SOUTH FLORIDA WATER MANAGEMENT DISTRICT



## "River of Grass" Land Acquisition Update

Governing Board Workshop September 10, 2008

### Everglades Land Acquisition Project Governing Board Update September 10, 2008

- 1. Presentation Introduction and Overview
- 2. Legal Support Team/Contract Development & Public Process
- 3. Due Diligence Appraisals
- 4. Due Diligence Environmental Assessments
- 5. Due Diligence Engineering Assessments
- 6. Due Diligence Capital Asset Reporting & Control
- 7. Public Assurances
- 8. Financing
- 9. Restoration Concepts and Planning
- 10. Outreach Update
- 11. Economic Transition / Community Resolutions and Identified Needs
- 12. Inter-modal Logistics Center
- 13. Stakeholder Correspondence

1. Presentation Introduction and Overview

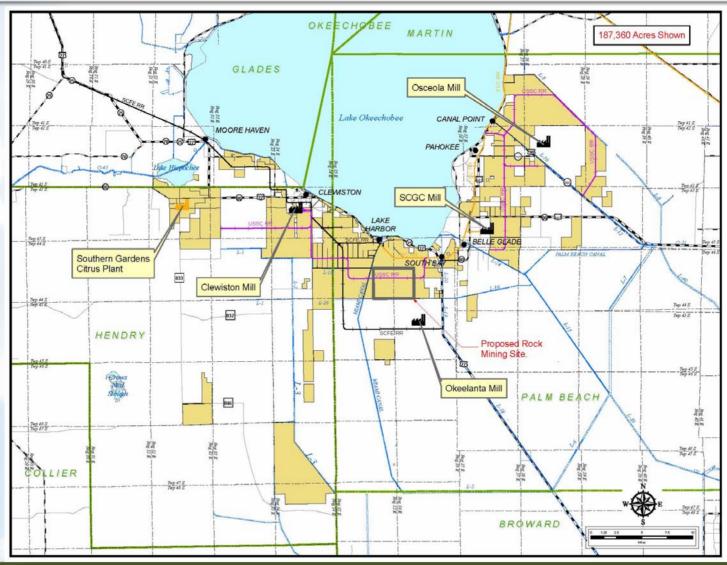
## **Everglades Land Acquisition Project**

## STATEMENT OF PRINCIPLES FOR THE ACQUISITION OF UNITED STATES SUGAR CORPORATION PROPERTY FOR THE RESTORATION OF THE EVERGLADES

- This Statement of Principles is entered into this 24th day of June 2008 by
  the South Florida Water Management District ("SFWMD") and the United States
  Sugar Corporation, a Delaware corporation ("USSC"). This Statement of
  Principles provides a framework for the acquisition of property for the protection
  of the coastal estuaries and the restoration of the northern and southern
  Everglades that include elements as set forth in paragraphs below.
- 2. USSC and its affiliates own interests in real property in Palm Beach, Hendry, Glades and Gilchrist Counties, including a sugar mill, a sugar refinery, an office building located in Hendry County, a citrus processing plant/tank farm, an internal railroad and an external short-line railroad, together with other fixtures, buildings, structures, and other improvements erected thereon, and fixtures, buildings, structures, and other improvements erected thereon, and the permits, licenses, rights, privileges and appurtenances thereto as set forth on the permits, licenses, rights, privileges and appurtenances thereto as est forth on the lattice of the province of
- 187,000 acres (or approximately 2007).
  3. USSC and its affiliates also own tangible personal property used in connection with the operation of USSC'S agricultural business, including formiture, equipment, tools, machinery, vehicles and railroad rolling stock, all to the more specifically described in the contemplated Purchase Agreement between between USSC ("Personally"). In no event shall Personalty be deemed to include planted or harvested crops (including sugarcane and citrus fruit), stubble cane and other consumables used or produced in USSC's business operations.
- For consideration as set forth in Paragraph 8 to be paid by SFWMD to USSC, USSC will convey or cause to convey to SFWMD and/or third parties designated by SFWMD all of USSC and its affiliates rights, title and interests in and to the Lands and Personally.
- 5. Lands owned in fee simple will be conveyed by the appropriate general warranty deeds. To the extent applicable, Lands leased or in which an easement interest is held will be transferred by assignment of lease or easement. Personalty will be conveyed by appropriate bill(s) of sale and applicable warranties or guarantees transferred. The SFWMD or USSC shall have the option of deferring closing on particular parcels pending completion of environmental remediation of pollutants on such parcels.

- Non-binding Statement of Principles signed June 24, 2008
- Staff negotiating contract and performing due diligence
- Working to bring solid contract to Governing Board for consideration and public discussion

## **U.S. Sugar Properties**





### **Presentation Overview**

- Contract Development & Public Process
- Due Diligence
  - Appraisals
  - Environmental Assessments
  - Engineering Assessments
  - Asset Management Reporting & Property Control
- Public Assurances
  - Fairness Opinion
  - Outside Audit
  - Inspector General Review

### **Presentation Overview**

- Financial Team & Process
- Restoration Project Concepts and Planning
  - Environmental Needs and Benefits
  - Preliminary Hydrologic Analysis
  - Conceptual Project Configurations
  - Public Planning Process
- Outreach and Economic Transition Activities
  - Media, Outreach
  - Community Resolutions and Identified Needs

2. Legal Support Team/Contract Development & Public Process

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



### Contract Development & Public Process Sheryl G. Wood, Esq. General Counsel

### **Legal Support Team**

- District Office of Counsel Asset Purchase Agreement and Due Diligence
- Sidley Austin Asset Purchase Agreement and Due Diligence
- Bryant, Miller & Olive Bond Counsel
- Nabors, Giblin & Nickerson Disclosure Counsel
- Tew Cardenas Title Review
- Duff & Phelps Fairness Opinion

## Legal Support Team District Office of Counsel



Sheryl Wood General Counsel



Abe Cooper Asset Purchase Agreement



Sarah Nall Deputy General Counsel



Frank Bartolone Public Finance



Carlyn Kowalsky Managing Attorney



Kirk Burns Environmental

## Legal Support Team District Office of Counsel



Cathy Linton Due Diligence



Frank Mendez Due Diligence



Holly Walter Real Estate



Andrew Ross Real Estate

## Scope of Transaction & Due Diligence



- 187,000 acres and business assets
- Reviewing over 5,000 documents including:
  - Title Policy / Surveys
  - Leases
  - Contracts / Agreements
  - Permits / Licenses
  - Sugar Mill and Citrus Processing Logs and Maintenance Records

# Legal Support Team Sidley Austin Team Leaders



William Sudow Real Estate and Finance



Joe Armbrust Mergers and Acquisitions



Maureen Crough Environmental



John Hughes Corporate Transactions











BEIJING BRUSSELS CHICAG

# Legal Support Team Overview of Sidley Engagement

- Scope of Transaction
- Expertise and Experience
- Officers & Directors Roles & Responsibilities





# Legal Support Team Sidley Deliverables

- Asset Purchase Agreement
  - ~ 8 exhibits
  - ~ 50 schedules
- Closing Documents
- Due Diligence Report
- Disposition of Assets





## Statement of Principles

## STATEMENT OF PRINCIPLES FOR THE ACQUISITION OF UNITED STATES SUGAR CORPORATION PROPERTY FOR THE RESTORATION OF THE EVERGLADES

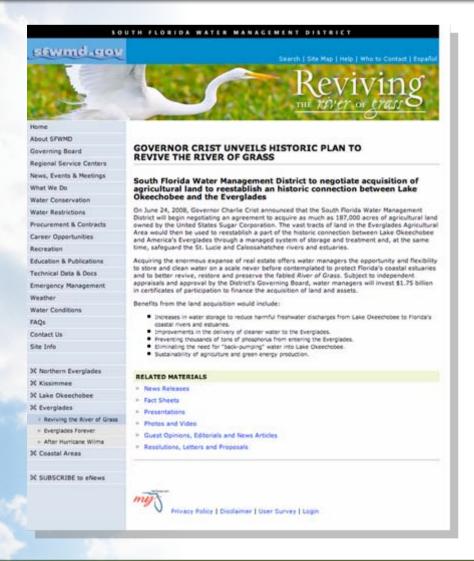
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- 3. USSC and its affiliates also own tangible personal property used in connection with the operation of USSC'S agricultural business, including furniture, equipment, tools, machinery, vehicles and railroad rolling stock, all to be more specifically described in the contemplated Purchase Agreement between SFWMD and USSC "Personalty"). In no event shall Personalty be deemed to include planted or harvested crops (including sugarcane and citrus fruit), stubble cane and other consumables used or produced in USSC's business operations.
- 4. For consideration as set forth in Paragraph 8 to be paid by SFWMD to USSC, USSC will convey or cause to convey to SFWMD and/or third parties designated by SFWMD all of USSC and its affiliates rights, title and interests in and to the Lands and Personalty.
- 5. Lands owned in fee simple will be conveyed by the appropriate general interest is held will be transferred by assignment of lease or easement warranties or guarantees transferred. The SFWMD or USSC shall have the option of deferring closing on particular parcels pending completion of environmental remediation of pollutants on such parcels.

- Adopted June 30, 2008
- Non-binding
- Sets forth proposed path
- Plan is flexible and subject to change

## **Contract Development**

- July 2008: Staff begins negotiating contract
- July 2008: Due diligence begins
- Fall 2008: Present purchase contract and COP financing documents to Governing Board for approval
- Closing subject to final due diligence including financing, appraisals, surveys, audits, environmental assessments and bond validation

### **Public Process**



- Website continually updated
  - www.sfwmd.gov/riverofgrass
- Public input received at board meetings
- Proposed contract will be available to public prior to Governing Board consideration

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Questions

sayund-gov



### Our People



Maureen M. Crough Partner New York 212.839.7323 212.839.5599 Fax mcrough@sidley.com Vcard

For several years, MAUREEN CROUGH has represented domestic and non-U.S. purchasers, sellers, lenders, landlords and tenants in the environmental aspects of a broad range of financial transactions. Ms. Crough has been involved in numerous aspects of environmental due diligence, evaluation of environmental insurance for use in transactions, negotiation of environmental provisions in acquisition and loan agreements, resolution of environmental matters in bankruptcy and environmental counseling pertaining to financial transactions. In related matters, she represents clients in buyer/seller environmental dispute resolution, and counsels clients in the requirements of U.S. and state environmental regulatory compliance and the development and implementation of environmental management systems. Her practice also includes representing clients in the performance of voluntary cleanups in state programs.

#### Selected Representations

- During a \$250 million retail construction project, contamination was unexpectedly discovered. Ms. Crough worked with the developer and an environmental consulting and legal team to: (1) identify the extent of the problem; (2) resolve permit, waste disposal and remedial issues with the New York State Department of Environmental Conservation on an expedited basis; and (3) pursue a claim against a prior environmental consultant for failing to properly assess environmental issues during due diligence.
- Counseled a pharmaceutical company regarding significant environmental claims against an indemnitor in bankruptcy and another indemnitor not in bankruptcy. This representation included: (1) defending against litigation in the bankruptcy court to attempt to relieve the debtor of its environmental obligations; (2) pursuing legal options to require the debtor to continue performing under environmental orders and settlement agreements in effect pre-bankruptcy; (3) analyzing proposals to settle the corporation's environmental claims in the bankruptcy; and (4) acting to preserve the corporation's indemnification rights.
- Advising a pharmaceutical company about complying with regulations applicable to numerous underground and aboveground storage tanks.
- Representing a manufacturer of consumer products who is challenging a Superfund claim by New York State at a former municipal landfill. The manufacturer is disputing the State's claim on a number of grounds, including statute of limitations and issues under the New York Environmental Quality Bond Act..
- Represented a multinational fertilizer company in its acquisition of a chemical company
  with facilities around the world. The project included the design and implementation of a
  global diligence strategy, coordination of activities among local counsel and consultants,
  evaluation of numerous environmental risks and development of a strategy to address
  them, and negotiation and drafting of contractual provisions to address cross-border
  environmental issues.
- · Counseled a group of lenders providing exit financing to a Long Island aerospace

#### PHACTIFE

Environmental

#### AREAS OF POOLS

- Climate Change
- Contaminated Sites and Natural Resource Damages
- Environmental Aspects of Transactions and SEC
   Disclosure
- Environmental Regulation

#### ADMISSIONS & CERTIFICATIONS

- Illinois, 1986
- New York, 1995

#### EDUL ATION

- The University of Michigan Law School (J.D., 1986, cum laude)
- Princeton University (A.B., 1983, magna cum laude)

- manufacturer emerging from bankruptcy. The matter included development of a pian to manage environmental risks in the credit agreement and through post-closing actions by the borrower
- Worked closely with a diversified multinational corporation and its accountants in performing environmental due diligence which focused on the adequacy of the target's environmental reserves, and identified key issues for the purchaser to address promptly after closing.
- Assisted an entertainment corporation perform environmental due diligence, and draft appropriate disclosure, in connection with a securities offering. The issuer's business included operation of racetracks, which may be subject to regulations for concentrated animal feeding operations.
- Counseled a natural resources company in connection with potential restructuring by evaluating which of its environmental claims would be dischargeable in bankruptcy
- Representing a paper manufacturer in connection with pursuing environmental insurance claims under old comprehensive general liability policies and evaluating the potential purchase of new environmental coverage.
- Counseled a major petroleum corporation in its cleanup of petroleum contamination at a former oil storage terminal in central New York. The remediation was performed under a Consent Order in connection with the Navigation Law.

#### **Publications**

- "Summary of Significant Environmental Law Developments Affecting Lenders and Fiduciaries 1999-2000," The Secured Lender (2000).
- "SEC Reporting Requirements: Environmental Issues." 7 Environmental Claims Journal 41 (Winter 1994/1995).

#### **NEWS & MEDIA**

- 138 Sidley Lawyers Recognized in Chambers USA: America's Leading Lawyers for Business for 2008
   June 18, 2008
- 109 Sidley Lawyers Recognized in Chambers USA: America's Leading Lawyers for Business for 2007
   July 9, 2007



### Our People



William E. Sudow Partner Washington, D.C. 202.736.8040 202.736.8711 Fax wsudow@sidley.com Vcard

WILLIAM E. SUDOW is a partner of Sidley Austin LLP, where he is the Head of the Firm's Washington Office Real Estate Practice group. Mr. Sudow has over thirty years' experience in representing clients in complex financial transactions, focusing on the representation of institutions in the Washington, D.C., area and in the representation of national and international institutions in joint ventures and other real estate transactions and financings, private equity investments and general business transactions. He has substantial experience in structured real estate capital markets financings, representing clients in related borrower portfolio REMIC financings, mortgage loan conduit financings, and lease securitizations. In addition, Mr. Sudow has extensive experience in dealing with European, Japanese and Korean companies and financial institutions, real estate companies, and financial intermediaries in joint ventures, real estate acquisitions and financings.

Mr. Sudow's experience encompasses all aspects of commercial real estate transactions, including the negotiation, structuring, and documentation of acquisitions, land assemblies, project developments, and dispositions; joint ventures; equity investments and financings; the drafting of construction and architectural contracts; the negotiation and drafting of commercial leases and work-outs and restructurings. He represents clients in Shari'ah compliant financings and complex structured finance transactions involving the securitization of commercial real estate loans through MBS Swap, REMIC and Collateralized Debt Obligation transactions.

Mr. Sudow also has represented clients in joint development transactions and has represented clients in Japan and Korea in complex commercial transactions. Mr. Sudow also counsels clients regarding matters relating to the U.S. Congress and U.S. government agencies.

Mr. Sudow was a member of the Documents Task Force of the Capital Consortium, an initiative of the National Realty Committee, National Association of Realtors and Mortgage Bankers Association of America that produced a standard set of ratable commercial and multifamily mortgage documents for use in the secondary market, and developed the Capital Markets Initiatives, a set of guidelines to reduce costs and ease the securitization process

Prior to entering private law practice in 1975, Mr. Sudow was Special Assistant and Counsel to U.S. Congressman John Brademas where he advised Mr. Brademas and worked with Members of the House Leadership on various legislative matters, including foreign trade and foreign policy and education policy

#### PRINCIPALES

Real Estate

CENTRACATIONS

· District of Columbia, 1970

#### EDUCATION

- University of Pennsylvania Law School (J.D., 1970)
- Yale University (B.A., 1967)

#### MEMBERSHIPS & AFFILIATIONS

- District of Columbia Bar Association
- Board of Trustees, Washington, D.C. Chapter of the Cystic Fibrosis Foundation
- Yale Development Board
- Real Estate Roundtable, Real Estate Capital Policy Advisory Committee
- Yeongdong (Korea) Master Plan International Advisory Committee
- Board Of Directors, District of Columbia Building Industry Association
- Washington Trustee, Federal City Council



### Our People



Joseph W. Armbrust, Jr. Partner New York 212.839.5390 212.839.5599 Fax jarmbrust@sidley.com Vcard

JOSEPH W. ARMBRUST, a partner in the New York office, practices in the Corporate/Securities group. Mr. Armbrust has spent his entire professional career with the firm, and has been a partner since 1976. His practice includes corporate governance and various areas of corporate finance, including mergers and acquisitions and public offerings of debt and equity securities. He regularly represents corporate boards and special committees in connection with acquisitions and dispositions, and investment banks in their role as financial advisors to acquirors and sellers. He has also participated in numerous internal investigations relating to corporate accounting and disclosure issues.

Mr. Armbrust has lectured on the securities laws and corporate governance at the University of Virginia School of Law, the University of Texas Law School and the University of Maryland. He is a regular participant in the KPMG Audit Committee Institutes and a frequent speaker at PLI and ABA seminars.

Mr. Armbrust is a member of the firm's Management and Executive Committees and is cohead of the New York office.

#### MEMBERSHIPS & AFFILIATIONS

- American Bar Foundation
- Advisory Committee to the Federal Regulation of Securities Committee of the American Bar Association
- New York City Bar

#### FALITHER:

- Corporate Governance and Compliance
- → M&A and Private Equity
- Securities

### NEW MERCATIONS

New York, 1970

#### EDUCATION

- University of Virginia School of Law (LL.B., 1968)
- Boston College (B.S., 1965)



### Our People



John K. Hughes
Partner
Washington, D.C.
202.736.8480
202.736.8711 Fax
jhughes@sidley.com
Vcard

JOHN K. HUGHES is a corporate and securities partner practicing out of Washington. D.C. and New York and heads the Corporate group in the Washington office. He concentrates in transactional work, with an emphasis on mergers and acquisitions, divestitures, leveraged buyouts and other private equity transactions, joint ventures, recapitalizations and restructurings, debt and equity financings and securities offerings, and strategic investments. In these transactions, he has represented the full range of parties involved, including bidders (U.S. and non-U.S.), targets, private equity and LBO groups, hedge funds (as private equity investors and activists) management teams, public companies, private companies, private investors, joint venture partners, investment banks and financing sources, boards of directors and special committees, arbitrageurs, and U.S. governmental entities. He has been involved in all phases of the transaction process, ranging from initial planning, structuring, and negotiation, to implementation and ongoing post-acquisition advice to portfolio companies. He also works with investment banking firms in their capacity as financial advisor to companies on merger and acquisition and other transactional matters.

Mr. Hughes has worked on domestic and cross-border transactions across a variety of industries, including manufacturing, financial services, technology, garning, media and telecommunications, consumer products, retail, airlines, aerospace and defense, healthcare and pharmaceutical, real estate and REITs, energy, and other regulated businesses. He also counsels clients on corporate, securities, and business-related matters, including directors' duties and responsibilities and other aspects of corporate governance and disclosure issues. He also has experience working on transactions, financings, and corporate governance issues in bankruptcy situations and where companies are financially distressed.

Mr. Hughes has spoken at seminars and conferences and written on legal and other developments in the area of mergers and acquisitions, and with respect to other corporate and securities law matters. Recent articles include: "Sarbanes-Oxley and Other Pending Corporate Governance Reforms," International Corporate Governance Review 2003, Euromoney: "NASD's Proposed Rule Change on Fairness Opinions." Wall Street Lawyer. August 2005. "Valuation and Fairness Opinions Roundtable," Financier Magazine (UK) October 2005; "NASD's Proposed Rule Change on Fairness Opinions: An Update." Wall Street Lawyer, December 2005. He is a member of the ABA's Committee on Negotiated Acquisitions, which is comprised of M&A professionals in the U.S. and worldwide, and is Co-Chair of that committee's Subcommittee on Private Equity M&A. Mr. Hughes graduated from Syracuse University College of Law. He was Editor of the Syracuse Law Review. Earlier, Mr. Hughes held a number of positions on the staff of the Secretary of Health, Education and Welfare in the Carter Administration and assisted a Cabinet Secretary on a book.

#### PRACTICE

- Corporate Governance and Compliance
- M&A and Private Equity
- Securities

#### ADMISSIONS / DESTIBILATIONS

District of Columbia, 1984

#### EDUCATION

- Syracuse University College of Law (J.D., 1984)
- Boston College (B.A., 1975)

#### MEMBERSHIPS & AFFILIATIONS

- ABA's Committee on Negotiated Acquisitions
- ABA's Subcommittee on Private Equity M&A (Co-Chair)



### Our People



Peter R. Steenland Counsel Washington, D.C. 202.736.8532 202.736.8711 Fax psteenland@sidiey.com Vcard

PETER R. STEENLAND, JR. has been a key participant in the development of federal environmental law for over three decades. Mr. Steenland's practice involves environmental counseling and litigation, with an emphasis on advising federal, state, and local entities on compliance with federal environmental obligations in large scale projects.

Mr. Steenland's clients include a number of governmental entities that have undertaken large projects that trigger a host of federal environmental obligations. For example, Mr. Steenland has advised the Federal Aviation Administration in its review of environmental issues for the \$15 billion Chicago O'Hare Modernization Program. He also represents the South Florida Water Management District on federal environmental issues relating to the Comprehensive Everglades Restoration Program and related initiatives, as well as other Water Management Districts, airport boards, and other entities involved in airport improvements.

From 1970 until 2002, Mr. Steenland was an attorney at the United States Department of Justice. Mr. Steenland joined the Department of Justice in 1970, just as Congress was enacting a number of federal environmental statutes, including, among others, the National Environmental Policy Act, the Clean Air and Clean Water Acts, the Endangered Species Act and the Coastal Zone Management Act. He participated in preparing the first federal appellate brief addressing the National Environmental Policy Act. First as an appellate attorney, and later as the Chief of the Appellate Section in the Environment & Natural Resources Division at the U.S. Department of Justice, Mr. Steenland participated directly in the formative litigation shaping and interpreting NEPA and these other measures. He has argued more than 150 cases in the federal courts of appeals, and worked closely with the Office of the Solicitor General when the Division's cases reached the Supreme Court.

Mr. Steenland's federal practice also included successfully representing the Federal Aviation Administration in environmental disputes involving airport and airspace improvements. He has successfully litigated and supervised some 35 cases where the FAA has prevailed in environmental disputes, Mr. Steenland's other litigation responsibilities included issues arising from the management and use of national forests, national parks and other federal lands, federal eminent domain activities, and federal Indian law. He was the lead federal negotiator in talks between the Navajo Nation and the Hopi Tribe in Arizona that ultimately resolved a 100-year old inter-tribal dispute to contested reservation lands. He also settled a claim on behalf of a California Indian Tribe for damages caused by flooding of tribal lands from irrigation activities

From 1995 until 2002 when he joined Sidley. Mr. Steenland served as Director of the Office

#### PRACTICES

Environmental

#### AREAS OF SCOUS

- Climate Change
- P: Environmental Experience in the Energy Sector
- NEPA and Natural Resource

#### ABANGSKIAG : DERTIFICATIONS

- U.S. Supreme Court, 1973
- U.S. Court of Appeals, 1st Circuit, 1974
- U.S. Court of Appeals, 5th Circuit, 1973
- U.S. Court of Appeals, D.C. Circuit, 1970
- U.S. Court of Appeals, Federal Circuit
- U.S. District Court, District of Columbia, 1970
- District of Columbia, 1970
- U.S. Court for Berlin, 1979

#### EDUCATION

- The George Washington University Law School (J.D., 1970, with honors)
- George Washington University (B.A., 1967)

of Dispute Resolution at the Department of Justice where he was the federal government's leading proponent of the use of dispute resolution as an alternative to litigation. Under his leadership, use of mediation and other forms of ADR by the federal government quadrupled

Mr. Steenland received the John Marshall Award for Appellate Advocacy from the Attorney General of the United States in 1985. In 1996, he received the Attorney General's Award for Distinguished Service. In 1999, he was one of 30 executives who received the Presidential Award for Distinguished Public Service.

3. Due Diligence – Appraisals

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



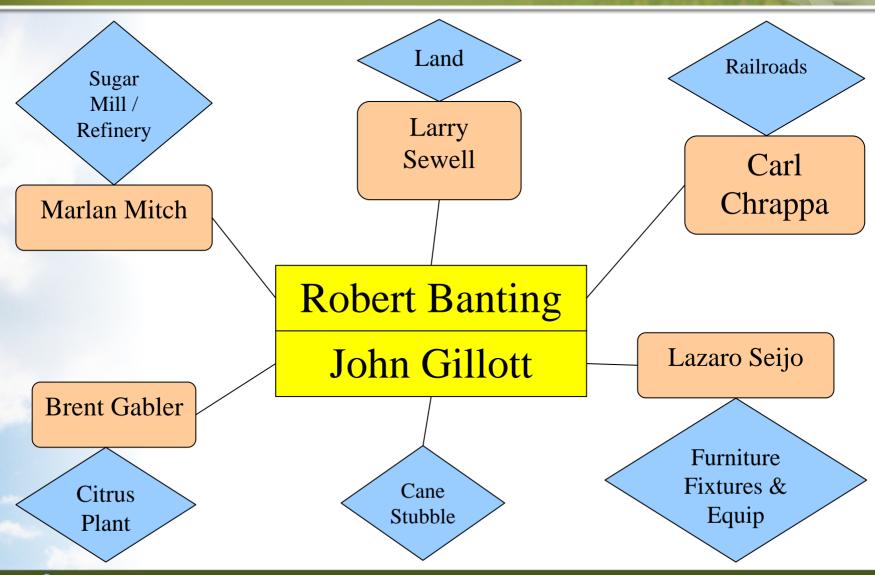
### **Due Diligence - Appraisals**

Ruth Clements, Land Acquisition Director Ray Palmer, Chief Appraiser

# Appraisals The Appraisal Team

- A team of seven appraisal and consulting organizations
- Headed up by two independent appraisers:
  - Robert Banting, Member Appraisal Institute (MAI), Senior Residential Appraiser (SRA)
  - John Gillott, MAI, SRA
- Both have been designated members of the Appraisal Institute (MAI) for over 25 years

# Appraisals Appraisal Assignments



# Appraisals The Appraisal Team

### Robert Banting, MAI

- Held the prestigious MAI designation for over 25 years and 35 years in the appraisal profession
- Past President of local chapter of the Appraisal Institute
- Holds a degree in Real Estate and Urban Studies
- Experience includes a wide variety of complex appraisal projects

# Appraisals The Appraisal Team

### John Gillott, MAI

- Held the MAI designation for over 25 years and 32 years in the appraisal profession
- Holds a degree in Economics and Real Estate
- Experience includes such complex appraisal projects as food processing facilities, orange juice storage facility, oil refinery, greenhouse facility, mining, coal reserves, to name a few
- Client list includes multi-national companies

# What will be appraised? Sugarcane Land



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

## What will be appraised? Citrus Groves



## Appraisals The Appraisal Team

### Larry Sewell, MAI

- 30+ years in the appraisal profession
- Holds a BSBA degree in Real Estate
- Experience includes a variety of property types including land for agriculture, submerged lands, reservoirs, airports, commercial and development land
- Client list includes both private companies and government entities

# What will be appraised? Sugar Mill and Refinery



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

# What will be appraised? Sugar Mill and Refinery



## Appraisals The Appraisal Team

### Marlan Mitch, Construction Engineer

- Schaffer Global Group
- Recognized as a world-wide leader in design, construction, and management of sugar facilities, ethanol and cogeneration plants
- Experience includes appraisals, project management and scheduling
- Client list extends globally

# What will be appraised? Citrus Processing Plant



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

# What will be appraised? Citrus Processing Plant



## Appraisals The Appraisal Team

### Brent Gabler, Citrus Consultant

- President of Creative Citrus Services, Inc., a global citrus processing consulting company
- 30 years in citrus industry including 15 years with Tropicana plus 15 years as a consultant
- Has an MBA and Engineering degree
- His team includes a CPAs with specialized experience analyzing citrus processing operations

## What will be appraised? Railroads



## What will be appraised? Railroads



## Appraisals The Appraisal Team

### Carl Chrappa, ASA

- President and CEO of Independent Equipment Co., a consulting and management firm
- Has valued over \$50 Billion in real and personal property
- 25+ years appraisal experience
- His team includes a Railroad right-of-way appraisers, Railroad equipment appraisers and financial analysts

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

# What will be appraised? Furniture, Fixtures and Equipment



## Appraisals The Appraisal Team

### Lazaro Seijo, ASA

- President of L&M Appraisal Services
- 22 years appraisal experience
- Operates on of the largest equipment appraisal firms in the state
- Client list includes a vast array of commercial, industrial, agricultural, and customer service organizations

### Appraisals The Process

- Provide Market Value of tangible assets according to State statutes and the Uniform Standards of Professional Appraisal Practices (USPAP)
- Market Value definition includes the "willing buyer-willing seller" principle in the development of the appraisal reports
- Appraised value is independent of the Statement of Principles
- Market value estimate must be based on market data

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



### **Due Diligence - Appraisals**

Robert Banting, MAI, SRA Anderson & Carr, Inc.

## Appraisals Approaching the Appraisal Problem

- Market value as it relates to this project
- How to approach the task within the time constraints

## Appraisals Completing the Appraisal

- Research of available market data
- Market data support of adjustments

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Questions

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#### **QUALIFICATIONS OF APPRAISER** ROBERT B. BANTING, MAI, SRA

#### PROFESSIONAL DESIGNATIONS - YEAR RECEIVED

MAI - Member Appraisal Institute - 1984

SRA - Senior Residential Appraiser, Appraisal Institute - 1977 SRPA - Senior Real Property Appraiser, Appraisal Institute - 1980

State-Certified General Real Estate Appraiser, State of Florida, License No. RZ4 - 1991

#### **EDUCATION AND SPECIAL TRAINING**

Licensed Real Estate Broker - #3748 - State of Florida

Graduate, University of Florida, College of Business Administration, BSBA (Major - Real Estate & Urban Land Studies) 1973 Successfully completed and passed the following Society of Real Estate Appraisers (SREA) and American Institute of Real Estate Appraisers (AIREA) courses and/or exams: Note: the SREA & AIREA merged in 1991 to form the Appraisal Institute.

SREA R2: Case Study of Single Family Residence SREA 201: Principles of Income Property Appraising Single Family Residence Demonstration Report SREA:

SREA: Income Property Demonstration Report AIREA 1B: Capitalization Theory and Techniques SREA 101: Introduction to Appraising Real Property AIREA: Case Studies in Real Estate Valuation AIREA: Standards of Professional Practice

AIREA: Introduction to Real Estate Investment Analysis

AIREA 2-2: Valuation Analysis and Report Writing

AIREA: Comprehensive Examination

AIREA: Litigation Valuation

AIREA: Standards of Professional Practice Part C

#### ATTENDED VARIOUS APPRAISAL SEMINARS AND COURSES, INCLUDING:

The Internet and Appraising Golf Course Valuation Discounting Condominiums & Subdivisions Narrative Report Writing Appraising for Condemnation Condemnation: Legal Rules & Appraisal Practices Analyzing Commercial Lease Clauses

Condominium Appraisal Reviewing Appraisals

**Eminent Domain Trials** Tax Considerations in Real Estate Testing Reasonableness/Discounted Cash Flow

Hotel and Motel Valuation Mortgage Equity Analysis Partnerships & Syndications

Advanced Appraisal Techniques Federal Appraisal Requirements Analytic Uses of Computer in the Appraisal Shop Valuation of Leases and Leaseholds Valuation Litigation Mock Trial Residential Construction From The Inside Out Rates, Ratios, and Reasonableness Analyzing Income Producing Properties Development of Major/Large Residential Projects

Standards of Professional Practice Regression Analysis In Appraisal Practice Federal Appraisal Requirements

Engaged in appraising and consulting assignments including market research, rental studies, feasibility analysis, expert witness testimony, cash flow analysis, settlement conferences, and brokerage covering all types of real estate since 1972.

President of Anderson & Carr, Inc., Realtors and Appraisers, established 1947

Past President Palm Beach County Chapter, Society of Real Estate Appraisers (SREA)

Realtor Member of Central Palm Beach County Association of Realtors

Special Master for Palm Beach County Property Appraisal Adjustment Board

Qualified as an Expert Witness providing testimony in matters of condemnation, property disputes, bankruptcy court,

foreclosures, and other issues of real property valuation.

Member of Admissions Committee, Appraisal Institute - South Florida Chapter

Member of Review and Counseling Committee, Appraisal Institute - South Florida Chapter

Approved appraiser for State of Florida, Department of Transportation and Department Natural Resources.

Instructor of seminars, sponsored by the West Palm Beach Board of Realtors.

Authored articles for The Palm Beach Post and Realtor newsletter.

Real Estate Advisory Board Member, University of Florida.

#### QUALIFICATIONS OF APPRAISER ROBERT B. BANTING, MAI, SRA (CONTINUED)

#### TYPES OF PROPERTY APPRAISED - PARTIAL LISTING

Air RightsMedical BuildingsApartment BuildingsChurchesAmusement ParksDepartment StoresHotels - MotelsMarinas

Condominiums Industrial Buildings Office Buildings Residences - All Types

Mobile Home ParksService StationsSpecial Purpose BuildingsRestaurantsAuto DealershipsVacant Lots - AcreageResidential ProjectsGolf CoursesShopping CentersLeasehold InterestsFinancial InstitutionsEasements

<sup>&</sup>quot;I am currently certified under the continuing education program of the Appraisal Institute."

#### **CARL C. CHRAPPA**

#### **EXPERIENCE**

4/89 - Present

President and C.E.O., Independent Equipment Company, Clearwater, Florida; President and C.O.O., Independent Equipment Company, San Francisco, CA;

Duties include: managing company, directing consulting practice; equipment consignment sales and auctions; performing complicated field inspections and appraisals; portfolio management; residual valuations; vendor program and equipment research; special studies; lecturing and instructing private industry as well as professional associations. Personally has valued over \$50 billion in real and personal property.

6/87 - 4/89

Vice President - Asset Management, TRAC Systems, Inc., New York, New York; Hampton, New Hampshire; Group Executive - TRAC Auction Services.

Duties include: managing division; equipment field inspections and appraisals; investment analysis; residual value analysis; equipment remarketing; auctions; equipment purchase and sales; portfolio management including insurance, legal, appraisal, inspections, residual valuations, collections, analysis, resale, leasing, and management reporting.

9/85 - 6/87

Vice President - Equipment Valuation & Remarketing, International Capital Equipment, Chicago, Illinois, Larchmont, New York.

Duties include: managing department; field valuations and inspections; research; replacement, fair market, and liquidation value appraisals and analysis; equipment remarketing; compiling economic and cost data, national and international in scope; established aircraft, marine vessel, medical equipment, railcar, hi-technology, electronic equipment, telecom, container/chassis, truck/tractor, machine tool, construction, processing, and mining equipment residual value guarantees; publish valuation guides and lease return and maintenance specifications; residual value analysis and "PUT" option value recommendations.

6/79 - 9/85

Property Valuation and Appraisal Manager, Kemper Group, Long Grove, Illinois, Quincy, Massachusetts

Duties include: managing valuation and appraisal division. Responsible for: sales and marketing; loss adjustment consultations and equipment liquidations; complicated real and personal property appraisals; value studies; conceptual estimates; research and issuance of cost trends; publishing cost data and valuations guides.

1970 - 6/79

Factory Mutual Engineering Association, Norwood, Massachusetts, San Jose, California.

Positions held include: Appraiser, Senior Appraiser, Resident Senior Appraiser - California, Senior Staff Appraiser, Manager of Appraisal Training, Manager of Resident Appraisal Operations.

#### **EDUCATION**

- 1971 University of Massachusetts, Amherst, MA BS Degree
- 1979, 1981 University of Missouri Certificate courses including: General Estimating; and Project Economics and Risk Analysis (via AACE).

#### PROFESSIONAL ASSOCIATIONS/DESIGNATIONS

<u>AMERICAN ASSOCIATION OF COST ENGINEERS</u> - Graded as "Member" - Certification as General Estimator and Certification in Project Economics and Risk Analysis

**AMERICAN BANKRUPTCY INSTITUTE** - Member

<u>AMERICAN SOCIETY OF APPRAISERS</u> - Machinery and Equipment Appraiser, Tested and Certified as "Accredited Senior Appraiser" (A.S.A. - Senior Member) - Reaccredited for 5 Years through June 29, 2010.

**ASSOCIATION FOR COMPUTING MACHINERY** - Professional Member, #5010640

FLORIDA AUCTIONEERS ASSOCIATION - Member

FLORIDA BOARD OF AUCTIONEERS - Member Company (Expiring Nov. 30, 2008)

<u>INSTITUTE OF COST ANALYSIS</u> - Graded as "Senior Member," designated Certified Cost Analysis, (CRA) Registration Number 992

**INSTITUTE OF PROPERTY TAXATION** - Member (1985-1988)

INTERNATIONAL ASSOCIATION OF ASSESSING OFFICERS - Graded as "Associate Member"

**INTERNATIONAL SOCIETY OF APPRAISERS** - Graded as "Associate Member"

NATIONAL ASSOCIATION FOR BUSINESS ECONOMICS - Member

**NATIONAL AUCTIONEERS ASSOCIATION - Member** 

NATIONAL SOCIETY OF REVIEW APPRAISERS AND MORTGAGE UNDERWRITERS - Graded as "Senior Member," designated Certified Review Appraiser (CRA) (1980-2008)

<u>NATIONAL ASSOCIATION OF INDEPENDENT FEE APPRAISERS</u> - Graded as "Senior Member" Designated "I.F.A."

NATIONAL ASSOCIATION OF MANUFACTURERS - Member

**SOCIETY OF MANUFACTURING ENGINEERS** - Graded as "Senior Member"

TURNAROUND MANAGEMENT ASSOCIATION - Member

#### PROFESSIONAL ASSOCIATION ACTIVITIES

EQUIPMENT LEASING & FINANCE ASSOCIATION - Chairman - Equipment Management Committee (1991-1992); Chairman - Appraisal Inspection Subcommittee (1987-2008); Founding and Current Member - Equipment Management Committee (1986-2008); Co-Author - "A Leasing Company's Guide to Equipment Management" (1991). Regular Column on Asset Management in "The Equipment Financing Journal" (1994 - 2005); Member - Equipment Vendor Relations Sub-Committee (1989-2008). ELFA Business Services, Inc. - Member - Board of Directors (2001-07); Lecturer - National Convention - (1986-1992; 1998); Equipment Management Conference (1987-2008); Credit and Collections Conference (1995, 2002, 2005, 2008); Captive Equipment Leasing Conference (2002, 2004); Executive Roundtable (1995); Lease Accountants Conference (1997).

AMERICAN ASSOCIATION OF COST ENGINEERS - AACE International Board of Directors - National Technical Director - Cost Estimating Division (1987-1990); National Chairman - Cost Index Committee (1980-1987); National Chairman - Appraisal Committee (1988-2008); Technical Reviewer - Cost Engineering Magazine (1983-2008); Technical Vice President - New York Metro Chapter (1987-1988); National "Outstanding Committee Chair" Award (1994, 1995, 2001); Lecturer, National Conventions (1980-1991; 1994)

<u>AMERICAN SOCIETY OF APPRAISERS</u> - Chicago Chapter Chairman - Public Relations Committee (1985), Member of Appraisal Education Committee. Lecturer (1973-1989); National Convention (1989).

**COMMERCIAL FINANCE ASSOCIATION** - Member of Board of Directors, Member of Education Committee and Planning Committee (1990-2008).

INTERNATIONAL SOCIETY OF APPRAISERS - Member Publication Review Board - ('85-'87); International Chairman, Equipment Examination Board - Member International Ethics and Arbitration Committee - wrote chapters for appraisal study guide (ISA-21), Lecturer - ('85-'87)

**INSTITUTE OF COST ANALYSIS** - 1985 Technical Vice President - Chicago/Midwest Chapter

**INSTITUTE OF PROPERTY TAXATION** - Lecturer, National Convention - (1988)

<u>INTERNATIONAL ASSOCIATION OF ASSESSING OFFICERS</u> - Member Association Technical Advisory Group, Lecturer (1984-1987)

<u>NATIONAL ASSOCIATION OF BUSINESS ECONOMICS</u> - Member - International and Manufacturing Roundtables, National Vice Chair - Manufacturing Roundtable (2004-2005), National Chair - Manufacturing Roundtable (2006-2007).

**TURNAROUND MANAGEMENT ASSOCIATION** - Charter Member and Member Board of Directors - Central Florida Chapter - (1994-1995)

#### **QUALIFICATION SHEET**

#### Robert A. H. Schultz

### Feb. 1, 1988 to present

### Rail Equipment Inspection Representative Independent Equipment Company, Crown Point, IN 46307

- Perform appraisals and inspections of railcars, MOW, and motive power.
- Manage Portfolio of covered hopper cars and tank cars including all necessary maintenance and paperwork.
- Issue advisories on matters concerning mechanical, safety, or design of equipment.
- Visit repair shops and lining shops to advise and inspect in order to opine on the value and quality of repair work.
- Perform inspections of all new and used equipment prior to acceptance or return from lease.
- AAR and FRA mechanical liaison/Tank Car Committee.

#### PRIOR WORK EXPERIENCE

#### 1971 - 1988

- Owned and operated small railroad freight car repair shop in Schererville, Indiana. Customers included: CCLX, CREX, ELCX, GRYX, HOCX, NPCX, NWAX, TMCX, and others.
- Owned and maintained a fleet of open top hopper cars with private marks which were leased to various users.
- Directly involved with Sales, Purchasing, and Public Relations.
- Performed inspections and appraisals for residual guarantors and leasing companies.

1967 to 1971 Car Foreman - Wreckmaster

ERIE LACKAWANNA RAILROAD, Hammond, Indiana

1960 to 1966 Welding Technician

PULLMAN STANDARD - Research and Development

Hammond, Indiana

1948 to 1960 Car Department

MONON RAILROAD

Education: 1962 to 1963 - Purdue University, Calumet Center, Illinois

1943 to 1947 - High School, Graduated

Thornton Fractional Township, Calumet City, Illinois

1936 to 1943 - Grade School, St. John's Ev. Lutheran,

Lansing, Illinois

Military Service: August 1951 to August 1953, U.S. Army Transportation Corps.

Rank - Corporal; Honorable Discharge

Professional Chicago Railway Car Association, 1980 - 1981

Associations: Current member of American Welding Society

#### **QUALIFICATION SHEET**

#### David A. Belyea

### July 1990 to present

#### Inspection and Appraisal Representative - Baltimore, MD

- Equipment Valuation and Sales
  - Field Inspections and Appraisals
  - Market Research and Analysis
  - Lease Analysis
  - Remarketing Off-lease Equipment
- Real Estate Valuation
  - Field Inspections and Appraisals
  - Market Analysis, Vacancy Rates, Absorption Rates;
  - Supply and Demand of Different Tiers and Classes of Commercial and Industrial Property;
  - Database of Market-derived Data, including Comparable Sales, Rents, Regional Construction Materials, Labor Costs, Architectural and Developer Fees, etc.

#### PRIOR WORK EXPERIENCE

#### 1985 - 1990

Global Valuations Group - Hingham, MA, Salisbury, MD
 Manage and administer valuation services for clients, including major corporations, banks and financial organizations, leasing corporations, bankruptcy courts, law firms, federal and state government agencies, real estate developers, individuals, and other equipment and real estate managers and appraisers.

#### 1984 - 1985

Arthur Andersen and Company - New York, NY

Train and supervise activities for appraisal and support staff. Develop relationships with clients. Promote continuing career education of valuation disciplines through the Appraisal Foundation, and ensure adherence to the Uniform Code of Ethics and Standards set forth by the Appraisal Standards Advisory Council of the Appraisal Foundation.

#### 1983

- Second National Service Corporation Ocean City, MD
  - Staff appraiser for Bank;
  - Real estate appraiser for Bank;
  - Narrative commercial real estate appraisal work;
  - Valuation of proposed new construction;
  - Inspection of projects in development/construction for
  - verification of development stages, and approval of release of Bank's funds for construction;

#### 1972 - 1982

- Factory Mutual Engineering Association Norwood, MA
  - Appraiser, Senior Appraiser, Resident Senior Appraiser Mid Atlantic Region
  - Appraisal trainer;
  - Valued over 310 industrial complexes;
  - Valued over 4,500 industrial buildings;
  - Valued over \$12 billion of industrial plant and equipment;

Military Service: U.S. Coast Guard, Boston, MA - Honorable Discharge - 1972

Education: B.S. in Business - Boston University, 1966

Marketing Research and Management

#### **Continuing Education:**

Numerous seminars and courses through ASA, ELFA, AIREA, and SREA on valuation and appraisal practices, lease and finance structuring;

### Professional

Affiliations: Candidate for Member Appraisal Institute (MAI) designation (1984-

2008) with AIREA;

Maryland Certified General Real Estate Appraiser, License #3394 (1993 - 2004); Temporary Licenses - Commercial/Industrial RE Appraiser (Florida, California, Indiana, Delaware, Illinois, Ohio, Virginia, New Jersey, Texas, Massachusetts, and Rhode Island).

#### Curriculum Vitae M. Brent Gabler

I am currently a partner in Creative Citrus Services, Inc. Creative Citrus is a small citrus consulting company that I helped found in 1992. I serve as President and Treasurer of the company.

#### Employment History:

I have had extensive experience in various engineering, maintenance, production, and procurement assignments for three large consumer goods companies, including General Foods Corporation, Philip Morris, Inc., and Tropicana Products, Inc. After receiving my B.S. degree in 1960, I was employed for four years as an Industrial Engineer by US Steel. I later acquired an MBA degree.

I began my citrus career at Tropicana in 1977 as Plant Superintendent at Tropicana's main plant in Bradenton, Florida. I was promoted to Tropicana's Vice President of Manufacturing and Engineering in 1984, and in 1990 became Tropicana's Vice President for Worldwide Fruit Procurement.

#### Experience:

At Tropicana, my management assignments were broad in scope and covered all operational aspects of two large citrus processing plants, a glass bottle manufacturing factory, a plastic package manufacturing facility, and a corrugated shipping container manufacturing plant. My assignment as Tropicana's Fruit Procurement Officer took me all over Florida, Brazil, Mexico, Spain, Israel, and the Caribbean, meeting growers and touring processing plant operations. Since becoming a consultant, I and a partner have provided technical and business consulting to an extensive list of citrus companies located in a number of citrus producing countries around the world (a list of clients is included in the Appendix).

