartow. Although flow from the spring ceased several years ago, considerable interest exists regarding the possibility for restoring spring flow. The BMR will continue to investigate this possibility with the cooperation of the current owner, Polk County, the Southwest Florida Water Management District, and the U.S. Geological Survey.

Data records for the other portions of the IHN acquired by donation, less-than-fee easement, regulatory action, or purchase which have not been leased to the BMR have not yet been reviewed by the DHR. The BMR recognizes the importance of Section 267.061, Florida Statutes regarding the protection and interpretation of archaeological/historical sites and will adhere to DHR guidelines recommending conservation until the resources have been better addressed by the DHR.

### **Vegetation and Land Uses**

Vegetation surveys have not yet been conducted on the majority of the IHN lands being managed by the BMR. Consequently, aerials (1994), LANDSAT maps (1986), and the Florida Land Use, Cover and Forms Classification System (1985) were used to identify possible habitat types present on the parcels. These generalized habitat types and sub-categories include: Urban and Built-Up (Extractive and Recreational); Agriculture (Cropland/Pastureland); Rangeland (Herbaceous and Shrub/Brushland); Upland Forest (Upland Coniferous Forest and Upland Hardwood Forest); Water (Stream/Waterways, Lakes, and Reservoirs); Wetlands (Wetland Hardwood Forests, Wetland Coniferous Forests, Wetland Forested Mixed, and Vegetated Non-Forested Wetlands); and Barren Land (Disturbed Lands).

Detailed examinations of all the tracts within the IHN are needed to determine the habitat types and plant species that are actually present. BMR staff and/or private contractors who are familiar with the floral species of Florida have begun conducting site-specific surveys of the IHN lands, with emphasis on locating listed species. Results of these surveys will be used to develop site-specific management activities, including the use of nuisance and exotic species control, supplemental planting, timber harvests, and controlled burns.

### **Fish and Wildlife**

The Florida Natural Areas Inventory ("FNAI") and FFWCC conducted database reviews of the BMR-leased portions of the IHN in April 1999. The FNAI database contained records of several wildlife species of interest either in or within one mile of the areas examined. The FNAI listed numerous Element Occurrence Records within one mile of the BMR-managed tracts along the Peace and Alafia River tracts.

While the FNAI database contained records of several wildlife species of interest either within or near the approximate boundaries of the BMR leases, a review by the FFWCC of its species occurrence database revealed no records of state or federally listed wildlife species in these areas. The FFWCC also reported that no records of state or federally listed plant species within the approximate boundaries of the property were found in either database.

The BMR intends to conduct site-specific surveys of its lands in the IHN to determine the current existence and status of listed species, with the surveys to be conducted by individuals familiar with Florida's fauna. Results will be used to determine the appropriate management activities needed to protect and preserve the existing wildlife and enhance conditions to promote and sustain their presence on the property.

### **Outstanding/Unique Natural Features**

Because of all the human-related activity that has occurred in this area, the greatest possibility for the presence of outstanding native landscapes with relatively unaltered flora, fauna, or geological conditions would occur in the southern portion of the mining district. The BMR will conduct field surveys and database reviews of the properties currently under its auspices to identify and locate any such remnant communities, population, or natural features that have gone undetected up until now. The BMR will emphasize the protection and preservation of any outstanding or unique natural features that currently exist or which may be found on IHN lands within the realm of this management plan. Outstanding and unique natural features on lands under plan development and lands that will be reviewed in the future will be protected through the Environmental Resource Permit process and any long-term maintenance and protection mechanisms arising from this process.

