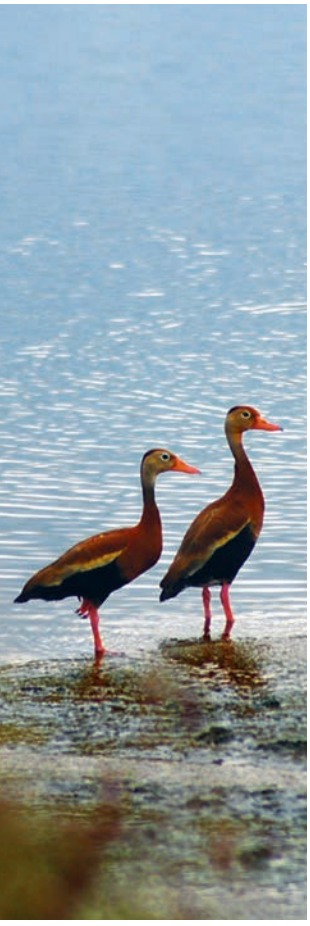
REMAKING

a partnership of resource conservation and management BIG BROWN MINE B AREA RECLAMATION



Luminant

About Luminant

Luminant, a subsidiary of Energy Future Holdings Corp., is a competitive power generation business, including mining, wholesale marketing and trading, and development operations. Luminant has more than 15,400 megawatts of generation in Texas, including 2,300 MW fueled by nuclear power and 8,000 MW fueled by coal. The company is also one of the largest purchasers of wind-generated electricity in Texas and the nation. EFH is a Dallas-based energy holding company that has a portfolio of competitive and regulated energy subsidiaries, primarily in Texas. Visit www.luminant.com for more information.

above: LUMINANT'S LAND RECLAMATION PROGRAM BEGAN AT THE BIG BROWN MINE IN 1971.

left: THE B AREA'S QUALITY WILDLIFE HABITAT ATTRACTS MANY BIRD SPECIES, INCLUDING THE EASTERN MEADOWLARK.

cover: BIG BROWN MINE'S RESTORED B AREA IS HOME TO A DIVERSITY OF WILDLIFE.

About Big Brown Mine

Luminant began mining lignite at the Big Brown Mine, near Fairfield, Texas, in 1971. Since then, over 15,000 acres have been mined and reclaimed. In its 41-year history, Big Brown Mine has moved over 2.3 billion cubic yards of earth material and mined an estimated 175 million tons of lignite. Lignite is delivered directly to the nearby power plant, which generates economical and reliable electric power for the citizens of Texas. After mining, reclamation and timely release from bond obligation then become the priority for the mined land through carefully thought-out plans for the future. The Big Brown Mine has an extensive history of environmental excellence, as evidenced by its outstanding compliance record in the areas of air, water and land resources. It has made positive contributions to the economy and the quality of life that is enjoyed by local citizens.

THE B AREA SUPPORTS A DIVERSE MIX OF VEGETATION TYPES AND DEVELOPED WATER RESOURCES.