#### Education:

I earned my B. S. in Industrial Engineering from Wayne State University (1960), and my M.B.A from the University of Chicago (1967). I have attended many seminars and short courses to keep my technical skills up to date and to further expand my knowledge of food and citrus juice processing, packaging, and agriculture.

Respectfully,	
M. Brent Gabler November 21, 2005	

#### M. BRENT GABLER

#### PROFESSIONAL EXPERIENCE

TROPICANA, IN	C., Bradenton,	Florida
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Vice President, Worldwide Procurement		1990 to 1992
Vice President, Manufacturing		1985 to 1990
Plant Manager		1980 to 1985
Plant Superintendent	*1	1977 to 1980

#### PHILIP MORRIS U.S.A., Richmond, Virginia

Fabrication Machinery Manager	1973 to 1977
Project Engineer	1971 to 1973
Staff Supervisor, Industrial Engineering	1967 to 1971

#### GENERAL FOODS CORPORATION, Avon, New York

Birds Eye Division	1965 to 1967
Kool Aid Division	1963 to 1965

Plant Superintendent Area Industrial Engineer Maintenance Superintendent Project Engineer

### U.S. STEEL CORPORATION, Gary, Indiana

1960 to 1963

Gary Sheet & Tin Mill

Industrial Engineer

Industrial Engineering Analyst

Management Trainee

#### RELATED PROFESSIONAL EXPERIENCES

University guest lecturer on Engineering Economics

Member of Governor's Management Study Team, Commonwealth of Virginia

Director, American Red Cross of Manatee County

#### **EDUCATION**

University of Chicago, Master of Business Administration	1967
Wayne State University, Bachelor of Science in Industrial Engineering	1960

(727) 787-3899 (F)

3136 Windmoor Drive North, Palm Harbor, Florida 34685-1741 (727) 787-2213 (O)

(727) 415-9847 (C)

### AREAS OF SPECIALIZATION

John A. Gillott, MAI, SRA, is a senior appraiser specializing in the valuation of investment grade real estate.

Mr. Gillott has been actively involved in the field of real estate appraising and counseling since 1976. He has completed appraisals of residential, commercial, industrial, and special purpose properties.

He has prepared narrative appraisal report for merger/acquisitions, allocation of purchase price, financing, leasehold/leased fee analyses, useful life determinations, component depreciation, ad valorem tax, condemnation, sales/purchases, value in use, and liquidations and distressed properties. He has extensive project management experience with multi-location assignments.

Mr. Gillott is an Appraisal Institute approved instructor, a Certified General Appraiser in Florida and North Carolina, and holds a Florida Real Estate Broker's license. He has also written a number of articles for publication.

Mr. Gillott has provided expert testimony to the Federal Asset Disposition Agency, Internal Revenue Service and the U.S. Bankruptcy Courts in Florida, New York, Texas and North Carolina. In addition, he has completed appraisal assignments for the Securities and Exchange Commission, Federal Housing Administration and Veterans Administration.

REAL ESTATE LICENSES/ REGISTRATIONS State-Certified General Appraiser RZ0000212 (Florida) Licensed Florida Real Estate Broker 0159502 State-Certified General Appraiser A5038 (North Carolina)

PROFESSIONAL AFFILIATIONS; DESIGNATIONS Appraisal Institute

MAI - Member Appraisal Institute SRA - Senior Residential Appraisal SRPA - Senior Real Property Appraiser RM - Residential Member

#### **EDUCATION**

B.S., Economics and Real Estate, Widener University, Chester, Pennsylvania

Appraisal Courses (most courses taken or taught prior to 1992 are not listed):

- 2-1 Case Studies in Real Estate Valuation, AIREA, 1987
- 2-2 Report Writing and Valuation, AIREA, 1988
- 110 Real Estate Appraisal Principles, AI, 1992-2006
- 120 Real Estate Appraisal Procedures, AI, 1992-2006
- 210 Residential Case Studies, Al, 1990-2003
- 200 Residential Market Analysis and Highest & Best Use, Al, 2006
- 310 Capitalization Theory and Techniques, Al, 1993-2006
- 320 General Applications, 1992, 1998
- 400 Foundation Approved USPAP Update-2003, Al, 2004
- 410 Standards of Professional Practice Part A, AI, 1992-2001
- 420 Business Practices and Ethics, Al 1992, 1994, 1999, 2003
- 500 Advance Residential Form & Narrative Report Writing, AI, 1994
- 510 Advanced Capitalization, Al, 1993, 1995, 1997, 1999, 2002, 2005
- 530 Advanced Sales Comparison and Cost Approaches, Al, 2000

(727) 787-3899 (F)	3136 Windmoor Drive North, Palm Harbor, Flori (727) 787-2213 (O)	da 34685-1741 (727) 415-9847 (C)
EXPERIENCE	Gillott Appraisal Services, Inc., Co-Owner,	Palm Harbor, Florida 1976 to Present
	American Appraisal Associates, Inc., Senio Tampa, Florida, February 1991 to August 1	
	AppraisalFirst, Inc., Office Manager, Tamp 1991, (Office Closed)	oa, Florida, November 1989 to Februa
	Marshall Stevens, Senior Appraiser, Tampa	a, Florida, June 1987 to November 198
PARTIAL LIST OF	ALCOA	Massachusetts Mutual Life Insurance
CLIENTS SERVED	American Rice	McKesson Robbins
AND PROPERTIES	Amoco Oil Company	Memorex Telex
APPRAISED	Astrotech	Merrill Lynch Capital Group
	ARCO Oil	Miller Brewing
	Bank of America	Motiva (Texaco/Shell)
	Bank of Netherlands	Nestle Bottling North America
	Bank of Singapore	Pepsico
	Berry Farms	Petroleum Packers, Inc.
	Blackstone Group, New York City	Pitney Bowes, Inc.
	Canadian Imperial Bank	Prudential Real Estate
	Cemex	Rinker Materials
	Chemical Bank of New York	Sanwa Business Credit
	Chevron USA	Sarasota Memorial Hospital
	Ciba-Geigy Corporation	Scott Wise Land Company
	Citgo Oil	Securities and Exchange Commission
	Coldwell Banker	Seminole Electric
	Coopers and Lybrand	Shell Oil
	Delaware North Corporation	Shurgard Storage
	El Paso Energy (Coastal Fuels)	SPACEHAB, INC.
	Equitable Life Assurance Company	StarEnterprise (Texaco)
	Federal Asset Disposition Agency	Texaco Refining
	Federal Home Loan Bank Board (FHLBB)	Trammel Crowe - Equity Partnership
	Federal Savings & Loan Insurance Corp.	Trammel Crowe - International
	Federal Housing Administration	Vanalco Ingot & Smelter
	Fireman's Fund	Venice Minerals
	First Union (Wachovia)	Veterans Administration
	Gale & Wentworth, New York City	WCI
	General Growth Properties	Westfield Corporation
	Hartz Mountain	Westway Terminals
	Hess Oil Company	Youngquist Brothers
	Hillsborough County School Board	Toungquiet Broundle
	Horizon Real Estate	
	Hughes Aircraft	
	Internal Revenue Service	
	International Paper	
	Irving Trust	
	Irving Leasing Corporation	
	ITF Willow Run Land Trust	
	Kash 'n Karry	
	Koch Refining	
	Martin Chemical	

(727) 787-3899 (F)	3136 Windmoor Drive North, Pa (727)	alm Harbor, Florida 34685-1741 787-2213 (O) (727) 415-9847 (C)
SPECIAL PROJECTS	NCNB	Project manager for assignment involving 134 branch banks
	Imperial Bank of Canada	Project manager for a leveraged buy-out of 200 Shoney's Restaurants
	Memorex/Telex	Appraised computer plants across the United States
	American Rice	Appraised the largest rice processing plant in the United States in Freeport, Texas
	Hartz Mountain	Project manager for appraisal of all real estate holdings
	Trammell Crowe	Project manager for appraisal of all Class A office buildings held in the international and equity partnership portfolios
	Bank of Singapore	Appraised a segment of office building portfolios in the United States
	The Blackstone Group	Appraised Ibis Golf & Country Club, a 1,900-acre upscale residential development in West Paln Beach, Florida, for syndication and allocation opurchase price for the Internal Revenue Service
	Sanwa Business Corp.	Appraised Super Shop locations in southeast U.S textile plants in North Carolina, and Atlas Iron Processors' plants in Ohio and Florida
	International Paper	Appraised and reviewed divestiture of \$750 million in medium-density fiber board plants at 13 locations in southeast United States
	Hess Oil Corporation	Appraised refinery's property in St. Croix, a 31 million barrel facility
	Bank of America	Appraised 2.1 million square foot high-tech gree house space in two facilities for Speedling, Inc. and appraised 375,000 square foot high-tech greenhouse facility for the Park Seed Company
	CSX Transportation, Inc.	Appraised 1,000-acre project being developed of Hutchinson Island in Savannah, Georgia
	Scott-Wise Land Co.	Appraised \$360,000,000 in coal reserves located is southwest Virginia
	Vanalco Ingot & Smelter	Appraised \$85,000,000 facility in Vancouver Washington as vacant and as a smelter

(727) 787-3899 (F)	3136 Windmoor Drive North, Palm Harbor, Florida 34685-1741 (727) 787-2213 (O) (727) 415-9847 (C)		
SPECIAL PROJECTS	General Growth Properties	Appraised Lakeland Square Mall, Lakeland, Florida and Eagle Ridge Mall, Lake Wales, Florida for tax appeal purposes	
	Westfield Corporation	Appraised Sarasota Square Mall, Sarasota, Florida for tax appeal purposes	
	Limestone, fill-dirt and sand mines and quarries	Youngquist Brothers, Bonita Grande Rock & Sand, Jesse Hardy, Willow Run Land Trust, Venice Minerals, County Concrete, New Hope Crushed Stone, Burnt Store Acres, Brooks Crushed Stone, Counts Construction 441 Mine, Mirror Lakes, Kings Mine, Winchester Lakes, Big Island, Tri-County Mines, Cemex, Westwind	
	North America Emerald Mine	Corkscrew  Appraised a host rock and emerald-producing mine	
	NOTH AMERICA EMERAIC MINE	in North Carolina	
	Pat Roberts	Appraised the \$5-million new-urbanism Opus Building, a two-unit residential condominium and retail property in Seaside, Florida	
	Astrotech Space Operations	Appraised a nine-building commercial satellite- processing facility in Titusville, Florida near Cape Canaveral	
	Berry Farms	6-Million gallon orange juice concentrate cold storage facility	
	Nestles Waters North America	Appraised a \$32,000,000, 404,000-square foot high speed bottling plant in Madison County, Florida	

#### **CURRICULUM VITAE**

NAME:

Marlan J. Mitch

PERSONAL DETAILS:

American

**QUALIFICATIONS:** 

B.S. Construction Technology

Louisiana State University, Baton Rouge, LA (1980)

LANGUAGE ABILITY:

Mother Tongue: English

Spanish - Read/Write/Speak Fluently

PROFESSION:

Construction Engineer

**MEMBERSHIP(S):** 

American Society of Sugar Cane Technologists

#### SUMMARY OF EXPERIENCE:

Twenty Five (25) years experience with the Company. B.S. in Construction Technology. Project Manager/Project Engineer on worldwide projects. Responsible for supervising the engineering on a wide variety of projects from power projects including both steam cycle and combined cycle to installations of complete plants. Also participated in the following activities: studies, appraisals, cogeneration projects, project supervision, project scheduling, estimating, and purchasing and procurement activities. Has been responsible for more than 30 appraisals/valuations of agroindustrial plants including both sugar factories, refineries and ethanol plants. Technical Director from 2003 to 2006 and Regional Director since 2006. Experienced in the use of AutoCAD in drafting and design work as well as other software packages.

Has developed or assisted in developing specialized software for numerous engineering applications including:

- Calculation of power generation utilizing a variety of agricultural waste fuels as well as conventional fuels.
- Calculation of power generation from combined cycle plants
- Sugar Refinery Material and Energy Balances
- Ethanol Plant Material and Energy Balances
- Financial Projections and Sensitivity Analysis Models

#### **DETAILS OF WORK EXPERIENCE:**

Schaffer & Associates, Baton Rouge, Louisiana (1980-Present)

Regional Director

- Technical and Financial Models HC&S, Hawaii
- Rice Husk Cogeneration Feasibility Study, Peru
- 7-UP Sugar Factory and Ethanol Plant Feasibility Study, Nigeria
- Pricing of Technical Options Markala Sugar and Ethanol Project, Mali

#### Curriculum Vitae Marlan J. Mitch Page 2

- Existing Sugar Factory and Cogeneration Project Due Diligence for Citibank, Guatemala
- Sugar Factory, Refinery, Cogeneration and Ethanol Plant/Distillery Due Diligence for Citibank, Nicaragua
- Production of Ethanol and Electricity from Sugar Cane, Belize
- Feasibility Study Ismailia Sugar and Ethanol, Egypt
- SONEDCO Sugar Factory Expansion and Efficiency Improvement Study and Engineering Project, Philippines
- Sr. Mitrovica Beet Sugar Factory Study, Serbia
- Ethanol from Sweet Sorghum Study and Basic Engineering, South America
- Ethanol from Agricultural Waste Study and Basic Engineering, Canada
- Cogeneration, Specialty and Refined Sugar and Ethanol Production Study, Barbados
- Rio Grande Valley Sugar Grower Boiler and Cogeneration Engineering Project, USA
- Rio Grande Valley Sugar Growers 16,000 tons per day Truck Dump and Cane Handling Engineering Project, USA
- U.S. Sugar Expansion Project, USA total value of project \$200 million supervised basic engineering during the initial phases of the project.
- Waste to Energy Study, Ghana
- Beet Sugar Factory and Refinery Study, Egypt
- Cogeneration and Ethanol Production Study, Central American
- Responsible for mobilization of a 12 man operations team for a 1,850 ton Sugar Refinery in Apapa, Nigeria.
- Project Manager for Ingenio San Ramon Modernization including design engineering of installations for one pan, two evaporators, one turbo-generator, one boiler and accessories.
- Project Manager for Ingenio Los Mangos Expansion Project including design engineering and constructions supervision for the installations of a six mill tandem, two pans, six evaporators, two heaters, one clarifier, one filter, one boiler, one turbo-generator, four centrifugals and accessories. Project value \$10,000,000.

#### Curriculum Vitae Marlan J. Mitch Page 3

- Project Manager for Modernization of Central Castilla's Instrumentation (Basic Conceptual Design).
- Project Manager for basic engineering of Ingenio Rio Lindo Cogeneration Project.
- Project Management/Estimating/Scheduling for Ingenio Santa Matilde Expansion. Duties included supervising engineering for an approximately \$2,000,000 project.
- Assistant Project Manager for Cinclare Mill Expansion. Project involved re-engineering existing mill tandems, issuing construction contract documents and monitoring construction progress of a \$2,500,000 project.
- Project Planner/Scheduler for MEI Olin Turnaround. An approximately \$1,000,000 turnaround in Hyco I and Hyco II at Olin, Lake Charles, Louisiana.
- Assistant Project Manager for new 6,000 TCD Sugar Factory in Chiriqui, Panama. Responsible for site management and coordination of construction.

#### **Consulting Operations**

Under the consulting operations, responsible for study assignments/privatization appraisals and by-products utilization studies for clients and financial institutions including:

- Cogeneration, Diversification and Ethanol Production, Barbados
- Ghana Waste to Energy Study
- Egypt Sugar Factory/Distillery/Refinery
- Central America Ethanol and Cogeneration Study
- Palm Oil Waste Cogeneration Study
- Ingenio Santa Matilde Expansion and Cogeneration Studies
- Federal Land Bank appraisals of St. James, Caldwell and Glenwood, St. Mary and Iberia Sugar Factories
- Appraisals of Ingenio Chaparrastique, Ingenio El Carmen, Ingenio La Grecia, Ingenio Francisco Morazan y Ingenio de Alanje
- La Victoria Refinery Study
- Mali and Eritrea New Factory Feasibility Studies
- Assistance in negotiation of flood insurance claims for Ingenio Los Mangos. Payments exceeded \$10,000,000
- Mexico Refinery Study of Two Factories

#### Curriculum Vitae Marlan J. Mitch Page 4

- El Salvador Privatization Appraisals of 5 Sugar Factories and Two Ethanol Plants and Panama Privatization Appraisals
- Honduras appraisals of 4 Sugar Factories
- Ghana Sugar Industry Rehabilitation and Expansion and Study
- Cogeneration Study of Sugar Industry of Guyana, funded by Inter-American Development Bank
- Survey of Cogeneration Potential in the Sugar Industry of Colombia, funded by Inter-American Development Bank
- Merger Study of two Louisiana factories
- Study on completion of 12 Ethanol Plants and Estimates of Operating Costs
- Study on Rehabilitation of Kinyara Sugar Factory, Uganda, funded by US Trade & Development Program
- Presentation of Results of Cogeneration Potential in Colombia
- Cogeneration Study for Ingenio Yojoa, Honduras
- Refinery Study/Production of High Quality Raw Sugar for U.S. Sugar factories
- Consultancy on Privatization of Guyana Sugar Industry and Operations & Management Projections funded by World Bank
- Appraisal Services for U.S. Agency for International Development on Ingenio Tempisque in Costa Rica for privatization purposes

Also responsible for major bids/estimating for turnkey projects.

During this time, employed by F. C. Schaffer & Associates, Inc., held the following positions:

#### <u>Sudan</u>

- a. Resident Manager and Assistant Resident Manager. Home Office Coordinator for Army Corps of Engineers' Project.
- b. Field Engineer. Responsible for inspection, commissioning and startup of the Kenana Sugar Factory. Supervised a 7 man startup crew and served as coordinator between the owner and contractor. Tracking of owner's claims against contractors and equipment manufacturers.

#### Louisiana

Field Superintendent and Estimator. Superintendent for jobs requiring field work. Principle duties also included estimating fabrication and erection cost of structural steel, tanks and piping. Developed computer software for estimating and detailing structural steel which dramatically reduced time and cost required for these activities and improved the quality and accuracy of the work.

#### Honduras

Field Project Engineer. Fully responsible for supervising and scheduling all phases of a \$2,000,000 highway project which included front line supervision of over 150 construction workers. This project included construction of a 90 meter bridge, box culvert, pipe culverts, catch basins, head walls and retaining walls. The project was completed on time and within budget.

Assistant Field Project Engineer on a \$6,000,000 highway paving and reconstruction project. Responsible for cost control and scheduling. Also directed bridge repairs, operation of asphalt plant and construction of contractor's camp and offices. This project was also completed on time and within budget.

#### QUALIFICATIONS OF APPRAISER

Lazaro J. Seijo, ASA 4301 South Flamingo Road Suite 103-305 Davie, Florida 33330 Telephone: (786) 293-1727 Fax (305) 256-1859

#### **EXPERIENCE:**

Abstractor at Attorney's Title Insurance Co., Miami, Florida

Research Analyst for **Appraisal Data Inc**. Did real estate research, comparable sales, rental surveys in Dade, Broward and Palm Beach Counties.

Named Regional Manager of Appraisal Data, soon after Dresco, Inc. bought the firm. Dresco is a national real estate firm which specializes in research and were publishers of the Dade County Roddy Report, the Dade County Office Guide, Apartment Guide, and Shopping Center Guide. Duties included running two fully staffed offices in Broward and Dade Counties.

Principal in South Florida Research Corp., a real estate research company that specialized in serving the real estate industry, brokers, appraisers, and investors. The firm did feasibility studies, rental surveys and comparable sales. Sold the company in September 1987.

Republic Appraisal Company/Gabriel Garcia-Menocal, MAI. Did commercial, residential and machinery and equipment appraisal work in Florida, California, Atlanta, North Carolina and Texas.

Principal in L & M Appraisal Services, Inc. The company specializes in Machinery and Equipment Appraisals for financing, buy-outs, advalorem, leasing, consultants in fixed assets and mergers.

#### **EDUCATION:**

Fort Lauderdale College, Miami Dade Community College

#### SPECIAL EDUCATION:

American Institute of Real Estate Appraisers.

Course IA-1 Real Estate Appraisal Principals, Florida State University

Course IA-2 Basic Valuation Procedure, Florida State University

Single Family residential appraisal seminar, NSFA

American Society of Real Estate Appraisers Standards of Professional Practice

Appraisal for Ad Valorem Taxation (Communications, Energy) Wichita State University

Narrative Appraisal Course by NSFA, Miami, FL

Residential Appraisal AB-1, Miami Dade Community College

Environmental Assessment Association Inspector, Miami, FL

Environmental Site Assessment, Miami, FL

Hurricane Andrew Seminal (residential appraising), Miami, FL

American Society of Appraisers, Machinery and Equipment, ME201,

Atlanta, GA

American Society of Appraisers, Machinery and Equipment, ME202, Washington, DC

American Society of Appraisers, Machinery and Equipment, ME203, Washington, DC

American Society of Appraisers, Machinery and Equipment, ME204, Chicago, IL

Asset Differences Between Disciplines, Newark, NJ

American Society of Appraisers, Report Writing Course, Sarasota, FL Certified by ASA through the year 2009

American Society of Appraisers Machinery and Equipment, ME206, Appraisal Inventory, Chicago IL

American Society of Appraisers, Machinery and Equipment, Appraisal Review All 300, Chicago, IL

#### SOCIETY OF REAL ESTATE APPRAISERS:

Introduction to Appraising Real Estate Property, Course 101, St. Thomas University, Miami, FL Real Estate Principles and Practices, Miami, FL IAAO - Preparation and Trial of The Property Tax Assessment - Las Vegas, NV

#### PERSONAL PROPERTY APPRAISALS:

#### TYPE OF PERSONAL PROPERTY APPRAISED:

Auto Dealerships

Bakery Plant

Bank Branches

Bank Main Operation Facilities

Broadcasting Facilities

Manufacturing Plant

Marina (Dry Dock)

Medical Clinics

Medical Equipment

Medical Offices

Movie Theaters

Broadcasting Facilities Movie Theaters
Concrete Factory Night Club
Cracker Factory Printing Plant

Department Stores Professional Offices
Fast Food Restaurants Radio Broadcast Studios

Fiber Factory Restaurants

Flight Simulation Equipment Satellite Repeater Stations

Food Processing Plant

Furniture Store

Hospitals

Scrap Metal Factory

TV Broadcast Studios

Tape Duplicating Co.

Hotels/Resorts Water Bottling Co.

# PERSONAL PROPERTY ASSIGNMENTS FOR THE FOLLOWING COMPANIES:

3I Implants
Aero Service (Flight Similutors)
Alamo Rent-A-Car
American Airlines

**Grocery Stores** 

Am	eri	can	Ba	nk	ers
/"S ##		CHIL			

**American Express** 

Anchor Glass Plant

**Andrx Pharmaceuticals** 

AT&T

**Auto Nation USA** 

Avmed

Baker Norther Pharmaceuticals

Bayshore Medical (Houston, TX)

Bill Ussery Motors

Boston Scientific Symbiosis

Burger King (Corporate Headquarters)

Burger King (Franchises)

CAC-Ramsay

Celebrity Cruise Lines

Central Concrete

Certegy

Charles Schwab

Checkers Restaurants, Inc.

Choice Point

Citicorp/Citibank

Citrix Systems, Inc.

Clearlake Hospital (Houston, TX)

Comdisco Leasing Corporation

Commercial Bank of Florida

Consultants For Property Tax

Costa Cruise Lines

**Del Monte** 

Deloitte & Touche, LLP

DIRECTV

Discount Auto Parts (Corporate Headquarters)

Dole

Dolphine Cruise Lines

Dresdner Bank

Duracell

East Houston Medical (Houston, TX)

**Ernst & Young LLP** 

Esserman Nissan

**Essex Plastics** 

**First Union** 

Florida Growers

Florida Rock & Sand Co.

Fountainbleau Hotel

FPL FIBERNET

**GE** Capital

General Electric

Gilda Industries

Goldline Laboratories

Haagen-Dasz Co.

Hallandale Artificial Kidney Center

Healsouth Hospital

HCA (Hospital Operators)

Heiro Aviation

Hilton Hotels

Hoerbiger Corporation of America

Holiday Inn Hotels

Hyatt Hotels

**IASIS** 

IBM Leasing Corporation

Intercontinental Hotels

Interim Services

Ital of Florida Foods, Inc.

Ivax

J. I. Kislak Mtg. Co., Inc.

JM Family (Corporate Headquarters)

Kelly

KMC Telecom (GA, NE, SC, FL, TN)

Kerry's Bromeliad (Plant Nursery)

**KPMG Peat Marwick Accounting Firm** 

Knology (Telecommunication) Georgia, Alabama

Landstar

Linens N' Things

Mayfair Hotel

**McArthur Dairy** 

McDonalds Corporation (Franchise)

McDonalds (Corporate Headquarters)

MCI Worldcom

Miami Dade Health Centers

Miami Herald

Miami Lincoln Mercury

Monty Trainers

**Muvico Theaters** 

Nations Bank

NCCI - National Council on Compensation Insurance

Olive Garden

#### Office Depot

Paetec Communication

Palm Beach Aggregate

Palm Beach Gardens Hospital

Palmetto Ford

Pan American (Flight Simulators)

Paradyne

Perfumania

#### Perry Ellis

Pillsbury Co.

Potamkin Chevrolet

Pratt & Whitney

**Precision Response Corporation (PRC)** 

**Price Waterhouse (Accounting Firm)** 

(Miami, Ft. Lauderdale, Orlando)

**Prudential Insurance Company of America** 

Prudential Securities

#### **Publix Supermarkets**

Ralco Milgo Solutions

Relm Communications

Republic Securities Bank

Richland Mills

Romac International

Royal Caribbean Cruise Lines

Ryder Truck Rental

Saks Fifth Avenue

Scientific Medical Lab.

Seaboard Marine

#### Sensormatic

Shula's Hotel/Restaurant

Siemens

Sikorsky

Smith & Company (Earth Moving Equipment)

#### **Sports Authority**

Sportsline.Com

Sunglass Hut of America

Sun Sentinel

Tape Duplicators Inc.

Tech Data

#### Telemundo (Television Network)

Tenet Health

The Post Edge, Inc.

#### The Golf Channel

Thomas Plastics

Tinter Inc.

Tire Kingdom

Tracfone (Telecommunication)

**Tropical Shipping** 

Tropical Telco (Plant Nursery)

Universal Concrete

Univision

US Agrichem

US-LEC (Telecom)

Verizon

VISA (USA)

Vitas Health Care

Walgreens

Warner Brothers

Wendy's Restaurants (Corporate)

Williams Communication

Woodlawn Park Cemetery

Z-Tel (Telecommunication)

(List Updated 11/14/06)

CURRICULUM VITAE

E. LARRY SEWELL, MAI

REAL ESTATE APPRAISER & CONSULTANT

The appraiser is a partner and principal in the real estate appraisal firm of SEWELL, VALENTICH, TILLIS & ASSOCIATES. This organization is a partnership of professional associations which was formally organized for the purpose of providing real estate and evaluation services to both public and private entities. Working throughout the State of Florida, as well as in other locations, we have completed appraisals for many clients with emphasis placed upon eminent domain evaluations. Properties appraised include a wide variety ranging from simplistic single-family residential sites to multi-million dollar commercial facilities. We have in the course of our practice had the opportunity to value many unique properties examples of which include reservoirs, airports, submerged lands, electrical transmission facilities, subterranean easements, flowage easements, landfills, as well as lands impacted by specific land use restrictions, environmental designations and other unusual value impacting factors.

Our firm has been commonly called upon to value properties which are the subject of litigation. Examples of assignments include a variety of partial takings where lost utility or damages resulting to the remainder property become the focus of the analysis. Such cases commonly require further study and analysis to specifically determine the impact caused to a remainder property by the public acquisition or by some unique condition. Examples of studies which we have performed to measure impact to real estate caused by a variety of circumstances are as follows:

- Right-of-Way Acquisitions for Road Construction: Where damages may be caused to the remainder property resulting in change of highest and best use, cost to cure damages, rental loss, temporary or permanent impact to business and real estate, as well as a wide variety of other potential valueinfluencing factors.
- Landfills: Where damage analyses have been conducted to reflect the loss in value caused by odor, subterranean pollution of aquifer, and change of character of adjoining lands.
- Airports: Where the impact caused by the overflight of aircraft in relation to the value for specific avigation easements has been studied.

- Public Schools: Where relative impact caused by the presence of school activities has been considered in relation to the lost utility caused to remainder properties.
- **Irregular Shape:** Governmental actions and takings sometimes result in a reduction in utility caused to a remainder property due to shape which is inappropriate for conventional development. These situations involve special analysis to determine lost utility in relation to the before condition.
- Access/Exposure Studies: Reflecting changing utility due to exposure and access.
- **Electrical Transmission Facilities:** Where the aesthetical value and concerns of the general public have been measured in relation to a wide variety of electrical transmission facilities varying in voltage, configuration and structure type.
- Governmental Regulations: The exercise of police power through zoning or comprehensive land use designations or the implementation of concurrency requirements has, in some situations, caused significant impairment to the value of lands which are the subject of the regulation.
- Functional Utility Analyses: Design and construction features can significantly impact the general utility and, therefore, value of a property. Improper design, underimprovement, overimprovement, construction defects, and design factors all may impact the value and marketability of properties.
- Waste Water Treatment Plants: Sometimes classified as a Locally Undesirable Land Use (LULU). These facilities can have a negative impact upon remainder lands resulting in the loss of utility and, therefore, loss of value.
- Void Space Evaluations: The evaluation of lands which are suitable for use as reservoirs, landfills, or other such uses where a void space has been created through mining or excavation processes.
- **Spray Irrigation Fields:** The discharge of sewage effluent also can have a negative effect on lands which it adjoins.

- **Drainage:** Public projects, in some situations, can impair drainage to remainder lands, decreasing the general suitability of the remainder for conventional development or usage.
- **Parking Analyses:** Where the impact of lost parking due to governmental actions creates lost utility to remainder property.
- Easements and Partial Interests: Where subterranean pipelines, avigation easements, electrical transmission easements, flowage easements, easements for public road right-of-way, and easements for ingress and egress, have affected value.

#### **Expert Testimony**

Expert testimony has been presented and E. Larry Sewell, MAI has been accepted as an expert in the field of real estate appraisal in a wide variety of federal, state, and circuit courts.

The appraiser has also served as a court-appointed commissioner for the purpose of partitioning properties, acted as a mediator, participated in binding arbitration, and is commonly called upon to assist in settlement negotiations.

#### Related Educational Accomplishments - E. Larry Sewell, MAI

- 1970 Real Property Valuation University of Florida, Gainesville, FL.
- 1971 Society of Real Estate Appraisers Course #101, University of Florida, Gainesville, FL Exam only.
- 1972 Real Estate Investment Principles and Practices University of Florida, Gainesville, FL.
- 1972 University of Florida, Graduate of College of Business Administration, B.S. Degree, Major: Real Estate.
- 1973 American Institute of Real Estate Appraisers, Course #8, Single-Family Residential Appraisal, New Orleans, LA.
- 1973 AIREA Exam only, Course 1-A, Appraisal Principles, Methods and Techniques, St. Petersburg, FL.
- 1974 Society of Real Estate Appraisers, Real Estate Investment Seminar, Tampa, FL.
- 1974 AIREA Examination only, Course 1-B, Capitalization Theory and Techniques, Tampa, FL.
- 1975 AIREA Applied Capitalization Technique Workshop, Orlando, FL.

#### Related Educational Accomplishments - E. Larry Sewell, MAI

- 1976 AIREA, Course #2, Urban Properties, Boulder, CO
- 1977 AIREA, Course #6, Investment Analysis, Chicago, IL.
- 1978 SREA, Condemnation Seminar, Tampa, FL.
- 1979 AIREA, Course #4, Condemnation, Boulder, CO
- 1980 Practical Appraisal Application of Statistics, Orlando, FL.
- 1980 Rural Valuation, Stanford, CA
- 1981 AIREA, Rates: Discount and Capitalization Their Components and How to Find Them, Orlando, FL.
- 1981 Business Valuation, Daytona Beach, FL.
- 1982 AIREA, Income Capitalization Workshop, Orlando, FL
- 1982 AIREA, Federal Income Tax and Real Estate Seminar, Daytona Beach, FL.
- 1982 Introduction to the Use of Computers in Real Estate Appraising, Orlando, FL
- 1983 AIREA, Standards of Professional Practice, Ft. Lauderdale, FL
- 1984 American Arbitration Association, Resolving Real Estate Valuation Disputes, Miami, FL
- 1984 Center of Professional Development & Public Service The Florida State University School of Business & Industry, Tallahassee, FL, Valuation of Businesses.
- 1985 AIREA, Introduction to the Integrated Software Lotus 1-2-3 for IBM-PC, Sanford, FL.
- 1985 AIREA, Market Analysis Course, San Diego, CA.
- 1985 AIREA, FHLBB Regulation R41b, Orlando, FL
- 1986 AIREA, Cash Equivalency Seminar, Orlando, FL
- 1987 AIREA, Seminar on Federal Home Loan Bank Board Regulation R41c, Orlando, FL
- 1987 AIREA, Computer Assisted Investment Analysis, Phoenix, AZ.
- 1988 AIREA, Standards of Professional Practice, University of Portland, Portland, OR.
- 1988 AIREA, Easement Valuation Seminar, Orlando, FL.
- 1989 AIREA, Litigation Valuation, San Diego, CA.
- 1990 AIREA, Seminar on Review for State Certification for Appraisers, Lakeland, FL.
- 1992 Appraisal Institute, Standards of Professional Practice, Sarasota, FL.
- 1992 Appraisal Institute, R.E. Appraisal Principles, Boulder, CO.
- 1993 Appraisal Institute, Litigation Valuation, Fort Lauderdale, FL
- 1994 Appraisal Institute, Basic Income Valuation, Boulder, CO.
- 1994 Appraisal Institute, Understanding Limited Appraisals, General, Orlando, FL.
- 1995 Professional Standards USPAP Update, "Core Law for Appraisers", Fort Myers, FL

#### Related Educational Accomplishments - E. Larry Sewell, MAI

- 1995 Appraisal Institute, Special-Purpose Properties: The Challenges of Real Estate Appraising in Limited Markets, Miami, FL
- 1996 Appraisal Institute, Standards of Professional Practice, Parts A & B, Tuscaloosa, Alabama
- 1998- Appraisal Institute, Valuation of Detrimental Conditions in Real Estate, Miami, FL
- 1998- Appraisal Institute, Advanced Income Capitalization, Tempe, Arizona
- 1998- Appraisal Institute, USPAP/LAW for Appraisers, Fort Myers, FL
- 1999- Appraisal Institute, Course 700, Litigation Valuation Overview, Atlanta, GA
- 1999- Appraisal Institute, Experience & Guidance Training for General and Residential Appraisers, Orlando, FL
- 2000- Appraisal Institute Course 720 "Condemnation Appraising: Advanced Topics and Applications", Tampa, FL
- 2000 West Coast Florida Chapter, Appraisal Institute "7-Hour USPAP/Law Update For Appraisers", Ft. Myers, FL
- 2000- West Coast Florida Chapter, Appraisal Institute, "Cross-Examination of USPAP", Tampa. FL
- 2002- Appraisal Institute Seminar, "Florida State Law and USPAP Review for Real Estate Appraisers", Fort Myers, FL.
- 2002- Appraisal Institute Course SE700, "The Appraiser as an Expert Witness: Preparation & Testimony," Sacramento, CA.
- 2002- Appraisal Institute Course, "Standards of Professional Practice, Part C," Tampa, FL.
- 2003 West Coast Florida Chapter, Appraisal Institute, "Evaluating Commercial Construction", Tampa, FL.
- 2004- Appraisal Institute, National USPAP Update (Course 400), Denver, CO
- 2004 West Coast Florida Chapter, "Florida State Law Update for Real Estate Appraisers", Sarasota, FL
- 2004 Appraisal Institute, "Uniform Appraisal Standards for Federal Land Acquisitions: Practical Applications for Fee Appraisers", Tampa, FL
- 2004 Appraisal Institute, FREAB Course, "The Valuation of Wetlands", Fort Myers, FL
- 2005 Appraisal Institute Seminar, "The Road Less Traveled: Special Purpose Properties", Sarasota, FL
- 2006 South Florida Water Management District, "Appraisal Seminar", Key Largo, FL
- 2006 National Uniform Standards of Professional Appraisal Practice (USPAP), Update Course, Fort Myers, FL
- 2006 Florida State Law for Real Estate Appraisers, Fort Myers, FL
- 2006 Appraisal Institute, "Expanding Your Range of Services", Tampa, FL
- 2007 South Florida Water Management District, "The Valuation of Wetlands", Key Largo, FL
- 2007 Appraisal Institute: "Business Practices & Ethics", Denver, CO
- 2007 Appraisal Institute: "Analyzing Distressed Real Estate", Sarasota, FL

#### **Partial List of Clients**

Florida Power & Light Corporation; Florida Power Corporation (Progress Energy); Palm Beach Aggregates; Seminole Gulf Railroad; Palmer Ranch; Florida Dept. of Environmental Protection; South Florida Water Management District; Tilcon Industries; Clear Springs Land Company; City of Sarasota; Sarasota County; Charlotte County; Manatee County; Monroe County; Lee County; Brevard County; Pasco County; Arcadia Chevrolet (DeSoto County); Mason Oil Company (DeSoto County); Peace River Water Authority (DeSoto/Charlotte Counties); Lafarge Corporation; and Gulfstream Natural Gas Company.

#### **Professional Affiliations**

Member Appraisal Institute (MAI)

E. Larry Sewell has completed the requirements of the Continuing Education Program of the Appraisal Institute.

#### Licensing

Florida Real Estate Broker #0079444
State-Certified General Real Estate Appraiser 0000501
Building Contractor's License, #RR0043100, (Class "C", Reg. Residential)

4. Due Diligence – Environmental Assessments

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



### **Environmental Assessment Approach**

Robert Kukleski Lead Environmental Engineering Specialist SFWMD Land Acquisition and Land Management Dept.

### **Environmental Assessment**

- Conducted by a team led by Professional Service Industries, Inc.
- Conducted according to a protocol for Ecological Risk Assessment (ERA) that has been approved by US Fish & Wildlife (USFWS) and Florida Department of Environmental Protection (FDEP)
- Reviewed in real time by agencies including the FDEP and USFWS

### **Environmental Assessment**

- Currently on track and a final report is to be completed by October 17, 2008
- Objective of assessment is to determine the viability of the property for the intended future land use, as well as the necessity of corrective actions

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



### **Environmental Assessment Approach**

Steve Long, PE, PG Professional Service Industries, Inc.

# A Unique Approach for A Unique Project









### **Project Team**

















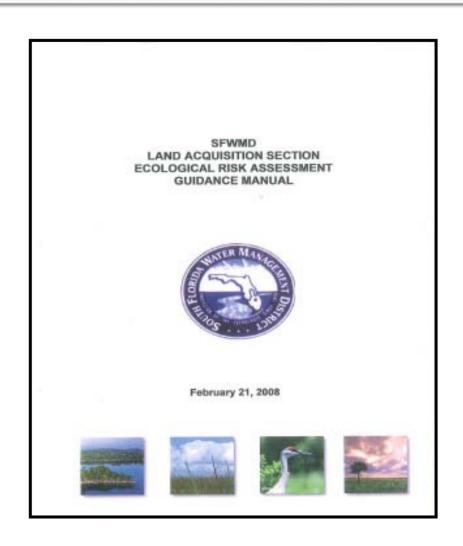






# Project Approach

- Assessment follows ERA Protocol
  - Phase I ESA
  - Phase II ESA
  - Screening Level ERA
  - Expanded ERA
  - Decision-Making



### **Data Collection**

- Investigation includes:
  - Assessment of 185 remote point sources
  - Assessment of two sugar mills, a juice plant, and two railways
  - Assessment of 187,000 agricultural acres
  - Collection of more than 12,500 soil samples and 500 water samples









### Geospatial Analysis of Data Joe Allen, MS NewFields

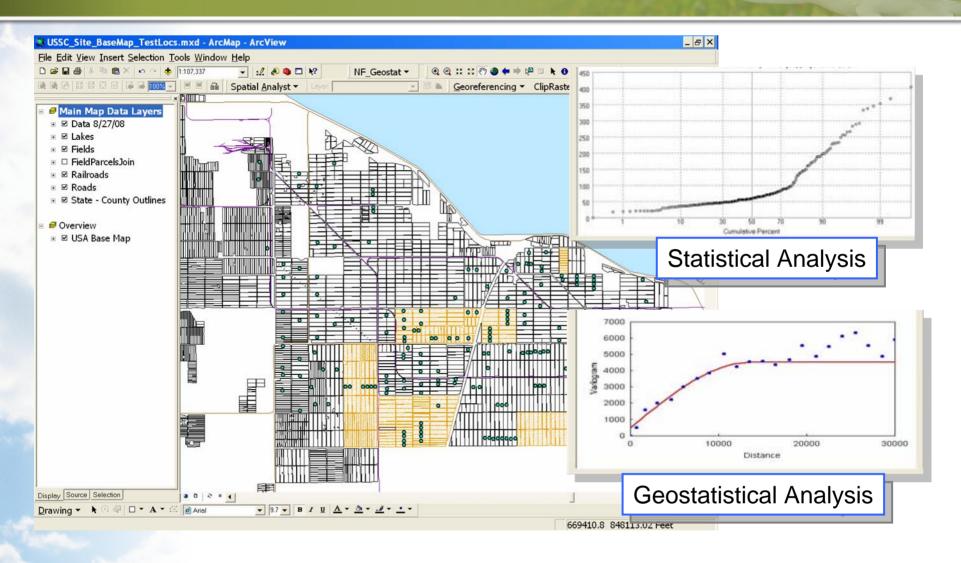
### **Data Compilation**



#### Lab Data

1,200 Composite Samples 4,400 Discrete Samples >100,000 Data Points

### **Geospatial Analysis**

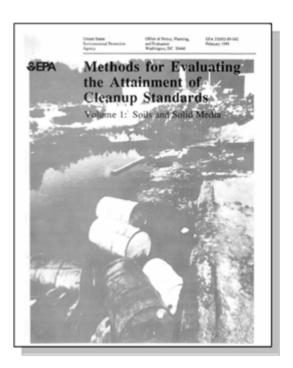


# Potential Outcomes (1)

- Isolated Exceedances
  - Typically less than 40 acres
  - Discrete Delineation

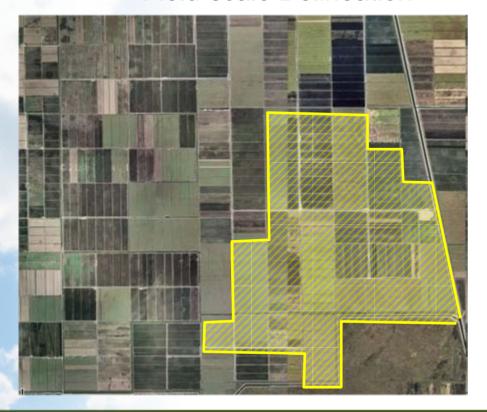
- Statistical Confirmation of Data Adequacy
  - EPA Guidance Documents





# Potential Outcomes (2)

- Large-scaleExceedances
  - Field-scale Delineation



- Geostatistical Delineation and Confirmation of Data Adequacy
  - EPA Guidance Documents
  - ASTM Standards



SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Ecological Risk Assessment (ERA) Approach Mark Lewis, PhD NewFields

# Flooding fundamentally changes the ecological environment

- Clear benefit from restoration and water resource projects
- However, agricultural chemicals are more readily mobilized and may enter the food web, exposing wildlife and aquatic life
- Residual chemicals can be toxic to benthic life, fish, and aquatic feeding wildlife

### **Ecological Risk Assessment (ERA) Process**

- Challenge: How do we assess risk from wildlife exposure and effects for conditions that do not yet exist yet?
- Screening-Level ERA is first step
  - Below screening levels no risk
  - Above screening levels need additional analysis

### **Ecological Risk Assessment (ERA) Process**

- Expanded ERA when site-specific conditions warrant additional analysis
  - Toxicity Testing
  - Bioaccumulation Tests
  - Porewater analysis
  - Foodweb and Exposure Models
- All tests identified in the ERA Protocol agreed upon with USFWS and DEP

### Example

### Florida Sediment Quality Assessment Guidelines

- Risk-based guidelines for sediment dwelling invertebrates.
- Based on ~1% Total Organic
   Carbon Content
- Many Sites have >25% TOC
- Therefore, additional testing warranted at times

Development and Evaluation of Numerical Sediment Quality Assessment Guidelines for Florida Inland Waters

Technical Report

Prepared for:

Florida Department of Environmental Protection Twin Towers Office Building 2600 Blair Stone Road Tallahassee. Florida 32399-2400

Prepared - January 2003 - by:

MacDonald Environmental Sciences Ltd. #24 - 4800 Island Highway North Nanaimo, British Columbia V9T 1W6 United States Geological Survey 4200 New Haven Road Columbia, Missouri 65201





### **Direct Testing in Bioassays**



Harbor Branch
Oceanographic Institute

NewFields Bioassay Facility

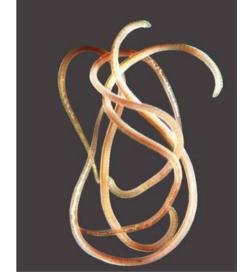


### Sediment Toxicity and Bioaccumulation Tests

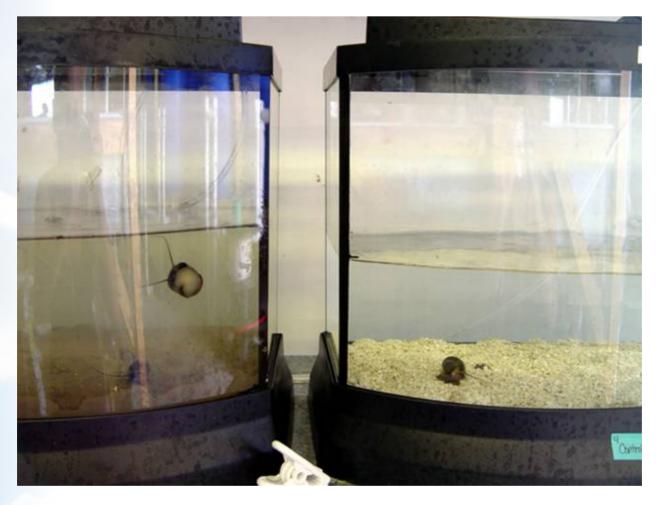
Acute toxicity tests evaluate survival and growth for two species: The amphipod *Hyalella azteca* and larvae of the midge,

Chironomus dilutus

Bioaccumulation and uptake potential evaluated using the worm, Lumbriculus variegatus and Apple Snails.