### **Soils**

The IHN is predominantly streams and rivers with adjacent floodplains and some isolated reclaimed uplands. The soils typically found in and near the Peace River in Polk County include Neilhurst sand, Nittaw sandy clay loam, Bradenton fine sand, Bradenton-Felda-Chobee association, and Chobee fine sandy loam. In Hillsborough County, the main soil type in the floodplain of the Alafia River was Winder fine sand. The phosphate mining, by-product disposal, and reclamation activities that occurred in some portions of the IHN resulted in soil types that are very different from the original soils. The soils typically produced by phosphate mining operations include Hydraquents, Arents-water complex, Haplaquents, and Arents, all of which are highly unsuited to development due to high clay or water content.

BMR management staff plans to protect and conserve land resources by employing site-specific management guidelines and by developing Reclaimed Land Best Management Practices ("BMPs") to address the varying conditions on the individual tracts.

### **Minerals**

The BMR has found no records of oil, gas, or remnant phosphate resources of economic importance in the BMR-managed portions of the IHN management plan area. The BMR has no

plans to attempt to locate and/or use any resources that may be discovered. Phosphate and sand reserves do exist in various grades and quantities within areas under a PCE and/or Conservation Agreement; the easements and agreements state that there will be no exploration for or exploitation of mineral resources within the protected lands.

## **Water**

Water resources in the IHN include natural rivers and streams, reclaimed lakes and streams, and unreclaimed mine cuts and clay settling areas created by phosphate mining activities. The predominant bodies of natural water in those areas of the IHN managed by the BMR are the Peace and Alafia Rivers and Bowlegs, Little Payne, Payne, and Horse Creeks. These rivers and streams have been labeled Class III waterbodies but are not designated as Outstanding Florida Waters. The reclaimed and unreclaimed streams, lakes, clay settling areas, and water-filled mine cuts in the area are of varying quality but are considered Class III waters. BMR staff is working with state, regional, and local agencies and private landowners to restore the drainage basins and floodplains of Saddle, Six-Mile, McCullough, and Whidden Creeks and Camp Meeting Ground Branch that were adversely affected by phosphate mining in the area.

Except for the Jahna Ranch Sand Mine, which is within the Green Swamp Area of Critical State Concern, the tracts in the IHN are not within an aquatic preserve or designated Area of Critical State Concern nor are they under study for such designation. However, the potential of the wetlands on the property to provide important ecosystem functions, such as flood mitigation, storm abatement, aquifer recharge, and water quality improvement, makes the IHN extremely important to downstream waters that may be in an aquatic preserve or a designated Area of Critical State Concern.

BMR management staff plans to protect and conserve water resources by employing site-specific management guidelines and by developing Reclaimed Land BMPs to address the varying conditions on the individual tracts within the IHN.

## Land Uses

"Approved" land uses in the IHN that may have occurred or may still be occurring include: mining and reclamation, industrial (power plants), timbering, and agricultural (including livestock grazing, row crops, and citriculture) activities. "Unauthorized" activities that previously occurred or may still be occurring on the property include: encroachment by adjacent property owners, hunting, trespassing, camping, fishing, vandalism, dumping, marijuana cultivation, the use of off-road vehicles, and the illegal excavation and/or collection of archaeological relicts from the riverbeds and floodplain forests along the Peace River, Bowlegs Creek and Kissingen Spring.

The BMR, as the sole managing agency for its leased lands within the IHN, has designated "single use management" for the submerged lands and "multiple use management" for the remainder of the lands in accordance with Sections 253.034(a, b), Florida Statutes. Submerged

lands will be managed primarily to maintain essentially natural conditions, the propagation of fish and wildlife, and public recreation, with limited public recreation permitted at the discretion of the managing agency. Timber, recreation, conservation of fish and wildlife and their habitat, agricultural lands, archaeological and historic sites, and water resources will be managed so that they are utilized in the combinations that will best serve the people of the state and provide the most judicious use of the land. Site-specific management decisions are to be predicated upon environmental, economical, recreational, sociological and aesthetical issues.