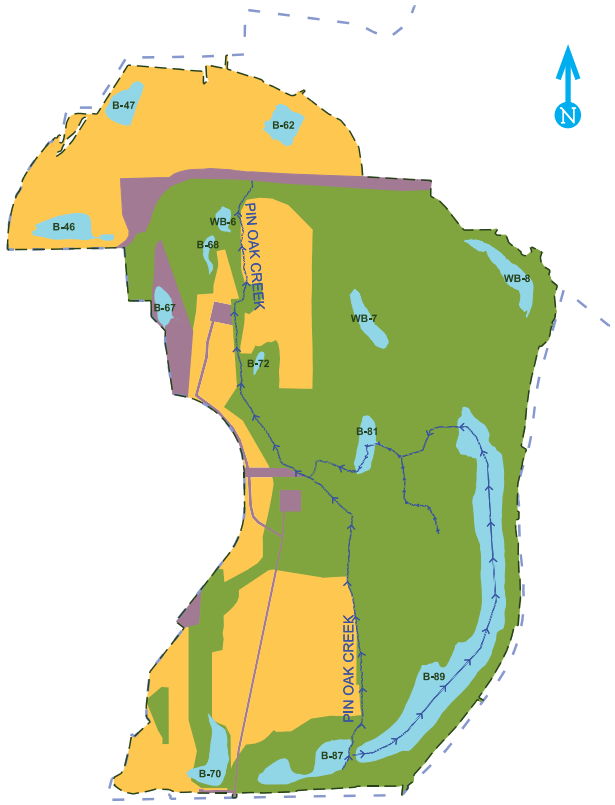
The B Area

The B Mining Area is located in the southern portion of the Big Brown Mine. The pre-mine landscape was typical of east-central Texas with gently rolling to hilly terrain. Pre-mine vegetation was typical of the Post Oak Savannah vegetational region of Texas, with improved or native pastures intermingled with blocks of oak-hickory woodlands. Mining in the B Area occurred from 1996-2001, with backfilling and grading of the final pit completed in 2005. Prior to mining, a post-mine land-use plan was developed based on pre-mine and post-mine factors, including vegetational region, topography, soil type and local economic trends. The result is approximately 2,224 acres supporting a diverse mix of vegetation types and developed water resources.

B Area Reclamation Land-Use Categories

LAND-USE TYPE	ACRES	% LAND USE
Fish & Wildlife Habitat	1,184.5	53.3
Pastureland	715.6	32.2
Developed Water Resources	220.5	9.9
Industrial/Commercial	103.3	4.6
TOTAL	**2,223.9**	**100.00**

The opportunity for developing a valuable water resource in the area of the final pit had long been considered and discussed by the company's mining engineers and environmental specialists. As mining in the area neared completion, the pace of discussions accelerated



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one: ALMOST 2 MILLION CUBIC YARDS OF EARTH MATERIAL WAITS TO BE MOVED TO RECLAIM THE 1.57-MILE-LONG FINAL PIT.

two: WITH LEVELING OPERATIONS UNDERWAY, THE LAND BEGINS TO TAKE ON ITS ORIGINAL CONTOURS.

three: NEWLY ESTABLISHED VEGETATION THRIVES AROUND THE HALF-FILLED LAKE.

four: AT APPROXIMATELY 112 SURFACE-ACRES, THE IMPOUNDMENT PROVIDES A RARE OPPORTUNITY FOR FISHERIES RESEARCH ON A CONTROLLED PRIVATE LAKE.

and the vision became more focused. Because of the potential size of the impoundment, the possibilities for fishery-related uses seemed significant. Luminant contacted Allen Forshage, director of the Texas Freshwater Fisheries Center near Athens, Texas. Luminant has long supported the work of the Texas Parks & Wildlife Department's Fisheries Division. The timing was perfect.

That initial contact led to the development of a plan to partner with the TPWD in a long-term research program. This project will attempt to determine if fast growth rate and large maximum size are heritable traits in largemouth bass and if these traits can be amplified through a selective breeding program. The logistics of the plan include the following key components: (1) brood fish procurement and maintenance, (2) DNA fingerprinting research, (3) fingerling production and stocking and (4) performance comparison of selectively bred largemouth bass. Fisheries biologists will continue to sample and monitor the growth of genetically marked fish throughout the 10- to 15-year project to determine the success of this ambitious selective breeding program.

The basic design plan for the impoundment was built on key reclamation factors essential to success – soil condition, topography and slope stability. Beyond the basics, the final plan also incorporated features intended to enhance fisheries management, such as a bench shelf to provide more shallow water around the perimeter, an island and irregular bottom contours. At approximately 112 surface-acres, the B-89 impoundment would provide a rare opportunity for fisheries research on a controlled private lake from inception.

B-89 IMPOUNDMENT

The Challenge

The B-89 impoundment had its fair share of challenges during the permitting and reclamation process. To achieve post-mine contours consistent with the approximate original contours of the area, the company would move over 1.9 million cubic yards of earth material to reclaim the 1.57-mile-long final pit. A 6,100-foot section of Pin Oak Creek would be bypassed with flow through the new impoundment. The plan would need to ensure that the bypassed segment of the creek was not negatively impacted. Additionally, the fact that the volume of the impoundment exceeded 200 acre-feet required that Luminant obtain water rights through the Texas Commission on Environmental Quality, or TCEQ, permitting process.

Pin Oak Creek

Pin Oak Creek flowed through the entire length of the B Area and was mined through and reclaimed as a part of the diverse post-mine landscape. As mining progressed, the creek was promptly and carefully restored, planted and stabilized using approved

species of trees, shrubs and grasses. In addition, minor drainage channels from surrounding areas were developed as the land was leveled and returned to approximate pre-mine topography. Throughout the Pin Oak Creek system, wetlands and ponds were blended in as companion resources.