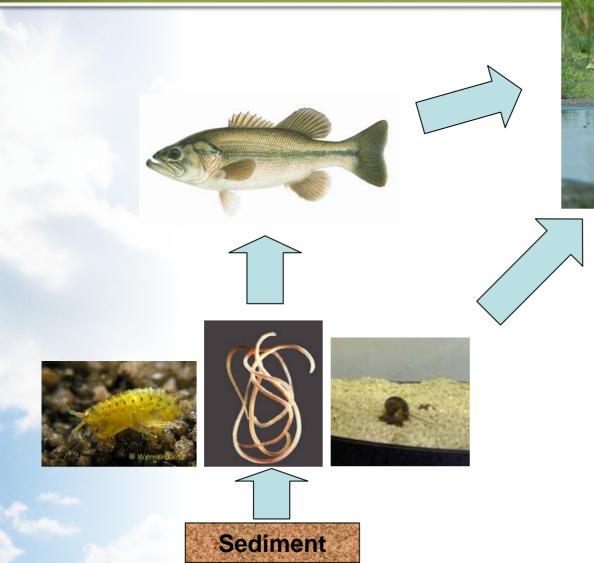


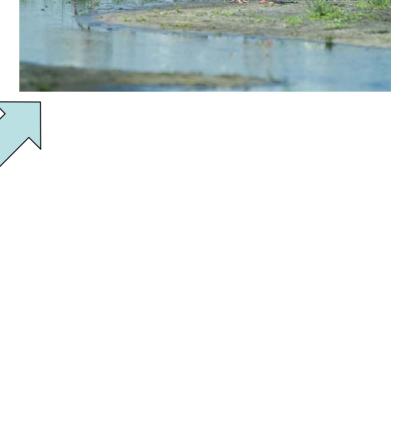
### Bioaccumulation Testing with Apple Snails for Everglades Snail Kite Risk Assessment



Florida Apple Snails in Bioaccumulation Tests

# Food Web Modeling



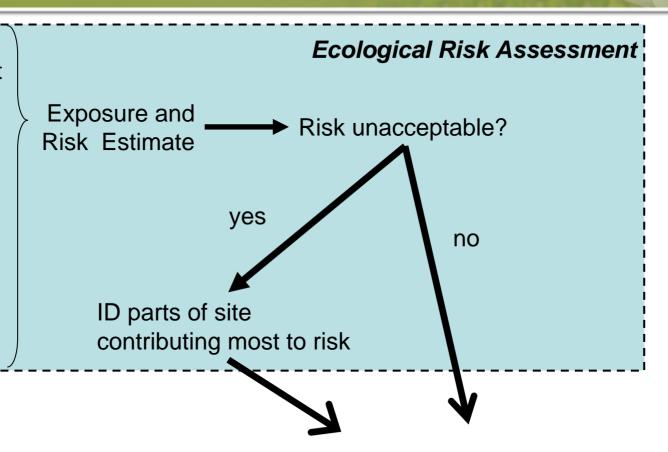


## **Expanded ERA Output**

Laboratory Test and Foodweb Model Outputs

Projected
Habitat
Characteristics

Receptor Feeding Range

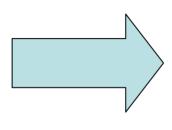


Corrective Action Feasibility
Decisions & Land Acquisition
Decisions

### **Decision-Making**

- What are appropriate cleanup target levels for proposed land use?
- Do point source areas or regional areas exceed cleanup target levels?
- Is the land suitable for the intended use, or is corrective action required?
- What corrective actions are appropriate?







### **Corrective Action Alternatives**





### Point Source Issues

- Dig and Haul
- Groundwater remediation
- Institutional Controls

### Regional Issues

- Avoidance
- Engineering Controls
- Soil Re-Use
- Soil Inversion

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



# **Discussion / Questions**

stimule gov



#### THE NEWFIELDS MISSION

**NEWFIELDS** was founded in 1995 to provide high-quality consulting services to clients seeking to cost effectively manage their science- and engineering-related issues. **NEWFIELDS**' mission is to act as a hands-on, client-oriented, technical advocate. We develop a project-specific, proactive strategy and identify cost- and time-saving opportunities by evaluating project history and considering the client's business and project-specific needs, key objectives, and priorities. We work as a member of the client's team to ensure optimal execution.

#### THE NEWFIELDS APPROACH

**NEWFIELDS** provides senior-level technical and management expertise, strategic planning, and project coordination and project implementation. **NEWFIELDS** offers a full range of environmental consulting disciplines. For large projects, "commodity" field or laboratory services and some specialty disciplines are provided to us cost effectively by high-quality local firms and individuals with whom we have established working relationships or affiliations.

**NEWFIELDS'** approach fosters development of "scope-limiting" project strategies, allows us to assemble the most qualified team, promotes development of innovative pricing strategies, and eliminates conflicts of interest inherent in many "full-service" engineering firms that may have a vested interest in providing work for a large staff of technicians or internal subsidiaries. Our mission is strategic and technical client advocacy.

**NEWFIELDS** specializes in value-added service that enhances our clients' business, financial, technical, regulatory compliance, and public relations decisions. Our science and engineering strategies employ techniques based on decision analysis, rigorous spatial data processing, up-to-date regulatory analyses, and comprehensive probabilistic cost-benefit analysis to create innovative solutions. Our specialists employ state-of-the-art data visualization, exploration, presentation and evaluation methods and innovative applications of science and engineering to maximize effective use of data already collected, solve our clients' technical and regulatory problems, and manage project execution.

**NEWFIELDS'** personnel provide expertise in the following areas that are important to the District's programs:

- Assessment of contaminant bioavailability in terrestrial and aquatic environments;
- Foodweb modeling for metals and organic compounds using diverse methodologies;
- Landscape-level risk assessment and risk management analysis based on a sophisticated GIS platform and advanced geospatial statistical analysis;
- Effective design and implementation of ecotoxicological sampling programs; and
- Interaction with agency personnel on technical and policy issues.





#### Shahrokh Rouhani, Ph.D., P.E.

Founder/President, NewFields Companies, LLC 1349 West Peachtree Street, Suite 2000, Atlanta, GA 30309 Tel: (404)347-9050; Fax: (404)347-9080 Internet Mail:srouhani@newfields.com

#### **EDUCATIONAL BACKGROUND**

Ph.D. S.M. B.A.	1983 1980 1978	Harvard University Harvard University University of California, Berkeley	Environmental Sciences Engineering Economics
B.S.	1978	University of California, Berkeley	Civil Engineering
PROFESSIONAL EXPERIENCE President		E NewFields, Inc.	1995 - Present
President		NewFields Companies, LLC	2002 - Present
Adjunct Professor		School of Civil and Environmental Engineering Georgia Institute of Technology	1996 - Present
Editorial Board Member		Environmental Forensics Association for Environmental Health and Sciences	2003 - Present
Associate Professor		School of Civil and Environmental Engineering Georgia Institute of Technology	1990 - 1996
Senior Consultant		Dames & Moore Atlanta, GA	1990 - 1995
Chairman		National Ground Water Hydrology Committee, Hydraulics Division, American Society of Civil Engineers	1991 - 1992
Expert Member		ASTM/EPA/USGS/DOD Geostatistics Standardization Committee	1991 - Present
Associate Editor		Water Resources Research American Geophysical Union	1989 - 1994
Assistant Profe	ssor	School of Civil Engineering Georgia Institute of Technology	1983 - 1990

Chairman	Task Committee on Geostatistical	1987 - 1989
Chairman	rask Committee on Geostalistical	1907 - 1909

Techniques in Geohydrology, American Society of Civil Engineers

National Science Centre de Géostatistique, 1987 - 1988

Foundation Ecole Nationale Supérieure Visiting Scientist des Mines de Paris, France

#### PROFESSIONAL REGISTRATION

Licensed Professional Engineer Georgia (Registration Number 19369)

#### **CURRENT FIELD OF INTEREST**

Geostatistics
Decision Analysis
Environmental Statistics
Geostatistical and Stochastic Hydrology
Surface and Groundwater Hydrology

#### HONORS AND AWARDS

HUNUKS AND AWARDS	
Tau Beta Pi (National Engineering Honor Society)	1977
Chi Epsilon (Civil Engineering Honor Society)	1978
Phi Beta Kappa (National Honor Society for Students	1978
in Social Sciences)	
Watson Award, Division of Applied Sciences, Harvard	1979-82
University	
Sigma Chi (Scientific Research Society)	1987
1990 Who's Who (Rising Young Americans)	1990
ASCE Task Committee Excellence Award, Hydraulics Division	1991
(S. Rouhani, Chairman of ASCE Task Committee	
on Geostatistical Techniques in Geohydrology)	
Dictionary of International Biography - 22nd Edition	1992
Two Thousand Notable American Men, First Edition	1992
Who's Who in America	1995-Present

#### NEWFIELDS REPRESENTATIVE PROJECT EXPERIENCE

Statistical Source Contamination Identification, Coleman-Evans Superfund Site, Whitehouse, Florida – On behalf of EPA, extensive historical soil data were analyzed in order to determine the extent of ambient versus site-related dioxins.

**Geostatistical Source Impact Delineation, Mission Valley, San Diego, California** – Extensive BTEX, MTBE groundwater database was geostatistically analyzed in order to define the extent of site-related plumes.

**Anniston Lead Site** – Lead negotiation, cleanup, and sampling efforts at Anniston Lead Site, Alabama. These efforts included statistical and geostatistical analyses of soil lead and PCB data in order to verify the extents of zones of investigations.

**UAO Case** – Lead expert on CERCLIS database in the UAO constitutionality case.

Groundwater Chlorinated Solvent Contamination Class Certification Evaluation - Extensive historical groundwater data from a region in Ohio were compiled and analyzed in order to evaluate the proposed class certification in a federal case of chlorinated solvent contamination in a mixed urban/rural area. For this purpose, multivariate statistical and geostatistical techniques were employed, which clearly indicated the presence of multiple sources unrelated to the defendants' activities.

**Groundwater MTBE Contamination Class Certification Evaluation** – Available historical groundwater MTBE data from a region in Connecticut were compiled and analyzed in order to evaluate the proposed class certification in a state case of chlorinated solvent contamination in a suburban area. For this purpose, multivariate statistical and geostatistical techniques were employed, which clearly indicated the limited extent of contamination associated with the defendant's facility.

**United Nations Compensation Commission Expert Assessment** – Extensive sediment and soil data provided associated with the environmental damages from post-1991 Kuwait conflict were statistically and geostatistically analyzed. These analyses were conducted as part of the UNCC technical review of submitted claims.

**St. Johns River Water Management District Minimum Flow Determination** – Developed an innovative combined hydrodynamic and statistical approach to establish minimum flow levels for Blue Spring based on protection of manatees winter refuge criteria.

**St. Johns River Water Management District Geostatistical Peer Review** – Lead technical reviewer for numerous projects at SJRWMD, including optimization of groundwater monitoring networks, mapping of potentiometric surfaces, groundwater flow modeling, assessment of seagrass monitoring protocols, Lake Apopka soil data analysis, and time series analysis of groundwater and lake monitoring data.

**South Florida Water Management District Lower West Coast Potentiometric Mapping** – Technical lead on statistical and geostatistical analysis of available seasonal, multi-layer groundwater elevation data for Lower West Coast potentiometric Mapping.

**US Navy CURT (Clean Up Review Team).** - Technical lead on strategic review of US Naval environmental projects worldwide. In this role Dr. Rouhani has assisted US Navy to review more than 750 projects and identify more than \$100 million in cost-avoidance.

**US EPA Project on Multivariate Geostatistical Trend Detection and Network Design for Acid Deposition Data.** Principal investigator for development of a multivariate geostatistical technique for trend detection in acid deposition data and spatial evaluation of current national network, known as NAPD/NTN.

US Department of Energy Project on Application of Geostatistical Methods to Savannah River Site Environmental and Geotechnical Investigation - Principal investigator for development and application of advanced procedures for evaluation of the adequacy of groundwater quality data at a waste site, as well as development of geostatistical estimation/simulation procedure in support of seismic modeling of the site.

**Mole Pier, San Diego Naval Station** - Projector Director for the data evaluation and analysis of the anticipated \$40 million dollar clean up project.

**Allen Harbor Landfill, North Kingstown, RI** - Projector Director for updating superfund remedy selection. The original cap remedy was cost estimated at \$14 million.

**Spatial Statistical Assessment.** Performed an extensive soil and groundwater analysis at a CERCLA site in Baton Rouge, Louisiana. Site was geostatistically analyzed in order to perform four major tasks: (1) to characterize three-dimensional soil contamination mapping, (2) to calculate block-area groundwater contamination levels, (3) to produce sampling plans for subsequent measurements, and (4) to provide most accurate information on the spatial distribution of parameters of the groundwater flow/transport model of the site.

**Groundwater statistical optimization.** Assessement of soil and groundwater at manufacturing facility in Athens, Georgia. Geostatistics was used to (1) characterize the groundwater contamination in a three-dimensional framework, and (2) identify areas which exhibit either data gaps, or potentially elevated contaminations. Geostatistically produced kriged and quantile maps were used to characterize the site contamination, as well as identify location for subsequent sampling activities.

**Statistical risk evaluation.** Principal investigator for risk assessment study of a major development site in Detroit Michigan. Geostatistics was used to estimate surface soil block contamination, evaluate the adequacy of the existing surficial measurements, and design an information-efficient deep soil sampling plan.

**Soil characterization planning and optimization.** An innovative phased geostatistical sampling plan was developed to characterize soil and groundwater contamination at a RCRA industrial site in South Carolina.

**Groundwater transport modeling for remedial evaluation.** Determined the effectiveness of a proposed list of groundwater remedial alternatives at a CERCLA site through the use of U.S. Geological Survey groundwater flow/transport model, MOC-2D. The results of model provided a realistic assessment of long-term potential efficiency of the various pump-and-treat alternatives.

**Risk evaluation of contaminated soils.** Existing soil data from an abandoned industrial site in Michigan were geostatistically analyzed to perform two tasks: (1) to characterize the site contamination in a multilayer framework, and (2) identify areas which exhibit either data gaps, or potentially elevated contaminations.

**Phased sampling planning.** Existing soil data from an industrial landfill in West Pittsburg, California were analyzed in order to produce an elaborate phased sampling plan. The plan included a series of interconnected rule-based stages that allow the decision-maker to pursue the sampling activity in an efficient manner, using a variety of geostatistical, statistical, and deterministic techniques.

**Statistical assessment of migration potential.** For a project in Memphis, Tennessee, existing data on the thickness of a critical near-surface aquitard were geostatistically analyzed in order to determine zones of potential leakage to the lower aquifer.

#### GEORGIA TECH REPRESENTATIVE RESEARCH EXPERIENCE

Title: Optimal Sampling of Stochastic Processes

Sponsor: National Science Foundation

Duration: (6/1/85 to 10/30/87)

Subject: In this project, Dr. Rouhani developed optimal sampling and monitoring techniques for

ground water quantity and quality investigations, based on advanced geostatistical

procedures. It was shown that using such techniques can yield economically efficient sampling plans.

Title: Optimal Schemes for Ground Water Quality Monitoring in the Shallow Aquifer, Dougherty

Plain, Southwestern Georgia

Sponsor: U.S. Geological Survey Duration: (4/1/86 to 3/31/87)

Subject: In this project, Dr. Rouhani developed a flexible geostatistical procedure for planning a

ground water quality monitroing network in Dougherty Plain, Georgia. The proposed network acts as a warning system for the protection of the Floridan Aquifer system which is

a major source of water in south Georgia and Florida.

Title: Advanced Geostatistical Studies at the Centre de Geostatistique, Ecole des Mines de Paris.

Sponsor: National Science Foundation

Duration: (9/1/87 - 2/18/89).

Subject: Through this project Dr. Rouhani developed new techniques for statistical analysis of

space-time data, including air pollution and ground water contamination data. The budget of this project was the highest amount awarded by the NSF's "U.S. - Industrialized

Countries Program for the Exchange of Scientists and Engineers" in 1987.

Title: Geostatistical Evaluation of Flow Parameters

Sponsor: U.S. Geological Survey Duration: (4/1/90 - 3/31/91)

Subject: Dr. Rouhani developed techniques for efficient estimation of ground water flow parameters

based on available hydrogeological field data.

Title: Multivariate Geostatistical Trend Detection and Network Design for Acid Deposition Data

Sponsor: U.S. Environmental Protection Agency

Duration: (3/1/1991 -9/30/1991)

Subject: Dr. Rouhani developed a multivariate geostatistical technique for trend detection in acid

deposition data and spatial evaluation of current national network, known as NAPD/NTN.

Title: Multilayer Geostatistical Ground Water Flow and Transport Modeling

Sponsor: HazLab, Inc.
Duration: (6/20/92 -12/30/92)

Subject: Dr. Rouhani developed a combined deterministic/geostatistical groundwater flow/transport

model.

Title: Velocity/Lithology Model Database, Statistical Models of Soil Columns Velocity, and Maps

of Model Layers

Sponsor: Westinghouse Savannah River Company / U.S. DOE

Duration: (1/1/1993-6/30/1993)

Subject: Dr. Rouhani developed a relational database and conducted extensive geostatistical

analyses of seismic data.

Title: Application of Geostatistical Methods to SRS Groundwater Monitoring and Environmental

Risk

Sponsor: Westinghouse Savannah River Company / U.S. DOE

Duration: (7/1/1993-10/15/1993)

Subject: Dr. Rouhani developed procedures for evaluation of the adequacy of groundwater quality

data at a waste site.

Title: H-Area/ITP Geostatistical Assessment of In-situ and Engineering Properties

Sponsor: Westinghouse Savannah River Company / U.S. DOE

Duration: (1/1/1994-6/30/1995)

Subject: Dr. Rouhani will develop geostatistical estimation/simulation procedure in support of

seismic modeling of the site.

#### **PUBLICATIONS**

#### **Published Books and Parts of Books**

1. Rouhani, S., and T.J. Hall, "Geostatistical Schemes for Groundwater Quality Management in Southwest Georgia," in *Pollution, Risk Assessment, and Remediation in Groundwater Systems*, pp. 197-223, R.M. Khanbilvardi and J. Fillos, Eds., Scientific Publications Co., Washington, DC, 1987.

- 2. Rouhani, S., and R. Kangari, "Landfill Site Selection," in *Expert Systems: Applications to Urban Planning*, Ch. 10, T.J. Kim *et al.*, Eds., Springer-Verlag, 1989.
- 3. Lennon, G.P., and S. Rouhani, Eds., *Ground Water*, Proceedings of the ASCE International Symposium on Ground Water, ASCE, 1991.
- 4. Rouhani, S., R. Srivastava, A. Debarats, M. Cromer, and I. Johnson, Eds., "Geostatistics for Environmental and Geotechnical Applications," STP 12 83, ASTM, 1996.

#### Standards and Guidance Documents (Main Author/Contributing Author)

- 1. American Society of Testing and Materials (ASTM), *Standard Guide for Reporting Geostatistical Site Investigations*, D5549-94, 1994.
- 2. American Society of Testing and Materials (ASTM), *Standard Guide for Analysis of Spatial Variation in Geostatistical Site Investigations*, D5922-96, 1996.
- 3. American Society of Testing and Materials (ASTM), *Standard Guide for Selection of Kriging Methods in Geostatistical Site Investigations*, D5923-96, 1996.
- 4. American Society of Testing and Materials (ASTM), *Standard Guide for Selection of Simulation Approaches in Geostatistical Site Investigations*, D5924-96, 1994.
- 5. Department of Navy (DON), *Guidance for Environmental Background Analysis, Volume I: Soil*, NFESC User's Guide, UG-2049-ENV, April 2002.
- 6. Department of Navy (DON), *Guidance for Environmental Background Analysis, Volume II:* Sediment, NFESC User's Guide, UG-2054-ENV, April, 2003.
- 7. Department of Navy (DON), *Guidance for Environmental Background Analysis, Volume III: Groundwater*, Final, April, 2004.
- 8. United States Environmental Protection Agency (US EPA), *Guidance for Soil Cleanup Strategies*, Draft, 2003.

#### **Published Journal Papers (refereed)**

- 1. Rouhani, S., "Variance Reduction Analysis", *Water Resources Research*, Vol. 21, No. 6, pp. 837-846, June, 1985.
- 2. Rouhani, S., "Comparative Study of Ground Water Mapping Techniques", *Journal of Ground Water*, Vol. 24, No. 2, pp. 207-216, March-April 1986.
- 3. Rouhani, S., and Fiering, M.B., "Resilience of a Statistical Sampling Scheme," *Journal of Hydrology*, Vol. 89, No. 1, pp. 1-11, December, 1986.
- 4. Rouhani, S., and Kangari, R., "Landfill Site Selection: A Microcomputer Expert System," International Journal of Microcomputers in Civil Engineering, Vol. 2, No. 1, pp. 29-35, March, 1987.
- 5. Rouhani, S., and Hall, T.J., "Geostatistical Schemes for Groundwater Sampling," *Journal of Hydrology*, Vol. 103, 85-102, 1988.

- 6. Rouhani, S., and Cargile, K.A., "A Geostatistical Tool for Drought Management," *Journal of Hydrology*, Vol. 106, 257-266, 1989.
- 7. ASCE Task Committee on Geostatistical Techniques in Geohydrology (S. Rouhani, Chairman and Principal Author), "Review of Geostatistics in Geohydrology, 1. Basic Concepts," *ASCE Journal of Hydraulic Engineering*, 116(5), 612-632, 1990.
- 8. ASCE Task Committee on Geostatistical Techniques in Geohydrology (S. Rouhani, Chairman and Principal Author), "Review of Geostatistics in Geohydrology, 2. Applications," *ASCE Journal of Hydraulic Engineering*, 116(5), 633-658, 1990.
- 9. Rouhani, S., and H. Wackernagel, "Multivariate Geostatistical Approach to Space-Time Data Analysis," *Water Resources Research*, 26(4), 585-591, 1990.
- 10. Rouhani, S. and D.E. Myers, "Problems in Space-Time Kriging of Geohydrological Data," *Mathematical Geology*, 22(5), 611-624, 1990.
- 11. Loaiciga, H.A., R.J. Charbeneau, L.G. Everett, G.E. Fogg, B.F. Hobbs, and S. Rouhani, "Review of Ground-Water Quality Monitoring Network Design," *ASCE Journal of Hydraulic Engineering*, 118(1), 11-37, 1992.
- 12. Rouhani, S., R. Ebrahimpour, I. Yaqub, and E. Gianella, "Multivariate Geostatistical Trend Detection and Network Evaluation of Space-Time Acid Deposition Data, 1. Methodology," *Atmospheric Environment*, 26A(14), 2603-2614, 1992.
- 13. Rouhani, S., R. Ebrahimpour, I. Yaqub, and E. Gianella, "Multivariate Geostatistical Trend Detection and Network Evaluation of Space-Time Acid Deposition Data, 2. Application to NADP/NTN Data," *Atmospheric Environment*, 26A(14), 2615-2626, 1992.
- 14. Casado, L., S. Rouhani, C. Cardelino, and A. Ferrier, "Geostatistical Analysis and Visualization of Hourly Ozone Data," *Atmospheric Environment*, 28(12), 2105-2118, 1994.
- 15. Rouhani, S., Geostatistical Estimation: Kriging, in Rouhani et al., Eds., "Geostatistics for Environmental and Geotechnical Applications," STP 12 83, ASTM, 1996.
- 16. Wild, M. R., and S. Rouhani, Effective Use of Field Screening Techniques in Environmental Investigations: A Multivariate Geostatistical Approach, in Rouhani et al., Eds., "Geostatistics for Environmental and Geotechnical Applications," STP 12 83, ASTM, 1996.
- 17. Lin, Y. P., and S. Rouhani, "Geostatistical Analyses for Shear Wave Velocity," *J. of The Geological Society of China*, Vol. 40, No. 1, p 209-223, 1997.
- 18. Lin, Y.P., and S. Rouhani, "Multiple-Point Variance Analysis for Optimal Adjustment of A Monitoring Network," *Environmental Monitoring and Assessment*, 69(3), pp. 239-266, 2001.
- 19. Lin, Y. P., Y. C. Tan, and S. Rouhani, "Identifying Spatial Characteristics of Transmissivity Using Simulated Annealing and Kriging Methods," *Environmental Geology*, 41:200-208, 2001

#### **Published Research Reports**

- 1. Rouhani, S., "Toward a More Efficient Farm Level Models," presented at the seminar on water management planning in Pakistan, Development Research Center, World Bank, Washington, DC, Ford-Pakistan Project Annual Progress Report, 1980.
- 2. Chaudri, A., S. Rouhani and P.P. Rogers, "Hydrology of Induced Recharge in Indus Basin Pakistan," Department of City and Regional Planning, Harvard University, 1980.
- 3. Rouhani, S., "Toward a More Effective Indus Basin Model, Waterlogging and Salinity Considerations," presented at the Tri-partite meeting in Pakistan, Development Research Center, world Bank, Washington, DC, Ford-Pakistan Project Annual Progress Report, 1981.
- 4. Rouhani, S. and T. J. Hall, "Optimal Schemes for Ground Water Quality Monitoring in the Shallow Aquifer, Dougherty Plain, Southwestern Georgia," Technical Completion Report, U.S. Dept. of Interior/USGS Project G-1219(05), ERC 05-87, Environmental Resources Center, Georgia Institute of Technology, Atlanta, Georgia, 49 p., 1987.
- 5. Rouhani, S., "Optimal Sampling of Stochastic Processes," Final Technical Research Report, National Science Foundation, Grant No. ECE-8503897, School of Civil Engineering, Georgia

- Institute of Technology, Atlanta, Georgia, p. 170,1987.
- 6. Rouhani, S., "L'Analyse de Donnees Geohydrologiques," *De Geostatisticis*, No. 3, pp. 5-6, August, 1988.
- 7. Rouhani, S., "Advanced Geostatistical Studies at the Centre de Geostatistique, Ecole des Mines de Paris," Final Technical Research Report, National Science Foundation, Grant No. INT-8702264, School of Civil Engineering, Georgia Institute of Technology, Atlanta, GA, 129 p., May 1989.
- 8. Rouhani, S., "Geostatistics: Theory, Practice, and Personal Computer Applications," Education Extension, Georgia Institute of Technology, September, 1989.
- 9. Rouhani, S., R. Ebrahimpour, I. Yaqub, and E. Gianella, "Multivariate Geostatistical Trend Detection and Network Evaluation of Space-Time Acid Deposition Data," Final Technical Report, AREAL, U.S. Environmental Protection Agency, Contract 68-D0-0095, RTP, NC, 320 p., October, 1991.
- 10. Rouhani, S., M. J. Maughon, and B. J. Weiss, "Geostatistical Mapping of Ground Water Contaminants," Technical Report, HazLab, Inc., Contract E-20-X18, School of Civil Engineering, Georgia Institute of Technology, Atlanta, January 1993.

#### **Conference Papers (refereed)**

- 1. Rouhani, S., "Optimal Groundwater Data Collection, Waterlogging and Salinity Considerations," *Proceedings of the International Seminar on Water Resources Management*, Lahore, Pakistan, No. 3, pp. 167-182, October 1983.
- 2. Rouhani, S., "A Scheme for Water Resources Monitoring in Rural Areas," *Proceedings of the Vth World Congress on Water Resources*, IWRA, Vol. 2, pp. 701-710, June, 1985.
- 3. Kangari, R. and Rouhani, S., "Expert Systems in Reservoir Management and Planning," in *World Water Issues in Evolution, Water Forum '86*, M. Karamouz <u>et al.</u>, Eds., Vol. 1, pp. 186-194, American Society of Civil Engineers, New York, 1986.
- 4. Rouhani, S., and R. Kangari, "Expert Systems in Water Resources," *Water for the Future: Hydrology in Perspective*, J. C. Rodda and N.C. Matalas, Eds., pp. 457-462, International Association of Hydrological Sciences, Publication No. 164, 1987.
- 5. Rouhani, S., and T.J. Hall, "Space-Time Kriging of Groundwater Data," in *Geostatistics*, M. Armstrong, Editor, Vol. 2, pp. 639-650, Kluwer Academic Publishers, Dordrecht, Holland, 1989.
- 6. Kangari, R., and Rouhani, S., "Knowledge-Based Systems in Water Resources Management," *Proceedings of the International Conference on Water and Wastewater*, pp. 588-593, Academic Periodical Press, Beijing, China, 1989.
- 7. Rouhani, S., "Geostatistics in Water Resources," *Proceedings of the 1989 Georgia Water Resources Conference*, K. J. Hatcher, Ed., pp. 169-171, Institute of Natural Resources, University of Georgia, Athens, Georgia, 1989.
- 8. Rouhani, S., and M. E. Dillon, "Geostatistical Risk Mapping for Regional Water Resources Studies," *Use of Computers in Water Management*, Vol. 1, pp. 216-228, V/O "Syuzvodproekt", Moscow, USSR, 1989.

(Also in Russian: Vol. 2, pp. 234-249.)

#### **PROFESSIONAL ACTIVITIES**

1. American Geophysical Union:

Member, 1981-Present.

Associate Editor. Water Resources Research. 1989-1994.

2. American Society of Civil Engineering:

Associate Member, 1983-1987.

Member, 1987-Present.

Chairman, National Ground Water Hydrology Committee (Standing Committee), Hydraulics Division, Oct. 1991-1992.

Chairman, ASCE Task Committee on Geostatistical Techniques in Geohydrology,

Ground Water Hydrology Technical Committee, American Society of Civil

Engineers, Hydraulics Division, Oct. 1987-Sept. 1989.

Contact Member, ASCE Task Committee on Groundwater Monitoring Network Design,

Probabilistic Approaches to Hydraulics and Hydrology Committee,

Hydraulic Division, Oct. 1988- Sept. 1990.

Secretary, ASCE Water Resources Committee, American Society of Civil

Engineers, Georgia Section, 1988.

Special Session Organizer,

Special Session on "Development and Applications of Geostatistics in Geohydrology," 1989 ASCE National Conference on Hydraulic

Engineering, New Orleans, August 14-18, 1989.

Special Session Organizer and Chairman,

Special Session on Geostatistics in Geohydrology, 1990 ASCE Water

Resources Conference, Fort Worth, April, 1990.

Symposium Organizer,

International Symposium on Ground Water, 1991 ASCE National Conference on Hydraulic Engineering, Nashville, July, 1991.

- 3. International Water Resources Association: Member, 1985-Present.
- 4. American Water Resources Association: Member, 1986-Present.
- 5. North American Council on Geostatistics, 1987-Present.
- 6. International Geostatistical Association: Member, 1989-Present.
- 7. Association for Environmental Health and Sciences (AEHS): Member, 2003-Present.

Member of Editorial Board, Environmental Forensics, 2003-Present.

### Mark C. Dunn Lewis, Ph.D. Senior Biologist/Risk Assessor

#### **EXPERIENCE SUMMARY**

Dr. Lewis has fifteen years of experience in environmental consulting, with emphasis on human and ecological risk assessments, natural resource impact assessments, and toxicology. He has been project manager or technical lead for complex remedial investigations/feasibility studies, risk assessments, impact assessments, mitigation planning, natural resource damage assessments, and similar projects. Projects have included hard-rock mine sites, mill sites, nuclear weapons facilities, and industrial harbors in a broad range of environments. Many of the sites have involved multiple responsible parties, agencies, and public stakeholder groups.

South Florida Water Management District. Mark Lewis was instrumental in conducting ecological risk assessments for the District on sites that are candidates for reclamation under the Comprehensive Everglades Restoration Plan (CERP). When these former agricultural areas become flooded during the restoration process, there is potential for the residual pesticides in soil to enter the aquatic food chain. NewFields' specific contribution has been to evaluate data from candidate restoration sites to characterize ecological risks to aquatic biota and aquatic-feeding wildlife that would utilize the sites after flooding. Generally, involves use of screening tools such as Florida Sediment Quality Assessment Guideline and a food web model developed by the District for screening the properties. However, some sites have required expanded risk assessment efforts including use of laboratory bioaccumulation data to develop site-specific assessment and remediation criteria. NewFields expertise in toxicology and risk assessment has become important in these instances to help ensure proper balance between adequate protection of ecological resources and controlling remediation costs. NewFields has used this ecological expertise to assist in the identification of areas within each site that require remediation but also to minimize the extent of those areas through the application of site-specific information and the rigorous modeling protocols.

RI/FS, Risk Assessment, and Natural Resource Damage Assessment, Port of Portland, Oregon. Dr. Lewis is the senior member of the NewFields team that is assisting the Port of Portland to evaluate natural resources injury and potential natural resource restoration needs associated with the Portland Harbor Superfund Site and other contaminated sites along the Lower Willamette River. Dr. Lewis provides technical advice and oversight representing the Port of Portland in the Lower Willamette Group, the PRP organizing implementing CERCLA assessment and cleanup in Portland Harbor. He also represents the Port in the Harborwide NRDA process. Project includes assessment of impacts to ecological resources from hazardous substances. The process also requires evaluation of the impacts of harbor development on ecological resources and habitats function. Includes assessment of effects on threatened and endangered fish species, critical habitat, and terrestrial wildlife that may use the Willamette River corridor.

**Terminal 4 Early Action, Port of Portland (Oregon).** As a subcontractor, Dr. Lewis is the task leader and technical lead for risk assessment and natural resources tasks for Engineering Evaluation/Cost Analysis for contaminated sediments at the Port's most active facility on the Willamette River. Risk assessment focused on evaluating risk associated with sediment removal alternatives and involves foodweb modeling to predict exposure to humans and wildlife for removal alternatives.

Estuarine Sediment Ecological Risk Assessment, Sierra Pacific Industries-Arcata Division Mill. (California). Task manager for ecological risk assessment involving release of wood stain

inhibitors estuary in Mad River Slough. Stormwater runoff to Mad River Slough carried pentachlorophenol mixture to sediments. After onsite source control measures attenuated release of materials to groundwater and surface water, the ecological and human health risk assessments investigation focused on characterization of risk of residual PCP and dioxin-furan contaminants in sediments. Investigation included collection an analysis of fish tissue, surface sediments and subsurface core samples. Project is ongoing, but it appears that PCP degradation rates may limit risk from this chemical. Dioxin-furan contaminants appear to be buried and not bio- accessible based on analysis of fish tissue samples.

Copper Mine, Mill, and Smelter/New Mexico Environment Department, Confidential Mining Company, and US Environmental Protection Agency (New Mexico). Project manager and principal investigator for a site-wide ERA at a large base-metals mine in New Mexico. The project involves assessing risk from historical releases of mine waste, mill tailing, and process waters from the mine and mill. The study site includes arid uplands, ephemeral drainages, and developed areas over approximately 50 square miles. State and federally protected plant and animal species are present. Key issues include characterizing the bioavailability and associated effects of metals deposited from smelter emissions, tailing, and concentrator dust. In addition, indirect effects on wildlife resulting from phytotoxicity and associated habitat degradation will be assessed on a landscape level of organization.

**Lisboa Springs Fish Hatchery (northern New Mexico).** Project manager for investigation and remediation of the Lisboa Springs Fish Hatchery on the Pecos River. Key issues included risk-based evaluation of mine wastes and contaminated soils to determine appropriate remedial action. Mill tailings were removed from Pecos River banks and the banks restored and revegetated to natural conditions. Project included bioengineered bank reconstruction and revegetation of the bank and floodplain with native riparian species.

**Pecos Mine Remediation/Cyprus Amax Minerals Company and the State of New Mexico (northern New Mexico).** Served as project manager for a Remedial Investigation/Feasibility Study (RI/FS), and managed remediation planning at the Pecos Mine. Remediation strategies evaluated included isolation of mine waste with low permeability cap, in-situ biological treatment of groundwater seepage, and restoration of the site to satisfy Natural Resource Damage Assessment requirements. Restoration of the site included reconstructing and revegetating Willow Creek riparian corridor and wetlands near the confluence with the Pecos River.

Ecological Risk Assessment at Superfund Site Confidential Mining Client (Colorado). Project manager for design and implementation of an ecological risk assessment for terrestrial components of an operable unit containing several inactive mines and a mill site. Project involved characterizing wildlife habitat quality in lodgepole pine forest, spruce-fir forest, and subalpine meadow habitat types, and evaluating toxicity of soils containing mine waste with the objective of identifying threshold toxicity due to heavy metal contents and histopathological analysis of chipmunk liver, kidney, and bone. Represented the client during review and evaluation of risk assessments conducted by EPA.

Lincoln Park Superfund Site/Colorado Department of Public Health and the Environment and Cotter Corporation (Canon City, Colorado). Principal investigator and project manager for an ecological risk assessment at the Lincoln Park Superfund site. The project site includes a uranium mill and the historically affected areas immediately surrounding it. The risk assessment addressed potential adverse impacts to vegetation and wildlife as a result of airborne and waterborne dispersal of mill tailings. The project also addressed the potential effects from smelter emissions not associated with the mill facility.

Rocky Flats Environmental Technology Site (near Golden, Colorado). Principal scientist and project manager for integration of seven operable unit-specific ERAs at Rocky Flats into a single site-wide ERA document. Tasks included management of additional field sampling operations, data compilation and analysis, and report preparation. Process included characterizing and ranking primary and secondary contaminant sources with respect to their contribution to overall risk. Worked closely with DOE and EPA personnel to gain consensus on approach, results, and conclusions. Project required management of a team of seven individuals and coordination with RI/FS project managers for operable units. Potentially ecotoxic contaminants included heavy metals, organic solvents, PCBs, and radionuclides.

**Rocky Flats Environmental Technology Site** (near Golden, Colorado). Principal investigator for Comprehensive Ecological Risk Assessment to assess sitewide risks at the end of the sitewide RI/FS and remedial action processes. Work included development and negotiation of a process to integrate data from diverse programs to estimate exposure and risk, development of toxicity benchmarks for over 200 chemicals, and negotiating risk management conclusions.

**Kinross DeLamar Mine (southwestern Idaho).** Risk assessment task leader for evaluation of a proposed land application treatment (LAT) at an operating precious metals mine. The LAT was one approach being considered for reducing the volume of excess mine and process water without discharging to a nearby perennial stream. The risk assessment addressed phytotoxicity of tailing water constituents as well as potential adverse impacts to wildlife, livestock, and human receptors as a result of accumulation of metal and metalloids in the soil and possible uptake by plants. Analyses included probabilistic modeling (e.g., Monte Carlo) to support risk analysis and system design.

**Envirocare Utah Ecological Risk Assessment.** Project lead for conducting a predictive ecological risk assessment for permitting of waste disposal facilities at the Envirocare Utah site. Project included modeling of aerial deposition of particulates in emission on soils in surrounding habitats, then estimating intake of chemicals by specific receptor types. Methods used were consistent with EPA ERA guidance for combustion facilities.

**J.R. Simplot Smoky Canyon Mine Ecological Risk Assessment.** Task lead for ecological risk assessment at active phosphate mine in southeastern Idaho. Broad-based ERA designed to evaluate potential exposure and risks to wildlife that utilize site facilities. Facilities included tailing ponds, waste rock piles and adjacent seep-affected areas. Specific issues include exposure of migratory and resident waterfowl, bald eagles feeding on waterfowl and carrion near the site, wildlife feeding in areas affected by runoff or seepwater. Project being conducted for Simplot as part of administrative order on consent between Simplot, USEPA, and the State of Idaho.

**Doe Run Company, St. Francois County Mine Sites Ecological Risk Assessment.** Task lead for conducting an ecological risk assessment for inactive tailing and waste rock piles. Primary concerns included exposure of migratory and resident wildlife utilizing waste piles. Key issues included evaluation of potential bioavailability of cadmium, lead, and zinc from waste materials, and the potential future development of habitat in currently unvegetated areas of the site.

**DOE Pantex Facility Quality Assurance (Amarillo, Texas).** Quality assurance coordinator for large risk-based soil remediation project at the DOE Pantex facility. Primary duties included management and implementation of statistical analyses, and development and implementation of framework for use of results in health risk analyses decision-making regarding site cleanup.

#### REGISTRATIONS AND PROFESSIONAL AFFILIATIONS



Society for Environmental Toxicology and Chemistry Water Environment Research Foundation Research Panelist

#### **EDUCATION AND TRAINING**

B.S., Biology – Buena Vista College (1980)

M.S., Biology – Eastern Kentucky University (1983)

Ph.D., Biology – University of Kentucky (Comparative Physiology) (1988)

Post-doctoral Fellowship, National Institute of Digestive, Diabetes, and Kidney Diseases, Bethesda, MD (1988-89)

Post-doctoral Fellowship, (NIH) Michigan State University (1989-90)

Grass Fellowship, Marine Biology Laboratory, Woods Hole, MA. (1989)

40-Hour Hazardous Waste Site Health and Safety Training

Assessing Ecological Risk in Contaminated Soils, SETAC Shortcourse (2000)

Application of Population and Community Ecology to Environmental Toxicology and Risk Assessment, SETAC Shortcourse (1997)

Stochastic Modeling in Exposure Assessment, SETAC Shortcourse (1995)

Assessment of Contaminated Sediment, SETAC Shortcourse (1993)

Ecological Risk Assessment and Management, Colorado State University (1992)

8-Hour Hazardous Waste Site Supervisor Health and Safety Training

8-Hour Radiation Safety Training (Rocky Flats Environmental Technology Site)

#### PAST WORK HISTORY

Senior Biologist/Partner – NewFields (2004 – present)

Senior Biologist/Project Manger – MFG, Inc. (2000-2004)

Senior Biologist/Project Manager – Schafer & Associates/Shepherd Miller (1997-2000)

Senior Biologist/Project Manager – The S.M. Stoller Corporation (1990-1997)



#### JOSEPH M. ALLEN, M.S.

#### Senior Wildlife Biologist/Ecological Risk Assessor

#### **EXPERIENCE SUMMARY**

Mr. Allen has 11 years of experience in the fields of risk assessment, wildlife biology, and forest/ecosystem biology. Mr. Allen provides project management and technical expertise in a number of disciplines, including: aquatic and terrestrial ecological risk assessment; field investigation design and data interpretation; Geographic Information Systems; data management; and statistical analysis.

#### **Ecological Risk Assessment/Ecological Toxicology**

**South Florida Water Management District.** Various Sites. Project manager and ecological risk assessment specialist providing risk assessments at multiple land acquisition sites. The risk assessments performed have included evaluations for potential risk to benthic macroinvertebrates and semi-aquatic avian species, including threatened and endangered species. Exposure to potential future receptors from pesticides, herbicides and heavy metals was estimated using fugacity models to predict surface water contamination and food chain transfer following flooding of agricultural areas under the Everglade Restoration Program.

Rocky Flats Environmental Technology Site. Project manager, principal author and subject matter expert for the 20 ecological risk assessments that comprised the comprehensive risk assessment at the 6,000 acre Rocky Flats site. Mr. Allen was the technical lead on all risk assessments, both aquatic and terrestrial, as well as the primary author on all aquatic risk assessments and seven of thirteen terrestrial risk assessments. Tasks included project management, risk assessment strategy, agency negotiation, data compilation and analysis, and report preparation. Worked closely with DOE, EPA, and state personnel to gain consensus on approach, results, and conclusions. Potentially ecotoxic contaminants included pesticides, herbicides, heavy metals, organic solvents, PCBs, and radionuclides. Also developed a database of ecological screening criteria for mammals, birds, terrestrial plants, terrestrial invertebrates, surface water and sediment for nearly 200 constituents of concern.

Alcoa Inc. Lavaca Bay Ecological Risk Assessment. Texas. Ecological risks from mercury, PAHs, and other constituents of concern were assessed for both aquatic and terrestrial receptors in multiple trophic levels. Tissue data from multiple prey species were used to derive realistic ingestion potentials for the COCs at the site for fish, birds and mammals. To accomplish the project goals, gut content data from upper trophic level fish were incorporated into the risk model to accurately assess risks. Detailed assessments of habitat area and usage by receptors were also used to provide realistic assessment of risks to terrestrial receptors.

Alcoa Inc., Bauxite Residue Disposal Area Risk Assessment. Illinois. Project manager and risk assessment specialist for the ecological risk assessment portion of a risk-based RI/FS process. Tasks and duties included all aspects of the ecological risk assessment from study design and problem formulation, field data collection, and data analysis. Tasks also included negotiation with EPA scientists to construct the ERA project plan and complete the risk assessment. The ERA was a multi-phased approach focused on the completion of an ERA that meets the site management goals.

**Visteon Inc. Ecological Risk Assessment for Volatile Organic Chemicals in Surface Water.** Indiana. Project manager for an aquatic ecological risk assessment for volatile organic constituents in groundwater migrating into surface waters. Tasks included the preparation of problem formulation documents, site



study plans, collection and analysis of field data, and preparation of the ERA. The ERA supported a no further action decision for groundwater contamination migrating into surface waters.

Company, and US Environmental Protection Agency. New Mexico. Lead ecological risk assessor for a site-wide ERA at a large base-metals mine in New Mexico. The project involves assessing risk from historical releases of mine waste, mill tailing, and process waters from the mine and mill. The study site includes arid uplands, ephemeral drainages, and developed areas over approximately 50 square miles. State and federally protected plant and animal species are present. Key issues include characterizing the differing bioavailability and associated effects of metals deposited from smelter, tailing, and concentrator dust. In addition, indirect effects on wildlife resulting from phytotoxicity and associated habitat degradation will be assessed on a landscape level of organization. Also assisted in the development of criteria for eco-risk driven remediation.

Confidential Client, Barium Mine Ecological Risk Assessment. Arkansas. Lead ecological risk assessor for the scoping level terrestrial ERA for a large area of mine waste materials. Constituents of concern included multiple heavy metals. Tasks included the preparation of problem formulation documents, site sampling plans, terrestrial habitat evaluation, and preparation of the ecological risk assessment. The project also included a thorough review of potential barium toxicity.

Confidential Client, Lead and Zinc Mine Disposal Area Risk Assessment. Missouri. Ecological risk assessor for a multi-pathway and receptor ERA for heavy metal exposure in a revegetated mine waste disposal area. Risks were assessed through a series of technical memoranda for a range of receptors from herbivores, omnivores, and insectivores.

**Alcoa Inc. Landfill Risk Assessment.** Washington. Conducted an ecological risk assessment under Washington's MTCA risk assessment regulations for a landfill area. Constituents of concern included PCBs, PAHs and other semivolatile organics. Tasks included the preparation of risk assessment problem formulation plans, data collection plans and the scoping level risk assessments. The focus of the risk assessment was to identify any ecological risk that remained after permitting of the landfill.

**Voluntary Packaging Inc. Pesticide Manufacturing Area Ecological Risk Assessments.** Texas. Ecological risk assessor for a series of pesticide manufacturing facilities. ERAs focused on terrestrial areas as well as perennial and ephemeral drainages. The primary constituents of concern are methylated arsenical pesticide products and other pesticides. The tasks responsible for included the preparation of risk assessment plans and multi-pathway, multi-receptor ERAs.