At the BMR's request, the Polk County Planning Division conducted an analysis of the IHN Management Plan and determined its compliance with the goals, objectives and policies of the Polk County Comprehensive Plan. By ensuring the minimization or mitigation of impacts, promoting the restoration of regional drainage patterns and wildlife habitats within the post-mining landscape, and manage the natural riparian lands and adjacent reclaimed habitats provide regional water quality enhancement and wildlife corridor connectivity, it is the BMR's contention that this management plan also complies with the goals and objectives of the Conceptual State Lands Management Plan.

## Plan Development

The BMR provided a very basic management plan pursuant to Lease No. 3963 in 1992 for the construction of the field office complex on the Homeland tract. This plan described the Homeland Field Office as a facility to be shared by staff of the BMR and BIPM.

During the development of this IHN management plan, the BMR had to take into consideration the existing and proposed land uses; recommendations and requirements of other agencies and organizations working in cooperation with the BMR; the purposes, restrictions, and requirements of the Coastal Petroleum Litigation Settlement Agreement; limitations and requirements of the two leases and four lease amendments; applicable phosphate mine reclamation and restoration requirements; and, the existing problems and needs of the property.

On July 17, 2001, copies of this draft were provided to the Advisory Committee, a group composed of numerous persons from a broad range of occupations, interests, and experience whose input was used to develop and improve the management plan for the IHN. The advisory committee meeting/public hearing was held on August 15, 2001 and the comments from committee members and the public were used to finalize the management plan. The final IHN management plan was submitted to the DSL on November 19, 2001 and is to be presented to the Acquisition and Restoration Council for the public hearing and the council meeting in February and April 2002, respectively.

## Priority Issues

Numerous issues currently exist on the tracts of land managed by the BMR that require attention from the BMR land management staff, including:

- a. property boundaries that are not affixed, delineated, or marked;
- b. access onto the individual tracts that is nonexistent or restricted;
- c. curtailing the continuing infringements from off-site sources;
- d. determining the location and extent of the renewable and non-renewable resources on the property so as to better address management needs;
- e. reclaiming the mined/disturbed areas in order to address safety issues and improve/enhance habitat values;
- f. correcting hazardous conditions created by abandoned mine equipment which create safety concerns on several tracts within the IHN;
- g. maintenance/enhancement activities, such as invasive plant reduction and native plant installation and maintenance, needed to preserve/conservate existing natural resources;
- h. the need to develop the scope of appropriate public recreational opportunities on the property;
- i. the need to increase public knowledge and understanding of the phosphate industry and reclamation; and,
- j. the need to advance the art/science of reclamation, mitigation, and management of reclaimed lands to increase the potential for use, where appropriate, by development, industry, agricultural interests, etc.

The BMR's land management staff will employ the following goals, objectives and activities (or "strategies") to address these problems and needs:

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### **Goal #1 – Property Definition and Protection**

There are eight tracts composed of numerous separate parcels covering several thousand acres of land within the BMR leased portion of the IHN. The boundaries of the majority of the tracts have not been delineated nor marked by signs or fencing. Access to many of these properties is restricted or non-existent. Encroachment from adjacent landowners and individuals is a common occurrence. Prevention and legal enforcement of these infringements is limited.

#### **Objective #1: Define property boundaries**

Activities:

- a. Determine or locate legal descriptions for each tract

- b. Affix property boundaries with surveying and Global Positioning System; it is anticipated that boundary surveying and establishment will be started in 2001/2002 utilizing a private firm under state contract for such activities with the DSL.

