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THE CONSULTANT®

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others stayed for months, and many returned multiple times as their schedules allowed. This continues currently, with a surge of college students arriving to volunteer over their 2008 Spring Break, preferring to help restore Southeast Louisiana and the Mississippi Gulf Coast instead of going to the Florida beaches. Professionals attending conventions in the region have also been organized during an extension of their stay in Louisiana to help

damage assessments were complete. In many instances, industrial recovery did not wait on insurance monies, as has been the case for many homeowners. Accepting the risk of possible disputes and litigation, many companies adopted the 'whatever it takes' policy to repair and recover properties in order to restore their commercial foundation. NELSON has been pleased to support many traditional and new clients requiring technical support and teamwork to put facilities back in working order along the nation's aptly named 'Energy

Major improvements to the region's public infrastructure have moved from the 'emergency' stage and are advancing through rigorous planning into implementation. With temporary pumping stations and flood protection feature repairs in place, the U. S. Army Corps of Engineers is moving toward permanent improvements to regional hurricane defenses which are unparalleled in the history of the region. Indeed, the current needs and massive budgets identified as justifiable today are unfortunately required due to decades of underfunded projects which were defined after Hurricanes Betsy in 1965 and Camille in 1969. Had plans been carried out for hardened hurricane protection as were defined as necessary after those storms, it is likely that the multi-billion dollar loss experienced in 2005 would have been dramatically reduced, along with the incalculable hardship of an esti-



Volunteers from Temple University

in the recovery effort.

largely outpaced residential reconstruc- and Congressional branches of our governtion. Logically, the profit motive and the need to get back in business pushed the long-term recovery for the region, and private investment in recovery as soon as State and local participation is much more

mated 1500 deaths. Current efforts by fed-Industrial recovery in the region has eral authorities from both the Executive ment are focused on providing for the

integrated in the process.

In short, the recovery at all levels is moving forward. As the Louisiana / Mississippi region looks forward, we take heed from other regions such as Charleston, South Carolina and Homestead, Florida, which have experienced their own recoveries from hurricanes. The major lesson learned, and for which our region is planning, is that two and three quarters years into our recovery puts us just past the quarter point of a ten year period needed to get the entire region back to its pre-storm status.

Mardi Gras Invitational **Career Fair**



Erin McCrossen and Ginger Dodge Human Resources Department

On Tuesday, February 19, 2008, the New Orleans Human Resources Department attended the Mardi Gras Career Fair at the Hilton Hotel. Students and alumni from eight local universities visited the more than 100 employer booths to learn of occupational opportunities. The picture above shows Erin and Ginger eagerly waiting to tell the next visitors about the many career opportunities in engineering at Waldemar S. Nelson and Company, Inc.

TOP 10 IN OFFSHORE AND ONSHORE **FACILITIES**

Based on supplemental market revenue data from 2006, provided by industry firms participating in ENR's sourcebook market survey, Waldemar S. Nelson and Company, Inc. ranked No. 10 in Offshore and Underwater Facilities.

NELSON MAKES THE NEWS IN LOCAL **BUSINESS JOURNALS**

Based on latest year revenue, Nelson ranked No. 29 in the New Orleans CityBusiness Top 100 Private Companies.

The Houston Business Journal, ranking firms by 2007 local gross billings, ranked Nelson No. 18 in the listing of the Largest Houston-Area Energy Engineering Firms.

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ExxonMobil Kizomba C Development By: James B. Lane, P.E.

ExxonMobil Corporation has recently announced that its subsidiary, ESSO Exploration Anglo Limited (EEAL) has started production from the Kizomba C development offshore Angola.

The development includes two leased Floating Production Storage and Offloading (FPSO) vessels producing from 36 subsea wells in 2,400 feet of water from 90 miles off the Angolan coast. The two FPSO's (Mondo and Saxi) are designed to handle a total of 200,000 barrels of oil a day. Production from Mondo is now in progress, with Saxi scheduled for later in 2008.

Waldemar S. Nelson and Company (NELSON) is pleased to have played a role in helping EEAL in its efforts to increase world energy supplies. NELSON's role for the Kizomba C project has been to assist ESSO in its quality assurance processes. This involved two main areas of focus, one as third party technical design verification agent, and the other as construction site inspector. The design verification phase involved a team of engineers from each discipline working in both our Houston office and the Gusto Engineering facility in Schiedam, the Netherlands.