**Envirocare Utah Ecological Risk Assessment.** Risk assessment lead for conducting a predictive ecological risk assessment for permitting of waste disposal facilities at the Envirocare Utah site. Project included modeling of aerial deposition of particulates in emission on soils in surrounding habitats, then estimating intake of chemicals by specific receptor types. Methods used were consistent with EPA ERA guidance for combustion facilities.

Confidential Client. Gold Mine Tailings Ecological Risk Assessment. Idaho. Lead ecological risk assessor in a project to assess the potential for risk to terrestrial receptors including mammalian, avian, and vegetation receptors following a release of gold mine tailings. The constituents of concern at the site included multiple heavy metals. Data from terrestrial plant seeding studies were utilized in a weight-of-evidence approach that was used to jusify a no further action decision for ecological receptors.

**United Technologies. Ecological Risk Assessment.** Connecticut. Ecological risk assessor with responsibilities including data management, identification of constituents of interest, derivation or toxicity reference values, and preparation of the ecological risk assessment document. Constituents of concern included PCBs, dioxins/furans, heavy metals, and other semivolatile organic chemicals.



**U.S. Department of Defense. Picatinny Army Depot Ecological Risk Assessment.** New Jersey. Ecological risk assessor for the Phase II ERA at the Picatinny Army Depot. Responsibilities included aquatic toxicological evaluations, receptor species identification, food chain modeling and preparation of the comprehensive ERA document.

**PPG Industries. Evaluation of PCBs in Fish Tissues.** Ohio. Project manager for monitoring PCB concentrations in fish tissues. Tasks included the preparation of sampling reports, fish tissue collection, and preparation of PCB concentration reports to support cleanup remedial activities at the Site.

**Union Pacific Railroad. Railyard Ecological Risk Assessment.** Oregon. Ecological risk assessor for a project to predict the potential for ecological risk from residual contamination of stream sediments from lead, PCBs, and PAHs in streamside soils. The assessment included the evaluation of soil concentrations that were used to conservatively model sediment concentrations and predict that no risk was possible for salmon runs in the adjacent stream.

Confidential Client. Ecological Risk Assessment for Boron in Surface Water and Sediment. Texas. Lead risk assessor for a project to assess potential impacts of boron contaminated groundwater discharging into a surface water body. Tasks included revision of Tier II boron surface water criteria and development of sediment criteria for boron.

#### **Human Health Risk Assessment**

**Aluminum Company of America.** Davenport, Iowa. Assisted in the preparation of several screening level human health risk assessments as part of the CERCLA Site investigation. Responsibilities included determination of data quality, selection of constituents of interest, and estimations of human health risks at the facility.

**PPG Industries Inc.** Natrium, West Virginia. Assisted in the preparation of a human health risk assessment for phase 3 of the RCRA facility investigation. Responsibilities included data management and preparation of several text sections of the report.

**Bayer Corp.** New Martinsville, West Virginia. Assisted in the preparation of a human health risk assessment for the RCRA facility investigation. Responsibilities included data management and preparation of several text sections of the report.

#### **Geographical Information Systems (GIS)**

**Confidential Superfund Site.** Developed a comprehensive 3-D GIS mapping system for the Superfund site. The GIS is used as a management system for environmental data that has been collected during the remediation process and allows quick access in the form of maps to the data. The generation of maps has allowed more efficient presentation of the data in a visually pleasing format that has been used in document presentation and in public meetings.

**Port Authority of Allegheny County** Pittsburgh, PA. Design of a GIS system to handle environmental data collected in association with cleanup activities at the facility. The GIS system will integrate traditional CAD mapping with a database of environmental data and will allow quick accurate data handling and presentation.



**Pennsylvania Department of Conservation and Natural Resources** Harrisburg, Pennsylvania. GIS construction and analysis of timber stand components in the Kittaning State Forest, Clarion, County, Pennsylvania. Analysis included input of all relevant data from various sources to construct the GIS database, base mapping to aid in product pricing of timber stands, and presentation-quality mapping for the PA DCNR.

**Columbia Natural Gas, Millennium Transmission Corp.** Charleston, West Virginia. GIS operation on a proposed large-scale natural gas pipeline Federal Energy Regulatory Commission Report. Field data was manipulated and combined with socio-economic, environmental, geological, and political data (in various formats such as raster, AutoCAD, etc.) from the Internet and other sources into presentation-quality layouts and designs for the environmental report. Over 200 different coverages and layers were created for this report.

**Mill Creek Coalition** Clarion Pennsylvania. GIS analysis of acid mine discharge, fish abundance, and aquatic invertebrate abundance in the Mill Creek drainage, Jefferson County, Pennsylvania. Data was supplied from various field sources and combined to show a dynamic model of the stream system. The information was used in various scientific presentations and in a publication.

#### **Database Programming**

Development of a comprehensive risk assessment data handling and presentation software package using Microsoft Access. The package allows user-friendly selection of samples, parameters, and other inputs to easily manipulate data. Duplicate processing is offered and output of data into standard or non standard table formats is supported. The system also allows comparison of data to known standard toxicity values for human health or ecological risk assessment.

#### **Wetlands Delineation**

Provided wetland delineation support for a 350 mile natural gas pipeline corridor in upstate New York. Delineated over 300 wetland patches using real-time GIS/GPS mapping tools.

Provided wetland delineation support for a proposed natural gas pipeline extension near York, Pennsylvania.

Provided wetland delineation support as part of a proposed remedial action for chlorinated solvents.

Delineated wetlands on an active 200 acre industrial facility near Chicago, Illinois.

#### **Environmental Impact/ Habitat Assessments**

Provided technical support for footprint study for major natural gas pipeline in upstate New York. . Assessment activities included wetlands issues, habitat and landuse evaluation, archaeology review and social impacts.

Directed studies of 4 graduate student in the Callen Run State Forest study area. Conducted and directed baseline presence and abundance surveys of small mammal, terrestrial plant, amphibian, reptile, whitetail deer, black bear, wild turkey, ruffed grouse, songbird, bats, bobcat and coyote populations.

Provided an Environmental Impact Assessment for a proposed rails-to-trails conversion near Morgantown, WV.



#### PEER REVIEWER

**Environmental Toxicology and Chemistry** 

#### **PRESENTATIONS**

Allen, J.M., S.A. Tiller, S.M. Covington, M.C. Petach, M.D. Marcus, M. Sonnet, B. G. Hansen. 2000. Using GIS to Develop Spatial Patterns of Ecological Risk. Society of Environmental Toxicology and Chemistry. Annual Meeting.

Allen, J.M., S. M. Covington, M.D. Marcus, M. Sonnet, B. G. Hansen. 2000. Using In Situ Plant Seeding Trials to Assess Risks to Herbaceous Plants and Terrestrial Herbivores from Arsenic, Mercury, and Silver in Mine Tailings. Society of Environmental Toxicology and Chemistry. Annual Meeting.

Allen, J. M., M.C. Lewis, K.W. Tegtmeyer, and J.K. Drexler. 2001. Cupric Ion Activity as a Measure of Site-Specific Copper Bioavalability. Society of Environmental Toxicology and Chemistry. Annual Meeting.

M.C. Lewis, J.M. Allen, K.W. Tegtmeyer, and J.K. Drexler. 2001. Bioavailable Copper as a Measure of Soil Phytotoxicity. Society of Environmental Toxicology and Chemistry. Annual Meeting.

#### REGISTRATIONS AND PROFESSIONAL AFFILIATIONS

Society of Environmental Toxicology and Chemistry

#### **EDUCATION AND TRAINING**

M.S., Biology, Clarion University of Pennsylvania, 1998

B.S., Biology, Shippensburg University of Pennsylvania, 1995

#### PAST WORK HISTORY

Senior Wildlife Biologist - NewFields (2004 - present)

Project II Scientist – Tetra Tech MFG (1999 - 2004)

Staff Scientist – ICF Kaiser/IT Corporation (1998 – 1999)

Staff Scientist – GAI Consultants (1997 – 1998)

Science and Technical Specialist – PA DCNR (1995 – 1997)

**Professional Service Industries, Inc.** 



## Company Profile Professional Service Industries, Inc.

Professional Service Industries, Inc. (PSI) is a national engineering company that provides environmental, geotechnical, and construction consulting services to a wide range of governmental and private clients. PSI has been in operation since 1961 and is based in Oakbrook Terrace, Illinois. With net revenues of more than \$200 million per year and more than 2,500 employees, PSI is consistently ranked by Engineering News Record as one of the 50 largest engineering consulting companies in the U.S and we are the largest independent testing organization in the US. We have twelve offices in Florida with six of those offices within the SFWMD boundaries.

We pride ourselves on establishing long-term relationships with our clients, and we have maintained many of our clients for over 30 years. Some examples of long term governmental clients in Florida include Miami-Dade County, Collier County, Lee County, Manatee County, Hillsborough County, City of Orlando, Florida Department of Environmental Protection, Department of Corrections, Department of Transportation, Department of Land Management Services, Escambia County Utility Authority, SWFWMD, and SFWMD. We have provided services to SFWMD for over ten years on numerous contracts and we have consistently provided a high level of service to the District.

PSI currently has three contracts with the District Land Acquisition and Land Management Sections under which we have provided environmental assessment and remediation services. We have managed the environmental due diligence assessments for numerous parcels acquired by the District within the C-23/C-24, C-44, BBCW, CREW, L-31, and EAA project areas. We also previously managed the implementation of corrective actions on the Talisman property for the EAA reservoir.



#### **RESUME**

#### STEPHEN P. LONG, PE, PG

Environmental Services Chief Engineer

#### **EDUCATION**

B.S., Geological Engineering, University of Arizona, 1988

#### PROFESSIONAL ORGANIZATIONS/REGISTRATION

Registered Professional Engineer, State of Florida Professional Geologist, State of Florida

#### PROFESSIONAL EXPERIENCE

Mr. Long has more than 20 years experience, as both an engineer and geologist on hazardous waste cleanup and ecosystem restoration projects throughout the United States. As a Chief Engineer, Mr. Long is responsible for planning, managing, and conducting groundwater and soil assessments, human health and ecological risk assessments, remedial design, and corrective action implementation.

Mr. Long has been in charge of the design and installation of over one hundred soil and groundwater remediation systems, which include a variety of technologies such as bioventing, biosparging, soil vapor extraction, air sparging, in-situ bioremediation, in-situ oxidation, multi-phase extraction, and other hybrid technologies. He provides overall technical support, including quality control and review of feasibility studies, assessments, design and engineering construction. Mr. Long has managed environmental engineering groups providing services to commercial, industrial and government clients. In addition, Mr. Long has extensive experience with Phase I and Phase II environmental site assessment for due diligence.

#### PROJECT EXPERIENCE

- Former St. Joe Paper Mill; Project manager for brownfields redevelopment at former paper mill. Responsibilities included assisting the client in entering the project into the brownfields program, evaluation of potential remedial alternatives and development constraints, conducting site investigation and remedial pilot studies, and preparation of a remedial action plan to address impacts.
- Talisman Sugar Company, Florida; Project director and lead engineer for a \$5M+
  environmental restoration project conducted as part of the Everglades Restoration
  Program. Responsibilities included the assessment and remediation of 40 separate
  impacted sites within a 56,000-acre former sugar plantation. Project sites included an
  abandoned landfill, multiple pesticide mixing and storage areas, and an operational
  sugar mill. Projects were completed on a fast-track basis under the direction of both
  State and Federal agencies.
- Hawaii Military Communities, LLC; Provided senior technical support and oversight for the investigation of organochlorine pesticide impacted soils at several base housing units. Also assisted in preparation of a risk assessment and soil management plan to manage impacted soils during and after construction.



- MacDill AFB; Project Manager for several environmental projects on the base, including upgrade of the runway stormwater system. Prepared plans and specifications for dewatering and handling of impacted soils during construction of the improvements. Also, prepared numerous NEPA Environmental Assessments (EA) for proposed developments on the base.
- Redstone Arsenal; Provided senior technical oversight to the investigation and remediation team addressing chlordane impacted soils during a housing redevelopment project. Developed alternate soil cleanup target levels for chlordane based on human health risk.
- Village of Merrick Park Mixed Use Project, Florida Project manager for redevelopment of a retail mall and mixed use complex on a former city maintenance yard, lumber yard, and industrial area. Prepared human health risk assessment to address arsenic impacted soils at lumber yard, designed and installed free product recovery system to address an abandoned waste oil tank, designed engineering controls to prevent exposure to impacted soils and groundwater, prepared health and safety plans for construction work, prepared site closure reports and secured closure from regulatory agency to allow development to proceed.
- City of Concord Police Station; Conducted site investigation and remedial design for a
  police station that was constructed on a former service station site. Also, conducted
  vapor intrusion modeling and designed vapor mitigation system to address potential
  affects of petroleum vapors beneath the basement of the building. Provided oversight
  of vapor mitigation system and conducted clearance testing before building
  occupancy.
- Collier County Solid Waste Consultant; Engineer of record for numerous projects conducted on behalf of county solid waste authority, including landfill reclamation project, design of operations centers at 3 facilities, design of household hazardous waste collection center, and remediation of a former gun range on landfill property.
- The St. Joe Company, Florida Project Manager and lead engineer for a bioremediation project involving over 17,000 cubic yards of bunker c oil and petroleum impacted soils. Soils were successfully treated using ex-situ engineered biopiles, which saved the client over \$250,000 in disposal costs.
- City of Orlando, Chlorinated Solvent Cleanup –Lead engineer and senior technical professional for the Remedial Investigation/Feasibility Study (RI/FS) phase of a multiacre chlorinated solvent plume in downtown Orlando, Florida. The work is being conducted under the direction of EPA Region IV under the Superfund program.
- Redevelopment of Former Dry Cleaner, Metairie, LA Lead engineer for assessment and rapid cleanup of a former dry cleaner property under the Louisiana Voluntary Cleanup Program. Designed an aggressive cleanup that included installation of a cofferdam to prevent off-site migration, hydrofracturing to enhance aquifer permeability, in-situ chemical oxidation, and multi-phase extraction. Received closure from VRP program within 1 year and allowed the redevelopment to proceed on schedule.
- Everglades Restoration Land Acquisition Project manager for numerous projects associated with land acquisition and reservoir construction on former agricultural lands as part of the Everglades Restoration Project. Projects have included conducting Phase I/Phase II environmental site assessments on numerous large



- (1,000 acres+) parcels, conducting ecological risk assessments to address residual pesticide impacts, assessment and remediation of cattle dipping vats, solid waste dumps, pesticide mixing areas, airstrips, gun ranges, and other areas of concern.
- Florida East Coat Railway Project manager for numerous environmental projects within the FEC system. Projects have included conducting environmental audits, preparation of pollution prevention plans, design of emergency spill containment basins, design and installation of wastewater pump stations and oil water separators, evaluation and retrofitting of an on-site wastewater treatment system, conducting numerous petroleum and chlorinated solvent assessment and cleanups, removal of underground storage tanks, design and construction of petroleum above ground storage tank systems, and phase I/II ESAs on proposed land sales.
- Federated Mutual Insurance Company; Nationwide-Project manager and lead engineer on over 75 petroleum cleanup sites. Responsibilities included preparation of corrective action plans, construction plans and specifications, management of construction projects, and operation and maintenance of soil and groundwater treatment systems.
- Intel Corporation; Northern California-Project manager and primary client contact for all remedial activities at four sites in Northern California. The sites include two Superfund Sites under EPA lead, one site under state water board lead and one site under Department of Toxic Substances Control lead. Duties include project/budget management, client maintenance, preparation of construction plans and specifications for remedial actions, preparation of technical documents, and oversight of daily operation and maintenance of soil and groundwater treatment systems.
- Mercury Plaza Redevelopment, Newport News, Virginia Project engineer for redevelopment of a closed shopping mall under the Virginia Voluntary Cleanup Program. Performed Phase I/II environmental site assessments, performed site investigation to assess petroleum and solvent impacts associated with former on-site dry cleaner and automotive repair shop, designed remedial action plan which included source removal and in-situ chemical oxidation, conducted oversight of remediation, prepared risk assessment and designed vapor mitigation system to address remaining concerns associated with vapor intrusion into buildings.
- Department of Energy; Davis, California-Project engineer on \$35 M+ cleanup of a former DOE site. Previous activities have included preparation of EE/CA report, evaluation of potential alternatives for removal actions, preparation of numerous workplans for field activities, and construction/remedial action cost estimating. Also served as project manager for decommissioning of a 40,000-curie Cobalt-60 irradiator at the facility.
- Various clients; Nationwide-Environmental professional for extensive experience with industrial motor controls, telemetry, and programmable logic controllers for monitoring and control of groundwater and soil treatment systems. Developed and maintained an active telemetry network for remote monitoring and control of treatment systems on 15+ sites.
- Various Private and Government clients; Nationwide-Project manager and lead engineer on a number of underground and above ground tank system installations and service station upgrade/remodel projects. Knowledgeable with all aspects of tank



- system design including secondary containment, overspill protection, cathodic protection, lead detection, and electrical systems.
- International Harvester; Memphis, Tennessee-Project manager for assessment of former production facility. Duties included estimating costs for bringing facility into compliance with RCRA and other environmental regulations, performing corrective action, and maintenance of post-closure landfill.
- Pinellas County School District; St. Petersburg, Florida-Engineering manager for a high profile investigation and cleanup of lead contaminated soils and groundwater at a public school in Pinellas County, Florida. The work was conducted under the direction of EPA Region 4 and Florida Department of Environmental Protection.
- Ray Distributing Company; Jacksonville, Florida-Environmental professional for developing standardized design software and report format for preparation of Remedial Action Plans which reduced project costs by over 30%. Developed standardized "library" of AutoCAD construction drawings and standard specifications for soil and groundwater treatment systems. The standards cut production costs by 25% and decreased preparation time significantly.
- Various Clients; Nationwide-Project manager for risk assessments at numerous sites under ASTM and Superfund RAGS guidance. Successfully negotiated alternative cleanup levels at many sites, saving clients thousands of dollars. Assisted in development of several models for evaluation of risks associated with inhalation of vapor phase contaminants.

5. Due Diligence - Engineering Assessments

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



# **Due Diligence – Engineering Assessments**

Tommy B. Strowd, P.E.

Asst. Deputy Executive Director, Everglades Restoration

# Engineering Assessments Tasks and Deliverables

- Evaluation of asset conditions
  - Identification of deficiencies, corrective improvements and costs
- Identification of repair, maintenance, and capital improvement requirements
  - Includes a summary of operation & maintenance activities and required future replacements/repairs
  - Intended to maintain current level of operations and efficiencies at turnover to the District
- Development of an Asset Transition Plan
  - Includes the activities and requirements necessary for the turnover of all assets to the District

# Engineering Assessments Shaw Environmental, Inc. (Shaw)



- Provides environmental, engineering, and construction solutions to government and private-sector customers
- More than 7,000 employees located in over 90 offices nationwide
- Recognized as one of the nation's largest full-service providers of a host of environmental and infrastructure engineering and design projects throughout the United States and the world

# Engineering Assessments Shaw Environmental, Inc. (Shaw)



- Edward Mayer, Sugar & Citrus Processing
- Harold Birkett, PhD, PE, Sugar Processing
- Gary Seavey, Non-Process Buildings
- Sal Bibona, PE, Vehicle Fleet Management
- Gene Gilpin, Railroads
- Nathan Newell, PE, Drainage Facilities in Crop Areas

## Engineering Assessments Categories of Infrastructure

- Categories of Infrastructure under evaluation
  - Sugar Mill and Refinery
  - Citrus Processing Plant
  - Non-Process Buildings
  - Vehicles and Equipment
  - Airport and Airstrip Facilities
  - Railroads
  - Crop Area Lands and Facilities

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

# **Engineering Assessments Sugar Mill and Refinery**



# **Engineering Assessments Sugar Mill and Refinery**





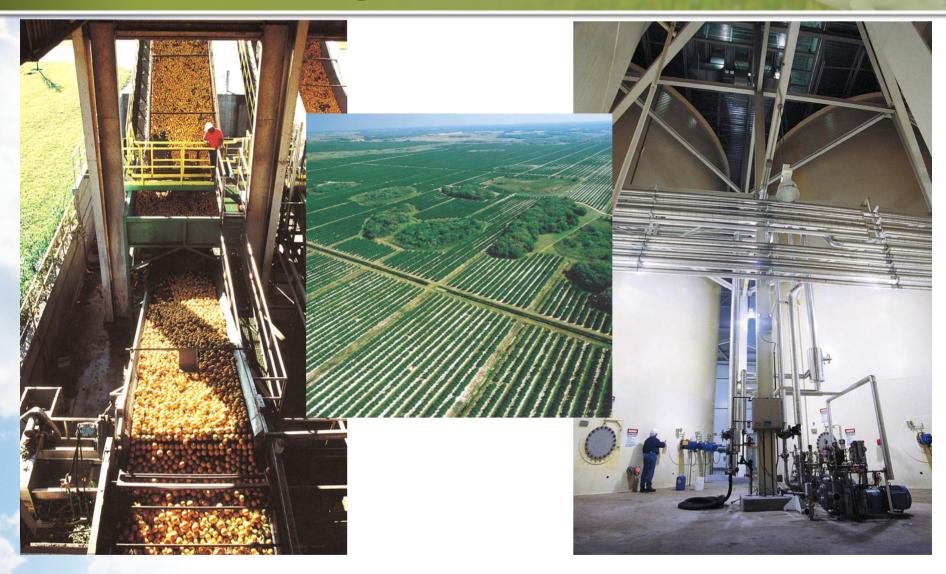




# **Engineering Assessments Citrus Processing Plant**



# **Engineering Assessments Citrus Processing Plant**



# Engineering Assessments Non-Process Buildings



# **Engineering Assessments Vehicles and Equipment**







# **Engineering Assessments Airport and Airstrip Facilities**







# Engineering Assessments Railroads





# **Engineering Assessments Crop Area Lands and Facilities**











SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Questions

sayund-gov



### Corporate Profile

Founded in 1987, The Shaw Group Inc. provides premier engineering, design, construction, maintenance, fabrication and manufacturing services to private-sector and government clients in the energy, chemicals, power, nuclear, environmental, infrastructure and emergency response markets.

Name: The Shaw Group Inc.

Headquarters: Baton Rouge, Louisiana

Public corporation: NYSE Symbol: SGR

2007 Revenue: \$5.7 Billion

Backlog: \$14.2 Billion\*

• Number of employees: 27,000

Web site www.shawgrp.com





<sup>\*</sup> As of the three month period ending 2/29/08

### **Worldwide Locations**



138 U.S. Locations33 International Locations





### Chairman, President & CEO

"Safety, integrity and service, combined with a demonstrated commitment to providing quality products and workmanship, are the core values that have established Shaw as a leader in each of the industries we serve. These are our founding values—ideals that drive us today and ensure our success tomorrow."

-J.M. Bernhard Jr.



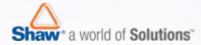
### Vision

The world's leading solutions based company that develops, designs, builds, maintains and operates programs and facilities for our clients.



### **Shaw Group Organization**

J.M. Bernhard Jr., Chairman, President & CEO Brian Ferraioli, EVP & CFO Gary Graphia, EVP, Corp. Dev & Strategy Cliff S. Rankin, General Counsel & Corp. Sec. **Energy & Fabrication & Environmental &** Power TBA Chemicals **Manufacturing** Infrastructure Lou Pucher. Dave Chapman, **Group President** Ron Oakley, **Group President Group President Group President Nuclear Division Fossil Division Maintenance Monty Glover** Ron McCall **Dave Barry** 



### Shaw – A Market Leader



Rank	Category
1	Power
5	Industrial Process/Petro.
7	International Markets
10	Hazardous Waste

April 2008 Issue



Rank	Category
3	Hazardous Waste
4	Power
10	Contractors by New Contracts
11	Domestic Heavy Contracts
16	Industrial Process/Petro.
19	Contractors Working Abroad
S	(I - S)

May 2008 Issue

ENR 2008
The Top
Environmental Firms
13 <sup>th</sup> Overall

Rank	Category
2	Hazardous Waste
5	Construction/ Remediation
8	Type of Client: Federal
9	Consulting/Studies
9	Nuclear Waste
24	Contracts Awarded in 07

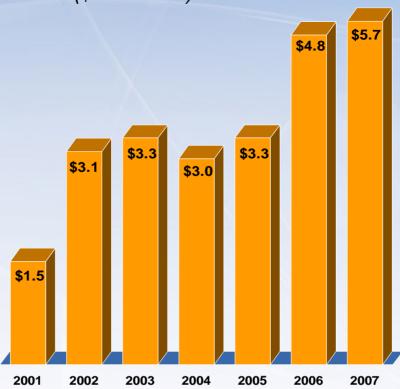
July 2008 Issue

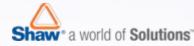


### Revenue Growth

#### **Historical Revenues**

(\$ in billions)





### **Shaw Power - Fossil**



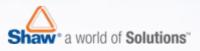
#### Services

- Engineering and design, procurement and construction
  - New-build, restart and retrofit capabilities
  - Coal-fired
  - Gas-fired
  - Hydro-electric and alternative fuels
- Project and construction management
- Modularization
- Transmission & distribution services
- Management consulting and feasibility studies

#### **Significant Customers**

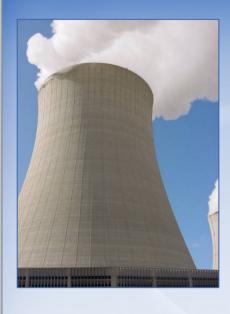
- Duke
- Dominion
- Mirant
- Entergy
- Cleco
- AEP
- PSEG
- PPL
- NRG
- Southern
- Xcel Energy

Industry leader in new coal-fired capacity additions and emissions controls systems installation



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### **Shaw Power- Nuclear**



#### Services

- Full service engineering, design, procurement and construction
- Configuration management
- Licensing support and safety analysis
- Major component replacement
- Operating plant services
- Maintenance & modifications services
- Decontamination & decommissioning services
- Environmental services
- Spent fuel dry storage

#### **Significant Customers**

- China State Nuclear Power Technology Company
- Duke
- Southern
- Entergy
- SCANA
- Exelon
- Progress
- LES National Enrichment Facility
- Tennessee Valley Authority
- Dominion
- Entergy
- TXU
- KOPEC
- Florida Power and Light
- FENOC

AP1000 Consortium awarded 4- Nuclear reactors in China; Nuclear new-build backlog over \$700 million



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### **Shaw E&C - Chemicals**





#### Services

- Engineering and design, procurement and construction
- Project and construction management
- Technology, proprietary equipment & catalysts
  - Ethylene: Deep Catalytic Cracking (DCC)
- Other refining and petrochemical technologies
  - Cumene
  - Ethylbenzene
  - Styrene
  - Propylene
  - Butene
- Consulting and feasibility studies

#### **Significant Customers**

- Aramco
- Marathon
- SABIC
- Dow
- Chevron
- PetroChina
- ConocoPhillips
- ExxonMobil
- Shell
- Sinopec
- BP
- QAPCO
- SABIC

Supplier of 35% of the world's incremental ethylene production capacity since 1995



### **Shaw Maintenance**



#### Services

- Over 60 clients at over 140 sites in the U.S. and abroad
  - Routine, outage and turnaround maintenance
  - Full service plant engineering
  - Modular fabrication/assembly
  - Tank construction and maintenance
  - Small capital construction
  - All craft disciplines
- Average approximately 11,000 active craft database pool
- Largest nuclear maintenance contractor in the U.S. with the record for the shortest nuclear refueling outage

#### **Significant Customers**

- Tennessee Valley Authority (Nuclear)
- Entergy (Nuclear)
- Exelon (Nuclear)
- Southern
- NRG
- Honeywell
- Shintech
- Huntsman
- Pioneer Companies
- Occidental Chemical

Provide maintenance services to approximately 40% of the nuclear plants in the U.S.



### **Shaw Fabrication & Manufacturing**



# 99

#### **Services**

- Largest supplier of fabricated piping systems in the U.S.
- Manufacturer of industry's most advanced induction and cold bending technology
- Industry leader in the supply of cold and induction bends
- Leading manufacturer of pipe fittings and master distributor of pipe flanges and fittings
- Industry leader in fabricated structural steel products and duct work for power, petrochemical and other industries
- Certified by ASME to perform all activities required for construction of ASME nuclear components including piping systems at nuclear generating facilities

#### **Significant Customers**

- Marathon
- ConocoPhillips
- Alstom
- Bechtel
- Fluor
- Alstom
- Kiewit
- Jacobs
- BASF

Largest supplier of fabricated piping systems in the U.S. for power and process facilities



### **Shaw Environmental & Infrastructure**





#### **Services**

- **Emergency response**
- Environmental remediation
- Infrastructure planning, engineering, construction and maintenance
- Facilities management/Military base Operations
- Environmental consulting and engineering
- Logistics
- Design-Build
- Construction
- Construction Management

#### **Significant Customers**

- U.S. Government
  - Defense
  - Energy
  - FPA
  - Homeland Security
- State/Local Government
  - Louisiana
  - Georgia
  - New York
  - Regional Authorities
- Commercial Customers
  - Waste Management
  - Honeywell

One of the largest and most experienced emergency response contractors in the U.S.



### Shaw Environmental & Infrastructure, Inc.

- Leading provider of environmental and infrastructure solutions to government and private-sector customers
- More than 7,000 employees located in more than 90 offices nationwide

### Shaw E & I Services

- Consulting/Engineering
- Construction/Remediation
- Facilities Management
- Housing Privatization
- Homeland Security
- Real Estate Restoration
- Solid Waste Management
- Sustainability Solutions



### Consulting/Engineering

- Risk analysis and management
- Site investigations and assessments
- Permitting
- Due diligence/property assessment support
- Remedial design
- Environmental health & safety consulting
- Pollution prevention/waste minimization
- Product registration
- Regulatory compliance and litigation support
- Technology development/evaluation
- Environmental information management



### Construction/Remediation

- Hazardous, toxic and radiological waste cleanup
- Decommissioning/decontamination
- Remedial systems operations and maintenance
- Water/wastewater treatment
- Civil works-related construction
- Watershed restoration
- Unexploded ordnance removal and disposal
- Chemical demilitarization



### **Facilities Management**

- Diverse range of services for the operation of large, mission-essential military and aerospace facilities
- Upgrade, streamline and manage facilities to create operational efficiencies and generate cost savings
- Logistics management
- Public works
- Maintenance and repairs
- Engineering and construction
- Design/build/operate
- Environmental and laboratory management
- Information management
- Mission support



### **Housing Privatization**

- Master planning and architectural and engineering support
- Maintenance, repair and renovation
- Financial management
- New construction
- Civil works
- Capital improvement programs
- Property management
- Asset management



### **Homeland Security**

- Leading anthrax emergency response contractor
- Nuclear/radiological, biological and chemical threat, vulnerability and risk assessment
- Weapons of mass destruction threat reduction strategies
- Facility hardening and critical infrastructure protection
- Security systems evaluation and selection
- Disaster and emergency response development
- Chemical and radiological release reporting
- Nuclear plant protection and safety programs
- Web-based emergency preparedness and response plans



### **Real Estate Restoration**

- National leader in the acquisition, restoration and redevelopment of environmentally impaired real-estate
  - Creative financing and acquisition strategies
  - Comprehensive insurance and indemnification packages
  - Environmental liabilities and restoration process management
  - Industrial sale/leasebacks
  - Transfer options for property "cleansed" of environmental liability
  - Industrial, residential, commercial, mixed-use and joint-venture redevelopments
  - Wetlands mitigation banks
  - Conservation transfers and reuse



### **Solid Waste Management**

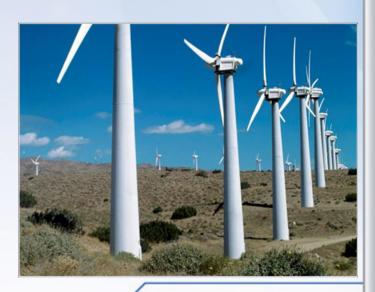
- Largest provider of services to the solid waste market
- Complete life-cycle management of solid waste
  - Site investigations
  - Permitting
  - Environmental compliance
  - Engineering
  - Design/build construction
  - Equipment fabrication and landfill products, including landfill gas treatment systems
  - Operations and maintenance
  - Landfill redevelopment



### **Sustainability Solutions**

- Program Development
- Waste Management
- Clean Energy
- Green Design/LEED
- Climate Change/Green House Gas Emission Reduction
- Environmental Markets
- Natural Resource Management







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Last Updated: 21 May 2008

# **Edward C. Mayer**

### **Professional Qualifications**

30 years of industrial plant maintenance management experience, primarily in the chemical manufacturing industry. 20 years experience in leading maintenance and engineering organizations including union represented workforces. Total maintenance and engineering budget responsibility as well as accountability for safety performance of maintenance function at an OSHA Star manufacturing plant.

Participated in more than 20 maintenance effectiveness assessments through Shaw Reliability Group, corporate maintenance excellence initiative and participation with the North American Maintenance Excellence Award program.

Currently responsible for operational management of Predictive Maintenance field services, including bid preparation, recruitment, and financial management.

# Education

Bachelor of Science, Engineering Mechanics, Lehigh University, Bethlehem, Pennsylvania, 1975

# Registrations/Certifications/Licenses

Certified Maintenance & Reliability Professional, 2006, Active, Nationwide

# **Experience and Background**

01/2006 - present

Project Manager, Stone & Webster, Baton Rouge, Louisiana

Consultation for Reliability Engineering Group in support of plant maintenance efforts.

Project management on FEMA emergency housing project

Operational management of Predictive Maintenance Field Services including bid preparation, recruitment, and finacial management.

Maintenance Assessments at customer locations

#### 09/1999 - 12/2005

Director Plant Engineering, Syngenta Crop Protection, St. Gabriel, Louisiana

Managed all Engineering and Maintenance activities at agricultural chemical plant.Responsibility for budget performance @\$35MM and staff of approximately 300 people. Administered contracts for contract maintenance organization and contract engineering staff. Oversaw capital budget that averaged about \$20MM per year.

01/1991 - 08/1999

Director Maintenance and Utilities, Ciba-Geigy Corporation, Agricultural Division, St. Gabriel, Pennsylvania

Managed all maintenance and utilities operations at agricultural chemical facility. Responsible for budget performance @\$40MM per year. Responsible for safety, cost, and reliability. Utility operations supplied plant with Steam, Cooling Water, compressed air, natural gas, and nitrogen.

#### 07/1989 - 12/1990

Site Director, Ciba-Geigy Corporation, Dyestuffs and Chemicals, Charlotte, North Carolina

Responsible for all plant operations at a textile chemical plant including a regional distribution warehouse. Responsible for consolidation project of warehousing operations including construction of 84,000 sp ft product storage warhouse with state of the art RF Order processing system.

Total staff of about 35 people.

### 06/1988 - 06/1989

Site Manager, Ciba-Geigy Corporation, Plastics and Additives, Glens Falls, New York

Repsonsible for all plant operations including production, maintenance engineering and environmental operations. Also responsible for the execution of a business exit plan including the phased shutdown and demolition of inorganic pigment plant.

Key components of closure plan included outplacement of 533 employees and demolition of 36 buildings.

#### 06/1986 - 06/1988

Maintenance Manager, Ciba-Geigy Corporation, Plastics and Additives, Gles Falls, New York

Managed maintenance at inorganic pigment plant including administering union represented work force of 126 employees and 6 unions. Negotiated contract including effects bargaining.

# 12/1982 - 06/1986

Maintenance superintendent, Ciba-Geigy Corporation, Plastic and Additives, Glens Falls, New York

Responsible for establishing maintenance planning and scheduling and preventive maintenance programs at inorganinc pigment plant. Also manged maintenance stores operation. Implemented a productivity improvement program resulting in a 10% reduction of maintenance labor requirements.

#### 11/1977 - 12/1982

Maintenance Engineer, Ciba-Geigy Corporation, Dyestuffs and Chemicals, Toms River, New Jersey

Responsible for maintenance for solvent dyestuff manufacturing building. Total budget @\$1.5MM per year. Equipment included rotary vacuum dryers, reactors, glasslined equipment, vacuum pumps, filter presses, pressure filters, and solvent distillation equipment. Experience with rubber linings, brick linings, hastelloy, and monel contruction materials.

# 06/1975 - 11/1977

Maintenance Foreman, United States Steel, Pipe Division, Fairless Hills, Pennsylvania

Supervised maintenance repair crew of union represented tradesmen. Millwrights, piefitters, welders, motor inspector electricians, and other support crafts. Rotating shift work in continuous

pipe mill.

# **Professional Affiliations**

Society for Maintenance and Reliabilty Professionals, 1999 NAME Award Board of Directors, 1997 American Society of Mechanical Engineers, Associate, 1975 138 Day Street Granby, CT 06035-1725

Tel: 860-653-4214 Cell: 617-571-5294



Consultant: Reinhard W. Maier, P.E.

**Expertise:** Power Generation Technology – Steam Generation Systems

**Project Engineering / Management / Development** 

**Plant Design & Specification** 

**Equipment & Environmental Performance Analysis** 

Mr. Maier's career spans over 35 years and includes a diversified power industry background. His experience encompasses equipment design, plant specification preparation, construction, commissioning, cost estimating, risk analysis, environmental permitting, proposal development, and project engineering & management services.

Types of project experience includes:

- Technology consultant on various coal based development projects including IGCC.
- Due diligence reviewer of biomass plants
- Project manager for development & construction of electric generation plants
- Due diligence reviewer for combined cycle and coal plants
- Boiler performance analysis based on various fuel type
- Project management of system wide upgrades for NOx compliance
- Development of plant life extension programs
- Project manager/engineer for biomass and coal plant design/specification & construction
- Execution of rehabilitation projects and fuel conversions

Mr. Maier started his career at Combustion Engineering (Alstom) as a design and applications engineer. During his tenure at CE he progressed through various positions including service engineer, project engineer, project manager and manager of aftermarket services. His experience includes all types of industrial and utility boilers, their design, installation, operation and the development of the CE life extension program.

Mr. Maier's recent biomass experience includes due diligence reviews for the Cadillac and Hillman plants in Michigan and the project feasibility study for the Mount Wachusetts Community College. The MWCC was implemented with support funding from the Massachusetts Renewal Energy Fund.

While at Combustion Engineer, Mr. Maier had extensive exposure to steam generation equipment installed at pulp and paper plants as a service and project engineer. These facilities included chemical recovery and bark boilers. Hogged fuel or bark boilers generally include a supplementary fuel such as coal or residual oil. Mr. Maier has reviewed several projects designed to convert conventional steam generators to combination biomass firing.

**Registration:** Licensed professional engineer (by examination): Connecticut

**Education:** Rensselaer Polytechnic Institute - Master of Business Administration – 1985 University of Connecticut - Bachelor of Science in Engineering - 1972

# **Professional Affiliations:**

- American Society of Mechanical Engineers
- Institute of Electrical and Electronic Engineers

Phone (225)698-6928 Fax (225) 261-9198 E-mail railteh1@bellsouth.net

# Gene R. Gilpin

Professional experience

1971 - 2000 CN/IC Railroad

Baton Rouge, LA.

I started working for the Illinois Central Railroad in October of 1971. I held various positions from 1971 – 2000, which are as follows.

- Trackman, Machine operator, Track Inspector, Track Foreman, General Foreman, Track Supervisor.
- I was Chairman of the safety board of Illinois Central for 2 years.
- I have attended Track Supervisor and Track Foreman training school.
- I have operated my present Consulting business since May of 1993.

# **Paul Farrington**

# **Professional Qualifications**

Mr. Farrington is a Professional Engineer with 36 years of experience and responsibilities that include the design, installation, and operation of pollution abatement systems for contaminated subsurface environments, as well as infrastructure facilities. His experience includes management of large and small projects, remediation system design, innovative system pilot testing, large system coordination, and system monitoring and upgrade. He is involved in the areas of regulatory compliance, permitting, and client relations and has been responsible for the oversight of more than fifty site cleanup projects funded by an insurance client. He is a technical resource to multiple project and proposal managers having worked on the development of our in situ chemical oxidation technology as well as negotiations for a marketing and materials alliance with a major chemical manufacturer. In recent years, he has become a technical lead and trainer in the Due Diligence Group performing and training staff to perform Property Condition Assessments in accordance with ASTM 2018 for real property transfers.

Much of Mr. Farrington's earlier work was related to municipal water and wastewater facilities, including treatment and pumping facility improvements, infrastructure investigations and repairs, and distribution and conveyance system expansions. He served the LEA Group of Boston as Environmental and Site Division Manager and was an Associate and Senior Environmental Engineer / Project Manager with Lombardo & Associates / Lombardo Group of Dames & Moore in Boston.

As a Project Manager, Mr. Farrington is responsible for managing the activities on multiple projects. He has managed projects under a U.S. Army Corps of Engineers (USACE) Total Environmental Restoration Contract (TERC), a Navy Remedial Action Contract (RAC), an Air Force Center for Environmental Excellence (AFCEE) Environmental Remediation and Construction (ENRAC), and presently manages an AFCEE Worldwide Environmental Remediation and Construction (WERC) Task Orders (TO) valued at approximately \$4 million. The largest of the TOs was recently awarded a Blue (excellent) rating by the AFCEE contract managers. This TO is one of four blue rated TOs out of 263 TOs in the program.

He has served as Project Manager for a hydraulic barrier installation to protect local groundwater at former agricultural chemical plant outside Buenos Aires, Argentina and managed three feasibility studies to assess remediation alternatives for an active pharmaceutical plant outside Sao Paulo, Brazil.

On a Superfund project in Indiana, Mr. Farrington was responsible for the design, installation and initial operation of a water system to serve 1,200 customers. He also served as Project Manager for a potential responsible party (PRP)-led project, which included innovative remedial system design, construction, and operations and maintenance (O&M) for a Superfund site in eastern Maine.

His responsibilities also include presentations to clients and in-house technical and management training sessions.

#### Education

Bachelor of Science, Civil Engineering, University of Rhode Island, Kingston, Rhode Island, 1971

Bachelor of Science, Civil Engineering, University of Rhode island, Kingston, Rhode Island, 1971

# **Additional Training/Continuing Education**

Property Condition Assessment, MGI management Institute, 2005

# Registrations/Certifications/Licenses

Professional Engineer, Civil, 1987, 5043, Active, Rhode Island, 06/2009

Professional Engineer, Civil, 1976, 10348, Active, Maryland, 04/2009

Professional Engineer, Civil, 1983, 7759, Active, Maine, 12/2008

Professional Engineer, Civil, 1993, 19300230, Active, Indiana, 07/2008

Professional Engineer, Civil, 1986, 32619, Active, Massachusetts, 06/2008

Professional Engineer, 1976, 22900, Active, New Jersey, 04/2008

Professional Engineer, Civil, 1976, 9041, Active, Virginia, 04/2008

Professional Engineer, Civil, 1985, 0622421, Active, New York, 03/2008

Professional Engineer, Civil, 1976, 024366, Active, Pennsylvania, 09/2007

# **Experience and Background**

05/2002 - Present

Senior Project Manager, Shaw Environmental & Infrastructure, Inc., Hopkinton, Massachusetts

Project Manager, Remediation Construction Project, Air Force CEE, NY Managed construction of groundwater recovery and transportation systems at former Strategic Air Command (SAC) base in upstate New York as task orders under AFCEE ENRAC and WERC contracts. Work includes horizontal directional drilling, three slurry trenches, recovery wells, gravity pipelines, storm drain repairs and replacement, silt removal in ponds and pumping station installation.

Technical Support, Multiple Projects, In-Situ Chemical Oxidation, Multiple Customers, Multiple States

Provided design and O&M support in the development of innovative use of permanganates for oxidation of volatile organic chemicals (VOCs) in the subsurface including early work on fractured bedrock sites and sites using recirculation of oxidants and groundwater. Working with Shaw corporate procurement team developed innovative pricing and marketing alliance with largest U.S. supplier of permanganates. Provided design and technical management of other insitu treatment system using reducing chemicals to rapidly degrade VOCs in the subsurface environment.

#### 10/1991 - 05/2002

Senior Consultant, Groundwater Technology / Fluor Daniel / IT, Norwood, Massachusetts

Project Manager, Remediation System Design Projects, Various Naval Facilities, US Navy NEESA RAC Contract, VA, MD

Managed seven service delivery orders under this contract including development of estimates, development of pilot test systems, and installation of pilot test and full-scale systems for the

remediation of petroleum and other lubricants in the subsurface. Project sites include the Naval Academy, Annapolis, MD; Naval Supply Center, Yorktown, VA; Armed Forces Staff College, Norfolk, VA; and the pier area of the Naval Base, Norfolk, VA. The projects at the Naval Supply Center Fuel Annex included a pilot study of the effectiveness of steam injection on the removal of weathered Navy Special Fuel Oil from a dense sandy soil and design for the cleaning and demolition of eight 90,000 barrel concrete underground fuel storage tanks and associated pumping and transmission facilities. The projects at the Norfolk Naval Base involve the recovery of fuel and lubricants from the subsurface immediately adjacent to the active piers and supply points on the waterfront of reportedly the busiest Naval facility in the world.

# Project Manager, Remediation, Superfund Site, ME

Managed PRP-led site remediation in accordance with all Maine Department of Environmental Protection (DEP) and U.S. Environmental Protection Agency (EPA) requirements. The remediation system was constructed and successfully operated for groundwater recovery and treatment, hot air injection to the soil, soil vapor extraction, and vapor treatment. Effluent discharge requirements and the time available for the work were extremely critical and the local public was deeply involved in the project. Changing the groundwater treatment to an innovative and very successful in-situ chemical oxidation process led to elimination of O&M of the groundwater treatment system.

# O&M Activities, Superfund Sites, MA

Developed startup and O&M plans; managed startup and operator training; and managed facility operation as a subcontractor for Superfund site with treatment facility construction and operation in the control of USACE. Managed operator training and operation and maintenance of a second USACE Superfund site.

Remediation and O&M, Underground Storage Tank (UST) Sites, MI, OH, IN Project activities included the preparation of remedial action plans, detailed system designs, construction engineering, and O&M support for groundwater and soil remediation systems at UST sites in three Midwestern states. As acting Midwest District Engineer, led development of design standardization and standardization of equipment for small remediation sites.

# Groundwater Remediation, Industrial Site, IN

Developed scope of work; project cost estimating; preliminary and final design; permitting; state, county and local government coordination; and installation of an alternate drinking water system to serve 1,200 homes and businesses in the potentially impacted area of a Superfund site associated with a large railroad yard spill cleanup. Project involved extensive work with the City of Elkhart Public Works Department.

Construction Engineering and System Start-Up, Industrial Manufacturing Facility, IN Provided construction engineering and start-up services for a large industrial soil and groundwater remediation project involving chlorinated solvents. The remediation systems designed for the site applied multiple technologies that included air sparging and soil venting systems for contaminated soil, and groundwater recovery and treatment by air stripping for contaminated water. Parts of the sparge and vent system were installed in and beneath operating industrial areas with heavy machinery and traffic.