To maintain the reestablished stream's functionality, a plan was developed to ensure adequate flow for sustaining the ecology of the intermittent stream channel while providing the critical watershed runoff needed to offset the evaporation loss from the B-89 impoundment's large normal pool surface area. This outcome was accomplished by the design elevation of the inlets to the impoundment and to the reestablished creek. Water flow down Pin Oak Creek between the B-87 impoundment and its confluence with the B-89 spillway occurs with all flow events. Higher volume runoff from more significant rain events spills over into the impoundment.

Water Rights

Rights to surface water in Texas are scarce. Since this had been a consideration throughout the planning process, Luminant knew that an innovative approach would be needed for the project to be successful. Early discussions with the TCEQ revealed that there were no available state waters for appropriation at the time. As the project progressed, Luminant and TPWD personnel met with the TCEQ to discuss the planned approach to the impoundment design and creek protection. Luminant was ultimately able to obtain the needed water rights for the B-89 impoundment based on the unique design that maintained normal flows through Pin Oak Creek and only diverted excess flows through the impoundment. The partnership with a sister state agency and the planned research use would also provide long-lasting public benefits.

Highwall Reclamation

Reduction of the final pit highwall resulted in slopes that blend well with the surrounding topography and support the planned fish and wildlife habitat land use. Selective handling and placement of the overburden material were executed throughout the project to ensure that the finished soil surface met all post-mine quality standards. As part of the detailed design plans, mining engineers also incorporated a terrace and drop pipe system to safely transition surface runoff into the impoundment. This system has functioned as planned helping to control surface runoff and protect against erosion.

As highwall reclamation progressed, it became evident that special revegetation practices would be needed to ensure success on isolated areas where the presence of shallow groundwater was resulting in surface soil saturation. Upon final grading, environmental specialists planted native hydrophytic vegetation in wet areas as appropriate for the micro-site conditions. The entire area surrounding the impoundment now supports a diverse plant community consistent with the fish and wildlife habitat land use.

In 2009, nearly four years after completion, the impoundment reached full capacity and discharged through the designed spillway, flowing back into the restored Pin Oak Creek.

Living Laboratory

Since the completion of final reclamation and implementation of the post-mine land-use plan, the B-89 impoundment has become a unique living laboratory for genetic research in the quest to isolate fast-growing strains of largemouth bass – research that has the potential to produce the next world record for this popular species of game fish. DNA testing of stocked fish and their offspring has yielded valuable information related to the study objective. The TPWD and Luminant partnership will benefit the citizens of Texas and the nation in the advancement of the science of fisheries management.

'The B-89 impoundment has added a very valuable and necessary component to our research. It provides a controlled study lake of significant size where we can stock the various crosses produced at our Center and then follow the long-term growth of each for 10 to 15 years.'

~ Allen Forshage, Director of the Texas Freshwater Fisheries Center in Athens, Texas

left: THE B-89 IMPOUNDMENT IS A UNIQUE LIVING LABORATORY FOR LARGEMOUTH BASS GENETIC RESEARCH.

below: BIOLOGISTS COLLECT DNA INFORMATION FROM ONE OF THE STOCKED BASS.

Stocking History of Largemouth Bass

DATE	SPECIES	SIZE (MM)	NUMBER STOCKED	SOURCE	PARENTS		CODED WIRE TAG LOCATION
					FEMALE SL#	MALE PIT TAG #	
11/15/2005	OWR 2005	167.8	2,800	TFFC	381	7F7D353200	None
11/16/2006	OWR 2006	171	741	TFFC	365	7F7D064002	Left nape
					401	7F7D082473	
					410	7F7D05477C	
					403	7F7D35403F	
					413	7F7F274B36	
					396	7F7D412A47	
11/13/2007	OWR 2007	193.9	450	TFFC	436	7F7D047D14	Left peduncle
11/13/2008	OWR 2008	159	1092	TFFC	446	7F7F1F4951	Left peduncle

above: THE RECLAMATION WORK LUMINANT HAS COMPLETED OVER FOUR DECADES, INCLUDING THE B AREA, PROVIDES A VALUABLE RESOURCE BASE FOR CURRENT AND FUTURE USERS OF THE LAND.

back cover: RECLAMATION AT BIG BROWN INCLUDES RESTORATION OF WILDLIFE HABITAT.

A LEGACY OF ENVIRONMENTAL STEWARDSHIP

For four decades, Luminant has set the standard in restoring land after mining, reclaiming over 70,000 acres. Years before government regulations were promulgated for coal mine reclamation, Luminant began reclaiming its mined lands at the Big Brown Mine. The company used innovative approaches to develop successful and productive reclamation techniques at Big Brown and later at its other mines. These techniques have not only produced short-term benefits but also long-term results. The reclamation work has produced land that is more productive than pre-mine land and provides a valuable resource base for current and future users of the land.