### **Objective #2: Mark property boundaries**

#### Activities:

- a. Develop and install markers denoting area as Integrated Habitat Network
- b. Install fencing as needed along property boundaries using BMR staff and/or private contractors

### **Objective #3: Create or improve access**

#### Activities:

- a. Review aerials to determine potential access points or routes
- b. Conduct site visits to verify pre-determined access points and routes or revise as needed
- c. Contact adjacent landowners if access to IHN property to be through adjacent lands
- d. Use BMR staff and/or private contractor to construct/improve access

### **Objective #4: Protect against infringements**

#### Activities:

- a. Construct ditches, repair fencing, install barriers along boundary where needed
- b. Install security gates and locks at access points
- c. Conduct frequent inspections of tracts to detect unauthorized infringements
- d. Work with the FFWCC and local law enforcement agencies regarding prosecution of violators

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## **Goal #2 – Conservation and Preservation of Non-Renewable Resources**

There is a possibility that archaeological/historical or outstanding/unique natural features resources may occur on the IHN, but more detailed field surveys and data reviews are needed to determine their existence. More specific information regarding these resources would be useful in developing guidelines to be used in the conservation and preservation of these non-renewable resources.

### **Objective #1: Conservation and preservation of archaeological/ historical resources**

Activities:

- a. Contact DHR regarding analysis of tracts in IHN not previously considered
- b. Assist DHR staff during investigations of potential archaeological/ historical sites
- c. Contact DHR prior to ground-disturbing activities in previously undisturbed areas
- d. Conduct impact assessment prior ground-disturbing activities in areas where archaeological/historical resources have been or may be found

### **Objective #2: Conservation and preservation of outstanding/unique natural features**

Activity:

- a. Survey property to detect any outstanding/unique natural features

### **Objective #3: Conservation and preservation of soils**

Activities:

- a. Contact appropriate agencies, such as U. S. Department of Agriculture-Natural Resources Conservation Service ("NRCS"), soil and water conservation districts, water management districts, and cooperative extension services regarding BMPs for soil erosion control
- b. Implement, as needed, appropriate soil conservation and preservation BMPs

### **Objective #4: Conservation and preservation of water resources**

Activities:

- a. Contact appropriate agencies, such as NRCS, soil and water conservation districts, water management districts, and cooperative extension services regarding BMPs for water
- b. Develop site-specific guidelines to address conservation of water resources and reduction of potential non-point source pollution on individual tracts
- c. Work with cooperative extension services to set up Integrated Pest Management program for IHN, to include BMPs for pesticides and fertilizers
- d. Implement appropriate water conservation BMPs in individual tracts of IHN, as needed

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### **Goal #3 – Maintenance/Enhancement of Renewable Resources**

While many species of fish and wildlife are presumed to be present on the individual tracts within the IHN, the density, location, and stability of the animal populations have not been accurately documented. The habitats that support these animals have also not been extensively surveyed, so that an accurate picture of the locations, extents, and "health" of vegetation populations are also not available. Maintenance activities such as prescribed fires and exotic species control and enhancement activities such as habitat enhancements for wildlife have been haphazardly performed in the past. More information needs to be obtained so that adequate guidelines and schedules can be developed for the maintenance and enhancement activities that need to be undertaken for the benefit of the fish, wildlife, and habitat resources on the IHN.

#### **Objective #1: Assess location, extent, and health of fish/wildlife/habitat resources on the IHN**

Activities:

- a. BMR staff and/or private contractor to conduct wildlife surveys, with emphasis on listed species, and prepare report of findings
- b. BMR staff and/or private contractor to conduct vegetation surveys, with emphasis on listed species, and prepare report of findings

#### **Objective #2: Investigate documentary sources and contact agencies such as Division of Forestry ("DOF"), FFWCC, DRP, NRCS, and Florida Institute of Phosphate Research for assistance in development of site-specific guidelines for maintenance and enhancement activities and schedules for individual tracts in IHN**

Activities:

- a. Work with DOF, FFWCC, and BIPM to develop wildfire emergency plans and controlled burning plans and evaluate timbering potential for individual tracts in IHN
- b. Work with BIPM, FFWCC, and University of Florida-Institute of Food and Agricultural Sciences ("IFAS") to determine BMPs for nuisance and exotic species control on the individual tracts within the IHN
- c. Develop BMPs for improved wildlife corridor functionality in conjunction with greenways used for recreational purposes
- d. Coordinate with FFWCC, Florida Institute of Phosphate Research, Department of Transportation, IFAS, and the U.S. Fish and Wildlife Service to determine enhancement actions, such as the planting of native food and cover species, the control of nuisance and exotic species, appropriate use of pesticides and fertilizers, and innovative methodologies to attract and sustain fish and wildlife, especially listed species, on reclaimed lands