06/1988 - 10/1991

Project Manager / Environmental & Site Division Manager, LEA Group, Boston, Massachusetts

Managed 30-person division performing water, wastewater, solid waste, commercial and public site design projects. Completed design and construction services for 28,000-gallon wastewater treatment facility and start-up of 45,000-gallon per day (gpd) septage treatment facility. Supervised several municipal infiltration/inflow studies and implementation of cost-effective wastewater collection system repairs and modifications resulting from those studies. Supervised design of water and wastewater system expansions and commercial site developments. Supervised utility relocation design projects related to Boston's Big Dig. Supervised studies and designs of municipal landfill operations and modifications including cap material selections, operation revisions, expansions, and permit compliance issues.

### 06/1984 - 06/1988

Senior Environmental Engineer and Project Manager, Lombardo & Assoc., Boston, Massachusetts

Prepared facilities plan and completed engineering design and construction engineering services on 0.5 million gallon a day (mgd) innovative wastewater collection and treatment facilities serving 2,300 homes for Mayo Peninsula, Anne Arundel County, Maryland. Facilities designed and constructed included a treatment facility utilizing constructed wetlands; pumping stations and pressure sewers; small diameter gravity collections systems; shallow river outfall in Chesapeake Bay; operations building; and computer-based radio telemetry systems for the Anne Arundel County Department of Utilities.

Provided construction-engineering services for an innovative and alternative small diameter septic tank effluent collection sewerage system serving the central business district and surrounding residential areas of Woodstock, New York.

#### **Professional Affiliations**

SAME, member, 1995 ASCE, Member, 1975

#### **Publications/Presentations**

Farrington, Smith and Moody, Full Scale Sodium Permanganate Treatment of Chlorinated Solvents at a Fractured Bedrock Aquifer Site in Central Texas, European Conference on Oxidation & Reduction Technologies, Gottingen, Germany, 2006

# Nathan L. Newell

### **Professional Qualifications**

Mr. Newell has more than 20 years of diverse engineering practice, including over 13 years of environmental consulting experience. He has worked directly for various public agencies, including State of California San Francisco Bay Conservation and Development Commission (BCDC), the State of Washington Thurston Conservation District, the US Forest Service and CALTRANS California Department of Transportation. Mr. Newell has worked in various capacities as a civil, structural and environmental engineer for the State of California for nearly 10 years. In addition, he has worked for other environmental consulting companies to provide engineering and environmental services mostly to the City of Woodland, California Department of Fish and Game, the El Dorado Irrigation District, the U.S. Forest Service and Trout Unlimited. He has worked as a resource and permitting agency Senior Engineer Liaison and Permit Analyst (BCDC). In this capacity he coordinated directly with U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Fish and Game, U.S. Army Corp of Engineers, State Water Resources Control Board, California Regional Water Quality Control Board and EPA for all projects within their jurisdiction. More recently he has worked with the South Florida Water Management District to plan and design Wetland Stormwater Treatment Areas (STAs) as part of the Everglades Restoration Program. He has experience managing teams to perform wetland design and restoration, stream restoration projects, stream surveys and mapping, wetland delineation, biological inventory, threatened and endangered species surveys, threatened species habitat restoration and non-native species removal, timber harvesting restoration projects and design and construction of recreational facilities, bike trails and public access improvements.

In one of his more prominent project involvements, Mr. Newell wrote the BCDC permit to authorize the San Francisco-Oakland Bay Bridge Replacement Project. This multi-billion dollar project replaces a 10-lane double-decker cantilevered steel bridge with a new concrete reinforced self-anchored suspension bridge and is the main arterial which links the two cities. Extensive coordination between BCDC and all city, county, state and federal agencies was needed for this project. Threatened and endangered species (and their habitat) were affected by this project for which continuous agency involvement was vital and mitigation requirements were unique particularly pertaining to eel grass restoration. In addition, Mr. Newell was Project Manager to manage staff that provided environmental compliance and consulting services to the City of Woodland for construction and operation of the South Urban Regional Storm Drainage Facilities Project (\$8.5 Million), the Spring Lake Development Community Facilities District Project (\$13.5 Million) and the City On-Call Inspection Services for SWPPP Inspection and Environmental Compliance in California.

Mr. Newell has extensive knowledge of many Federal, State and local environmental compliance requirements in Florida, California, Oregon and Washington State. His extensive environmental experience is also invaluable on projects with sensitive habitat, nature preserves or other regulated areas. He has worked as a civil, structural and environmental design engineer, Resident Engineer and Project Manager on more than a dozen projects, ranging in size from multi-Billion dollar wetland restoration and bridge projects, to smaller vernal pool, seasonal marshland restoration and wetland mitigation projects. He is well versed in many aspects of infrastructure

construction such as new development infrastructure projects, bridges, roadways, storm systems, buildings, environmentally sensitive areas, and other civil related work. Mr. Newell also has extensive experience in disaster relief such as earthquake retrofitting after the Loma Prieta Earthquake (1989) and the El Niño Storm Damage of 1997. He was involved in emergency permitting authorization for several bridge projects throughout California.

#### Education

Postgraduate Studies, Environmental & Hydraulics, Humboldt State University, Arcata, California, 1995

Bachelor of Engineering, Environmental, Civil and Structural, University of Florida Gators, Gainesville, Florida, 1988

# **Additional Training/Continuing Education**

Environmentally Sensitive Streambank Stablization, IECA; Orlando, FL, 2005

Innovative Restoration: Applied Processes & Technology for Stabilizing Streambank & Restoring Rivers, IECA; Orlando, FL, 2005

Natural Stream Channel Design, Interfluve; Bozeman, MT, 1998

Aquatic Ecosystem Monitoring & Evaluation (NR16), USFS; Portland, OR, 1997

Stream Habitat Inventory Training for Watershed Personnel (NR9), USFS; Portland, OR, 1997

Stream & Watershed Restoration Design & Implementation, USFS; Portland, OR, 1997

Pacific Northwest Botany and Plant Community Surveys, USFS; Malheur National Forest, 1996

River Morphology, HSU; Arcata, CA, 1995

# Registrations/Certifications/Licenses

Professional Engineer, Civil, 1996, 33586, Active, Washington, 09/2009 Professional Engineer, Civil, 2007, 67138, Active, Florida, 02/2009 Associate Environmental Professional (AEP), 2007, Associate Member, Active, Florida, 12/2008 Professional Engineer, Civil, 1995, 17596, Active, Oregon, 12/2008 Professional Engineer, Civil, 1994, C53000, Active, California, 12/2008

# **Experience and Background**

07/2008 - Present

Senior Project Manager/Engineering Manager, Shaw Environmental & Infrastructure, Inc., Civil & Environmental, Palm Beach Gardens, Florida

Senior Project Manager for large environmental assessment and restoration projects, civil engineering restoration projects and regulatory compliance. Construction manager for large environmental, civil, structural and bridge construction projects. Environmental, civil and structural designer for habitat restoration projects, stormwater treatment ponds/reservoirs using natural bioengineering processes, stream and river restoration projects, wetland design and mitigation banking.

12/2005 - 06/2008

Project Manager/Senior Engineering & Environmental Compliance Manager, URS, Inc., Environmental, Boca Raton, Florida

SFWMD ECART, Compartment B and Compartment C Projects T&E Panther Surveys

Project Manager/Environmental Compliance Manager

As Project Manager for Florida panther Surveys, Mr. Newell prepared environmental reports for the Compartment B, C and ECART Projects, (\$250+ Million) which will create approximately 15,000 acres of impoundment and wetlands to treat phosphorous laden agricultural runoff. Mr. Newell managed a project team of 2 environmental scientists to provide Threatened and Endangered Species Survey and Reports for projects within the Everglades Protection Area. He coordinated with all applicable resource agencies including USACE, USFWS, EPA, FWC, FDEP and SFWMD. T&E species of concern included the Florida panther. This project was successfully completed in June 2008.

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SFWMD ECART, Compartment B and Compartment C Projects T&E Wildlife Surveys and Wetland Evaluation Reports

Project Manager/Environmental Compliance Manager

As Project Manager for Wildlife Surveys and Wetland Evaluation Reports, Mr. Newell prepared environmental reports for the Compartment B, C and ECART Projects. Mr. Newell managed a project team of 7 environmental scientists to provide Threatened and Endangered Species and Wetland Evaluation Reports for projects within the Everglades Protection Area. He coordinated with all applicable resource agencies including USACE, USFWS, EPA, FWC, FDEP and SFWMD. T&E species of concern included, but were not limited to, Crested Cara Cara, Florida panther, Black Bear, Manatee, Bald Eagle, Wood Stork, Blue Heron, Tri-colored Heron, Burrowing Owl, Snail Kite, American alligator, Gopher Tortoise, and Okeechobee Gourd. In addition, Mr. Newell was responsible for conducting wetland evaluation and impacts assessment for project areas. Surveys were conducted using helicopter, swamp buggy, airboat and pedestrian transects. Established USFWS and USACE survey protocols were mostly utilized for this project. Mr. Newell continued to provide ongoing support and technical assistance during EIS and design processes. This project was successfully completed in January 2008.

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SFWMD Compartment C Buildout Stormwater Treatment Area (STA) Basis of Design Report and Preliminary/Intermediate/Final Design Services

Senior Project Managing Engineer/Project Manager

Mr. Newell served as Senior Project Managing Engineer and a Project Manager for the Compartment C Buildout Project Basis of Design Report (BODR) and the Preliminary/Intermediate/Final Design services to construct 8,800 acres of impoundment and treatment wetlands (Stormwater Treatment Area - STA) to treat phosphorous for agricultural runoff (\$150+ Million) within the Everglades. Mr. Newell recently submitted the Final Design Package for the Compartment C Buildout and the BODR was completed in June 2008. Other related projects he was involved with include STA 5-3 and 6-2 (\$40 Million) construction support, RFI and RFP coordination, Design Change Notifications (DCN) and BODR finalization. Mr. Newell designed cultural resource protection sites for STA 6-2 and was extensively involved with proposed mitigation and protection of existing sites within the Compartment C Buildout area. He has worked as task manager for all Compartment C preliminary surveys, geotechnical, and watershed studies. He is familiar with all permit and regulatory agency requirements for this project. Mr. Newell managed staff to coordinate the project team for preparation of all engineering documents and all other deliverables related to this project.

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# SFWMD Compartment C Buildout STA Design Services

Senior Project Managing Engineer/Project Manager

Mr. Newell previously worked as the Senior Project Managing Engineer and Project Manager Design for the Everglades Compartment C Buildout Project (\$150+ Million) as described above. Mr. Newell managed a staff of over 10 engineers and environmental scientists to design wetland treatment areas (STAs), a 1600 cfs inflow pump station, small pump stations, inflow and outflow structures, bridges, canals, levees, and civil works. Mr. Newell served as Engineer of Record for this Project which is estimated for completion in 2008 and construction completion estimated for 2011.

# SFWMD CCCP Central Region Project

### **Project Engineer**

As Project Engineer, Mr. Newell performed surveys of SFWMD canals (approximately 100 miles) throughout the central region in Hendry, Palm Beach, Broward and Dade counties. Survey work involved reconnaissance and evaluation of canal erosion, debris accumulation, drainage structures inventory, and general site evaluation for assessment of repairs and improvements. Mr. Newell served as primary hydrologist for canal survey work and helped in preparation of all deliverables for this project.

## 05/2004 - 11/2005

Project Manager/Resident Engineer/Environmental Compliance Manager, Salaber Associates, Construction Management, Woodland, California

City of Woodland, California Construction and Environmental Services, South Urban Growth/Spring Lake Development Projects

Project Manager/Resident Engineer/Environmental Compliance Manager
As Project Manager and Resident Engineer, Mr. Newell was responsible for the contract
administration and oversight of an \$8.5 Million storm drainage facilities project which included
retention/detention ponds, eight (8) RCB culverts, drainage canals, operating roads, public access
parking lot, utilities and water service for the City of Woodland. Mr. Newell also managed
contract inspection, administration and environmental compliance services for the construction of
a \$13.5 Million dollar sanitary sewer, water supply and street improvement project for the Spring
Lake Development Community Facilities District in Woodland, California. This project included
inspection of VCP and RCP sanitary sewer collectors, new water service and street improvements
such as rough/finish grading, paving, curb/gutter/sidewalks/bike paths, street lights, signalized
intersections, sound-walls and landscaping.

Project Manager/Environmental Compliance Manager & Liaison

Mr. Newell was acting as the City Environmental Compliance Manager for this project (and other

construction projects throughout the City of Woodland) to ensure groundwater dewatering operations met SWRCB General Permit requirements. Other duties were to perform SWPPP inspections and verify basin plan standards and discharge requirements were in compliance, and, other mitigation requirements and measures were met. Mr. Newell served as Environmental Liaison between the City and many other regulatory agencies such as SWRCB, RWQCB, California Department of Fish and Game, and U.S. Army Corps of Engineers for environmental and SWPPP compliance.

#### 03/2003 - 05/2004

Senior Engineer, ECORP Consulting, Environmental Restoration, Roseville, California

# Senior Engineer/Resident Engineer

Mr. Newell worked for ECORP Consulting an environmental consulting firm for environmental restoration and assessment projects throughout the State of California. As a Senior Engineer and Resident Engineer with this firm, Mr. Newell worked on various environmental restoration projects. He prepared construction drawings and specifications for over 55 acres of seasonal marsh and vernal pool creation for 800 acres of mitigation bank. He also worked on numerous projects involving biological inventory, comprehensive stream and habitat surveys, water quality assessment, wetland delineation, threatened and endangered species surveys, and exotic nonnative species inventory and removal. Mr. Newell prepared grading permit applications and dredging permit applications for submittal to State and Federal agencies. He also performed stream cross section surveys and hydrological analysis for PG&E, Squaw Valley Ski Resort and El Dorado Irrigation District. Mr. Newell worked as a Resident Engineer for construction management of wetland creation and construction projects as well as with environmental/SWPPP compliance and erosion control for large housing development projects.

### 10/1997 - 01/2003

Senior Engineer/Resident Engineer, State of California; BCDC and CALTRANS(Dept. of Transportation), Regulatory Compliance/Bridge Dept., San Francisco, California

State of California San Francisco Bay Conservation & Development Commission (BCDC), Regulatory, Resource & Permitting Agency

# Senior Engineer/Staff Permit Analyst

As a Senior Engineer, Mr. Newell was the lead Senior Engineer and Staff Permit Analyst primarily on the San Francisco-Oakland Bay Bridge Replacement Project. As the BCDC Senior Engineer, he provided engineering and technical support for all other major projects, including 5 Bay toll bridges, various other bridges, highways, rock slope protection work and other projects within BCDC jurisdiction. He supervised staff and was the primary liaison to the California Department of Transportation (CALTRANS) District 4 Construction /Environmental Division to provide support and analysis on all Department of Transportation projects within BCDC jurisdiction. Mr. Newell worked with several municipalities such as the S.F. Public Transportation Agency (MUNI), San Francisco Airport Authority (SFO), City of San Francisco, Port of Oakland, Port of San Francisco, and various other agencies requiring permit authorization. He reviewed and approved several unique wetland and eel-grass restoration and relocation projects along with various other environmental mitigation and compensation proposals. In addition, he performed engineering plan review and approval for wetland creation and restoration projects. Mr. Newell frequently performed public speaking engagements including: San Francisco/Oakland Bay Bridge Replacement Project Permit, several other presentations at BCDC (commission) hearings and various other formal permit authorization commission votes.

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# State of California (CALTRANS) Dept. of Transportation

### Resident Engineer/Associate Design & Construction Engineer

Mr. Newell was the Resident Engineer for several storm damage repair projects in northern California which included a new post-tensioned concrete bridge viaduct, large tie-back soldier pile retaining wall structures, and earthquake retrofitting of large steel truss bridge structures. Mr. Newell reviewed and approved Contractor SWPPP and other proposed environmental compliance measures while working closely with the state and federal resource and permitting agencies on the above listed projects. Mr. Newell worked as an associate construction engineer on several high profile projects such as the SFO Bay Bridge Seismic Retrofit in Oakland, the Vincent Thomas Suspension Bridge Seismic Retrofit in Los Angeles and the Central Freeway Viaduct (US 101) Seismic Retrofit in San Francisco. Mr. Newell worked as a structural design engineer for various new bridge design and seismic retrofit design projects in Los Angeles, San Luis Obispo and Colfax, California. Mr. Newell successfully completed the CALTRANS Bridge Design coursework and received his certification in 1992.

# 08/1996 - 10/1997

Staff Engineer, Thurston Conservation District, Environmental Regulation and Permits, Olympia, Washington

# Staff Engineer

While working for public agencies such as the Thurston Conservation District in Thurston County, he was the Staff Engineer and Hydrologist responsible for timber harvesting projects and various environmental restoration projects. Mr. Newell was the Staff Engineer responsible for environmental restoration projects. His duties included construction surveying, sampling and testing construction materials, preparation of environmental design plans, and contract administration. Mr. Newell performed several project surveys which included proposed layouts and geometrics utilizing a total station technology. He prepared bid documents and engineering specifications. Mr. Newell was also in charge of tracking the TCD engineering budget and equipment purchasing.

#### 05/1995 - 08/1996

District Hydrologist (GS-9), US Forest Service; Malheur National Forest, Long Creek Ranger District, Environmental Compliance, John Day, Oregon

### District Hydrologist/Resident Engineer

While Mr. Newell worked for the US Forest Service Malheur National Forest, he was the District Hydrologist for the Long Creek Ranger District responsible for timber harvesting projects and various environmental restoration projects. He was responsible for stream and habitat inventory, fish surveys, stream mapping and timber harvesting mitigation projects. His work was performed in coordination with biologists, silviculturists, botanists and landscape architects. He also managed of the Stream Temperature Monitoring and Water Quality Program. Mr. Newell inventoried and compiled comprehensive stream survey for over two dozen water courses while working for the Long Creek Ranger District. Mr. Newell also served as Resident Engineer for several recreational use improvement projects which included retaining walls, pedestrian bridges and water access facilities.

# Structural Engineer, Ben C. Gerwick, Inc., Structural Design, San Francisco, California

# Structural Engineer

Mr. Newell served as a structural design engineer for several seismic retrofit projects including various bridges throughout the Presidio Military Reserve and the Presidio Viaduct (US 101) the main southern access point to the Golden Gate Bridge. Mr. Newell was involved with computer modelling (SAP) and structural design to retrofit the Presidio Viaduct which was a steel truss bridge supported on concrete pedestals and piling foundation. A major design consideration was to maintain the aesthetic qualities of the viaduct which was listed as a state historic monument. Mr. Newell worked with a design squad to design the piling and concrete cap foundation and colums supports for a cable stay bridge in Hong Kong. Design standards implemented for this project included British Design Codes with loading criteria which included seismic, typhoon and ship impact.

#### 08/1988 - 02/1993

Associate Bridge Engineer, State of California (CALTRANS) Dept. of Transportation, Structure Construction & Design, Sacramento, California

# Associate Bridge Engineer

Mr. Newell worked as an Associate Bridge Engineer on bridge construction and design projects throughout the State of California. Mr. Newell worked on various bridge construction and widening projects (District 4) throughout the San Francisco Bay Area. Mr. Newell worked as a bridge design engineer for various seismic retrofitting bridge projects and new bridge design contract plans and specifications. Mr. Newell worked for the Department of Special Analysis which used elastic finite element analysis (STRUDL) and plastic push-over analysis computer models for complex systems involving bridge and viaduct seismic retrofits. He was involved with the stability analysis of the Southern Freeway Viaduct (I-280) double-deck reinforced concrete freeway corridor similar to the collapsed Cypress Freeway Viaduct in Oakland, California. Mr. Newell successfully completed the CALTRANS Division of Structures Bridge Design Coursework and certification. He was also an active member of the OSC computer committee.

#### 05/1987 - 08/1987

Junior Engineer, Statens Vegvesen; Norwegian Department of Transportation, Freeway Construction, Trondheim, Norway

# Junior Engineer

Mr. Newell was involved with the construction of a one-mile long tunnel construction project as part of the Trondheim East-West Freeway Expansion Project. Mr. Newell worked as a construction inspector for contract compliance along with other responsibilities to map out bedrock profiles and route geometric surveys.

#### 05/1984 - 08/1984

Junior Surveyor, Florida Dept. of Transportation, Surveys, Bartow, Florida

# Junior Surveyor

Mr. Newell worked as a surveyor for various road improvement projects and drainage mapping throughout central Florida. Mr. Newell gained vast experience in the use of surveying equipment such as the survey level, theodolite, chain as well as survey records necessary for all projects conducted.

# **Professional Affiliations**

Florida Association of Environmental Professionals (FAEP), Associate, 2007 California Society for Ecological Restoration (SERCAL), Associate, 2003 International Association for the Exchange of Students in Technical Experience, Associate, 1987 American Society of Civil Engineers, Associate, Vice President, 1984

# SAL BIBONA President

A management consultant and licensed engineer with diversified international and domestic experience in fleet management, transportation, logistics, management and operations reviews, feasibility studies, economics, market research and other areas. Assignments included work for industry, utilities, government and financial institutions.

#### PROFESSIONAL EXPERIENCE

| 1995 – present | Chatham Consulting, Inc. President                                    |
|----------------|-----------------------------------------------------------------------|
| 1976 – 1995    | Stone & Webster Management Consultants, Inc. Assistant Vice President |
| 1971 – 1976    | URS/Coverdale & Colpitts, Inc.<br>Project Manager                     |
| 1970 – 1971    | New Jersey Department of Transportation Assistant Engineer            |

# **CONSULTING EXPERIENCE**

# Fleet Management

Responsible for leading fleet management consulting practice area and providing consulting assistance to both public and private sector fleet operations ranging in size from 50 vehicles to 20,000 in the United States, Canada and abroad. Have conducted extensive research into best fleet management practices of utility and government fleets. Have made numerous presentations on fleet management issues at national conferences.

#### **Assistance Areas**

Benchmarking studies Operations Assessment
Expert Testimony Strategic Planning
Fleet Condition Assessments Surveys

Implementation Assistance Training Seminars

# **Study Areas**

Alternate Fuel Studies Fleet Information Systems Policies & Procedures **Benchmarking Studies** Fleet Size and Mix Requirements Preventive Maintenance Programs Centralization Analyzes In-house vs. Contract maintenance Privatization and Outsourcing Charge Back Rate Studies Maintenance Facility Studies Purchase vs. Lease of equipment Competitive Assessments MRU Analysis **Shop Operations** Financial Management Organization and Staffing Needs **Spare Parts Management Studies** Fleet Acquisition and Replacement Performance Measurement Systems Training Needs and Programs

Chatham Consulting, Inc. 1 of 5

# **Representative Fleet Client Listing (Partial)**

Private Sector Public Sector

AGL Resources, Inc. Atlanta, City of American Electric Power BC Hydro

Aramco Services Co./SCECO- East Brookhaven National Laboratory
ATCO Electric Chelan County Public Utility District

Baltimore Gas & Electric Company Clatsop County

Central and Southwest Services, Inc. Colorado Springs, City of

Consumers Power Company Forysth County
Duquesne Light Company Houston, City of

Florida Power & Light Company

New York City Department of Correction

Georgia Power Company

New York City Dept. of Parks & Recreation

Houston Lighting & Power Company New York Power Authority

IMC-Agrico Company New York State Dept. of Correctional Serv.

KeySpan Energy Ohio Department of Transportation

National Grid, USA Philadelphia Gas Works

Nova Gas Transmission, Ltd. Reading Municipal Light Department

Nova Scotia Power, Ltd.

OG&E Electric Services

Peoples Gas Light and Coke Company

Potomac Electric Power Company

Southern California Gas Company

Salt River Project

Snohomish County

Springfield, City of

State of Georgia

Town of Reading

Siemens Medical Systems Tualatin Valley Water District

Virginia Power Company Woodbury, City of

# **Transportation and Logistics**

Planned, directed, and contributed to an extensive array of transportation assignments for mana gement. Studies have encompassed virtually every public and private mode of transportation:

## **Modes Studied**

Airlines and Airports Trucking

Conveyor Systems Toll Bridges, Roads, and Tunnels

Inter-City Bus Operations Transit Systems
Rail Waterborne Systems

Assignments have been in the following areas:

#### **Assignment Areas**

Capital Programming Mine-Mouth Transportation Studies
Coal Transportation Studies Modeling of Transportation Systems
Distribution studies Railroad Electrification Studies
Economic Analyses Transportation Planning

Economic Analyses Transportation Planning Logistics Analyses Transportation Rates

Financial Feasibility Studies Travel Surveys and Demand Forecasts
Management Audits Valuations of Transportation Systems

Market Surveys and Analyses Warehousing and Distribution

Chatham Consulting, Inc. 2 of 5

#### PRIOR EXPERIENCE

### **Financial Studies**

Have consulted to bond counselors, financial advisors, and investment bankers regarding financial feasibility studies for over \$200 million of proposed transportation projects. Analyzed Alaskan international airport system including: projection of traffic and revenues, review of rate structures, impact of trans-Alaskan pipeline projects, and recommendations regarding management and administration of the airport.

Contributed to an operational and financial analysis of a major airline involved in multi-million dollar litigation against an aircraft manufacturer.

# **Transportation Planning**

Conducted several transportation planning assignments, including: origin and destination surveys, traffic impact, travel demand forecasts, capital improvement programs, socioeconomic studies, and transportation systems analysis.

#### Other

Contributed to a broad array of: facility planning, site location, market research and valuation studies.

# **EDUCATION**

Northwestern University, MS, 1970 Newark College of Engineering, BS, Civil Engineering, *Magna cum laude, 1969* 

Continuing education courses in:

- Computer networks
- Computerized maintenance management systems,
- Data validation techniques,
- Failure investigation and forensic engineering basics,
- Hazardous waste,
- Parking lot demand, traffic impact and site access,
- Quality improvement process,
- Reliability engineering fundamentals.

#### PROFESSIONAL REGISTRATIONS

Professional Engineer - New York and New Jersey

# **PROFESSIONAL AFFILIATIONS**

American Public Works Association American Society of Civil Engineers Chi Epsilon National Association of Fleet Administrators Tau Beta Pi

Transportation Research Board

Chatham Consulting, Inc. 3 of 5

#### **PUBLICATIONS AND PRESENTATIONS**

"Four Ways To Boost Fleet Operations Accountability, *Government Fleet Management*, May/June 2007.

"Striving For Continuous Improvement," presentation at CCG Systems 2006 Conference For Fleet Professionals, Norfolk, VA, October 2006.

"Fleet Benchmarking," presentation at CASCOR Client & Manufacturer Conference, Philadelphia, PA, September 2006.

"Vehicle Ratios and Law Enforcement," presentation at National Association of Fleet Administrator's Fleet Management Institute and Law Enforcement Group, Dallas-Fort Worth, TX, April 2005.

Fleet Maintenance Management Seminar, Institute for Professional Development, New Brunswick, NJ, September 19, 2003

"Cost-Effective Fleet Replacement Program," Fleet Financials, January/February 2003.

"How to Develop A Cost-Effective Vehicle Replacement Policy," presentation at Fleet Expo 2002, Meadowlands, NJ, October 2002.

"Trends in Utility Fleet Staffing," presentation at Electric Utility Fleet Managers Conference, Williamsburg, VA, June 2002.

"Developing A Commercial Charge Back Rate," Utility Fleet Management, June 2002.

"NAFA Fleet Management Staffing Guide," contributor to National Association of Fleet Administrators, May, 2002.

"Benchmarking Techniques Help You Plan for The Future," presentation at Fleet Management Workshop of the Western Energy Institute's Energy Industry Symposium in Vancouver, BC, March 2002.

"How to Determine Fleet Staffing Needs," presentation at Fleet Expo 2001, Rosemont, IL, Sept. 2001.

"Developing A Commercial Charge Back Rate," presentation at Electric Utility Fleet Managers Conference, Williamsburg, VA, June 2001.

"Benchmarking Fleet Operations," presentation at Vehicle Maintenance Management Conference, University of Washington, Seattle, WA, March 2001.

"Estimating Maintenance Work," Light & Medium Truck, November 2000.

"MRU Analysis and Other Vehicle Equivalency Techniques," *Utility Fleet Management*, October 2000.

"Benchmarking Bottom Line Fleet Costs Results," presentation at Electric Utility Fleet Managers Conference, Williamsburg, VA, June 2000.

Chatham Consulting, Inc. 4 of 5

"Maintenance Resource Factors: The Right Equation," presentation at National Association of Fleet Administrators: Fleet Management Institute, Nashville, TN, April 2000.

"Benchmarking Fleet Operations," presentation at Canadian Fleet Forum, Edmonton, AB, April, 1999.

"Benchmarking Fleet Operations," presentation at Electric Utility Fleet Managers Conference, Williamsburg, VA, June, 1998.

"Outsourcing & Developing Alliances in Fleet Management," *Fleet Financials*, Fourth Quarter, 1996.

"Vehicle Replacement Strategies", paper presented at American Gas Association, Operations Conference, Montreal, Quebec, May 1996.

"Economic Life Cycle Analysis," *Utility Fleet Management*, June 1995.

"MRU Analysis: An Introduction," presentation at American Gas Association, Las Vegas, NV, May 1995.

"Some Thoughts on Fleet Vehicle and Equipment Replacement Criteria", presentation to Canadian Utility Fleet Forum, Canadian Electric Association, Toronto, Ontario, March 1994.

"Benchmarking 101: A Basic Primer," Utility Fleet Management, July 1993.

"The Competitive Environment and Fleet Management", paper presented at American Gas Association, Distribution/Transmission Conference, Orlando, Florida, May 1993.

"How to Survive a Fleet Management Audit," NAFA Fleet Executive, April 1993.

"How Does Your Fleet Measure Up?" Utility Fleet Management, September 1991.

"Performance Measurement & Maintenance Repair Unit Analysis," presentation to Electric Utility Fleet Managers Conference, Williamsburg, VA, June 1991.

"Fifth Utility Fleet Management Survey," presentation to Southeastern Electric Exchange Conference, Atlanta, GA, May 1990.

"Maintenance and Repair Unit Analysis: Benefits and Applications," paper presented at American Gas Association, Distribution/Transmission Conference, New Orleans, LA, May, 1989.

"Performance Measurement: Myths and Realities," *Electric Utility Fleet Management* Dec./Jan. 1987.

"Third Utility Fleet Management Survey," paper presented at American Gas Association Distribution Conference, Houston, Texas, May 1983.

# KENNETH L. KALEN, P.E. Senior Consultant

A fleet management consultant and automotive engineer who has given expert testimony in vehicle design and maintenance. Brings special expertise regarding vehicle and mounted equipment specifications; maintenance practices; regulatory, safety and ANSI compliance; shop evaluations; accident investigations; and, training programs.

#### PROFESSIONAL EXPERIENCE

# CITY OF FORT LAUDERDALE, Fort Lauderdale, FL (2004-Present) Automotive and Equipment Engineer

Directs and prepares specifications for all new vehicles purchased by the City for their 1400 vehicle fleet. Provides coordination between vehicle maintenance personnel and equipment manufacturers to resolve vehicle problems of an engineering nature. Works closely with using departments to consult on their vehicle needs to fulfill their specific requirements.

# Calvary Chapel Fort Lauderdale, Fort Lauderdale, FL: (1999-2004) Administrative Coordinator

Responsible for oversight of Men's and Small Group ministries and for planning and implementing Leadership and Men's conferences. Planned and managed a complete re-organization of the Small Group ministry

# Kalen Fleet Management Inc., Lighthouse Point, FL: (1996-2001) President

- Provided management services for Electric Vehicle program at Florida Power & Light.
- Performed engineering study for Florida Power Corp., St. Petersburg, Florida and Virginia Electric Power Company, Richmond, Virginia, and City of Woodbury, MN.
- Provided training to technicians of six electric utility companies serving the Caribbean Islands.
- Developed utility vehicle specifications for Jamaica Public Service Company.
- Performed vehicle condition assessment, maintenance facility review, and application/specification review for 600-vehicle phosphate mining company in Lakeland, FL.
- Provided third party expert information in legal cases for attorneys.

# Florida Power & Light Company, West Palm Beach, FL: 1980-1996 Superintendent Fleet Maintenance (1990 – 1996)

Managed staff of 19 charged with overseeing maintenance and acquisition for fleet of over 700 vehicles in Palm Beach, Martin, Okeechobee and Indian River Counties. Acted as internal leasing company representative for 15 service centers. Determined fleet size, correct mix of equipment, required replacements and/or additions, and assured required preventive maintenance and repairs were completed in a timely manner. At beginning of assignment 95% of maintenance was done by outside, contract garages. During 48 months, corporation built three garages and four work areas for vehicle PM and repair. Directed pilot corporate repair facility located in a service center which provided first ever on-site maintenance.

- Initiated company trend to replace manual slack adjusters with automatic slack adjusters on trucks that reduced labor time and expenditure by 25%.
- Began division-wide program of using retread tires that resulted in 50% cost per mile reduction against purchase of new tires.

- Directed rental acquisition and vehicle maintenance activities for restoration activities after Hurricane Andrew. Restoration activities lasted for 30 days.
- Engineering/safety representative of corporate Vehicle Specification Committee.
- Provided technical and performance expertise to team that reviewed and re-established vehicle charge-back rate.
- Managed new, in-house, forklift truck maintenance program for repair and PM of over 200 units previously done by outside contractors and dealers.

# **Construction Services Engineer (1980-1990)**

- Reviewed and approved equipment modification requests.
- Determined and implemented necessary actions to assure conformance to governmental and industry regulations and standards that applied to all fleet of vehicles.
- Conducted accident scene investigation, follow-up with equipment and chassis manufacturers, and required depositions and testimony.
- Led task force which insured compliance to new state law requiring 3,500 heavy truck drivers to be qualified for Commercial Driver's License prior to law becoming effective.
- Led three quality improvement teams as part of corporate quality effort that resulted in winning 1989 Deming Award.
- Advised Joint Safety Committee comprised of management and union personnel of safety issues related to vehicles.
- Taught crane operator safety classes in power plants.

# Key Power Inc. (now Florida Detroit Diesel Allison), Miami, FL: 1976 - 1980 Sales Engineer

Established Allison transmission remanufacturing operation. Converted two truck shop bays into enclosed transmission rebuild area and adjoining test area. Designed and supervised construction of transmission inspection stand to test complete line of Allison transmissions for functionality. Conducted engine/transmission sales inventory control, field and inside sales engineering activities for Detroit Diesel engines and Allison transmissions.

# ALLISON TRANSMISSION DIV., GENERAL MOTORS CORP., Indianapolis, IN: 1967-1976 Application Engineer

Provided engineering support to OEM truck chassis manufacturer customers and fleet customers. Acted as company liaison with engineering departments of all major fire/heavy duty truck manufacturers, and specialized equipment manufacturers utilizing Allison transmissions. Also provided engineering support to major fleet customers in conjunction with Service Department. Responsibilities required travel to Europe South America, and Japan.

### **EDUCATION**

B.S. Mechanical Engineering, Valparaiso University, Valparaiso, IN 1967

# PROFESSIONAL REGISTRATION

Registered Professional Engineer - State of Florida

# **PROFESSIONAL AFFILIATIONS**

Florida Trucking Association
National Association of Fleet Administrators
Society of Automotive Engineers
TMC American Trucking Association

# JOHN E. DOLCE Senior Consultant

Mr. Dolce has over 30 years of fleet management and consulting experience. He has served as an active fleet manager, consultant, author and industrial instructor. He is experienced in working with both private and private fleets in pursuit of excellence. He is also a trustee and board member of several organizations and companies.

#### PROFESSIONAL EXPERIENCE

| 2000 to present | Senior Consultant                                                                         |
|-----------------|-------------------------------------------------------------------------------------------|
| 2001 - 2003     | Director Fleet Management Essex County, N.J.                                              |
| 2000 - 2001     | Mail Contractors of America, Vice President of Fleet Maintenance                          |
| 1998 - 2000     | Command Bus Company, Facility Manager                                                     |
| 1996 - 1997     | Baker Engineering, Project Manager (CNG Garage)                                           |
| 1993 - 1996     | Liberty Lines, Inc Yonkers, NY<br>Fleet Manager, Transit Maintenance                      |
| 1980 - 1993     | General Public Utilities - Parsippany, NJ<br>Fleet Manager - 5,500 vehicles               |
| 1975 - 1980     | U.S. Postal Service - Newark, NJ - 3,000 vehicles                                         |
| 1973 - 1974     | Wooster Express, Inc South Windsor, CT Director of Personnel Safety & Security            |
| 1971 - 1973     | Royal Globe Insurance Co. New York City, N.Y. Assistant Chief Engineer, Fleet             |
| 1966 - 1971     | Renter Educational Corp Long Island City, N.Y. Operations Manager - Truck Training School |

Mr. Dolce has helped hundreds of companies achieve strategic goals and objectives through cooperative and tactical changes in short time periods with substantial sustained long-term improvements.

His progression has been from mechanic-supervisor to general management for the last 20 years, where he has been responsible for light and heavy vehicle operations and maintenance. His budgetary responsibility has been \$60 million. He has been responsible for: problem solving, vehicle specification, procurement and disposition, capital budgeting (\$30 million), vehicle maintenance, and managing the rebuilding of parts, engines, transmissions, brakes, engine accessories and drivelines.

Chatham Consulting, Inc. 1 of 2

His labor relations experience covers a staff of over 200 mechanics and 20 supervisors 10 administrative staff, and is practical and participatory in nature. Areas included are grievances, arbitration's and collective bargaining agreements.

He has developed programs for the specification, solicitation and purchase of vehicles and equipment. Also, he has designed and implemented effective life cycle costing and vehicle replacement strategies.

#### AUTHOR

Fleet Management - McGraw Hill, 1982 - revised 1990,1996, 2003 Vehicle Specification and Procurement - SAE, 1990 Analytic Vehicle Maintenance Management, - SAE, 1992

### **EDUCATION**

New York University, M.A, Industrial Management, New York University, B.S., Industrial Management State University of New York at Farmingdale, A.A.S., Auto & Diesel Technology

# **PROFESSIONAL AFFILIATIONS**

Society of Automotive Engineers - Membership Committee and Commercial Vehicle Maintenance Committee

National Private Truck Association - Fleet Management Certification Program Board of Directors - International Fleet Management, Inc.

Trustee - Tri-State Equipment Managers' Association & Certification Program

# Alan L. Berg,

# P.E

3950 Greenside Court, Dacula, GA 30019 (h)770.945.4093 (c)770-845-5261 alanlberg@comcast.net

#### **EDUCATION**

B.S., 1970, Civil Engineering, University of Wisconsin, Madison, Wisconsin

#### PROFESSIONAL REGISTRATIONS

Professional Engineer: Wisconsin, 1974; Minnesota, 1987; North Dakota, 1989; Georgia, 1996

Registered Land Surveyor: Wisconsin, 1971

#### **PROFESSIONAL AFFILIATIONS**

Water Environment Federation

Georgia Water & Pollution Control Association

#### **AWARDS**

1989 – Philip F. Morgan Medal, Water Environment Federation

# **Professional Experience**

I'm a professional engineer with over 37 years of experience in the planning and design of municipal water and wastewater utility systems. My background experience includes facilities planning and design of wastewater treatment plants, pumping facilities, and wastewater collection and water distribution systems. My background experience also includes preparation of grant applications, Infiltration/Inflow studies, area-wide plans, rate studies, biosolids management plans, flood studies, storm water management plans and combined sewer separation plans for clients ranging in size from small Sanitary Districts to large metropolitan Sewerage Districts. Selected project experience includes:

#### Potable Water

**Greensferry Basin Water Mains, Atlanta, GA.** Project Principal for design of 55,000 LF of 6-inch and 8-inch replacement water mains and 7,000 LF of new 54-inch transmission main.

Water Line Replacement Projects, DeKalb County, GA. Project Principal for the replacement of over 10 miles of small diameter water main in the 15<sup>th</sup> District of DeKalb County.

**Peachtree Industrial Boulevard Water Main, Dekalb County, GA.** Project Principal for design of 37,000 LF of 6-inch replacement water main.

## Wastewater

**Greensferry Basin Sewer Separation, Atlanta, GA.** Project Principal for the design of approximately 57,000 LF of new sanitary sewer ranging in size from 8-inch to 36-inch.

**GA.** Project principal for fine screening technology assessment and design of new 5 mm band screen for 5-MGD WRF.

Beaver Ruin Water Reclamation Facility Aeration Improvements, Gwinnett County, GA. Project Principal for design of aeration equipment replacement for 5-MGD WRF.

**Pre-design of Combined Sewer Separation, Atlanta, GA.** Project Manager for preparation of preliminary designs and cost estimates for the separation of 160 miles of combined sewers and the best management practices (BMP) treatment of storm water following separation.

**Stockade Trunk Interim Sewer, Atlanta, GA.** Project Manager for the design of approximately 4000 L.F. of new sanitary sewer and 1000 L.F. of new storm sewer required for closure of five openings in the existing Stockade Trunk line combined sewer.

**Inman Park Sewer Improvements, Atlanta, GA.** Project Manager for the design of new sanitary sewers, storm sewers, and catch basins to relieve combined sewer surcharging and street flooding on Austin Avenue in the Inman Park area of Atlanta.

Jackson Creek & Beaver Ruin Water Reclamation Facility Phosphorous Removal Improvements, Gwinnett County, GA. Assistant Project manager for build-out master planning and design of phosphorus removal improvements for Beaver Ruin, and Jackson Creek WRFs.

**Gary Sanitary District, Gary, Indiana.** Project Manager for preparation of Design Development Report, and plans and specifications for upgrade of 80-MGD pump station serving combined sewer area.

**Metropolitan Council Environmental Services, Minnesota.** Joint Venture Principal for design and Construction related services for 12 feet diameter, 23,000 feet long Minneapolis East Interceptor Tunnel.

**City of Racine, Wisconsin.** Project Engineer for design and construction related services for 60-inch diameter, 3.5 mile long Sturtevant-Mt. Pleasant Interceptor.

**Metropolitan Council Environmental Services, Minnesota.** Project Manager for Preliminary Design Report and design of N-viro biosolids treatment facilities at Empire (30 mgd) and Metro (130mgd) POTWs.

Western Wisconsin Regional Biosolids Commission, Baldwin Wisconsin. Project Manager for siting and design of new regional biosolids dewatering (centrifuge) and treatment (Lime Stabilization) facilities serving 11 rural communities in Western Wisconsin.

**City of Hutchinson, Minnesota.** Project Manager for design and permitting of new biosolids heat drying facilities for 10 mgd POTW.

**City of Racine, Wisconsin.** Project Manager and Lead Engineer for biosolids dewatering (belt press) additions and permitting of biosolids land application sites for 60 mgd POTW.

Cities of Appleton, Brownsville, Dodge Center, Grand Marais, Kandiyohi, Lakefield, and Osakis, Minnesota. Project manager for preparation of State and Federal Grant Applications and plans and specifications for new municipal wastewater treatment facilities ranging in size from 0.3 to 5.0 MGD.

Cities of Lake Geneva, Racine, Walworth, Fontana, and Williams Bay, Wisconsin. Project Manager for preparation of grant applications, 201 facilities plans, and public participation programs for new regional wastewater conveyance and treatment serving multi-jurisdictional areas.

Villages of Baldwin, Howards Grove, Oostburg, and Sturtevant, Wisconsin. Project Engineer for preparation of grant applications, infiltration/inflow reports, and 201 facilities plans for new wastewater treatment facilities.

Villages of Baldwin, Howards Grove, Oostburg, Port Washington, Sturtevant/Mt. Pleasant, Wisconsin. Project Engineer/Manager for preparation of plans and specifications for new wastewater treatment and conveyance facilities.

**Rock and Brown Counties, Wisconsin.** Project Manager for preparation of 208 County- wide sewer plans

#### Stormwater

Monroe Circle Flooding Abatement, Atlanta, GA. Project Manager for study to determine extent of flooding and to develop potential flood storage alternatives.

**Boulevard Trunk Drainage Improvement Plan – Atlanta, GA.** Project Manager for study to develop inlet modifications to eliminate unpermitted CSOs.

#### **CURRICULUM VITAE**

NAME:

Harold S. Birkett

PERSONAL DETAILS:

American

QUALIFICATIONS:

Ph.D. Chemical Engineering (1977) M.S. Chemical Engineering (1971) B.S. Chemical Engineering (1964)

Louisiana State University, Baton Rouge, Louisiana

Registered Professional Engineer Louisiana, Registration No.: 15135 Florida, Registration No.: 22712

LANGUAGE ABILITY:

English - Read/Write/Speak - Fluently

PROFESSION:

Senior Design and Process Engineer

#### **SUMMARY OF EXPERIENCE:**

Over 40 years sugar, ethanol and sugar by-products experience, all of which represent work with Schaffer & Associates and its predecessor companies. Holds a B.S., M.S. and Ph.D. in Chemical Engineering. Registered Professional Engineer in Louisiana and Florida. Chief Process Design Engineer and Process Specialist for the Company for past 33 years. Developed computerized Material and Energy programs for the sugar and process industries that facilitate the design of plants and the analysis of factory operation and laboratory reports. Part time during the fall semesters as Adjunct Associate Professor Sugar Technology at Louisiana State University. Formally Process Manager in sugar factories and ethanol facilities in Guyana and USA. Member and past president of the American Society of Sugarcane Technologists and the author of over 50 publications.

### **DETAILS OF WORK EXPERIENCE:**

Schaffer & Associates International, L.L.C, Baton Rouge, Louisiana (1972 - Present)

# **Technical Director**

Material & Energy Balances, and Process Design for sugar factories, sugar refineries, alcohol distilleries, and chemical plants. Air quality calculations. Engineering for new cane sugar mills, cane sugar refineries and sugar facility expansions.

Computerized the entire Material & Energy (Steam) Balance for cane sugar operations. Simulation models used for balancing the factory operations, de-bottlenecking based on actual operating parameters and quality of cane; factory modernizations, expansions and rehabilitations.

Responsible for Computerization of the Lab Report Analysis, which analyzes results of the factory operations, loss time analysis and sugar losses in the process.

Developed the Cane Core Sampling System for testing sugar content in cane, upon delivery to the factory.

# Steam and Energy Utilization

 Boiler efficiency testing and recommendations for modifications for efficient utilization of energy and to eliminate auxiliary fuel usage.

#### **Alcohol Production**

 Design, equipment sizing balances, cost estimates, operations and operations analysis, and research and development.

#### Raw Cane Factories and Refineries

- Feasibility studies, basic design, material and energy balances, for new factories, modernization programs, expansion programs, rehabilitations and modifications.

Supervises selection of cane handling systems and layout of cane handling systems within new and existing factories. Supervises selection of milling equipment, shredders, mill tandems and conveying equipment. Integrates equipment into factory layouts and process requirements.

Developed math model to predict imbibition performance on cane crushing mill.

Verifies operation of cane crushing mill through the use of material and energy balance and predictive imbibition model. Consults with mills on proper operation of their mill tandems.

Operations Evaluations on Operating Facilities

#### Privatization Diagnostics

Technical Assistance - Maintenance Programs and Capital Improvement Programs

Training Programs for Schaffer's annual training program, in addition to Louisiana State University and Nichols State University (classroom and hands-on).