Phase two of our efforts included the provision of a team of over 25 site inspectors during the vessel conversion phase in the Keppel Singapore yard, and a rotating team of inspectors in Angola during hook up and commissioning activities for both vessels. These inspectors were largely provided through a subcontract with



ExxonMobil's Mondo FPSO



Kizomba C Project Team

Back I to r; Jim Carlton, Scott Singletary, Wayne Quayle, Jim Lane, Bart Harris; Front I to r; Bill Seward, Bob Myers, Ron Villere and Steve Stringer. Missing from photo are Laurie Wood, Mike James and Paul Chhabra.

Campbell Associates PTE Ltd.

Mondo and Saxi are two more vessels in a string of successful FPSO's commissioned by ExxonMobil utilizing "design one, build multiple" strategy. NELSON has played a similar role in assisting in the design verification of each of these proj-

Steve Stringer displays his award from ExxonMobil in recognition of his valuable contribution to the Kizomba C effort



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1st Quarter 2008



What An Accomplishment!!

Congratulations to Bob Myers and John Choate on their outstanding atheletic ability in completing four marathons in a four month period.

Bob and John participated and finished the Marathons of Texas

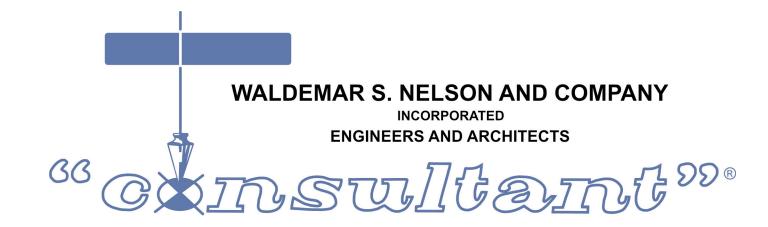
San Antonio Marathon in November 2007 Dallas Marathon in December 2007 Houston Marathon in January 2008 Austin Marathon in February 2008

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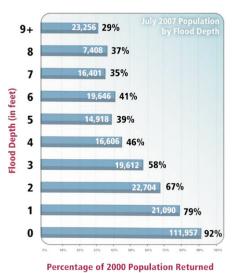
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Katrina Recovery 2.75 By: Charles W. Nelson, P.E.

wo years and nine months after Hurricane Katrina hit the Louisiana/Mississippi Gulf Coast, the New Orleans Metropolitan area has shown a population rebound in excess of 87 percent of the area's pre-Katrina level. Understandably, the flooded areas south and east of the city, which took the brunt of the storm's winds, waves and weeks of standing water, have taken longer to recover. However, the older portions of New Orleans, built on slightly higher ground, as well as most of Jefferson Parish to the west of the City, and the entire West Bank of the Mississippi River, fared quite well as far as flooding was concerned. Wind damage to those unflooded areas has to a large extent been repaired, with many residential areas surrounding the city

recovering almost 100%. Figure 1 below, provided by Gregory C. Rigamer and Associates (GCR) for December 2007, shows the relative populations of New Orleans proper and the seven parishes surrounding the city.

Several noticeable trends have become apparent in the region in the early years after this unprecedented disaster. One trend witnessed as residential and commercial sectors recovered is that those neighborhoods with greatest flooding are taking longer to recover. During July of 2007, GCR reported the percentage of population returned to a given area against the depth of flood waters experienced. The results, in Figure 2, show the correlation. Another trend appearing as the region rebuilds has been that the early recovery



Data and Graphics: GCR- Figure 2

December 2005 Population
Total: 1,422,228

December 2007 Population
Total: 1,236,505

452,524
442,133
454,863

295,448

220,195
229,541

100,000
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Data and Graphics: Gregory C. Rigamer and Associates (GCR) - Figure 1

occurred adjacent to undamaged neighborhoods, and that ongoing recovery is growing outward from early recovery areas. This phenomenon was anticipated by City and regional officials, and justified focusing the limited early recovery funding on targeted neighborhoods which would spawn and engender an 'organic' growth in the recovery districts.

A third trend not initially as obvious as the two just mentioned has been the phenomenal impact upon the region's recovery accomplished by the many volunteers who have visited the region since Katrina. It was estimated approximately two years after the storm that over 500,000 volunteers had visited the region from faithbased, university and civic organizations. Some arrived to work for a weekend,