- e. Work with NRCS, DOF, etc. to develop BMPs for the protection and conservation of soil and water resources on reclaimed lands

**Objective #3: Implement maintenance and enhancement activities in individual sites according to guidelines and schedules**

Activities:

- a. BMR staff and/or private contractor to identify and prioritize parts of or entire tracts in the IHN in terms of prescribed burns, exotic species control, enhancement plantings and techniques, etc.
- b. BMR staff and/or private contractor to implement maintenance and enhancement measures in individual tracts based on results of rankings

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**Goal #4 – Reclamation/Restoration of Mined/Disturbed Areas**

Phosphate mining occurred in many of the IHN tracts and some unreclaimed areas remain. To eliminate safety concerns and to improve habitat, especially for listed species, mining debris needs to be removed and clay settling areas and other mined/disturbed areas need to be reclaimed. Impacted habitats can be enhanced through the implementation of nuisance/exotic species control, revegetation with beneficial native food and cover species, and the creation of artificial nesting, resting, and roosting sites.

BMR land management staff is interested in addressing the lack of commercially available native plant species for use in reclamation. Sources are currently inadequate because of a lack of production in the local area, high costs, and uncertainty regarding their long-term survival and viability.

**Objective #1: Determine where lands disturbed by mining activities are located**

Activities:

- a. Review BMR and industry documents to determine where mining, disturbances, and reclamation have occurred on IHN
- b. Conduct on-site inspections to evaluate existing conditions to determine need and/or feasibility of reclamation

**Objective #2: Determine eligibility for nonmandatory funding or other funding sources for proposed reclamation and restoration activities**

Activity:

- a. Determine potential sources of reclamation funding

**Objective #3: Develop reclamation/restoration plans that are specific for individual sites within the IHN**

Activities:

- a. Develop reclamation plans for areas with secured funding
- b. Have BMR staff and/or contractors inventory and remove mine debris from reclaimed areas

**Objective #4: Determine enhancements needed for existing reclaimed lands and conduct research to determine efficacy of reclamation and enhancement activities**

Activities:

- a. Form committee (including members of the Florida Native Plant Society, IFAS, The Nature Conservancy, phosphate industry representatives, BMR staff, etc.) to identify and collect native plants and seeds throughout the phosphate district for growth and survival experiments at the Homeland facility
- b. Encourage research by interested investigators to study wildlife on reclaimed lands, headwaters and hydrology restoration, etc.
- c. Review BMR and industry records and inspect reclaimed lands to determine feasibility of enhancements
- d. Continue research efforts at Homeland into the propagation of native plant seeds and seedlings with potential for high demand in phosphate industry
- e. Construct "grow-out" facility to propagate seeds of desirable, unique, or endangered species for planting on the IHN and to allow study by environmental and research groups
- f. Develop a satellite reclamation research and environmental education facility on BMR-leased lands that could be used to develop BMPs for phosphate mine reclamation activities as well as educate the public about the phosphate industry
- g. Work with FIPR in the development of a mined lands environmental education facility that can provide opportunities to the public to learn about the phosphate industry and serve as part of a larger regional environmental education center