Various study and consulting assignments as follows:

- Operations Study for Improvement in Efficiencies and Personnel Evaluation for 4 factories in Hawaii
- Study into Ethanol Production and Power Cogeneration in Malawi funded by US Agency for International Development
- Energy/Cogeneration Studies on 9 factories for Hawaiian Sugar Planters' Association
- Factory Performance Energy Studies on 2 factories for Caroni (1975) Ltd.
- Energy Studies for 11 Colombian Factories funded by Inter-American Development Bank
- Guyana Evaluation of Privatization Offers, World Bank Study
- Presentation of Results of Cogeneration Potential in Colombia

- Development of Proposal on Core Sampling for Sugar Manufacturing Corporation of Jamaica, Ltd.
- Pollution Control Study for Lafourche Sugar Corporation
- Ethanol Facilities Consulting for Agri-fuels Refining Corporation
- Study on Technological Developments and Trends in the Cane Sugar Industry funded by World Bank
- Engineering for Sugar Storage Facility for Shepherd Oil, Inc.
- Technical Assistance for all Schaffer clients throughout the United States, Latin America, the Caribbean and Africa.
- Pollution Control/Wastewater Studies
- Environmental Impact Assessments
- EPA Boiler Permits
- Rehabilitation of Uganda Sugar Factory Study funded by TDP
- Studies on High Pol Sugar Production
- Cogeneration Study for Azucarera Yojoa, Honduras

#### Louisiana State University, Baton Rouge, Louisiana (1977 - Present)

Adjunct Associate Professor, teaches and directs research at the Audubon Sugar Institute for the Louisiana Sugar Industry

Schaffer & Associates, Baton Rouge, Louisiana (1969 - 1977)

Part time while doing graduate work at Louisiana State University on M.S. and Ph.D. Degrees Graduate Assistant

Breaux Bridge Sugar Cooperative, Breaux Bridge, Louisiana (1970 Sugar Crop)

In charge of all process operations at a 2400 TCD raw sugar factory

Breaux Bridge Sugar Cooperative, Breaux Bridge, Louisiana (1968 Sugar Crop)

In charge of all process operations at a 2400 TCD raw sugar factory

Bookers Sugar Estates, Georgetown, Guyana (1967 - 1968)

Assistant Chief Technologist - Technical assistant and consultant to 9 raw sugar factories (1600 - 5000 tons cane/day). Design and pilot plant investigations and in charge of Ethanol Production for Bookers in Guyana

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# Blairmont Central Factory, Guyana (1967)

Fabrication Superintendent - in charge of all processing operations for 3000 tons cane/day raw sugar factory

Albion Distilleries, Albion, Guyana (1965 - 1967)

Manager - Fermentation, distillation, aging, blending, warehousing rum for 10,000 liter/day pot still batch rum plant and 6000 liter/day continuous still rum plant.

Schaffer & Associates, & Predecessor Company, Baton Rouge, Louisiana (1964 - 1965)

Part-time while working crops at various sugar factories

Albion Sugar Factory, Berbice, Guyana (1965 - 1967)

Assistant Fabrication Superintendent. (This position held concurrently with above)
Operation, maintenance, and training of personnel at 3600 tons cane/day raw sugar factory

Meeker Sugar Cooperative, Lecompte, Louisiana (1964 - 1965)

Process control, cane sampling and testing, and cane payment

Arthur G. Keller Consulting Engineers, Baton Rouge, Louisiana (1964) (Predecessor Company of F. C. Schaffer & Associates)

Design, checking and drafting for raw sugar factories Effluent treatment plant design

#### **PUBLICATIONS:**

- Birkett, H.S. "The Efficiency of the Steam Generating Plant in the Cane Sugar Factory" Proc. B.W.I. Sugar Tech. Vol 2, 1966: 352-362
- Birkett, H.S. "An Investigation of Certain Factors Which Influence Raw Sugar Quality"
   M.S. Thesis, Louisiana State University, August 1971
- Birkett, H.S. and J.J. Seip. "Core Sampling Studies 1973" Proc. ASSCT Vol 4(NS), 1974: 195-209
- 4. Birkett, H.S. and J.J. Seip. "Core Sampling Studies 1973" Proc. ASSCT Vol. 4(NS), 1975: 163-177
- 5. Birkett, H.S. "Preliminary Report on the 1974 Factory Scale Core Studies" Proc. ASSCT Vol. 5(NS), 1976: 202-207
- Birkett, H.S. and J.J. Seip. "Bagasse as a Fuel for the Louisiana Raw Sugar Industry" Energy Resources Situation Study, Working Paper 74-4 Louisiana Department of Conservation. November, 1974

- 7. Birkett, H.S. "The Determination of Sugar Cane Quality in Louisiana by the Core Press Method" Ph.D. Dissertation, Louisiana State University, May 1977
- 8. Birkett, H.S. "The Fuel and Steam Balance in the Raw Sugar Factory" Proc. ASSCT Vol.(NS), 1977: 165-176.
- 9. Polack, J.A. and H.S. Birkett. "Saving Energy in Sugar Mills". Proc. ASSCT Vol.
- Polack, J.A. and H.S. Birkett. "Processing of Total, Close-Spaced Cane" Proc. ASSCT Vol. 7(NS), 1978: 173-179
- Birkett, H.S. "The Multi-Product View of a Fermentation Industry"
   Proc. First Inter-American Conference on Renewal Sources of Energy, 1979: 215-219
- 12. Birkett, H.S. "Improvements in the Technology of Processing Sugar Cane
- Birkett, H.S. "Raw Sugar Manufacturing reports and Factory Performance (Part II)"
   The Sugar Bulletin, Vol. 58 No. 23, Sept. 1980
- Birkett, H.S. "Raw Sugar Manufacturing Reports and Factory Performance (Part II)"
   The Sugar Bulletin, Vol. 58 No. 24, Sept. 1980: 10
- 15. Birkett, H.S. "A Comparison of Raw Sugar Boiling Schemes" Presented at the Eighth Annual Joint Meeting of the Florida and Louisiana Divisions of the ASSCT June 22-23, 1978
- Polack, J.A. and H.S. Birkett. "Alcohol from Sugar Cane in Louisiana"
   Presented at ASSCT Meeting, Baton Rouge, Louisiana, February 10, 1978
- Polack, J.A. and H.S. Birkett. "The Use of Dextranase in Processing Sour Cane"
   Presented at the Eighth Annual Joint Meeting of the ASSCT, Orlando, Florida, June 23, 1978
- Birkett, H.S. "Observations on the Louisiana Core Samplers"
   Presented at the Annual Meeting of the Louisiana Division of the ASSCT, February 8-9, 1978
- Birkett, H.S. "Observations on Louisiana Factory Operations" Sugar Journal. March 1977: pp 25-27
- 20. Polack, J.A., H.S. Birkett and M.D. West. "Sugar Cane Positive Energy Source for Alcohol" For publication in Chemical Engineering Progress. Presented at the Annual Meeting, AICHE, November 20, 1980, Chicago, Illinois
- 21. Birkett, H.S. "Computer Solution of the Material and Energy Balance and Analysis of Capacity for a Sugar Factory". Proc. Tenth Convention of the Association of Mexican Sugar Cane Technologists. Sept. 1980
- 22. Birkett, H.S. "Computer Checking and Analysis of Factory Performance from Manufacturing Run Report" Proc. Tenth Convention of the Association of Mexican Sugar Cane Technologists. Sept. 1980
- 23. Birkett, H.S. and J.A. Polack. "Preliminary Trials of Dextranase"
  Presented at ASSCT Meeting, Baton Rouge, Louisiana, February 10, 1978

- Polack, J.A. and H.S. Birkett. "The Use of Dextranase in Processing Sour Cane" Proc. ASSCT Vol. 8, 1981: 127-133
- Birkett, Harold. "Review of Papers Presented at the ASSCT Meeting"
   Sugar Journal, Vol. 44, August 1981: 12
- Birkett, Harold S. Deaerators" Sugar Bulletin
- Birkett, H.S. "Evaporation and Sugar Boiling"
   Sugar y Azucar 1982 Yearbook. Vol XLX: pp. 191-199
- Polack, J.A. and H.S. Birkett. "A Look at Very High Pol Sugar, Parts I and II" Presented at the ASSCT Meeting - Louisiana Division, February 3-4, 1983
- 29. Birkett, Harold S. "Papers on Factory Operations" Sugar Journal, Vol. 46, August 1983: 14
- Birkett, Harold S. "Cane Washing"
   Sugar Bulletin, Vol. 62, No. 5, December 1983: 6-7
- 31. Birkett, Harold S. "Energy Conservation Measures in the Louisiana Cane Sugar Industry" F. O. Licht's Guide to the Sugar Factory Machine Industry. 1984: A91-A94
- Birkett, Harold S. "Computer Applications"
   Sugar Journal, Vol. 46, March 1984: 10
- 33. Birkett, H.S. "Higher Exhaust Steam Pressures" Proc. ASSCT Vol. 4, 1985: 120
- 34. Birkett, H.S., S.J. Clarke, Y.K. Cho, W. Keenliside and J.A. Polack. "Factors Affecting Mill Extraction" Proc. ASSCT Vol. 5, 1985: 101-108
- 35. Birkett, Harold S. "Review of Manufacturing Operations" Sugar Journal, Vol. 47, March 1985: 9
- Birkett, Harold S. "Trends in the Louisiana Sugar Industry"
   ASSCT Meeting Louisiana Division, February 7-8, 1985. Sugar Journal, Vol. 47, May 1985: 14-19
- Birkett, Harold S. "Review of ASSCT Papers Manufacturing"
   Sugar Journal, Vol. 48, August 1985: 13
- Birkett, Harold S. "Review of ASSCT Manufacturing Papers"
   Sugar Journal, Vol. 48, March 1986: 9-10
- Birkett, Harold S. "Review of ASSCT Papers Manufacturing"
   Sugar Journal, Vol. 49, August 1986: 18
- 40. Birkett, H. S., S.J. Clarke, W. Keenliside, J. A. Polack and J. Stein. "1984 ASI Milling Studies" Proc. ASSCT Vol. 6, 1986: 91-101

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- 41. Birkett, Harold S. "President's Message: Louisiana Division" Sugar Journal, Vol. 50, August 1987
- 42. Birkett, H.S. and J. M. Stein. "Milling Studies"
  Presented at the 17th Annual Joint Meeting of the Florida and Louisiana Divisions of the ASSCT, June 1987
- 43. Birkett, Harold S. "Interpretation of Cane Sampling Results"
  Presented at the February, 1988 Meeting of the American Society of Sugar Cane Technologists

# **MEMBERSHIPS:**

American Society of Sugar Cane Technologists Phi Mu Epsilon - Chemical Society, Honorary

#### James A Barrack Jr

#### **Professional Qualifications**

Mr. Barrack has 24 years of experience in the civil and transportation industry. He is also a registered professional engineer in 4 states. Currently, as the lead civil engineer he is responsible for preparing the civil site and roadway plans, utility system designs and construction cost estimates for five military family housing projects totaling over 3,000 housing units.

As a Senior Civil Engineer, he is responsible for the preparation of highway plans and profiles, bridge and tunnel alignment plans, commuter station plans and track profiles, bus and rail maintenance facility civil layouts and designs; technical specifications, construction cost estimates, and project scheduling.

As a Senior Traffic Engineer, he is responsible for the preparation of traffic impact studies, traffic safety studies, access studies, parking studies, traffic signal plans, traffic control plans, construction cost estimates, and project schedules.

Prior to joining Stone & Webster, Mr. Barrack was the Unit Manager of traffic operations at HMM Associates, Inc. where he was responsible for the technical preparation and budget administration of traffic projects for the public and private sector.

Prior to joining HMM, Mr. Barrack was a Civil Engineer at Greenhorne and O'Mara, Inc. in Greenbelt, MD, where he was responsible for preparing traffic studies, highway and signal plans for state agencies in the mid-Atlantic area, and flood insurance studies for the Federal Emergency Management Agency (FEMA).

Mr. Barrack was an employee at EMJ/Electrack Inc. and also has experience in railway engineering, overhead electrification and catenary designs.

#### Education

Master of Engineering, Civil Engineering, University of Maryland at College Park, College Park, Maryland, 1985

Bachelor of Engineering, Civil Engineering, University of Maryland at College Park, College Park, Maryland, 1978

Associate of Arts, Engineering, Essex Community College, Essex, Maryland, 1976

#### **Additional Training/Continuing Education**

Survcadd, Stoughton, MA, 2004 CEAL Coordinate Geometry, Boston, MA, 1998 PDS cadd training, Boston, MA, 1994 Intergraph User, Cogo, and Inroads, Huntsville, AL, 1984

#### Registrations/Certifications/Licenses

Professional Engineer, Civil, 1985, 0045450, Active, Florida, 02/2009 Professional Engineer, Civil, 1997, 23608, Active, Georgia, 12/2008 Professional Engineer, Civil, 2000, 018-0007730, Active, Vermont, 07/2008 Professional Engineer, Civil, 1988, 34931, Active, Massachusetts, 06/2008 Professional Engineer, Civil, 1984, 13789, Active, Maryland, 01/2008

#### **Experience and Background**

05/2002 - Present

Lead Civil Engineer, Shaw Environmental & Infrastructure, Inc., Stoughton, Massachusetts

Responsibilities include providing support to client projects and office staff as a senior lead civil engineer. Also responsible for business development, preparing technical and cost proposals for major housing privatization projects, civil roadway and bridge projects, and traffic studies.

#### The following is a summary of key projects:

<u>Lead Civil Engineer, Bridge Project - Route 2A over I-95 (Route 128), 116943, Mass Highway, Lexington, MA, \$9,000,000.00, 05/2005 - Present</u>

Prepared plans, specifications and cost estimates for the Route 2A approach roadwork and drainage, and developed the maintenance of traffic and construction sequence plans for the bridge replacement. The new bridge was constructed approx. 3-feet higher than the existing bridge. The TCP required 6 individual phases in order to maintain 2 lanes of moving traffic on Route 2A. A detour plan showing total closure of I-95 (night) was required to allow multiple cranes to swing into place the new bridge beams. Design work was completed in 2006.

## <u>Project Manager (Civil Site Design)</u>, <u>Hanscom Family Housing</u>, 112758, <u>American Eagle</u>, Lincoln, MA, \$200,000,000.00, 11/2004 - Present

Project Manager responsible for the civil and utility designs for demolition of 850 housing units and construction of 784 housing units and 5 neighborhood centers. The project included design of 8 miles of new roadways, parking areas, 350 drainage structures, 8 detention areas and 7 underground infiltration galleries, fire protection, water distribution and a sanitary collection system, natural gas, electrical and communication systems. Our design team also prepared the documents required to process the State and local environmental permits. The design fee is confidential (internal client). Site design and environmental permitting was completed in April 2006.

#### Accomplishments:

All design submittals were made On-time

## <u>Civil Engineer, Military Family Housing, 540208085, American Eagle/Shaw E&I, various,</u> \$50,000,000.00, 08/2003 - Present

Privatization of Military Family Housing

As a Senior Lead Civil Engineer, Mr. Barrack has submitted comprehensive design master plans (CDMP), 15 percent design level utility plans, construction cost estimates and assisted in the submission of Step II design and construction proposals for the following military bases.

- Beale\* Air Force Base, Beale, CA
- Cannon Air Force Base, Cannon, NM
- Hill Air Force Base, Salt Lake City, UT
- Nellis Air Force Base, Las Vegas, NM
- Hanscom\* Air Force Base, Hanscom, MA
- Fort Benning Army Base, Atlanta, GA
- Fort Rucker Army Base, AL
- Army Northeast\* (Carlisle, PA; Picatinny, NJ; Monmouth, NJ)

#### - Fort Leonard Wood\*, St Louis, MO

Each project requires the 50-year privatization of the entire family housing area. Major items include demolition, construction, operation, and maintenance of the housing areas, and all utilities serving these areas. Currently, the Shaw E&I team has been awarded (see asterisk) at least 6 projects totaling over 5,000 housing units.

#### Awards/Client Commendations:

At least six bases have been awarded to the American Eagle/Shaw E&I team.

### Project Engineer, MBTA Transitway, 602053, MBTA, Boston, MA, \$500,000,000.00, 02/1991 - Present

Southampton Street Maintenance Facility (Contracts EO2CN21 and EO2CN22)

As a Lead Civil Engineer, Mr. Barrack was responsible for the preparation of final plans, specifications, quantity and cost estimates for the new Silver Line Bus Maintenance Facility. The new facility will house and maintain 77 sixty-foot articulated buses. The contract required relocation of Moore Street, design of a 250-car parking garage, maintenance building, fueling building, wash and degrease building, and a transportation building. Numerous design issues included a contaminated site which required extensive soil testing and disposal, a pre-existing MBTA police station which must stay operational, and a very small site which restricts vehicle movement, and numerous utility corridors and conflicts.

South Boston Transitway Systemwide Design (Contract EO2CN16) and Connector Road Assisted in the final design of the Systemwide AC/DC ductbanks along D Street and Summer Street, and assisted in the design reviews for the new Connector Road.

#### South Boston Piers Transitway Schematic Design Report

Assisted in the preparation of the Schematic Design Report. The report included development of an operations plan, tunnel typical sections, alignment studies, underpinning plans, right-of-way taking plans, station and headhouse studies, bus maintenance facility site location studies, 30 percent design plans and schedules, arrangement of power and catenary, signals and communications, emergency ventilation, preparation of construction contract limits, and cost estimates.

#### Courthouse Station (Contract CC07/CC08)

Prepared the preliminary civil and utility plans for construction of the proposed station, cut and cover tunnels, street restorations, drainage and utility systems.

#### Codman and Mattapan Yards (Contract U48CN08)

Prepared the final design plans, specifications and cost estimates for the new bus washing facilities at both Green Line maintenance yards.

#### Boston Engine Terminal Maintenance Facility

Prepared the conceptual site plans including building program and layout, train and consist schedules, site and trackwork, wetland areas, and building demolition for support of the relocation of the BET Maintenance Facility. A total of seven sites were studied with a total improvement cost of \$6.2 million.

#### Foxboro Station Platform Improvements

The MBTA requested that Stone & Webster complete the civil site and structural plans for the fast-track construction of Foxboro Station prior to the 1994 World Cup soccer event. The total design and construction schedule was 6 weeks. Mr. Barrack prepared the civil site plans and cost

estimate.

## <u>Lead Engineer, Eastchester Extension Hunts Point Compressor Station, 613073, Iroquois Natural</u> Gas Transmission, New York, \$40,000,000.00, 10/1998 - 10/2004

Prepared conceptual design services related to the new 26-mile gas pipeline, which will connect Long Island to the Bronx borough. Reviewed directional drilling and cut/cover plans and profiles, and prepared TCP's for several alignment alternatives which are under FERC review. Prepared the civil site plans for the Hunts Point Compressor Station.

### <u>Lead Civil Engineer, VTrans Bridge Project, Route 5 over I-91 Hartland VT, VTrans, Hartland, VT, \$1,800,000.00, 06/2000 - 05/2003</u>

Prepared the roadway plans, profile, cross sections, highway specifications and cost estimate for this bridge replacement project. The traffic control plans required longitudinal demolition of one side of the existing bridge. A temporary traffic signal was specified to provide a one-lane, 2-way traffic operation over the bridge. Also, a truck detour plan was implemented since no truck traffic was permitted on the bridge for a 72-hr period after the deck concrete pour. The project was completed in 2003.

## Runway Conceptual Design and Cost Estimates, Belize International Airport, 839944, Luftansa, Belize, \$10,000,000.00, 09/2002 - 11/2002

Assisted in the proposal development and civil conceptual designs and construction cost estimates for the runway extension at the Belize International Airport.

#### 01/1991 - 05/2002

#### Senior Engineer, Stone & Webster, Civil & Transportation, Boston, Massachusetts

Provided civil engineering design and support services as a senior civil engineer. Also, assisted in the preparation of numerous technical and cost proposals, and oral presentations. Recent assignments include roadway design, bridge deck replacements, natural gas compressor station site designs, site planning and design, utility design, storm drainage design, commuter station design, railroad track interlocking design, platform geometry, construction inspections, construction phase support services (including requests for information, change orders, modifications, contract amendments, addenda)

#### The following is a summary of key projects:

<u>Civil Engineer, Eastchester Extension, 0788221, Iroquois Natural Gas, Bronx, NY, \$3,000,000.00, 01/1998 - 01/2004</u>

Iroquois Pipeline Operating Company

Eastchester and Bronx, NY

Prepared conceptual design services related to the new 26-mile gas pipeline, which will connect Long Island to the Bronx borough. Reviewed directional drilling and cut/cover plans and profiles, and prepared TCP's for several alignment alternatives which are under FERC review.

## <u>Civil Engineer, Maywood Pilot Demonstration Project, US Army Corps of Engineers (COE),</u> <u>Maywood, NJ, 01/2000 - 01/2002</u>

US Army Corps of Engineers

Pilot Demonstration Project, Maywood, NJ

Analyzed existing soil conditions, and prepared the roadway paving section calculation for the MISS area. Prepared civil and roadway specifications.

Civil Engineer, MHD Footprint Bridge Project, 06800, MHD, Lee, MA; Somerville, MA,

#### 01/1994 - 01/2002

Tyringham Road Bridge, Lee, MA

Assisted in the design of three (3) roadway alignments and two (2) vertical profile alignments for the Tyringham Bridge Reconstruction. Prepared the conceptual quantity and cost estimates for the highway related construction items.

Cross Street Bridge over B&M Railroad, Somerville, MA

Assisted in the design of two (2) roadway alignments and vertical profiles for the Cross Street Bridge Reconstruction in Somerville, MA. Prepared the conceptual quantity and cost estimates for the highway related construction items.

#### Accomplishments:

Cross Street Bridge is out for bid.

#### <u>Civil Engineer, Dracut Compressor Station, 08694, Duke Energy, Dracut, MA, 01/1998 - 01/2000</u> Duke Energy

Dracut Meter and Compressor Station, Dracut, MA

Prepared the site plan, final grading plan, layout and materials plan, roadway plan and profiles, and drainage design for the proposed facility

## Civil and Railway Engineer, Woburn Anderson Regional Transportation Center (RTC), 07473, MHD, MBTA, Massport, Woburn, MA, \$250,000.00, 01/1998 - 01/2000

Mass Port Authority, Massachusetts Bay Transportation Authority, MHD

Woburn Regional Transportation Center, Woburn, MA

Managed civil design team responsible for preparing final rail plans, profiles, cross sections, traffic control plans, platform geometry, drainage and erosion control plans, construction staging plans, civil specifications and cost estimate. Coordinated track design with a new 2000-car parking lot, two pedestrian bridges, and new commuter station. Specific design issues included determining proper rail alignment (10 switches), spiral curves through platform, rock excavation adjacent to existing warehouses, and contaminated soil testing and disposal. The accelerated design schedule called for four design reviews and the PS&E submittal in a 10-month period. Provided support and RFI responses during the 18-month construction phase. Project was successfully completed in Summer 2000.

#### Accomplishments:

The Anderson RTC is fully operational.

#### <u>Civil Engineer, Clayton Station, North Carolina Natural Gas, Clayton, NC, 01/1997 - 01/1999</u> North Carolina Natural Gas

Clayton Compressor Station, Wake County, NC

As Lead Civil Engineer, Mr. Barrack was responsible for Prepared the site plan, final grading plan, layout and materials plan, roadway plan and profiles, and drainage design for the proposed facility.

### <u>Civil Engineer, Algonquin 3 Projects, 08399, Algonquin Natural Gas, MA, RI, NY, 01/1997 - 01/1999</u>

Algonquin Natural Gas Transmission Company

Vaporizer Station, Providence, RI

Prepared the site plan, finished grading plan, survey control and layout plan and detailed roadway and drainage designs for the proposed expansion of the vaporizer units.

Algonquin Natural Gas Transmission Company

Route 2 Arlington, MA

Prepared the traffic control plans (TCP) for the proposed closure of Route 2 due to the pressure testing of the new 12 natural gas pipeline. Also prepared similar TCP's for the lane closure on the Massachusetts Turnpike (I-90) for rock blasting and excavation.

Algonquin Natural Gas Transmission Company

Odorization Plant, Plattsburg, NY

Prepared the roadway template, plan and profile, specifications and cost estimate for a 4,000 ft access road serving the border odorization plant in Plattsburg, New York.

## <u>Civil Engineer, Covert Generating Station, 13275, PG&E National Energy Group, Covert, MI, 01/1997 - 01/1999</u>

Covert Generating Station, Covert, MI

Responsible for review of soil boring data, and analysis of all vehicles on Plant Roads and lots. Prepared final pavement calculations for pre- and post bituminous concrete pavement placement. Also prepared final roadway specifications.

## <u>Civil Engineer, Sumpter Combustion Turbine Plant, 13053, First Energy Corp, Sumpter, MI, 01/1997 - 01/1999</u>

Sumpter Combustion Turbine Plant, Sumpter, MI

Prepared analysis of the heavy haul equipment traveling on the Georgia Pacific pavement near the site. Specific recommendations were made to reduce the equivalent single axle loads on the paved area to extend pavement life. Coordinated work with heavy hauler and State DOT to gain permit approval for transporting all overweight/oversize equipment.

## <u>Civil Engineer, Central Artery Tunnel Project (D09C)</u>, 04433, MHD, Boston, MA, \$330,000,000.00, 01/1996 - 01/1999

Central Artery/Tunnel Project

I-90 at I-93 Contract 09C, Boston, MA

Lead engineer responsible for all right of way and civil survey control plans for the new I-93 at Mass Pike (I-90) interchange. Also responsible for final COGO horizontal and vertical deign of the Interim Viaduct over Albany Street (IVAS).

## <u>Traffic Engineer, Bradley Airport UPS Sorting Facility, 06575, United Parcel Service, Bradley Airport Windsor Locks, CT, \$50,000.00, 01/1996 - 01/1998</u>

United Parcel Service/Connecticut DOT

Sorting/Distribution Facility, Bradley International Airport, Windsor Locks, CT

Prepared the major traffic generator study for the proposed 272,000 sq. foot airmail facility. The study included an analysis of peak hour traffic operations at five signalized intersections, queuing analysis, sight distances, and signal timing optimization. Also assisted in the site plan development, which includes parking, truck circulation, handicapped access, storm drainage, glycol recovery, erosion and sediment control, and fuel delivery systems.

## Civil Engineer Highway Design, Texas Utilities Big Brown Railroad, 06061, TXU, Big Brown TX, 01/1996 - 05/1997

Texas Utilities/TxDOT

Interstate 45 at CR 1080, FM 80, FM 488, FM 2547, FM 246

Managed civil design team responsible for preparing final highway plans, profiles, cross sections, traffic control plans, drainage and erosion control plans for several at-grade and grade separated interchanges. Responsibilities included determining proper highway alignment(s) due to

construction of a proposed rail line, while maintaining adequate vertical clearances below existing structures and minimizing impacts to adjacent property owners. The accelerated design schedule called for all five projects (460 drawings) to be completed and ready for bid in a 5-month period.

#### Accomplishments:

The 24-mile rail spur is complete and operational.

## <u>Civil Engineer, Union Station DEIR and FEIR, 05418, Worcester Redevelopment Authority,</u> Worcester, MA, \$200,000.00, 01/1996 - 01/1997

Union Station Intermodal Transportation Center DEIR and FEIR

Technical Project Manager responsible for preparing the traffic sections of the FEIR for the proposed intermodal transportation center in Worcester. The report included an analysis of the impacts of traffic, parking, bus, rail, pedestrian, air quality and construction mitigation. The study included 25 intersections and 11 highway merge/diverge ramps (I-290) where the LOS for the existing, no-build, and 3 build conditions were analyzed. The recommendations made, if adopted, would result in a LOS below D for only 2 of the 25 intersections. The FEIS was approved and the project has progressed to the design phase.

#### Accomplishments:

FEIR was approved, and the train station was reconstructed and is operational.

### <u>Civil Engineer, Masspike Ramp Feasibility Study, 06312, Masspike, Boston, MA, \$160,000.00, 01/1995 - 01/1997</u>

Ramp Feasibility Study, I-90 Boston Extension

For a joint venture involving Stone & Webster and another area A/E firm, leads design and construction functional area in this study to determine the impacts of adding egress/exit ramps to the Boston Extension of the Turnpike on Turnpike operations and local traffic flow and volume. Directs survey and engineering team in geotechnical investigations, civil and structural engineering, cost estimating, railroad operations, and constructibility investigations of the various ramp alternatives under investigation. Coordinates efforts of Stone & Webster personnel performing air quality and noise impact studies with the environmental and planning lead from Stone & Webster's joint venture partner.

## <u>Civil Engineer, Skull Valley Private Fuel Storage Facility, 05996, Private, Skull Valley, UT, 01/1995 - 01/1997</u>

Private Fuel Storage Facility, Tooele, UT

Prepared the transportation study for transport of nuclear spent fuel casks from the Union Pacific railroad mainline south to the PFSF reservation (approximately 24 miles). The study included 6 intermodal transfer options (rail to heavy haul tractor trailer), and 5 direct rail options. The conceptual designs included study of several intermodal transfer points, rail and roadway typical sections, land ownership and right of way issues, property access, horizontal and vertical alignments, vertical clearances, drainage structures, environmental impacts and construction costs.

## <u>Civil Engineer, Aberdeen MD Chemical Demilitarization Project, 02887, US Army, Aberdeen, MD, 01/1995 - 01/1996</u>

US Army Program Manager for Chemical Demilitarization

Aberdeen Proving Ground, Aberdeen, MD

Prepared the conceptual alignment study for transport of the VX and mustard gas filtered effluent from the bio-treatment area to the water treatment plant. Five transport options; trucking, buried

force main, above grade force main, directional drilling, and force main to gravity, were studied and construction cost estimates were provided. The final report was submitted to the program manager and is awaiting agency bid for design.

## <u>Civil Engineer, Route 122 over Millers River, 06800, Massachusetts Highway Department,</u> Orange, MA, \$1,600,000.00, 01/1995 - 01/1996

Massachusetts Highway Department

Route 122 Bridge over Millers River, Orange, MA

Prepared final plans, specifications and cost estimates for the Route 122 approach roadwork, and developed the maintenance of traffic and construction sequence plans for the bridge replacement. The bridge TCP required 6 individual phases in order to maintain 2 lanes of moving traffic.

#### Accomplishments:

Design approved and the bridge is under construction.

## <u>Civil Engineer, Longfellow Bridge, 06447, Metropolitan District Commission (MDC), Cambridge, MA, \$100,000.00, 01/1994 - 01/1996</u>

Longfellow Bridge Repair/Rehabilitation Study, Boston, MA

As Lead Civil Engineer, prepared maintenance of traffic and construction sequence plans for two design alternatives. Computed the AM/PM peak hour LOS for three adjacent intersections (Cambridge Street at Charles Street and Cambridge Street at Embankment Road in Boston, and Broadway at Third Street in Cambridge) using the Highway Capacity Manual Software for each phase of bridge construction. Overall intersection delay, queue length, signal timing and phasing, and LOS indicated that one design alternative could not process the projected peak-hour volume.

## <u>Civil Engineer, Wells LNG Facility, 04977, Granite State Transmission Co., Wells, ME, 01/1993</u> - 01/1996

LNG Facility, Wells, ME

Prepared the traffic impact and safety assessment for the new facility. Developed roadway, construction cost estimate for the Federal Energy Regulatory Commission (FERC) license application.

## <u>Civil Engineer, Darien and New Haven Vehicle Maintenance Facilities, 18736, CDOT, Darien, CT; New Haven, CT, \$30,000,000.00, 01/1992 - 01/1996</u>

Connecticut Department of Transportation

New Haven Car-Diesel Rail Shop and Darien Vehicle Maintenance Facility

Prepared final plans for the proposed New Haven rail maintenance facility and the Darien garage. Responsibilities included preparation of site plans, roadway plan and profile, utility plans (water, sewer, storm, liquid recovery system, gas, and electricity), specifications, and construction cost estimates.

#### East Cut Drainage Project, New Haven, CT (Contract 301-0031)

Prepared final drainage plans, special provisions, and cost estimates for the installation of a new 5000-ft storm drain system, grit chamber, two flex valves, and pump station modifications within the New Haven rail yard. Major design and construction coordination was required with Metro North and AMTRAK. Represented CDOT at claims hearing to reduce the amounts awarded to Contractor regarding delays in construction schedule and dewatering implementation.

#### Accomplishments:

Both vehicle maintenance facilities were constructed and are operational.

## <u>Traffic Engineer, Pawling and Dover Plains Commuter Rail Station, 04541, MetroNorth Railroad, New York, NY, 01/1994 - 11/1995</u>

Metropolitan Transportation Authority/Metro North Railroad

Pawling and Dover Plains Commuter Train Stations

Performed traffic and parking analysis to support construction of high-level platforms and increased commuter service. Traffic analysis for local roadways included 24-hour tube counts, manual peak-hour counts, vehicle occupancy, trip generation, distribution, and LOS calculations for the existing, no-build, and build scenarios using Highway Capacity Analysis software. Parking analysis included license plate survey to determine parking lot turnover, space occupancy, and practical capacity. Prepared concept plans for both parking lots and kiss-and-ride areas. Final plans, specifications and estimates were completed in 1994.

## <u>Traffic Engineer, Miami Airport Circulation Study, Dade County Aviation Dept, Miami, FL, 01/1992 - 01/1993</u>

Miami International Airport

Traffic Circulation Study Miami Airport

Prepared the traffic circulation study, which developed the 2005 vehicle trip projections, and analyzed intersection operations and levels of service (LOS) for five (5) roadway circulation alternatives for the expansion of the Miami International Airport.

## <u>Traffic Engineer, I-95 Traffic Control Plan, 02166, Maine DOT, Maine, \$20,000.00, 01/1992 - 06/1992</u>

Maine Turnpike Authority

Interstate 95 Traffic Control Plan

Prepared traffic control plan for utility work and lane closures for a new 8-inch transmission pipeline at Maine Mall Road and I-95.

## <u>Traffic Engineer, Amoco Oil Whiting Indiana TIS, Amoco Oil Co., Whiting, IN, 05/1991 - 01/1992</u>

Amoco Oil Corporation Whiting, IN

Oil Refinery Traffic and Parking Study

Prepared the traffic and parking study for the AMOCO refinery in Whiting, IN. The study included a determination of employee and peak hour trip generation, distribution, assignment, and intersection LOS analysis and signal timing mitigation at 5 locations for 4 design years. The study also included a parking supply/demand analysis for 2500 additional employees at 8 parking areas. The study included TSM and shuttle bus service recommendations to ameliorate traffic congestion during several construction phases.

#### 04/1998 - 01/1991

#### Project Manager, HMM Associates, Transportation, Concord, Massachusetts

As Unit Manager, provided overall direction to junior engineers and technicians which included collection of traffic data using Automatic Traffic Recorders (ATR's), calculation of trip generation, gravity model distribution, highway and intersection level of service (LOS) using the latest Highway Capacity Manual Software (HCS), and preparation of environmental impact reports. Provided expert witness testimony at public hearings for private developers of residential/commercial properties. Also responsible for preparation and presentation of technical proposals and adherence to budgets, scopes and schedules.

#### The following is a summary of key projects:

Civil Engineer, New England Deaconess Medical Center, New England Deaconess Hospital,

#### Boston, MA, 01/1990 - 01/1991

New England Deaconess Hospital

Access Plan, Boston, MA

Project Manager for access plan for 400,000-sq-ft new facility in Boston's Longwood Medical Area. FEIR approval was secured and construction completed in 1994.

#### Accomplishments:

FEIR approval secured

## <u>Traffic Signal Designer, Gould Signal Plans, , Gould-Shawmut, Inc., Newburyport, MA,</u> \$15,000.00, 01/1990 - 01/1991

Gould-Shawmut, Inc., Newburyport, MA

Senior Engineer for preliminary and final traffic signal design for 2 intersections

## <u>Traffic Engineer, Sears Building - Olmsted Plaza, Notter, Finegold, and Alexander, Boston, MA, 01/1989 - 01/1991</u>

Notter, Finegold and Alexander

Olmsted Plaza, Boston, MA

Prepared the ENF and Draft and Final EIR's for the renovation of the 800,000-sq-ft Sears Building in the Fenway area of Boston from a warehouse and distribution facility to research and office uses. The FEIR included the analysis of 24 intersections and 1 rotary. The FEIR was approved and Stage I site development proceeded in 1991.

#### Hancock Garage and Office Complex, Boston, MA

Performed operational review under 8 separate Build scenarios of 7 intersections within the Copley Square study area for 95,000 sq. ft of office and retail space and a 525-vehicle garage.

## <u>Civil Engineer, Harrison Blvd Traffic Signal Design, Jordan's Furniture, Avon, MA, 01/1990 - 05/1990</u>

Mass Highway Department: Jordan's Furniture

Harrison Blvd Traffic Signal, Avon, MA

Prepared the signal warrant study, traffic signal plans, and civil highway plans for the intersection improvements at the congested site entrance. Signal Plans,

#### Lynn, MA

Senior Engineer in charge of final traffic signal design, cost estimates, and specifications for 24 intersections.

#### 09/1979 - 04/1988

#### Civil Engineer, Greenhorne and O'Mara, Inc., Transportation, Greenbelt, Maryland

As a Civil Engineer, prepared project planning studies; highway plans, specifications and cost estimates, traffic signal plans, reversible lane high occupancy vehicle (HOV) traffic signal system, traffic control plans, right-of-way plans, and intersection geometric plans. Also responsible for training staff in the use of Intergraph User and COGO software.

As a Traffic Engineer, responsible for preparing over 150 traffic impact studies, data collection, traffic safety studies, road inventories, functional classifications, and expert witness testimony.

#### The following is a summary of key projects:

Traffic Engineer, Signal Designer, Maryland SHA Continuing Services, Maryland State Highway

## Administration (MD SHA), Bethesda, MD; Columbia, MD; Prince Georges Co., MD, 01/1981 - 01/1987

Maryland State Highway Administration

Connecticut Avenue, Bethesda MD- Prepared final plans, specifications, and cost estimates for a 1.1-mile, 7-lane arterial with a reversible lane signal control system. The latest IVHS technology was utilized.

#### Maryland State Highway Administration

West Nursery Road, Howard County MD - Prepared traffic control plans and final plans and specifications for 4 traffic signals on a 2.4-mile, 6-lane divided highway.

#### Maryland State Highway Administration

Maryland Route 140 - Prepared preliminary and final plans, specifications, and estimates for the construction of a new 4-mile, 4-lane divided highway in Columbia, MD. Design included 3 alternative alignments, 2 interchanges, 6 bridges, 4 traffic signals, ROW acquisition, utility relocations, and maintenance of traffic plans.

#### Maryland State Highway Administration

Maryland Route 32 - Led planning study for a 3.5-mi, 4-lane divided arterial with 2 full diamond interchanges.

#### Maryland State Highway Administration

Maryland Route 246 - Led planning study for a 2.5-mi, 4-lane divided arterial with 10 at-grade intersections.

#### Maryland State Highway Administration

Maryland Route 130 - Preliminary and final design of a 1000-ft arterial and retaining wall.

## <u>Traffic Engineer, Dept of Public Works Task Order Contract, Frederick Co DPW, Harford Co DPW, Prince Georges Co DPW, Maryland, 01/1982 - 01/1986</u>

Department of Public Works, Frederick County, MD

Developed report, entitled "Traffic Impact Study Guidelines," outlining steps needed for preparation and analysis of traffic impact studies.

#### Department of Public Works, Harford County, MD

Reviewed and redeveloped the highway functional classification for the county. Assisted in developing computer software for computing critical land volumes for intersections and for a sign inventory DBMS.

#### Department of Public Works, Laurel, MD

Prepared final plans, specifications, and cost estimates for 4 traffic signals on Route 197 for the Laurel Lakes development.

## <u>Traffic Engineer, Multiple Traffic Impact Studies, various private clients, Maryland, Virginia,</u> DC, 01/1981 - 01/1986

As a Traffic Engineer, Mr. Barrack prepared over 150 traffic impact studies for numerous clients for submission to the Maryland National Capital Parks and Planning Commission, Prince Georges, and Montgomery Counties MD. The studies included traffic data collection, safety studies, road inventories, functional classifications, access studies, level of service (LOS) calculations, mitigation plans, cost estimates, signal timing and phasing plans, and expert witness testimony.

## <u>Traffic Engineer, Safety Analysis, Hagerstown High Accident Study, Hagerstown DPW, Hagerstown, MD, 01/1985 - 11/1985</u>

City of Hagerstown, MD

Operational review of 40 high-accident and high-hazard locations within the city limits. Collected data on traffic flow, pedestrian movement, accident patterns, highway geometrics, and human factors. Analyzed all school locations, including vehicle ingress and egress, internal circulation, and pertinent traffic control devices on-site and in the surrounding area. Analyzed all at-grade crossings within the city to determine the adequacy of traffic control devices, safety and vehicle operations. Provided input into the final report, including priorities for all improvements and summaries of their costs over a 5-year period.

#### Traffic Engineer, Centennial Downs, CO, Private, Denver, CO, 01/1983 - 01/1984

Centennial Downs Traffic Analysis, Denver, CO

Conducted study for this community in Littleton, CO, proposed to hold 1850 townhouses, 210,000 sq. ft of commercial space, and 310,000 of office space. Study included LOS analysis for 16 nearby intersections, 9 of which were found to require pavement and signalization improvements to accommodate the peak-hour and daily trips to be generated by the site.

#### <u>Traffic Engineer, New Carrollton Metro Station, Washington Metropolitan Area Transit</u> Authority, Prince Georges County, MD, 01/1982 - 12/1982

New Carrollton Metro Station

Project Manager responsible for preparing the intermodal analysis (rail, traffic, pedestrian) of the proposed 3,000-car garage, station, roadway network, existing and proposed interchange of I-95 and US-50.

#### Traffic Engineer, Pinnacle, WV, Private, Charlestown, WV, 01/1981 - 01/1982

Pinnacle Traffic Study, Charlestown, WV

Conducted traffic study to analyze impacts of a proposed 740-home residential development. Analyzed more than 10 intersections, including an at-grade railroad crossing.

### <u>Traffic Engineer, Maryland Business and Technology Center, Univ of MD, Prince Georges Co,</u> 01/1980 - 01/1981

Maryland Business and Technology Center, Prince George's County

Traffic Engineer responsible for traffic analysis of a proposed 7,700,000 sq-ft office park. Access study involved review of traffic impacts at 16 intersections and 2 cloverleaf interchanges for the Existing, No Build, and three Build scenarios.

## <u>Hydraulics Engineer, FEMA Flood Insurance Study Unit, Federal Emergency Management Agency (FEMA), Nationwide, 01/1979 - 01/1981</u>

Federal Emergency Management Agency (FEMA)

Flood Insurance Rate Maps and Flood Hazard Boundary Maps (Nationwide). As a Junior Engineer, duties included hydrologic/hydraulic analysis of river flood stages, and preparation of flood hazard boundary maps, flood insurance rate maps, water surface profiles, and reports.

#### 08/1978 - 09/1979

Junior Engineer, EMJ/Electrack, Inc., Civil, Catenary Design, Hyattsville, Wales

As a Junior Engineer, responsible for field surveying the overhead bridge and railway tunnel clearance envelopes for the AMTRAK Northeast Corridor Improvement Project (NECIP) between Washington, DC. and Boston, MA. Also prepared railroad track alignment plans and

hanger calculations for various overhead contact systems (OCS).

#### The following is a summary of key projects:

Engineer, Northeast Corridor Improvement Project, , AMTRAK, Washington, DC to Boston, MA, \$50,000,000.00, 08/1978 - 09/1979

The entire rail corridor from Boston, MA to Washington, DC was upgraded to support 25 KV overhead electrification. Over 200 overhead bridges and several tunnels required final design of the overhead catenary system (OCS). The project also included installation of continuous welded rail (CWR) and high speed switches and interlockings to support operating speeds up to 150 mph.

#### Accomplishments:

Construction was completed in 1999 on this 450 mile project.

#### **Professional Affiliations**

Town of Lakeville Master Plan Committee, member, Chair, 2002 American Association of State Highway and Transportation Officials, member, none, 1998 Chapman Place Condominium Association, trustee, President, treasurer (1991-1995), 1991

#### Awards/Honors

Senior Technical Lead - Transportation, Shaw, 2004 Trustee Excellence Award, Chapman Place Association, 1995

#### **Publications/Presentations**

Jim Barrack, Gene Baumgaertner, "Traffic Signal Design by Computer", 1985 Compendium of Technical Papers, Institute of Transportation Engineers, Greenbelt, MD, 1985

#### GARY B. SEAVEY

7837 Valleyfield Drive Springfield, VA 22153 (703) 231-2429 Gary.Seavey@Shawgrp.com

#### PROFESSIONAL QUALIFICATIONS

Mr. Seavey has the capability to direct compliance management, permitting, construction/infrastructure, research, and facility condition assessment projects, lead business development, maintain joint venture projects, long term alliances, and lead staff and manage budgets. His specific abilities in the federal and commercial sectors include:

- Regulatory Compliance Management
- Construction Management
- Conceptual Design/Build
- Permitting & Regulatory Interface
- Property Condition Assessment
- Due Diligence

- Sustainability
- Baseline & Siting Assessment
- Business Development
- Risk Assessment, Remediation, & Corrective Action Activities
- Emergency Security Management

#### **EDUCATION**

M.S., Chemical Engineering, (incomplete), University of Florida, Gainesville, Florida B.S., Chemistry, 1977, University of Florida, Gainesville, Florida

#### **EXPERIENCE**

#### 1999 - Present

#### Client Program Manager. Shaw Environmental & Infrastructure, Alexandria, VA

Mr. Seavey directs consulting and construction projects. This includes construction, comprehensive regulatory compliance management, technical document review, permitting, assessment, environmental impact/NEPA review, wastewater management, and technology transfer with support for the DoD, DHS, and private/commercial clients. Mr. Seavey is also a subject matter leader for property condition assessment and comprehensive operations permitting.

#### 1993 – 1999

#### Director, Environmental Management Division. TechLaw, Inc., Chantilly, VA

Mr. Seavey's responsibilities included staff management, staff budgets, business development and direction of projects in the areas of comprehensive liability, strategic and tactical regulatory compliance, baseline assessment, delisting, health, quality and ISO program, safety assessment and management services. He served as lead program manager for the USEPA Regional Oversight Contracts (ROC) with more than 45 personnel reporting to him under the ROC program.

#### 1989 - 1993

#### Program Manager. Radian Corporation.

Mr. Seavey successfully directed business development and technical programs for comprehensive regulatory management, delisting petitions, trial burns and siting, site investigation, design, remediation, waste management/minimization including program planning, and project marketing and staffing. Implemented comprehensive regulatory management programs for clients, cost saving approaches to source, soil, and groundwater contamination mitigation, and negotiated level of effort on behalf of clients with regulatory agencies. Mr. Seavey brought all projects to completion on budget and in a quality manner.