Luminant is committed to being an innovative leader in the management of environmental resources. Leadership requires that in all of its business decisions Luminant seeks to practice sustainability while appropriately balancing the environmental, economic and social needs of today without sacrificing the interests of future generations.

The Big Brown Mine B Area final pit reclamation project demonstrates the company's commitment to stewardship and the sustainable and responsible management of its reclamation areas. Thoughtful, forward-thinking decision-making has resulted in the successful reestablishment of beneficial land uses as well as the development of a new resource for long-term contribution to the surrounding region and beyond.

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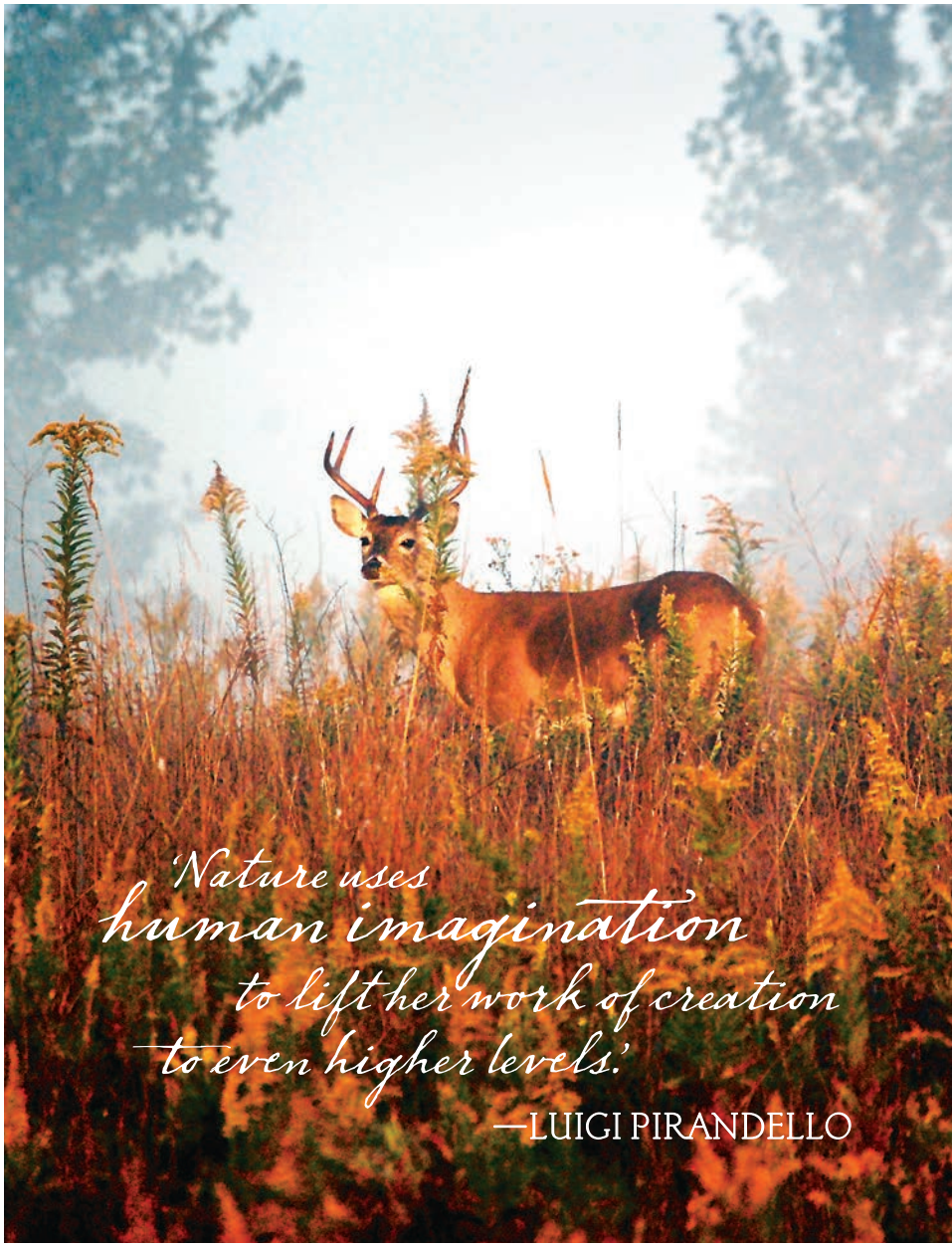

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