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**GOAL #5 – DETERMINE APPROPRIATE PUBLIC USES OF PROPERTY**

Except for portions of the Alafia River State Recreation-Reclamation Area tract, the current level of public use in the IHN is extremely low. Numerous areas, such as the sensitive floodplain wetlands or lands that may contain archaeological/historical resources, wildlife habitat, or geological sites, will not be able to support unrestricted public use. Some areas contain

unconsolidated clays, mine debris, or unreclaimed lands that would make them unsafe for public use in their present condition. However, under certain conditions, other areas may be capable of supporting recreational, educational, and limited agricultural activities. Until it can be determined exactly what resources and conditions exist on these lands, it is in the best interests of the public and the State to restrict recreational use on the BMR-leased lands. The Department is aware of the need to facilitate public access to State lands in portions of the IHN, provided that this increased use does not compromise the original conservation intent of the IHN property. As the need for more human-intensive uses of these lands increases, the BMR will work with land management agencies to ensure compatibility of use and may relinquish management of portions of the IHN as appropriate on a site-specific basis.

**Objective #1: Evaluate IHN tracts to determine potential uses**

Activities:

- a. Review agreements and leases to determine restrictions and requirements for each tract
- b. Work with other agencies, adjacent landowners, and environmental organizations to determine appropriate levels of public use

**Objective #2: Designate areas where public use could occur without detriment to IHN lands**

Activities:

- a. Designation of public use areas and appropriate activities
- b. Integrate results of vegetation and wildlife surveys into determinations
- c. Use site-specific information to determine types, schedules, and extents of activities to be permitted

**Objective #3: Develop cooperative efforts with other agencies, local governments, environmental organizations, and citizen's groups to maintain and monitor public use areas**

Activities:

- a. Develop volunteer organizations with the Florida Trail Association, the Florida Canoe and Kayak Association, the Audubon Society, etc. to construct and maintain areas to be used by the public
- b. Organize volunteers to assist with resource management and environmental education projects, such as conducting resource inventories, monitoring population changes in

response to management activities, mapping exotic/nuisance species, creating information kiosks for trails, etc.

- c. Investigate programs that provide funding for organizations that create/maintain greenways and trails systems with in-kind services and volunteer hours, such as the Recreational Trails Program, DuPont Awards Program, the Forest Service's Florida National Scenic Trail cost-share program, Florida Recreational Development Assistance Program, etc.

## Cooperative Efforts

Organizations and agencies that have been or will be involved with the development and implementation of the management plan for the Integrated Habitat Network lands include: the Department of Environmental Protection's Bureau of Mine Reclamation, Office of General Counsel, Office of Greenways and Trails, Division of Recreation and Parks, Division of State Lands, and the Bureau of Invasive Plant Management. Also involved are the Florida Fish and Wildlife Conservation Commission, Department of Transportation, Division of Forestry, Central Florida and Tampa Bay Regional Planning Councils, Southwest Florida Water Management District, Florida Greenways and Trails Council, Hillsborough County Environmental Lands Acquisition Program, Polk County Environmental Lands Acquisition Program, Hillsborough County Greenways Committee, Peace and Alafia River Basin Boards, Hillsborough Basin Board, city and county governments from Polk, Hardee, Hillsborough, Manatee, DeSoto Counties, Florida Institute of Phosphate research, University of Florida - Institute of Food and Agriculture Sciences, U.S. Department of Agriculture - Natural Resources Conservation Service, U.S. Army Corps of Engineers, , U.S. Environmental Protection Agency, Florida Phosphate Council and associated member companies, Royal Rangers youth group, Florida Cattlemen's Association, large developers such as Old Florida Plantation, Ltd. and Clear Springs Land Development Company, and various local and state environmental and citizen groups.

Examples of existing or proposed cooperative efforts include:

- a. the oversight of the Royal Rangers' volunteer assistance with land management of the Bowlegs Creek;
- b. working with the NRCS, IFAS's Ona Agricultural Research and Education Center, area native plant nurseries, the Florida Native Plant Society, and various phosphate companies regarding the construction and operation of a native plant nursery at the Homeland tract to study and develop native species to be used in phosphate mine reclamation;
- c. a sub-lease to the Polk County Division of Recreation and Parks for a canoe launch/take-out site at the Homeland tract, with construction of a semi-pervious entrance road and parking area to be provided by the Gulfstream Natural Gas