#### *1986 - 1989*

#### Senior Engineer. Ebasco Services, Inc.

Mr. Seavey was responsible for projects involving site investigation, powerhouse geotechnical siting, trial burns, and permit applications, landfill management, feasibility study, remedial design and remedial action. He was a corporate-wide technical resource for projects involving solidification/stabilization as a treatment technology and transportation issues. Mr. Seavey conducted successful treatability and management studies, binder design, and remediation on complex waste streams.

#### 1980 - 1986

#### Technical Sales to Senior Technical Manager. RAD Services, Inc.

Mr. Seavey's responsibilities included the management of difficult to handle waste streams including hazardous, nuisance, and low-level radioactive wastes. His position required full understanding of image protection, safety, and health concerns, and governing regulations such as DOT transportation issues, RCRA, NRC, CERCLA, and TOSCA. Mr. Seavey directed projects for a number of innovative waste solutions including support to the Three Mile Island power plant accident, purging of State of Virginia educational institutions of hazardous wastes, and successfully implementing a multi-million dollar waste management program at the National Institute of Environmental Health.

#### MAJOR ACCOMPLISHMENTS

#### FEMA IATAC Assessments Louisiana & Texas. Project Manager.

Mr. Seavey served as the project manager for structural assessment, utilities condition assessment, and temporary housing solutions for evacuees under several FEMA task orders due to the Katrina and Rita disasters from 2005 to 2007.

#### U.S. EPA CERCLA/RCRA Oversight of Federal Facilities, Program Manager.

Regional Oversight Contracts (ROC) EPA Zones 3 & 5. Program manager for contracts providing quality control engineering enforcement support, training, permitting, and oversight to USEPA Regions 5, 6, 7, and 9. Work included permitting, engineering/construction review, and O&M plan document and site reviews ensuring compliance with all applicable federal and state regulations, validity of calculations, applicability of design, and compliance with industry certification standards.

#### Various Clients, Program and Projects Manager.

Reviewed 27 Part B permit applications, post-closure and RD&D, for completeness and technical adequacy including facility description, hazard prevention, training, closure plan/post-closure and financial assurance, contingency plan, risk burn and trial burn plan and reports, human health and ecological risk assessments, quality assurance project plans, permits, waste analysis, groundwater monitoring, Subpart AA/BB, and process design sections.

#### Property Condition Assessment, Engineering Evaluation, Construction Management.

Multiple on-going projects involving assessment of the condition of facilities and systems engineering evaluations for sustained management or acquisition/divestiture. Preconstruction and planning, construction, and post-construction as construction manager.

#### Midwest Power Company, 26 Site Brownfields Project, Project Manager.

Identification of construction costs for remediation of 26 former manufactured gas plants (MGP) as Brownfield properties. Identified best available treatment technology and feasibility of use. Prepared extensive cost spreadsheets identifying construction, capital, future and deferred project costs. Data were utilized in cost recovery with insurance carriers for \$110 million.

#### NEPA Project Manager, Various Clients.

Assessment and preparation of NEPA program documents for various clients for powerhouse, tower, office and other infrastructure needs. Interfaced with state and federal regulatory personnel. Identified and proposed alternative siting where needed.

#### Rail Facilities, NPDES, Program Manager.

Regulatory compliance review, investigation, design, and implementation of regulatory compliance and engineered remediation to bring seven rail yard facilities into NPDES compliance for various fuel system and wastewater violations. Client had received a notice-of-violation (NOV) with penalties initially assessed at \$13.2 million. Extensive interfacing with EPA reduced client's fine by more than \$10.6 million.

#### Pittsburgh, Pennsylvania, Project Manager.

Developed and executed closure and remedial action for removal of PCB articles, destruction/removal of a PCB-contaminated building, and soils from power house for a steel manufacturing site.

#### Multimedia Regulatory Compliance Baselines for ISO 14000/14001.

Technical manager for contract with multi-national automobile parts manufacturer to assess regulatory compliance and management systems, improve quality control systems, and achieve ISO certification.

#### Law Firm, BLEV Evaluation, Technical Manager.

Determination of cause of industrial accident. Project work involved examination of 140,000 pages of documents and process controls associated with the operation of a 76,000-gallon process batch tank to determine the cause of runaway reaction and subsequent vessel failure/explosion.

#### BP America, Project Manager.

Assessment and upgrading of NPDES practices at fuel oil jobber facilities. Project required performance evaluation and construction upgrades of oil-water separators, storm water drainage areas, equipment upgrades, wetlands assessment, and institutionalizing of best management practices (BMP) for the fuel farms and fuel distribution operations.

#### Open Pit Burning Ground, Army Ammunition Plant, Construction Manager.

Project involving the upgrading of an open pit burning ground at this Army Ammunition Plant. This construction project involved the grubbing and regrading of the site, construction of berms, installation of a geomembrane liner, a clay pipe collection and drainage system, preparation of working surface for further use as a materials disposal burning ground.

#### Bridgeport, New Jersey, Technical Construction Manager.

Conceptual design for incinerator ash materials handling and treatment system. Bridgeport site remediation project worth \$55 million.

#### Baytown, Texas, Procedures Specialist.

Developed specifications and procedures for handling and testing of wastes to be disposed of in an industrial landfill per federal and Texas Water Commission requirements to support client regulatory compliance and institute safe waste handling practices.

#### DoD Mentor-Protégé, Nunn-Perry Award Winner, Project Manager.

Under the Baltimore Corps of Engineers, Mr. Seavey has been guiding an SDB 8(a) in their growth through establishment of company protocols, strategic direction, financial guidance, technical mentoring, and business development. For his work, Mr. Seavey was awarded the distinguished Nunn-Perry Award for excellence in development by the DoD.

#### AFCEE ENRAC/DESC/3P AF-1 Project Manager.

Project involving phased engineering design and construction of fuel depot area upgrades, truck off-load areas, new pump house controls system, and fuel hydrant pits at Air Force Base. Also managed five delivery orders involving site assessment, risk assessment, and remediation for the IRP.

#### Dulles Airport Fuel Farm Management Planning, Project Manager.

Project involving the development of an Integrated Contingency Plan (ICP One Plan) for the new airport fuel farm, existing fuel farm, fuel line delivery systems, and the glycol distribution and collection system. The ICP One Plan incorporates multiple regulatory required emergency response and management practices into one implementation plan for the airport.

#### Pulp and Paper, Wilmington, North Carolina, Program Manager.

Installation of groundwater monitoring well system, air and soils sampling, redesign of fuel tank farm, permits, site capping, and removal of contaminated soils. Coordinated the efforts of engineering subcontractors. Project on schedule and on budget.

#### Manassas Airport, Manassas, VA, Project Manager.

Development and implementation of a spill control and contingency plan (SPCC) for this small Northern Virginia airfield.

#### Florida Air National Guard, Jacksonville, FL, Construction Manager.

Assessment and remediation of tank farm and fueling systems for the Florida Air National Guard facility at the Jacksonville Airport. Project involved the assessment of the fuel storage and fuel line systems, assessment of surrounding soils and groundwater, and, groundwater extraction and treatment, area capping and the construction of a below-ground, cut-off wall to mitigate the further migration of contaminated groundwater.

#### Caribbean Oil Refinery, Puerto Rico, Construction Manager.

Series of projects for groundwater evaluation and construction, storm water permit application, wastewater treatment facility upgrading, RCRA Part B document preparation, and closure of equalization basins. Successfully met requirements for best storm water management practice and time deadline for waste lagoon closures.

#### U.S. Air Force Base, Macon, Georgia, Engineering Project Manager.

Evaluation of hardware systems to implement in-situ treatment of VOC wastes by solidification/stabilization. Study to establish regulatory basis for standard procedures for ascertaining mass balance disposition of VOCs from lagoons. Principal study for U.S. Air Force in assessment of most suitable treatment technology.

#### New Mexico Site, Project Director.

Ground penetrating radar investigation, assessment, excavation and removal of soils at former motor fuel underground storage tank site. Interfaced with regulatory agencies on behalf of the client. Revised substandard project plan of previous consultant to bring about successful execution of project. Prepared witness deposition facilitating client's recovery of closure costs from former site operator.

#### Building Complex, Silver Spring, Maryland, Project Construction Manager.

Comprehensive asbestos containing material survey and removal of four 65-year-old underground fuel storage tanks. Project required extensive work specification development due to overlapping, abandoned, and unidentified utilities. Additionally, the close proximity of site buildings, retaining walls, and a historic monument necessitated shoring, bracing and buttressing to ensure the stability of the excavations.

#### USEPA Regulatory Development Contract. Technical Writer.

Development of Treatment Technology Land Ban Rules definitions of treatment by solidification/stabilization/fixation methods. Conducted for U.S. EPA Waterways Experiment Station.

#### Acquisition/Divestiture Projects.

Series of assessment reviews for corporations for the purpose of mergers or selling. Facilities have included rail yards, office buildings, manufacturing plants, and inactive facilities. Recent project was the Canadian National Railroad acquisition of Illinois Central.

#### AFCEE Research Laboratory Closure, Project Manager.

Project involved the assessment, packaging, salvage and/or disposal of more than 1,400 pieces of research equipment from an AFCEE research laboratory that was conducting classified radiological, biological, hazardous material, and high-explosive material research. Project was successfully conducted for AFCEE under the adverse conditions of forced closure.

#### Northern Virginia, Maryland and Washington, D.C., Project Director.

Numerous Phase I/II environmental site assessments of operating facilities to minimize client liability potential.

#### Brake Manufacturing, Maxton, North Carolina, Program Manager.

The turnkey investigation and stabilization of two abandoned asbestos landfills. An extensive investigation of the impact of the two landfills on air quality was undertaken during the project along with extensive review and compliance actions to protect wetlands. Project execution and extensive interfacing with regulatory agencies minimized actions and therefore, costs for clients.

#### Tritex Chemical, Construction Manager.

Decontamination and demolition of a brownfield chemical manufacturing plant. Work at the site included decommissioning of waste filled railroad tank cars, disposal of packaged wastes, removal of contaminated soils, and on-site treatment of underground tank wastes. Project carried out on schedule with client approved project change orders.

#### State of Virginia, Project Director.

Program to purge state-operated grade schools and colleges of hazardous and unstable laboratory chemicals. Trained site individuals in the proper identification, segregation and safe handling of laboratory wastes. Designed and staffed a number of temporary, regional, waste collection facilities. Coordinated three projects during program for safe destruction of unstable explosive wastes, all carried out successfully.

#### Norfolk, Virginia, Project Manager.

Removal and detonation of 600 pounds of unstable explosive materials contained in several buildings at facility. Project involved strict review with regulatory agencies for project compliance with numerous State of Virginia and Federal regulations.

#### DC Capital Management Group, Project Manager.

Developed regulatory compliance management procedures for real estate capital management company as part of overall management plan to maintain regulatory compliance, image protection, and reduction of potential liability.

#### NCSU, North Carolina, Project Manager.

Site stabilization, identification, packaging, and disposal of 74,000 pounds of laboratory chemical, nuisance, explosive, and radioactive wastes contained in a series of unstable, aboveground, storage vaults. Fast paced, 3-week project successfully completed without incident.

#### NIEHS, North Carolina, Project Manager.

Contract with federal government for an on-site management program at facility with 300-laboratory waste generating points. Held managerial responsibility for ongoing program for regulatory compliance, removal, packaging, transport, and disposal of wastes. Project was first of its kind for federal research center and required development of original and innovative approaches.

#### REM III Federal Program, Treatability Specialist/Project Manager.

Multiple investigation, treatability, feasibility, design, and remediation concerns on EPA Superfund sites in support of U.S. EPA REM program for Superfund sites remediation.

#### Pool Company, Louisiana, Pre-Construction Project Manager.

Treatability and feasibility studies on the remediation of 29-B type oil pit wastes. Fieldwork for processing by a solidification/ stabilization method. Interfaced for client with LA-DEQ regulatory personnel.

#### Wellsville, New York, Treatability Specialist.

Binder research and conceptual design for treatment of 200,000 yd<sup>3</sup> of lagoon sludges at brownfield closed petroleum-refining facility.

#### Arlo Industrial, Construction Manager.

Closure of a plating operation on an emergency basis due to accidental discharge by client to sanitary sewer of spent user chemicals. Planned and coordinated securing of the site for isolation of wastes, and decontamination of affected areas, including tanks, facilities, soils, and sewer system. Project carried out successfully within required 8-day time frame. Excellent coordination with regulatory authorities.

#### Oil Spill, North Carolina, Project Director.

Wetlands and stormwater impact assessment and remediation of a three-source oil spill on 30 miles of riverbank. Over 11,000 gallons of fuel were accidentally discharged during a 3-day period into the river by three separate industrial and municipal facilities. Projects conducted with no adverse effect to client image.

#### Chemical Facility, Kingsport, Tennessee, Program Manager.

Specification of soil gas survey equipment and use training specifically for investigation of underground storage tanks at large manufacturing facility. This project was executed to reduce the client's outside costs for such work.

#### Pulp and Paper, Plymouth, North Carolina, Program Manager.

Specification of potable water well abandonment program with construction management of well closures. All wells successfully closed on schedule and within budget.

#### Pensacola, Florida, Project Director.

Study for the chemical and biological stabilization of municipal WWTP sludges to reduce the utilities cost of operation of the plant and the disposal of sludges.

#### State of Florida, Project Director.

Water Quality Assurance Act "Amnesty Days" program. Project involved operation of temporary receiving stations throughout the state for receiving dangerous household wastes and small quantity generator wastes. This was the first project of its kind successfully carried out on a large scale.

#### Closed Commercial Laboratory, Virginia, Project Remediation Manager.

Project has involved the investigation and assessment of underground dilution chambers at this closed testing facility. Specifications were developed for removal of the chambers. Environmental remedial action included soils excavation, free product removal, and groundwater correction for dense and light non-aqueous contaminants.

#### PROFESSIONAL ASSOCIATIONS/CERTIFICATIONS

**ASTM Property Condition Assessment Training** 

Member-American Institute of Chemical Engineers, Associate

Member-American Society of Quality Control (Energy and Environment Division)

Member-American Association of Environmental Professionals

#### **PUBLICATIONS**

Seavey G., Priznar, F.J. 1994. "Environmental Hazards on Your Property?" Land Development, Journal of the National Association of Home Builders, Spring Issue, Washington, D.C.

Seavey, G., et. al. 1990. "Protocol for Conducting Pre-ROD Treatability Studies." Risk Reduction Engineering Laboratory Office of Research and Development. USEPA, Cincinnati, OH.

Seavey, G., Adaniya, N. 1998. "Solvent Capture and Recovery at EPA Laboratories." Safety, Health, and Environmental Management Division. U.S. EPA, Washington, D.C.

Seavey, G., Cole, G. 1991. "Suitable Hardware Systems for Minimizing VOC Loss During Stabilization/Solidification Treatment." Oak Ridge National Laboratories, U.S.A.F., OH.

Seavey, G, et. al. 1997. "Superfund - Changing Routines." National Environmental Trade Journal, New York, New York.

6. Due Diligence - Capital Asset Reporting & Control

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

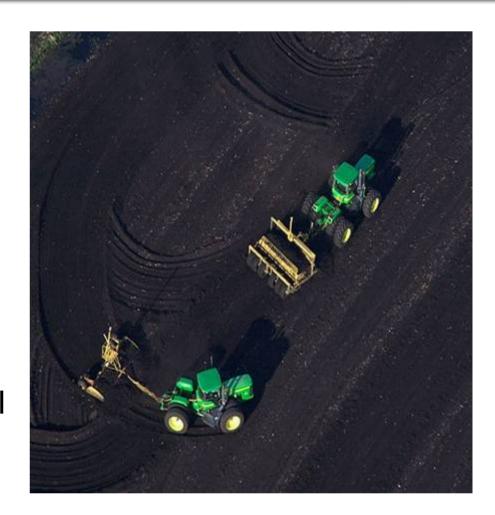


# **Due Diligence – Capital Asset Reporting** and Control

Aaron Basinger
Director, Finance & Administration Department

## Today's Capital Asset Discussion

- Definitions & Asset Categories
- Capital Asset Reporting Requirements
- Florida Statutes & District Asset Policies
- Management/Control of Movable, Tangible Assets
- Inspector General/External Auditor Coordination
- Questions

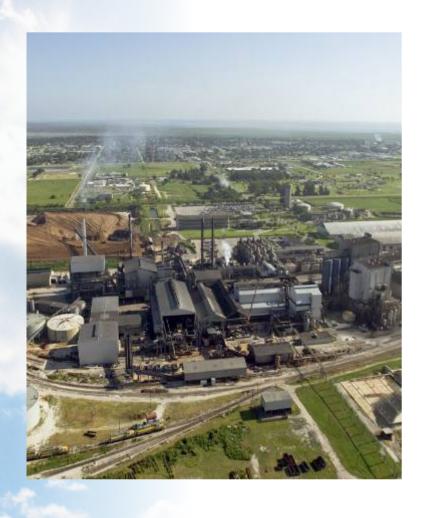


## General Capital Asset Classes



- Land & Improvements
- Buildings & Improvements
- Infrastructure & Improvements
- Leasehold Improvements
- Construction In Progress
- Furniture & Equipment
- Other Fixed Assets
- Canals & Levees
- Water Control Structures

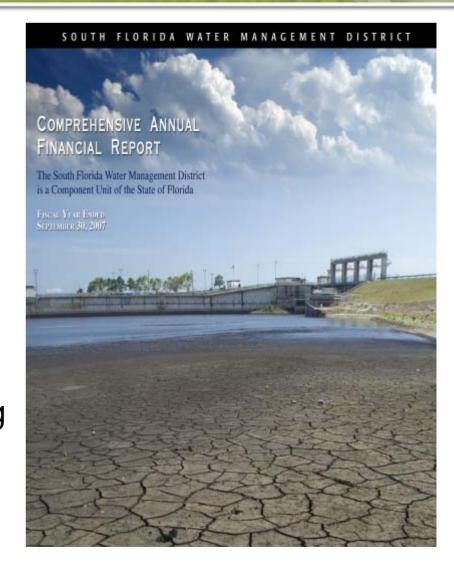
## **U.S.** Sugar Asset Classes



- Land & Land Improvements
- Buildings/Improvements
- Furniture & Equipment
- Agriculture Implements
- Pumps/Motors
- Conveyance Elevators
- Sugar Mfg (Mill, Refinery, Water Treatment)
- Citrus Manufacturing/Groves
- Rail Road Track/Cars/Locomotives
- Other Fixed Assets (Lab/Computer/Communications)

## Capital Asset Reporting Requirements

- Appraisals Underway for Various Asset Classes
- Values Based on Final Acquisition Price
- Inspector General/External Auditor Coordination
- Recorded in District Financial Statements
- In accordance with Accounting Principles and Governmental Accounting Standards

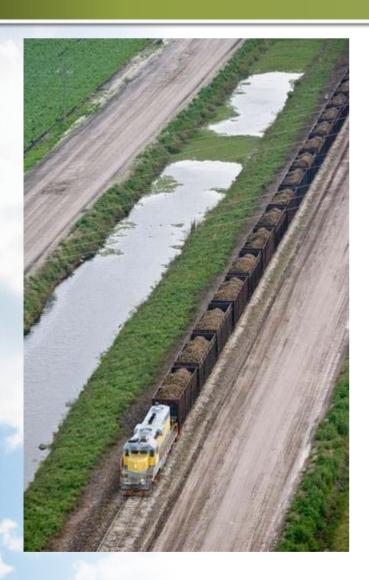


## **Inventory Management & Control**



- After Close & Values Recorded – Further Requirements
- Florida Statutes & District Policy -- requires an annual inventory of moveable, tangible assets
- Defined as: Have a cost \$1,000 or more and a useful life of more than 1 Year

## U.S. Sugar Tangible Asset Examples



- Vehicles/Trucks/Tractors/ Trailers
- Excavators
- Forklifts
- Railroad Rolling Stock
- Graders/Harvester/Loaders
- Sprayers/Tanks
- Shop Equipment
- Computers/Furniture

## Accountability, Control & Verification Strategy

- Tangible Personal Property Strategy
  - Establish Internal Property Control Team
  - Initiate a 100% inventory of tangible property
  - Install new bar code tags and use District's asset scanner technology
  - Reconcile physical inventory to USSC inventory records
  - Use outside contractor to conduct inventory activities under District supervision
  - Coordinate onsite activities with USSC
  - Coordinate with Inspector General/External Auditor
  - Initiate Similar process for spare parts/ consumables



SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Questions

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#### 7. Public Assurances

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



## **Public Assurances**

Tom Olliff, Assistant Executive Director John Williams, Inspector General

## Public Assurances...continued

- Public assurances covered already:
  - Outside independent appraisals
  - Independent environmental assessments
  - Outside engineering assessments
  - Third party inventory of assets
- Audit & finance related public assurance: Ensure the District and its tax payers are getting value; and that the process used for due diligence is appropriate and thorough for a deal of this scope and complexity

## **Public Assurances**

- Additional audit & finance related assurances:
  - Outside Auditor
  - Inspector General
  - Fairness Opinion



### Outside Auditor and/or Inspector General

- Assisting with review of the processes being used to inventory and manage assets to be acquired
- Providing a third party review of the due diligence process to ensure the appropriate investigations are conducted and a sufficient level of care is taken in investigations

### Outside Auditor and/or Inspector General

- Typically in a deal of this sort, complete due diligence is likely to include:
  - Financial
  - Real and personal property
  - Legal
  - Labor
  - Tax
  - Environment
  - Market/commercial situation of the company

### Outside Auditor and/or Inspector General

- Other areas include:
  - Intellectual property
  - Insurance and liability coverage
  - Debt instrument review
  - Employee benefits and labor matters
  - Immigration
  - International transactions

### **Fairness Opinion**



### **Duff & Phelps Overview**

Duff & Phelps Corporation (NYSE: DUF) is a leading provider of independent financial advisory and investment banking services, supporting client needs principally in the areas of valuation, transactions, financial restructurings and disputes.

Our professionals bring practical experience, responsiveness and a collaborative approach to satisfy our clients' needs with the rigor and independence that the market demands. When our clients can't afford to get their analysis wrong, they look to Duff & Phelps to get it right.

With over 1,100 employees serving clients worldwide through offices in the United States, Europe and Asia, Duff & Phelps is committed to delivering insightful advice and service of exceptional quality, integrity and objectivity.

#### **Services Offered**

- Independent Business Valuations
- Fairness Opinions
- Solvency Opinions
- Real Estate Advisory
- Financial Reporting Valuations
- Portfolio Valuations

- M&A Advisory
- Financial Restructurings
- Tax Valuations and Transfer Pricing
- Transaction Due Diligence
- Dispute Consulting
- Commercial Reasonable Opinions on Related-Party Debt Securities

### **Strong International Presence and Experience**

Duff & Phelps has built an impressive global network of over 1,100 professionals strategically located in 21 offices across the United States, Europe and Asia



### **Leading Provider of Independent Expert Opinions**

| Rank | Financial Advisor             | Number of Deals |  |  |  |
|------|-------------------------------|-----------------|--|--|--|
| 1    | Goldman Sachs                 | 130             |  |  |  |
| 2    | JP Morgan                     | 102             |  |  |  |
| 3    | Morgan Stanley                | 80              |  |  |  |
| 4    | Merrill Lynch                 | 77              |  |  |  |
| 5    | Citigroup                     | 76              |  |  |  |
| 6    | Credit Suisse                 | 72              |  |  |  |
| 7    | Lehman Brothers               | 66              |  |  |  |
| 8    | UBS                           | 65              |  |  |  |
| 9    | Houlihan Lokey Howard & Zukin | 63              |  |  |  |
| 10   | Sandler O'Neill Partners      | 60              |  |  |  |
| 11   | Duff & Phelps                 | 57              |  |  |  |
| 12   | Banc of America Securities    | 51              |  |  |  |
| 13   | Keefe Bruyette & Woods        | 48              |  |  |  |
| 14   | Lazard                        | 45              |  |  |  |
| 15   | Deutsche Bank                 | 42              |  |  |  |
| 16   | Bear Stearns                  | 38              |  |  |  |
| 17   | Stout Risius Ross, Inc.       | 31              |  |  |  |
| 18   | Wachovia Corp                 | 27              |  |  |  |
| 19*  | Jefferies & Co.               | 23              |  |  |  |
| 19*  | RBC Capital Markets           | 23              |  |  |  |
|      |                               |                 |  |  |  |

| Rank | Financial Advisor             | Number of Deals |  |  |  |
|------|-------------------------------|-----------------|--|--|--|
| 1    | Goldman Sachs                 | 47              |  |  |  |
| 2    | JP Morgan                     | 44              |  |  |  |
| 3    | UBS                           | 25              |  |  |  |
| 4    | Duff & Phelps                 | 24              |  |  |  |
| 4*   | Morgan Stanley                | 24              |  |  |  |
| 6    | Lehman Brothers               | 23              |  |  |  |
| 7    | Deutsche Bank                 | 22              |  |  |  |
| 8    | Sandler O'Neill Partners      | 21              |  |  |  |
| 8*   | Houlihan Lokey Howard & Zukin | 21              |  |  |  |
| 10   | Keefe Bruyette & Woods        | 18<br>18        |  |  |  |
| 10*  | Credit Suisse                 |                 |  |  |  |
| 12   | Merrill Lynch                 | 17              |  |  |  |
| 13   | Banc of America Securities    | 13              |  |  |  |
| 14   | Lazard                        | 12              |  |  |  |
| 14*  | RBC Capital Markets           | 12              |  |  |  |
| 16   | Citigroup                     | 11              |  |  |  |
| 17   | Stifel Financial              | 8               |  |  |  |
| 17*  | Jefferies & Co.               | 8               |  |  |  |
| 19   | Wachovia                      | 6               |  |  |  |
| 19*  | Raymond James Financial       | 6               |  |  |  |

#### **Duff & Phelps' Competitive Advantages**

- Extensive Fairness Opinion Experience
  - From 2005 to 2007, Duff & Phelps rendered over 170 fairness opinions in transactions aggregating nearly \$90 billion in deal value
  - In 2005, Duff & Phelps rendered over 40 fairness opinions.
  - In 2006, Duff & Phelps rendered over 62 fairness opinions.
  - In 2007, Duff & Phelps rendered over 62 fairness opinions.

#### Unparalleled Reputation

- International reputation and top-tier credibility
- Reputation for integrity and independence
- Provide fairness opinions that withstand scrutiny
- Stand behind opinions (in the event of litigation or other challenges)

### Independence

Independent from underwriters, accounting firms, research analysts, and credit rating agencies

#### **Duff & Phelps' Competitive Advantages (continued)**

- Senior-Level Engagement Commitment and Execution Capabilities
  - A dedicated team of senior advisors for each engagement we undertake
  - Reputation for responsiveness and timeliness
  - With over 1,100 professionals, we have a vast repository of knowledge across numerous industries
- Risk Management Approach to Transaction Opinions
  - Our procedures and opinions comply with FINRA Rule 2290
  - Thorough due diligence and financial analysis
    - Valuation is the cornerstone of Duff & Phelps
    - Extensive knowledge of transaction structures and fairness issues
  - Thorough documentation
    - Well organized notes, files, transaction summary
    - Formal board presentation and assistance with any need for disclosure

#### What is a Fairness Opinion?

- With the heightened awareness on corporate governance issues, governing boards are increasingly seeking fairness opinions (and independent, second fairness opinions) to ensure that the board's fiduciary duty to shareholders has been fulfilled.
- A fairness opinion is a letter delivered to a fiduciary (typically a company or public agency's board of directors) as to whether or not a transaction is fair, from a financial point of view, to shareholders or public stakeholders.
- A fairness opinion provides a decision-maker with essential information, and serves as an element of proof that the decision-maker or fiduciary has used reasonable business judgment in making a decision on behalf of others.

#### A Fairness Opinion is Not...

- A valuation opinion regarding a target company.
- An evaluation of the business rationale to proceed with the proposed transaction.
- An opinion as to the legal fairness of the proposed transaction, as the opinion speaks only to fairness from a financial point of view.
- A recommendation that a board of directors vote to approve the proposed transaction.

#### **Deal Team**

Andrew W. Capitman - Duff & Phelps, Managing Director

Christopher L. Janssen – Duff & Phelps, Managing Director

Michael A. Gibbs - Duff & Phelps, Managing Director

David J. Wilk – Duff & Phelps, Managing Director

Jeffrey G. Ashmore – Duff & Phelps, Industry Consultant

Neisen O. Kasdin – Akerman Senterfitt

Stephen K. Roddenberry – Akerman Senterfitt

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Questions

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**Our History** 

Leadership Team

**Quality Assurance** 

Civic Responsibility

#### Firm Profile

Sharpton, Brunson & Company is not a traditional accounting firm. We er

- CPAs
- Forensic Accountants
- . Business Valuation Experts
- Engineers
- Economists
- Project Managers

Our scope of services expand beyond the ordinary. In addition to tradition audit, tax and management advisory services, we provide:

- Economic Impact & Valuation Services
- Feasibility Studies
- Operational Studies & Reviews
- Program Management/Financial Controls
- Litigation Support/Right-of-Way Acquisition services

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**Our History** 

Leadership Team

**Quality Assurance** 

Civic Responsibility

#### Firm Profile | Our History

#### In The Beginning

In 1984, Darryl K. Sharpton gambled against the business "odds" and founded Sharpton & Company after spending several years with one of the "Big 4" accounting firms. Those "odds" predict that most businesses will fail within their first five years of existence.

In 1986, Sharpton & Company became Sharpton, Brunson & Company when Anthony "Tony" Brunson joined Mr. Sharpton as a partner. Mr. Sharpton and Mr. Brunson are former high-level CPAs at Price Waterhouse.

#### **Two Decades Later**

From the humble beginnings of a one-man operation in less than 250 square feet of space, the firm now has offices on one of the penthouse floors of the SunTrust Building in downtown Miami as well as offices in downtown Fort Lauderdale and Tallahassee. Sharpton, Brunson & Company has grown to become one of the to 25 accounting and consulting firms in South Florida.

The firm has gained a stellar reputation for recruiting some of the most talented professionals in the industry. This team of talented and dedicated professionals and support staff has enabled the firm to be awarded many accolades of accomplishments.

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**Our History** 

Leadership Team

**Quality Assurance** 

Civic Responsibility

Firm Profile | Leadership Team



### Darryl K. Sharpton

<u>Darryl K. Sharpton</u>, CPA/ABV, Consulting Partner. Darryl has over 22 years of public accounting experience, most of which has involved complex financial analyses and providing business valuations and economic damage assessments. He is highly sought as an expert witness by leading law firms, governmental entities, transportation concerns and businesses throughout Florida.

He is among the elite few who has earned the designation of Accredited in Business Valuation (ABV) from the American Institute of Certified Public Accountants. ABV is granted exclusively to a select group of certified public accountants who demonstrate substantial experience and expertise in the business valuation field



### **Anthony Brunson**

Anthony "Tony" Brunson, CPA, Senior Audit Partner. Tony is the firm's government specialist. With over two decades of public accounting experience, he has an intimate knowledge of governmental and municipal financial reporting requirements. His financial experience is drawn upon by a vast number of South Florida not-for-profits and governmental entities.

Additionally, Tony serves as an expert witness in matters involving construction claims and cost allocation methods due to his in-depth knowledge of federal and state cost methods, practices and theories.

#### **About Our Professionals**

Sharpton, Brunson & Company's breadth of expertise is cultivated from nearly 400 years of experience. We have a staff of over 33 professionals. Our partners and senior managers generally come from "Big 4" accounting firms and have a minimum of 10 years

#### experience.

- <u>Kevin Adderley</u>, CPA, Senior Manager, Government/Not-for Profit
- <u>Tom Schlosser</u>, CPA/ABV/CBA, Senior Manager, Consulting Services
- Wesley Agee, CPA, Senior Manager, Tax/Entrepreneurial Services

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# Due Diligence & Valuation Services

Re: U.S. Sugar Acquisition

### **Objective of SOW**

Provide due diligence and valuation services for the pending U.S. Sugar Acquisition

- Assist District with fully executing its due diligence processes and responsibilities related to the U.S. Sugar acquisition
- Ensure there is a well coordinated process of evaluating and consummating the acquisition based on an appropriate level of financial and commercial due diligence

- Develop a thoroughly documented due diligence process that will help:
  - > Ensures that the District's resultant actions are unquestionably transparent
  - Provide accountable to all key stakeholders affected by the acquisition transaction(s); particularly the citizens of the State of Florida

- Documented due diligence process anticipated to:
  - > Sufficiently justify the acquisition price for the contemplated asset purchase,
  - Provide a baseline for which any subsequent resell prices (of the resultant assets and or business segments) will be benchmarked and justified

- Serve as a coordinator of the District's due diligence team.
- Help ensure that the District is planning appropriate stewardship of human and financial resources required to negotiate and execute the contemplated acquisition.

• Assess the primary benefits (and issues of significant concern, if any) of the Acquisition, by inquiring into the relevant aspects of the past, present and predictable future of the business/asset interests to be acquired.

- Ultimately determine the cost/benefit of the acquisition.
- Responsible for ensuring that such analysis is sufficiently inclusive and exceedingly disciplined to allow all key stakeholders to readily determine that the District has successfully advanced the interests of the State of Florida.

- Develop the information necessary in order for stakeholders to assess whether the potential acquisition value justifies the significant investment being made
- Also determine that the transaction is truly capable of realizing its acquisition value.

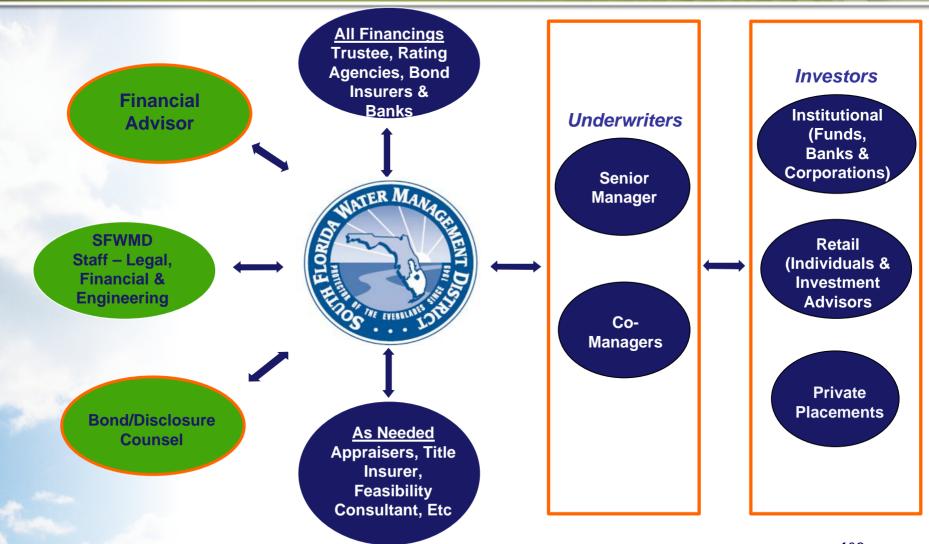
### 8. Financing



### **Financing Team & Process**

Paul E. Dumars, Sr. Chief Financial Officer

### Financing Team



## Public Financial Management (PFM) Asset Management LLC



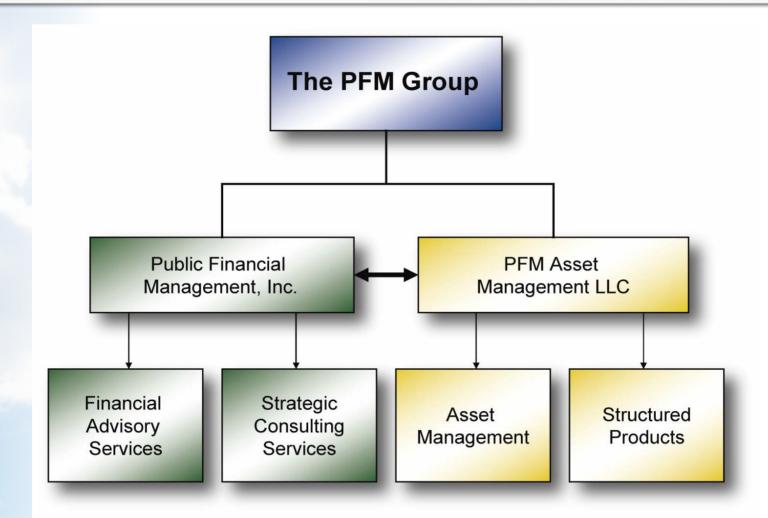






- Leading financial advisor in the nation and Florida
- Engages in capital planning, revenue forecasting and evaluation, resource allocation, debt management policy development and debt transaction management
- Registered investment advisor under the Investment Advisor's Act of 1940.
- Reports to the Securities Exchange Commission (SEC) and the Municipal Securities Rules Making Board (MSRB)

### The PFM Group



## The PFM Group Technical & Analytical Expertise

- Unique among financial advisors in that we are independent and price as many bonds as the leading investment banks.
- Do not buy or sell securities for our own account, so there is no potential conflict of interest.
- Price an average of three deals per business day, so we know the market preferences when pricing bonds for our clients.
- SFWMD does not have to accept a trade off between technical expertise and sound, independent financial advice. PFM has both the technical resources and the independence.

## The PFM Group Technical & Analytical Expertise

### **Technology**



### Independence

Municipal market knowledge

Trading desk

Swap structuring

PFMAuction (internet bidding)

**Debt profiles** 

Sizing and structuring bonds

Refunding analysis

Call option analysis



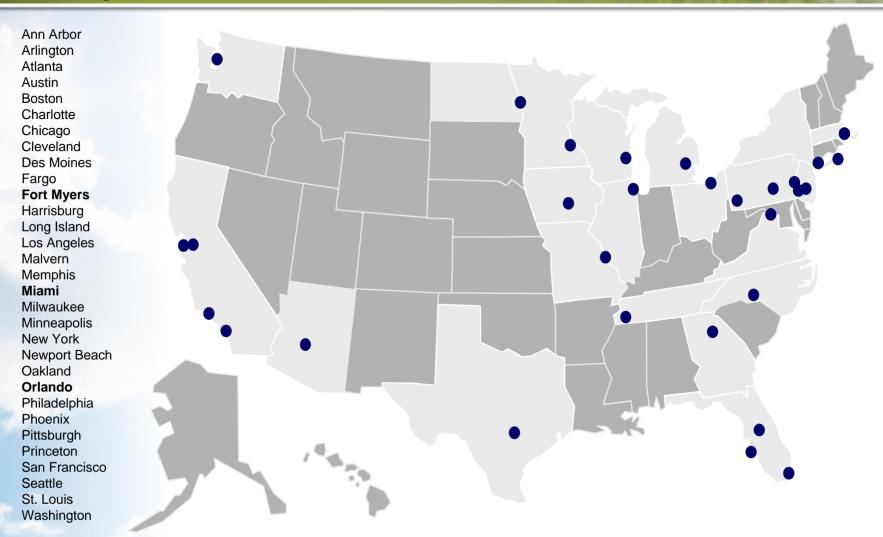
No conflict of interest

Client interest only

Business agent for the client

No investor pressures

## The PFM Group: National Resources, Local Perspective and National Market Stature



### National and Florida Tax Exempt Rankings

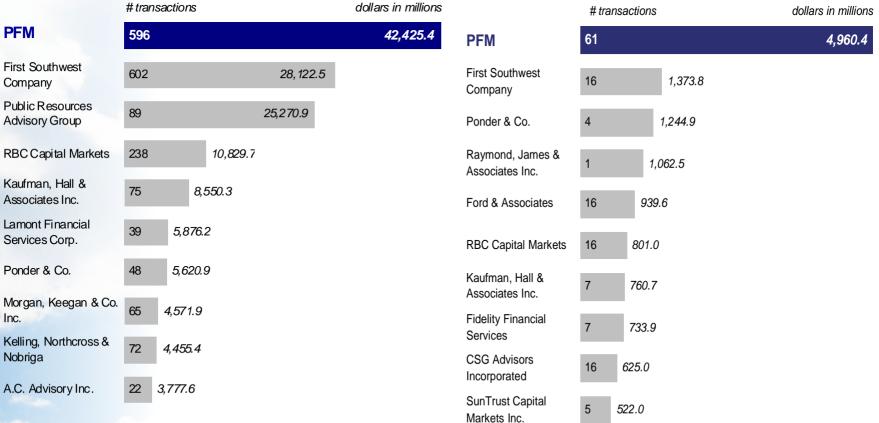
#### 2007 Year End Tax Exempt Long-Term Municipal New Issues

National Municipal Financial Advisory Ranking

Source: The Bond Buyer/Securities Data Company

#### 2007 Year End Florida Tax Exempt Long-Term Municipal New Issues

National Municipal Financial Advisory Ranking Source: The Bond Buyer/Securities Data Company



## The PFM Group The SFWMD Team

- David Moore, Managing Director, is the Engagement Manager. Manages PFM's Florida practice and brings special expertise related to Certificates of Participation. Winner of the *Deal of the Year* twice (Palm Beach Schools and SFWMD).
- Sergio Masvidal, Senior Managing Consultant in the Coral Gables office. Assists Mr. Moore with project management on a day-to-day basis. Mr. Masvidal specializes in Florida municipal finance for authorities, counties and cities.
- Jeremy Niedfeldt, an experienced Consultant in the Orlando office assists Mr. Moore and Mr. Masvidal with analytical and technical support.

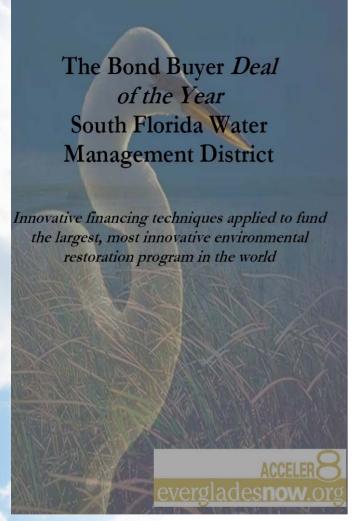
## The PFM Group Role of the Financial Advisor

- Strategic Advisor
- Developing the Plan of Finance
- Manage the Financing
- Work with the members of the financing team to implement the financing(s)

## The PFM Group Develop a Plan of Finance

- Develop Financing and Debt Objectives
- Review Legal Structure
- Analyze Future Debt Capacity
- Review Capital Budget
- Identify Financing Alternatives
- Debt Profile/Debt Structuring Modeling
- Final Financial Plan

## The PFM Group Series 2006 COPs



- Funded the first phase of the Acceler8 program \$546M
- Financial markets rewarded the District's prudent financial strategies with AA+/Aa3/AA- ratings on the COPs.
- Credit Presentation and Insurer negotiations
- Financing was completed in late 2006 and won the Bond Buyer Deal of the Year award as the most creative, efficient and innovative financing in the nation

## The PFM Group Market Conditions

- The sub-prime mortgage crisis
  - Only 2 insurers remain strong (Berkshire Hathaway (Buffett) is new, 3<sup>rd</sup> insurer)
  - Commercial banks (providers of Letters of Credit to municipal market) are also under pressure
  - Critical to develop a flexible plan of finance and access diverse segments of the market to limit risk and obtain lower interest rates.
- Long-term interest rates still reasonable and short-term (variable rate) debt is very cost effective as long as the Federal Reserve leaves short-term rates low.

# Current Status of Credit Ratings for Bond Insurers

|                              | Moody's Investors Service                  | STANDARD<br>&POOR'S                | FitchRatings                       |
|------------------------------|--------------------------------------------|------------------------------------|------------------------------------|
| Ambac                        | • 'Aa3' / Negative Outlook                 | • 'AA' / Negative Outlook          | • Ratings Withdrawn                |
| ASSURED<br>GUARANTY          | • 'Aaa' / Review for<br>Possible Downgrade | • 'AAA' / Stable Outlook           | • 'AAA' / Stable Outlook           |
| BERKSHIRE<br>HATHAWAY INC.   | • 'Aaa' / Stable Outlook                   | • 'AAA' / Stable Outlook           | • NOT RATED                        |
| CIFG IXIS FINANCIAL GUARANTY | •'Ba2' / Watchlist<br>Developing           | •'B' / CreditWatch<br>Developing   | • 'CCC' / Evolving Watch           |
| FGIC                         | • 'B1' / Negative Outlook                  | • 'BB' / CreditWatch<br>Negative   | • 'CCC' / Evolving Watch           |
| FFSA A Dexia Company         | • 'Aaa' / Negative Credit<br>Watch         | • 'AAA' / Negative Outlook         | • 'AAA' / Stable Outlook           |
| mbia ASSET MANAGEMENT        | • 'A2' / Negative Outlook                  | • 'AA' / Negative Outlook          | • Ratings Withdrawn                |
| SYNCORA<br>Guarantee         | • 'B2' / Under Review                      | • 'BBB-' / CreditWatch<br>Negative | • 'CCC' / Rating Watch<br>Positive |

# The PFM Group Planning Model

- PFM developed a comprehensive financial planning model that allows the District to vary a wide range of assumptions to aid in determining the most prudent, cost-effective and flexible Plan of Finance.
- The variables built into the model include:
  - Interest rate
  - Mode of debt (variable/fixed)
  - Taxable/tax-exempt
  - Potential impact of lease revenues and land sales
- The model helps the staff evaluate all alternatives.

## The PFM Group Future Refinements

- Finalize Financing Documents and Validation
- Refine Plan of Finance
- Execute completion of the Plan of Finance



#### **Bond Counsel**

Paul E. Dumars, Sr. Chief Financial Officer

# **Bond Counsel Bryant Miller and Olive**

- Leader in legal matters related to public finance, government and complex structured transactions
- Bases its constituent success on the provision of quality legal services, a clear understanding of the needs of clients and solid, lasting relationships
- Recognized for quality legal services in highly specialized technical areas.



#### **Bond Counsel Team**



Randall Hanna Engagement Leader



Kenneth Artin



JoLinda Herring



Samuel Queirolo

# **Bond Counsel Overview of Engagement**

- Support in Negotiation of Transactional Documents
- Provisions regarding Public Financing
- Assistance in Structuring COP Issuance
- Preparation of Public Financing Documents

## Bond Counsel Deliverables

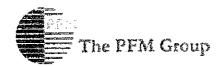
- Governing Board Bond Resolutions
- Not for Profit Leasing Corporation Resolutions
- Associated Agreements, Indentures And Leases
- Bond Opinion

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Questions

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Professionals



#### David Moore

Managing Director

Email:

moored@pfm.com

**Business Specialty:** 

Financial Management

Office:

Orlando

300 S. Orange Avenue

Suite 1170

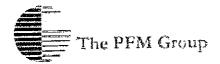
Orlando, FL 32801 Phone: 407-648-2208 Fax: 407-648-1323

Mr. Moore has worked as an investment banker and financial advisor for the past eleven years and joined PFM in 1998.