Pipeline conglomerate as partial compensation for pipeline construction impacts to the Homeland tract;

- d. the development of a wildlife habitat management plan for property owned by Old Florida Plantation Ltd. pursuant to the City of Bartow DO, in cooperation with Old Florida Plantation, Ltd. and the FFWCC;
- e. cooperation with Clear Springs Land Development Company with respect to development planning adjacent to the Peace River floodplain (Clear Springs tract) and environmental enhancement of Six-Mile and Peace Creeks;
- f. working with the DSL to standardize documents and procedures and share Global Information System data relative to surveying, mapping, and titles;
- g. coordinating with the Polk County Land Acquisition Section regarding priority lists for acquisitions that will simultaneously benefit the county and the IHN; and,
- h. coordinating with local organizations and agencies to develop unreclaimed or modify reclaimed nonmandatory lands for horseback, off road bicycling, all-terrain vehicles, and other high impact public recreational uses.

## Expenses

### **Potential Revenue Generation**

Section 378.035(6)(a), Florida Statutes authorized the use of up to one-half of the interest income annually for basic management of lands in the IHN from \$30 million reserved in the Nonmandatory Land Reclamation Trust Fund. This reserved amount was increased to \$50 million through legislation enacted by the Legislature and Governor in 2001. These monies are available to the Department annually to fund basic management or protection of reclaimed, restored, or preserved phosphate lands: (1) which have wildlife habitat value as determined by the BMR; (2) which have been transferred by the landowner to a public agency or private, nonprofit land conservation and management entity in fee simple, or which have been made subject to conservation easement; and, (3) for which other management funding options are not available. These funds may, after the basic management or protection has been assured for all such lands, be combined with other available funds to provide a higher level of management for such lands.

Other possible funding sources include Conservation and Recreation Lands, Florida Forever P2000, Department of Transportation, Charlotte Harbor National Estuary Program-Restoration Partners Grant, water management districts, acquisition programs, mitigation projects, and environmental organizations, depending on the intended use of the funds and the requirements of the organization. Potential revenue sources include payments for agricultural leases, natural gas pipeline leases, recreational user fees, timber leases, etc.

## Estimated Costs of Management Activities

The Legislature and Governor approved a \$200,000 appropriation in the 2001/2002 Department of Environmental Protection's portion of the State budget. The estimated costs to be incurred by the BMR land management staff as it conducts the basic management activities outlined above are:

TASK	ESTIMATED COST
a. boundary determination, including surveys and marking	\$75,000
b. physical land management, including fire guards, localized exotic plant control, fencing, mowing, controlled burns, etc	\$ 5,000
c. equipment and supplies, including fuel, lubricants, hand tools, etc	\$10,000
e. part-time assistance	\$45,000
f. helicopter rental to conduct cursory aerial inspections to assist in prioritization of boundary determinations	\$15,000

Not specifically described but included in the cost estimates are: (a) the cost of training BMR staff in exotic plant control (pesticide applicator's licenses) and prescribed burning and fire control; (b) gates, chains, locks, and extra keys for fenced areas; (c) aerial photographs and topographic maps; assistance from the DOF; and, (d) seed, plant stock, and fertilizer for the native plant nursery and reforestation areas. Cost-effective measures that may be employed to minimize the costs of basic land management activities include:

- a. fencing only those areas where infringements from off-site sources continue to occur;
- b. minimizing the use of boundary markers where possible (such as along boundaries of state- or county-owned or -managed lands);
- c. having trained and certified BMR staff conduct herbicide treatments of nuisance and exotic species;
- d. having trained and certified BMR staff conduct prescribed burns; and,
- e. using volunteers where appropriate in maintenance and monitoring activities.

An analysis of the potential use of contractor services for management and restoration activities was conducted as part of the development of this IHN management plan. The activities that were considered for outsourcing to private entities included: surveying, road development and maintenance, prescribed burning, vegetation inventories, timber harvest activities, public contact and education facilities development, and exotic species control. Although some of these activities will be contracted, results of the analysis revealed that existing BMR personnel are extremely qualified to perform the majority of the required land management activities on the IHN lands.

The "core" of the BMR land management group is comprised of six highly skilled BMR employees who are directly involved in actual management, another staff member who is involved in the management activities through regulatory oversight, and a "support" group that contains five other highly experienced BMR employees (resumes will be made available upon request). BMR staff possesses considerable education and experience in land management as well as numerous other disciplines. In addition to conducting the basic management activities, the BMR land management group will provide informed assistance with management tasks for leased properties, Geographical Information System support and DSL records experience, and considerable State Lands, budgetary, and legislative guidance and support. In those areas where outside assistance may be required for restoration or management activities, the BMR land management staff also has access to and is part of an extensive network of land managers throughout the State who can provide additional information and assistance upon request.

## Conclusion

The BMR developed the IHN concept in the early 1990's as a guide to assist the phosphate industry with the reclamation, enhancement, and management activities of lands within the southern mining district. The BMR itself is currently responsible for approximately 7,650 acres of mined and unmined lands in several disjunct parcels within the IHN that were acquired by the State through settlement agreements or donations and then leased to the BMR for management and protection. The BMR-leased parcels are a complex mixture of lands primarily within and adjacent to the floodplains of the Peace and Alafia river systems that contain diverse habitats and wildlife, different lease and agreement requirements, and assorted management and monitoring needs.

The linear, diffuse nature of the IHN is not compatible with the current management philosophies and strategies of other land management agencies and sections of the Department, especially when all the conditions and requirements for these IHN lands are considered. The BMR's regulatory presence and familiarity with the central Florida phosphate mining district, as well as the commitment and experience of its staff, render it uniquely qualified for the protection and production of vital greenspace within a rapidly urbanizing area. The BMR is committed to providing basic management for long-term protection of greenways/wildlife corridors, wildlife habitat, and riparian buffers within the region.

## Acknowledgements

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Finally, we would like to thank the numerous staff members of the Bureau of Mine Reclamation who have and will continue to dedicate significant time and effort to this undertaking.

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# Abbreviations and Acronyms used in IHN Management Plan

<b>Abbreviation/ Acronym</b>	<b>Explanation</b>	<b>Page Where First Used</b>
BIPM	Bureau of Invasive Plant Management (Division of State Lands)	7
BMP	Best Management Practice	13
BMR	Bureau of Mine Reclamation (Division of Water Resource Management)	3
BOT	Board of Trustees of the Internal Improvement Trust Fund	4
Cargill	Cargill Fertilizer, Inc.	7
Coastal Settlement	Coastal Petroleum Litigation Settlement Agreement	4
Cytec	Cytec Brewster Phosphates, Inc.	6
Department	Florida Department of Environmental Protection	4
DHR	Division of Historical Resources (Florida Department of State)	11
Division	Division of Water Resource Management (Florida Department of Environmental Protection)	4
DO	Development Order	9
DOF	Division of Forestry (Florida Department of Agriculture and Consumer Affairs)	19
DRP	Division of Recreation and Parks (Florida Department of Environmental Protection)	6
DSL	Division of State Lands (Florida Department of Environmental Protection)	4
FFWCC	Florida Fish and Wildlife Conservation Commission	9
FNAI	Florida Natural Areas Inventory	12
FPC	Florida Power Corporation	8
IFAS	Institute of Food and Agricultural Sciences (University of Florida)	19
IHN	Integrated Habitat Network	3
IMC	IMC Phosphates Company	7
Jahna	E.R. Jahna Industries, Inc.	9
Mobil	Mobil Mining and Minerals Company	6
NRCS	Natural Resources Conservation Service (U.S. Department of Agriculture)	18
PCE	Perpetual Conservation Easement	8