Mr. Moore's clients are primarily located in Florida and include cities, counties, school districts and a variety of authorities. Mr. Moore's project finance experience includes economic development, airports, housing, education public power, solid waste, assessment programs and utility systems. His expertise includes complex financing modeling and credit analysis where he assisted numerous Florida credits achieve "AAA" ratings.

Mr. Moore holds a M.B.A., cum laude, from the Crummer School of Business at Rollins College and a B.S. in Electrical Engineering from Auburn University.

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Professionals



#### Sergio Masvidal

Senior Managing Consultant

Email:

masvidals@pfm.com

Business Specialty:

Financial Management

Office:

Miami

2121 Ponce De Leon Blvd.

Suite 510

Coral Gables, FL 33134 Phone: 305-448-6992

Fax: 305-448-7131

Sergio Masvidal joined Public Financial Management in 2003. As a Senior Managing Consultant in the Miami office, he has assumed an active role in providing technical financial advisory support to clients throughout the Southeast. Having actively supported over \$3.0 billion of bond transactions, Mr. Masvidal's clients include a variety of Counties, Cities, Transportation Authorities and School Districts.

Mr. Masvidal is primarily responsible for providing analytical and technical support to his clients and the financial advisory group. These responsibilities include sizing bond transactions, creating spreadsheet models, performing refunding analyses, long-term capital planning and innovative structures.

Mr. Masvidal graduated from Muhlenberg College in May of 2002, where he earned his Bachelor of Arts in Psychology.

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9. Restoration Concepts and Planning

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



### **Restoration Project Concepts & Planning**

Kenneth G. Ammon, P.E. Deputy Executive Director, Everglades Restoration

Tommy B. Strowd, P.E. Asst. Deputy Executive Director, Everglades Restoration

#### **Presentation Overview**

- Environmental Needs and Benefits
  - The CERP 'Yellow Book'
  - Needs & Benefits
- Preliminary Hydrologic Analysis
- Conceptual Project Configurations
- Public Planning Process

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



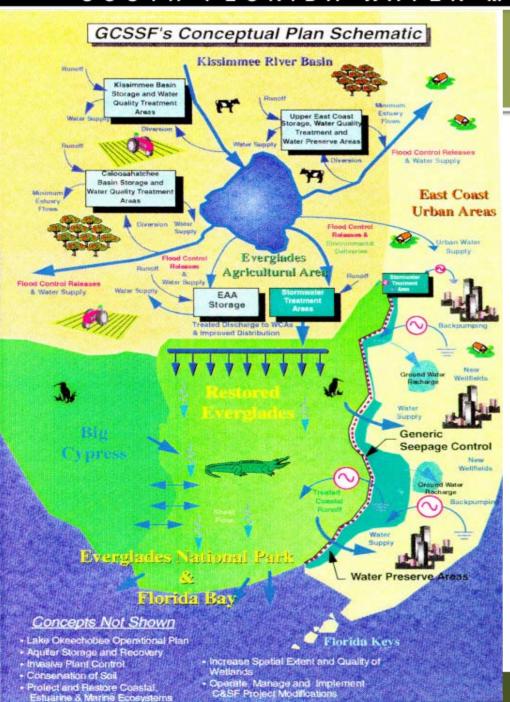
**Environmental Needs and Benefits** 

## **Environmental Needs and Benefits**What the Yellow Book Was...

- The Comprehensive Everglades Restoration Plan (CERP aka 'the Yellow Book') was finalized in 1999
  - Consensus driven document based upon the 'Governor's Commission' Conceptual Plan
- A major element of the Plan was returning water storage capacity to the system
  - "Storage, storage, storage..." Stu Appelbaum
- Recognized there were limitations on availability of land from willing sellers in the Everglades Agricultural Area (EAA)
  - Assumed the Talisman acquisition would provide the necessary storage
- Assumed water quality requirements for Everglades would be met, however, no additional treatment acreage was explicitly included

## Environmental Needs and Benefits What the Yellow Book Was...

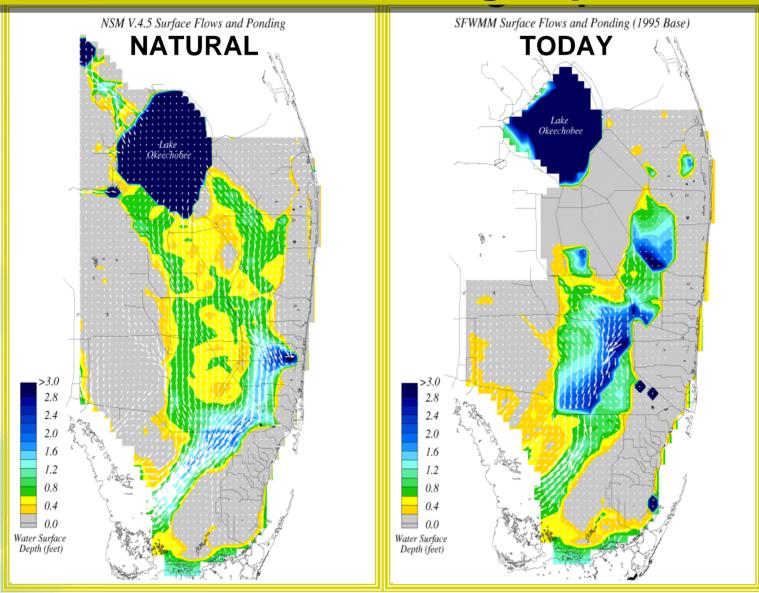
- Assumed significant level of Aquifer Storage and Recovery (ASR) wells adjacent to Lake Okeechobee to provide multi-year carry-over storage
  - High and low levels of Lake Okeechobee were attenuated through the use of ASR
- Natural Systems Model (NSM) stages were used as a target for Everglades restoration
  - While decompartmentalization of Water Conservation Area 3A was included...
    - There was very little understanding of the quantities of flow needed to facilitate Everglades Restoration



## What the Yellow Book was...

- Governor's Commission for a Sustainable South Florida
  - Storage, Water Quality & Flow
    - North of Lake Okeechobee
    - C-43 & C-44 basins
    - EAA
    - Flows re-established in the Everglades
      - Water Conservation Areas
      - Everglades National Park
      - Florida Bay

### Natural vs. Altered Ponding Depth Patterns



## Environmental Needs and Benefits How have things changed since the Yellow Book?

- Significantly more water is needed to restore the central and southern Everglades system
  - Importance of flow to restoration of the lost "ridge and slough" characteristics of the Everglades
  - Emphasis on high salinity impacts to Florida Bay
  - Emphasis in the Everglades has shifted from a primary focus on water depths to a recognition of the importance of overland flow
    - Major focus of discussion at 2008 Greater Everglades Ecosystem Restoration (GEER) conference
- Additional treatment capacity is necessary to meet the water needs of the Everglades
- Continued ecological decline in the St. Lucie and Caloosahatchee Estuaries is leading to a desire for total elimination of damaging discharges from Lake Okeechobee

### Environmental Needs and Benefits How have things changed since the Yellow Book

- Continued ecological decline in Lake Okeechobee resulting from the impacts of extreme stages, is leading to a need to manage the Lake within ecologically desirable levels
- Herbert Hoover Dike limitations for the foreseeable future
- Uncertainty of ASR technology
- Optimum surface water reservoir depths provide greater carry-over storage
- Potential willing seller opportunities increase the availability of land for storage and treatment in the EAA

## Environmental Needs and Benefits Desired Benefits

- Significantly reduce the potential for ecologically harmful estuary discharges from Lake Okeechobee by the US Army Corps of Engineers
- Maintain ecologically acceptable stages in Lake Okeechobee
- Significantly increase year-round flows of high quality water to the Everglades
- Eliminate the need for "back-pumping" water into Lake Okeechobee from the EAA
- Provide additional water storage alternatives, relieving some pressures on the Herbert Hoover Dike while the federal government undertakes repairs
- Sustainability of agriculture and green energy production

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

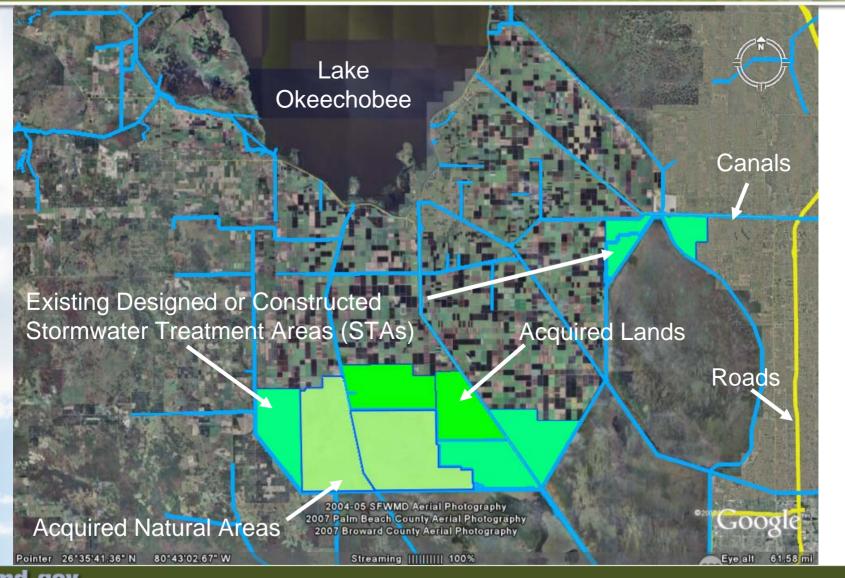


**Conceptual Project Configurations** 

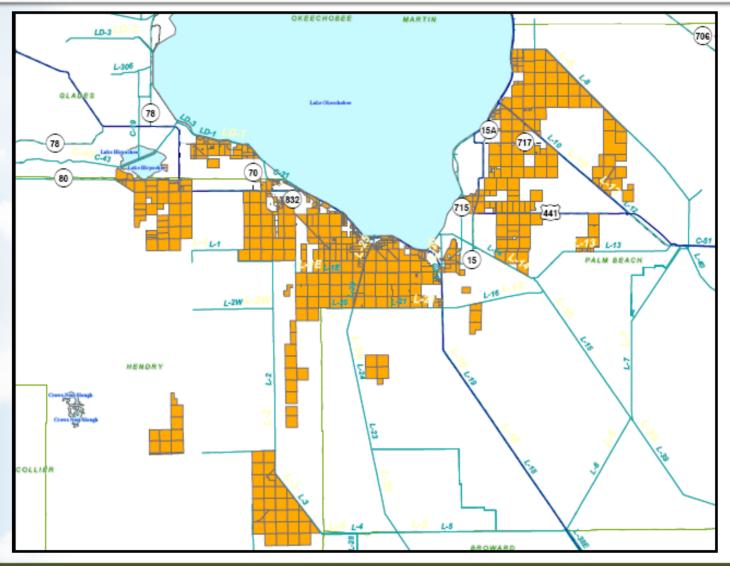
#### **Project Facilities Concepts**

- Focused to provide water storage, water quality treatment and conveyance
- Utilizes reservoirs with depths expected between 12 and 15 feet
- Water quality treatment areas to deliver proper flows to the remnant Everglades at appropriate nutrient concentrations and loads
- Improved water conveyance capacity within the EAA

# Conceptual Project Configurations Existing Features

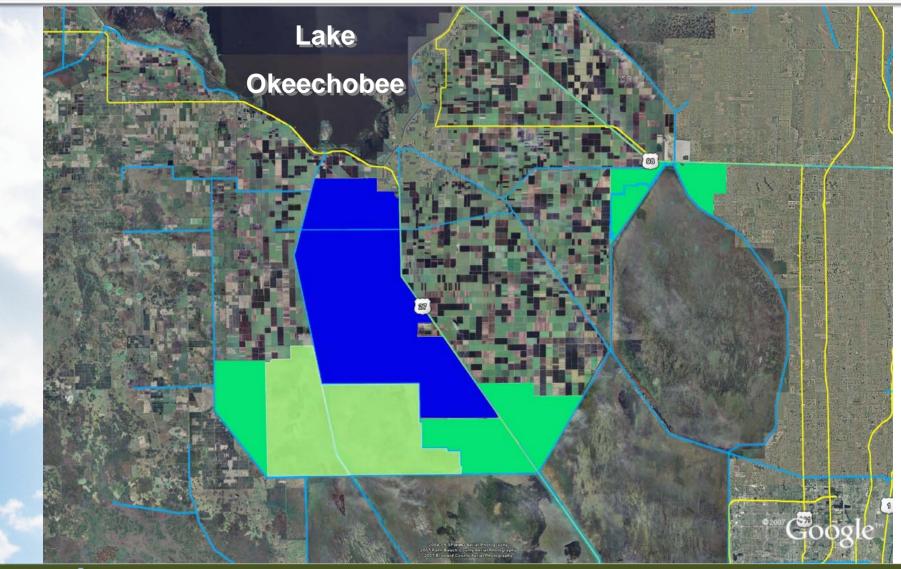


### Location of U.S. Sugar Properties

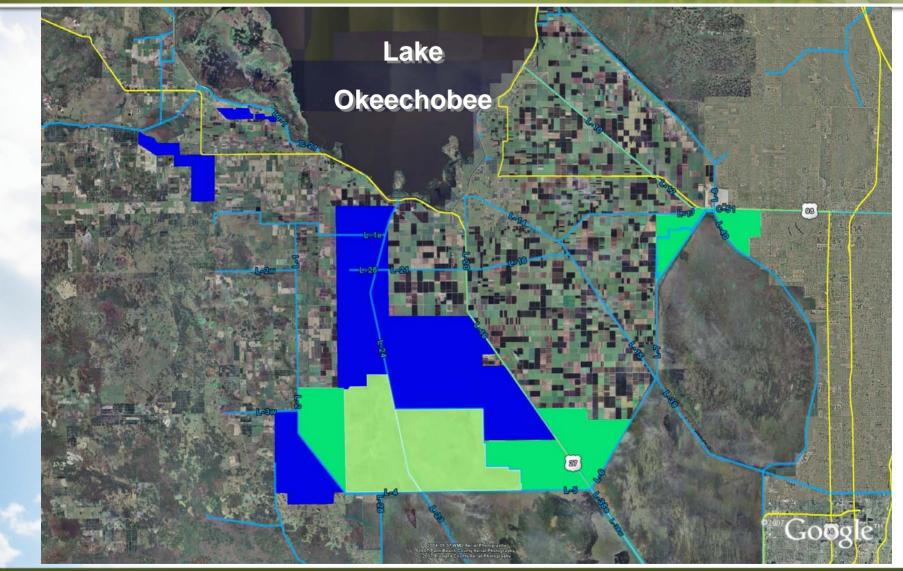


### Conceptual Project Configurations

Located Between Miami & North New River Canals

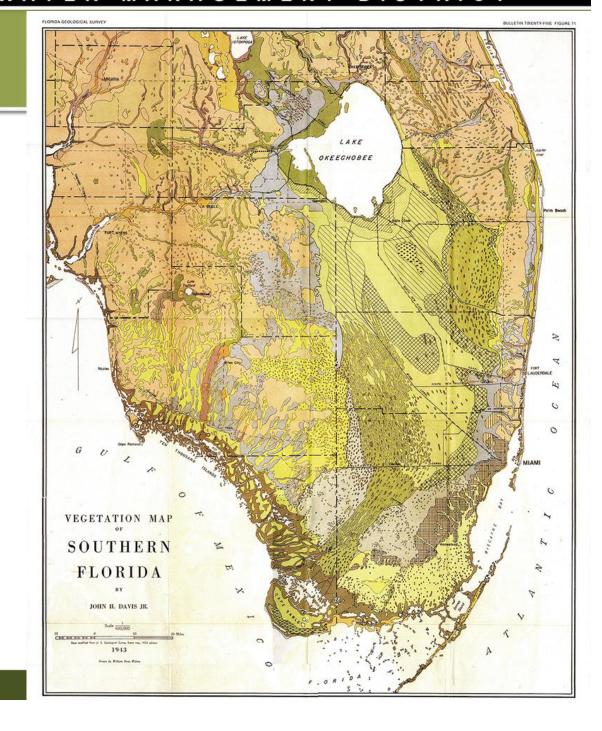


## Conceptual Project Configurations Adjusted to Address Land Constraints

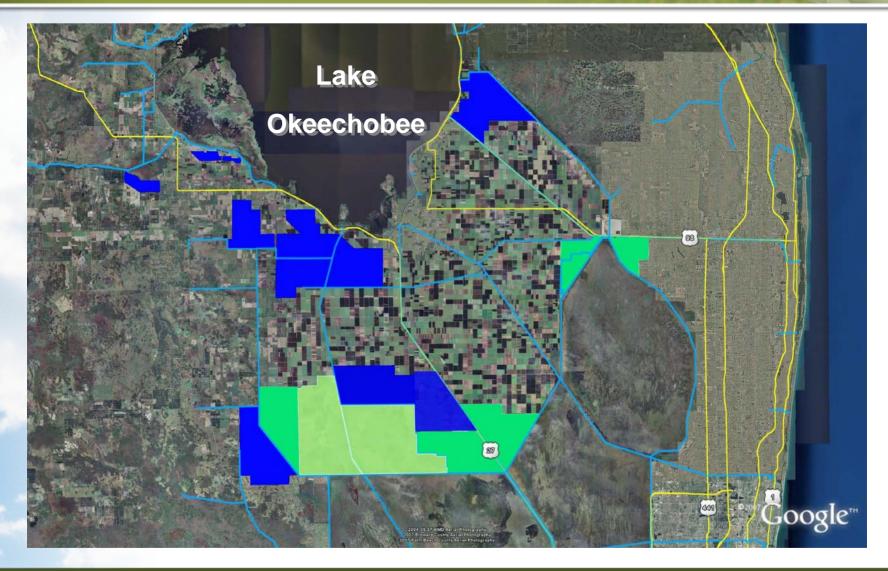


### Davis Map

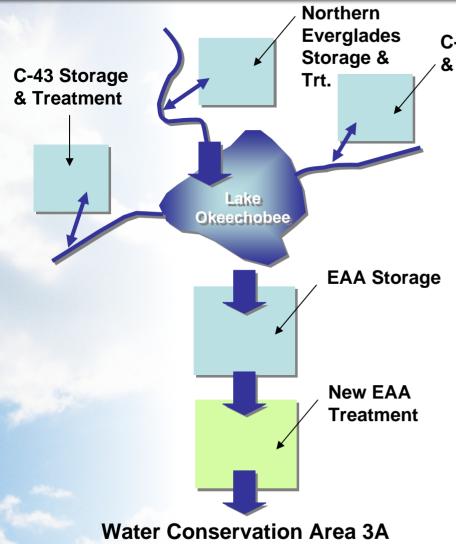
sfwmd.gov



## Conceptual Project Configurations Located Within USSC Lands



## Conceptual Project Configurations Preliminary Hydrologic Analysis



C-44 Storage & Treatment

- Basic 'Water Budget' analysis
  - 41 year period of record (1965-2005)
- Considers a range of natural system flows for the Everglades
- Flows of the necessary magnitude require that the major water budget elements are considered as a system

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



### **Public Planning Process**

saymel-gov

## Public Planning Process for River of Grass Features

#### The Goal

Ensuring broad public involvement in planning the features that are facilitated through the River of Grass land acquisition

# Public Planning Process Initial Process

- Initial conceptual planning to be a SFWMD/State led public effort utilizing the Water Resources Advisory Commission (WRAC)
  - A forum for improving public participation on water resource issues which includes broad stakeholder participation
- Build on successful WRAC planning processes for the C-111 Spreader Canal and Northern Everglades
- The process will follow a step-wise planning approach
  - Identification of problems and opportunities
  - Goals, objectives and constraints
  - Identification, formulation, and evaluation of facilities to meet the goals and objectives
- Creates the foundation for more extensive/detailed planning and formulation

# Public Planning Process Initial Process

- Key ecological areas that need to be taken into consideration:
  - Lake Okeechobee excessive high and low levels
  - St. Lucie and Caloosahatchee Estuaries excessive high Lake Okeechobee discharges
  - Central and Southern Everglades providing the flows necessary to restore the key components of the remaining Everglades and Florida Bay
- Planning variables to be considered:
  - Storage and treatment within and adjacent to EAA
  - Northern Everglades storage
  - Lake Okeechobee operations
  - Everglades demands

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



Questions

sayund goy

### 10. Outreach Update

SOUTH FLORIDA WATER MANAGEMENT DISTRICT



## **Outreach & Economic Transition Activities**

Deena Reppen
Deputy Executive Director, Government and Public Affairs

## **Outreach Activities**



### **Since June 24, 2008**

#### **Media Hits**

761 state 447 national 67 international

## Community/Government Meetings 133

## Local Government Resolutions 36 (28 in support; 8 economic concerns)

#### **River of Grass Web Site**

3,241 hits Expanded to include additional records

#### **E-Newsletter**

12,337 distribution River of Grass Special Edition July 3, 2008 Governing Board July Update Governing Board August Update September 8, 2008

**Government & Public Affairs** 

## **EVERGLADES LAND ACQUISITION OUTREACH UPDATE**

- Activity beginning June 24, 2008 through September 4, 2008 -

#### Media

Media Hits <u>State</u> <u>National</u> <u>International</u>
To date 761 447 67

This week 2 1

News Interviews <u>State</u> <u>National</u> <u>International</u>

104 27

News Releases 3
Press Conferences 1

#### Local/State/Federal Government Outreach

Local Government 36
State Briefings 43
Federal Briefings 37

Resolutions 36 (twenty-eight in support)

#### Stakeholder Meetings/Citizen Requests

Stakeholder Meetings 17
Citizen Info Line calls 31
E-mails Received 14
Public Records Requests 13

#### **River of Grass Website**

Hits to date 3,241 Hits this week 190

#### **Materials Distributed**

Information Packages 70

E-Newsletters

The Ripple Effect 2 (12,337 distribution)







September 2008

**Government & Public Affairs** 

## **EVERGLADES LAND ACQUISITION OUTREACH UPDATE**

- Activity beginning June 24, 2008 -

#### **Local Government Outreach**

- 7/1 Hendry County, City of Clewiston and City of LaBelle Joint Commission Meeting
- 7/1 Hendry County Board of County Commissioners
- 7/8 St. Lucie County Board of County Commissioners
- 7/8 Glades County Board of County Commissioners
- 7/14 City of Clewiston City Manager Wendell Johnson and Hendry County Commissioner Kevin McCarthy
- 7/16 Tri-Cities Meeting South Bay
- 7/18 Belle Glade Town Hall Meeting
- 7/21 Mick Denham, Mayor of Sanibel
- 7/21 Clewiston City Council
- 7/21 Special Board Meeting of the Florida's Heartland Rural Economic Development Initiative (FHREDI) and Florida's Freshwater Frontier Inc.
- 7/22 Glades County Board of County Commissioners
- 7/23 Palm Beach County Zoning Board
- 7/24 Okeechobee County Board of County Commission
- 7/28 Glades County Board of County Commissioners
- 7/28 Clewiston City Council
- 7/29 Palm Beach Commissioner Jeff Koons/Solid Waste Authority
- 7/31 Hendry County Administrator Judy Kennington-Korf
- 7/31 Sustainable Glades Coalition of Palm Beach Economic Development Agencies
- 8/4 Palm Beach County/Port of Palm Beach District
- 8/5 Lee County Board of County Commissioners
- 8/5 Okeechobee City Council
- 8/5 Clewiston Mayor Mali Chamness and Clewiston Chamber
- 8/6 City of Pembroke Pines
- 8/6 Okeechobee Economic Council





#### Local Government Outreach - Continued

- 8/12 Hendry County Board of County Commissioner Meeting
- 8/12 Hendry County Public Workshop
- 8/12 Clewiston Mayor Mali Chamness, Clewiston City
  Manager Wendell Johnson, LaBelle City Commissioner
  David Lyons, Hendry County Commissioner Kevin
  McCarthy, Interim Hendry County Administrator Judy
  Kennington-Korf, Hendry County Planner Vince Cautero,
  Lobbyists Joe Spratt and Curt Kiser
- 8/21 Southwest Florida Regional Planning Council
- 8/21 LaBelle City Commission
- 8/25 Regional Economic Development Initiative (REDI)
  Palm Beach County
- 8/26 City of Aventura
- 8/27 Sustainable Glades Task Force Palm Beach County
- 8/27 Tri-Cities Meeting in Belle Glade
- 8/27 Regional Economic Development Initiative (REDI) Glades County
- 8/28 Regional Economic Development Initiative (REDI) LaBelle, Hendry County
- 8/28 Regional Economic Development Initiative (REDI) Clewiston, Hendry County
- 8/29 Clewiston Mayor Mali Chamness, Clewiston City
  - Manager Wendell Johnson, LaBelle City Commissioner
  - David Lyons, Hendry County Commissioner Kevin
  - McCarthy, Interim Hendry County Administrator Judy
  - Kennington-Korf, Hendry County Planner Vince Cautero,
  - Lobbyists Joe Spratt and Curt Kiser
- 9/2 Chamber of the Palm Beaches Government Affairs Committee





#### **State Legislative Outreach**

- 6/23 Representative Mary Brandenburg
- 7/1 Representative Kelly Skidmore
- 7/2 Representative Maria Sachs
- 7/3 Senator Ted Deutch
- 7/8 Representative Carl Domino
- 7/8 Representative Julio Robaina
- 7/8 Representative David Rivera
- 7/8 Representative Oscar Braynon
- 7/11 Senator Nan Rich
- 7/11 Representative Matt Hudson
- 7/14 Mike Hansen (Representative Ray Sansom)
- 7/18 Representative Priscilla Taylor
- 7/21 Representative Denise Grimsley
- 7/21 Senator J.D. Alexander
- 7/25 Representative Joe Gibbons
- 7/25 Representative Ari Porth
- 7/29 Senator Paula Dockery
- 7/29 Senator Lee Constantine
- 7/29 Representative Baxter Troutman
- 7/29 Senator Lee Constantine
- 7/29 Representative Baxter Troutman
- 7/29 Senator Jeff Atwater
- 8/1 Representative Gary Aubuchon
- 8/1 Representative Michael Grant
- 8/4 Representative Will Weatherford
- 8/6 Representative Bogdanoff Airboat Tour
- 8/6 Representative Evan Jenne
- 8/7 Senators Ken Pruitt and Dave Aronberg; Representative William Snyder
- 8/8 Representatives Anitere Flores and Carlos Lopez Cantera
- 8/11 Representative Franklin Sands
- 8/11 Representative Carlos Lopez-Cantera
- 8/12 Representatives Denise Grimsley and Marty Mielke Aerial Tour
- 8/22 Representative Ralph Poppell
- 8/26 Governor's Washington DC staff members
  - Kerry Feehery and Hannah Walker
- 8/26 Senator Jeremy Ring





### State Legislative Outreach - Continued

| 8/26 | Representative Jim Waldman    |
|------|-------------------------------|
| 8/28 | Representative Darren Soto    |
| 8/28 | Representative Steve Precourt |
| 8/29 | Representative Dean Cannon    |
| 8/29 | Ten County Coalition          |
| 9/3  | Senator Larcenia Bullard      |





#### Federal & Tribal Outreach

- 6/24 Senator Bill Nelson
- 6/24 Congressman Timothy Mahoney
- 6/24 Congressman Connie Mack
- 6/24 Congressman Alcee Hastings
- 6/24 Congresswoman Ileana Ros-Lehtinen
- 6/24 House Sub-Committee Fisheries
- 6/24 Congressman Adam Putnam
- 6/25 Congressman Vern Buchannan
- 6/25 Congressman Lincoln Diaz-Balart
- 6/25 Congressman Ron Klein
- 6/25 House Transportation Committee
- 6/24 Senator Mel Martinez
- 6/25 Congressman John Mica
- 6/25 White House CEQ
- 6/27 Senator Mel Martinez
- 6/27 Senator Bill Nelson
- 7/2 Congressman Timothy Mahoney
- 7/2 Senator Mel Martinez
- 7/2 Congressman Mario Diaz-Balart
- 7/28 Miccosukee Tribe Representatives
- 7/30 Congressman Robert Wexler
- 7/30 Congressman Lincoln Diaz-Balart
- 7/30 Congressman Alcee Hastings
- 7/30 Congressman John Mica
- 7/30 Congressman C.W. Bill Young
- 7/30 Congressman Ron Klein
- 7/30 Congressman Mario Diaz-Balart
- 7/30 Congressman Adam Putnam
- 7/30 Congressman Dave Weldon
- 7/30 Congresswoman Debbie Wasserman Schultz
- 7/30 Aide to Senator Bill Nelson
- 7/30 Congressman F. Allen Boyd
- 7/30 Congressman Timothy Mahoney





#### Federal & Tribal Outreach - Continued

8/8 Seminole Tribe
8/12 Senator Bill Nelson
8/12 Senator Mel Martinez
8/12 Congressman Ron Klein





#### SOUTH FLORIDA WATER MANAGEMENT DISTRICT

#### **Other**

7/30

| 6/25 | The Washington Group                                                  |
|------|-----------------------------------------------------------------------|
| 6/25 | The Furman Group                                                      |
| 6/25 | The Nature Conservancy                                                |
| 6/25 | Audubon                                                               |
| 7/9  | Rural Economic Development Initiative (REDI)                          |
| 7/18 | Broward Alliance – Broward County's Economic<br>Development Program   |
| 7/29 | Hendry County property owners Daniel Weekly and<br>Cheryl Eby Gutjahr |
| 7/29 | Marine Resources Foundation                                           |
| 7/30 | Malia Hale - National Wildlife Federation                             |
|      |                                                                       |



7/30 Jennifer Heller - National Wildlife Federation

Fowler West - Washington Group

7/30 Kirk Fordham - Everglades Foundation

7/30 April Smith - Audubon

8/5 Ardis Hammock, Independent Grower, Clewiston

8/6 Martin County Rivers Coalition

8/6 Green Sage, L.L.C. - Renewal Energy and Sustainable Technologies

8/28 Martin County Rivers Coalition



#### **River of Grass Resolutions**

#### **Resolutions of Support - 28**

City of Coconut Creek, Broward County

City of Coral Springs, Broward County

City of Dania Beach, Broward County

City of Deerfield Beach, Broward County

City of Key Colony Beach, Monroe County

City of Layton, Monroe County

City of Marathon, Monroe County

City of Margate, Broward County

City of Pahokee, Palm Beach County

City of Parkland, Broward County

City of Pembroke, Broward County

City of Plantation, Broward County

City of Pompano Beach, Broward County

City of Port St. Lucie, St. Lucie County

City of Sanibel, Lee County

City of Stuart, Martin County

City of West Park, Broward County

Florida Keys Aqueduct Authority, Monroe County

Florida Keys National Marine Sanctuary Advisory Council, Monroe County

Lee County Board of County Commissioners

Martin County Board of County Commissioners

Monroe County Board of County Commissioners

Ocean Reef Community Association, Monroe County

The Rivers Coalition, Martin County

The Village of Islamorada, Monroe County

Town of Cutler Bay, Dade County

Tri-Cities of the Glades - Sugar Transition

Tri-Cities of the Glades - Inland Port

#### **Resolutions of Concern - 8**

City of Clewiston, Hendry County

City of LaBelle, Hendry County

Florida's Heartland Rural Economic Development Initiative (FHREDI) and

Florida's Freshwater Frontier Inc. Board of Directors

Glades County Board of County Commissioners, Glades County School District,

City Council of Moore Haven, Senator J.D. Alexander

Hendry County Board of County Commissioners

Lee County Board of County Commissioners - Urging SFWMD and

Corps to Expedite Congressional Authorization of the C-43 Project

Hendry County Board of County Commissioners – Critical Need for

Economic Transition and Support Plan

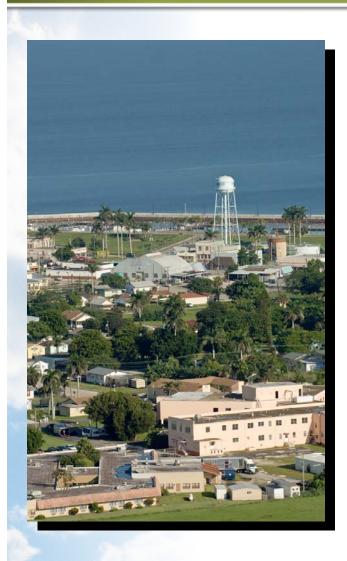
Ten County Coalition





11. Economic Transition / Community Resolutions and Identified Needs

## **Economic Transition Activities**



## Rural Economic Development Initiative (REDI)

### REDI Community Meetings

- August 25-29
- Belle Glade (Tri-Cities)
- Moore Haven (Glades Co.)
- LaBelle & Clewiston (Hendry Co.)

### Previously Identified Industries

 Medical Sciences, Logistics & Distribution, Biofuels, Building Components & Design, Niche Manufacturing

### Community Discussion

- Customized transition process
- Communications, public involvement

### Next Steps

- REDI Report
- Community Input

## **Economic Transition**



### **Communities' Identified Needs**

- Land for Economic Development
- Expedited Permitting
- Targeted Industries
- Continued Operations of USSC facilities for 10 years
- Infrastructure Improvements
- Transportation Improvements
- Economic Development Support Fund
- Payment in Lieu of Taxes
- Transfer of Water Allocations
- District Offices in Glades

## **Land-locked Communities**







Clewiston

Pahokee

Belle Glade

## City of Clewiston Resolution



- 95-acre Clewiston Airport
- Vacant USSC parcels within City limits (~100 acres)
- Land for sprayfield (~300 acres)
- Annexation of refinery
- Existing USSC power and WWTP line easements
- Dedicate land west of City limits for city expansion
- Wastewater expansion to Air Glades Industrial Park
- Expedite C20 and C21 stormwater area
- Expedite Clewiston Trailhead

## **Hendry County Resolution**



- Land between the canals
- Land transfers not to prevent expansion of Harlem
- USSC reverter clauses
- Green Energy Research & Manufacturing Park
- Relocate S-169
- Dredge C-21
- SR 80 ROW & 4-laning
- Fund water and wastewater projects
- Consideration of local businesses for restoration work

## City of Pahokee



 Surrounding land deeded to the City (~3,000 acres)

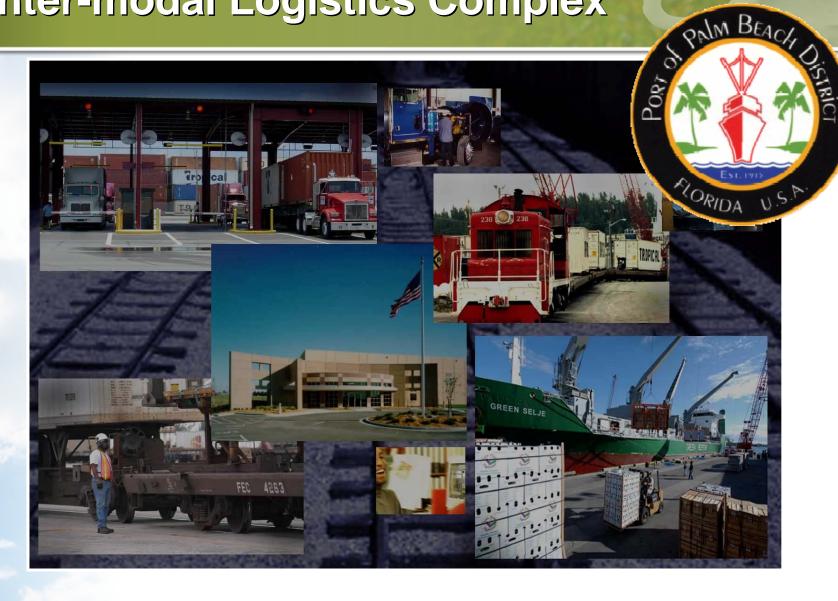


## **Glades County Proposal**



- Infrastructure improvements at Glades County Business and Commerce Park
- Improvement and expansion of SCFE Railroad
- Expedite Moore Haven Canal project
- Surplus of lands not needed for restoration for agriculture & economic development
- Dredging of 589 acres of state-owned land around Lake Hicpochee
- Health Department facility

Inter-modal Logistics Complex



SOUTH FLORIDA WATER MANAGEMENT DISTRICT



## **Discussion / Questions**

stimule gov

|                        | River of Grass Resolutions |                                                                                                                                     |                |                   |  |  |  |
|------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------|--|--|--|
| Position               | Resolution<br>Number       | Supporting Group / Organization / Local Government<br>Entity                                                                        | Date Adopted   | Location          |  |  |  |
| Support                | N/A                        | The Rivers Coalition                                                                                                                | June 26, 2008  | Martin County     |  |  |  |
| Support                | 08-7.2                     | Martin County Board of County Commissioners                                                                                         | July 1, 2008   | Martin County     |  |  |  |
| Concern                | 2008-                      | Hendry County Board of County Commissioners                                                                                         | July 1, 2008   | Hendry County     |  |  |  |
| Support                | N/A                        | Ocean Reef Community Association                                                                                                    | July 1, 2008   | Keys              |  |  |  |
| Concern                | 2008-10                    | City of Labelle                                                                                                                     | July 1, 2008   | Hendry County     |  |  |  |
| Concern                | 2008-                      | Glades County Board of County Commissioners, Glades<br>County School District, City Council of Moore Haven,<br>Senator JD Alexander | July 8, 2008   | Glades County     |  |  |  |
| Support                | 08-07-42                   | The Village of Islamorada                                                                                                           | July 10, 2008  | Keys              |  |  |  |
| Support                | 80-08                      | City of Stuart                                                                                                                      | July 14, 2008  | Martin County     |  |  |  |
| Support                | 08-R73                     | City of Port St. Lucie                                                                                                              | July 14, 2008  | St. Lucie County  |  |  |  |
| Support                | 2008-030                   | City of Coral Springs                                                                                                               | July 15, 2008  | Broward County    |  |  |  |
| Support                | 217-2008                   | Monroe County Board of Commissioners                                                                                                | July 16, 2008  | Monroe County     |  |  |  |
| Support                | 08-44                      | Town of Cutler Bay                                                                                                                  | July 16, 2008  | Miami Dade County |  |  |  |
| Support                | 2008-01                    | Tri- Cities, Belle Glade, Pahokee and South Bay                                                                                     | July 16, 2008  | Palm Beach County |  |  |  |
| Support of Inland Port | 2008-02                    | Tri- Cities, Belle Glade, Pahokee and South Bay                                                                                     | July 16, 2008  | Palm Beach County |  |  |  |
| Concern                | 2008-07-01                 | FHREDI and FFF Board of Directors                                                                                                   | July 21, 2008  |                   |  |  |  |
| Support                | 2008-108                   | City of Marathon                                                                                                                    | July 22, 2008  | Monroe County     |  |  |  |
| Support                | 2008-252                   | City of Pompano Beach, Florida                                                                                                      | July 22, 2008  | Broward County    |  |  |  |
| Support                | 10332                      | City of Plantation                                                                                                                  | July 23, 2008  | Broward County    |  |  |  |
| Support                | 2008-06                    | City of Key Colony Beach                                                                                                            | July 24, 2008  | Monroe County     |  |  |  |
| Support                | 2008-76                    | City of Coconut Creek                                                                                                               | July 24, 2008  |                   |  |  |  |
| Concern                | 2008-03                    | City of Clewiston                                                                                                                   | July 28, 2008  | Hendry County     |  |  |  |
| Support                | 3202                       | City of Pembrook                                                                                                                    | August 1, 2008 | Broward County    |  |  |  |
| Support                | TBD                        | Lee Board of County Commissioners                                                                                                   | August 1, 2008 | Lee County        |  |  |  |
| Concarn                | TBD                        | Lee Board of County Commissioners - Urging SFWMD and<br>Corps to Expedite Congressional Authorization of the C-43                   |                | Lee County        |  |  |  |
| Concern                | IDD                        | Project                                                                                                                             | August 1, 2008 | Lee County        |  |  |  |
| Support                | 08-092                     | City of Sanibel                                                                                                                     | August 5, 2008 | Lee County        |  |  |  |
| Support                | 2008/153                   | City of Deerfield Beach                                                                                                             | August 5, 2008 | Broward County    |  |  |  |

| Support | 2008-48    | City of West Park                                                       | August 6, 2008  | Broward County    |
|---------|------------|-------------------------------------------------------------------------|-----------------|-------------------|
| Support | 2008-08-05 | City of Layton                                                          | August 7, 2008  | Monroe County     |
| Support | TBD        | City of Pahokee                                                         | August 12, 2008 | Palm Beach County |
| Support | TBD        | City of Dania Beach                                                     | August 12, 2008 | Broward County    |
| Concern | 2008-96    | Hendry BOCC - Critical Need for an Economic Transition and support plan | August 12, 2008 | Hendry County     |
| Concern | 2000-90    | and support plan                                                        | August 12, 2006 | Heriary County    |
| Support | 11-271     | City of Margate                                                         | August 20, 2008 | Broward County    |
| Support | 2008-81    | City of Parkland                                                        | August 20, 2008 | Broward County    |
| Concern | 2008-1     | 10 County Coalition                                                     | August 29, 2008 |                   |
| Support | TBD        | FL Keys Aqueduct Authority                                              | Pending         | Monroe County     |
| Support | TBD        | FL Keys National Marine Sanctuary Council                               | Pending         | Monroe County     |

### City of Clewiston

### **CITY OF CLEWISTON**

115 WEST VENTURA AVENUE CLEWISTON, FL 33440 Carol Wahle Deera Repper Phil Hood

TELEPHONE 983-1484 AREA CODE 863

FAX 983-4055 AREA CODE 863

Executive Office AUG 0 8 2008

August 6, 2008

The Honorable Charlie Crist Governor of the State of Florida PL-05 The Capitol 400 S. Monroe Street Tallahassee, FL 32399-0001

Dear Governor Crist:

With this letter, I share our city's great concern resulting from the SFWMD initiative to purchase all United States Sugar Corporation assets. By this announcement, the future of our beloved Clewiston, as "America's Sweetest Town" hangs perilously in the balance. Agriculture has provided the economic foundation and "lifeblood" for thousands of people throughout the City of Clewiston, Hendry County and this region for over seventy years. Now, we are faced with distress and uncertainty as we await the immeasurable economic consequences of this land acquisition initiative.

To reiterate the words of USSC President Bob Buker during your public announcement of this land acquisition plan in late June, "we are all truly excited by what this land deal means for the future of Florida and its environment." As community leaders, we all realize the phenomenal value of Everglades restoration. However, Governor Christ, the restoration plan, in any respect, must be such to sustain the economic future of impacted communities. Since your announcement, a negative impact to our community is already taking its toll as we have no visible evidence from the State or SFWMD for consideration of this most crucial aspect of the land deal.

Please find enclosed Resolution No. 2008-03 adopted by the Clewiston City Commission on July 28, 2008. This resolution conveys at Exhibit "A" Clewiston's interests in the form of a number of reasonable "economic incentives and initiatives" for inclusion in an economic transition plan. This plan is crucial to our economic survival and we are adamant that it must be agreed upon before the signing of the land purchase agreement between SFWMD and USSC. The list is not all inclusive and is presented only as a beginning based upon what we presently know and understand about this matter. We wholeheartedly support and stand unified with Hendry County but our plan is customized specifically for Clewiston.

The Honorable Charlie Crist USSC/SFWMD Land Purchase Page 2, August 6, 2008

In conclusion Governor Christ, we are dedicated to work cooperatively with you, your economic staff and the SFWMD. We anxiously await a response regarding the needs expressed in the attached resolution and when the economic element of the plan can be placed into motion. Please know that you have an open invitation to come see us in America's Sweetest Town. Thank you for your time and consideration in this matter.

Sincerely,

Mali Chamness,

Mayor

Encl.

City of Clewiston Resolution 2008-03

LEWISTON

cc: Honorable Mel Martinez

Honorable Alcee Hastings

Honorable Tim Mahoney

Honorable Allen Boyd

Honorable J.D. Alexander

Honorable Dave Aronberg

Honorable Larcenia Bullard

Honorable Denise Grimsley

Honorable Michael Sole, Secretary DEP

Mitchell Cypress, Seminole Tribe of Florida

SFWMD - Ms. Carol Wehle

OTTED - Mr. Dale Brill

Hendry County BOCC

**Glades County BOCC** 

Palm Beach County BOCC

Clewiston City Commission

LaBelle City Commission

#### **RESOLUTION NO. 2008-03**

A RESOLUTION OF THE CITY COMMISSION OF CLEWISTON, FLORIDA DECLARING THE CRITICAL NEED FOR AN ECONOMIC TRANSITION AND SUPPORT PLAN IN RESPONSE TO THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT (SFWMD) INITIATIVE TO PURCHASE ASSETS OF THE UNITED STATES SUGAR CORPORATION; PROVIDING FOR COOPERATION WITH THE STATE OF FLORIDA AND THE SFWMD; PROVIDING FOR DISTRIBUTION OF THIS RESOLUTION TO DESIGNATED AGENCIES; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the United States Sugar Corporation (USSC) has been the economic backbone of the City of Clewiston and other surrounding communities for over 70 years and has provided an agricultural livelihood for thousands of people in this region; and

WHEREAS, the SFWMD has announced an initiative to purchase all assets of the USSC and the impact of the purchase will result in a direct loss of 1,700 agricultural jobs and incalculable service and contractor related jobs, along with significantly reduced residential and commercial property values and the related revenue base within the City; and

WHEREAS, by Executive Order of the Governor, the City of Clewiston was previously designated as one of Florida's three (3) Rural Areas of Critical Economic Concern and this vast land purchase by the SFWMD will further degrade the city's already critical economic condition; and

WHEREAS, the City needs available land now owned by USSC combined with other economic support from the State and SFWMD to provide for the sustainability and growth of the City's agricultural livelihood; and

WHEREAS, the City conveys to the Governor and SFWMD a critical need to provide an Economic Transition and Support Plan (*The Plan*) which is deemed essential to the future survival of the City, and appeals for *The Plan* to be finalized prior to signing of the SFWMD agreement for purchase of the United States Sugar Corporation's assets.

## NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF CLEWISTON, FLORIDA THAT:

- 1. The City pledges it's cooperation to the Governor's Office of Tourism, Trade, and Economic Development (OTTED) and to the SFWMD and will work diligently with their designated representatives to prepare, agree upon, and implement *The Plan* to the mutual benefit of all parties concerned.
- 2. The City proposes that vital elements of *The Plan* include, but not be limited to, a combination of land assets along with other incentive resources and initiatives that are presented herein at "Exhibit A" for consideration of approval by OTTED and the SFWMD.

3. Resolution 2008-03 will be distributed to the Governor's Office of Tourism, Trade, and Economic Development, the South Florida Water Management District, Corps of Engineers, City's Congressional and State Delegation.

**DULY ADOPTED** by the City Commission of Clewiston, Florida, effective this 28th day of July 2008.

CITY OF CLEWISTON, FLORIDA

ATTEST:

MALI CHAMNESS MANO

RICHARD MILLER, CITY CLERK

(SEAL)

#### RESOLUTION 2008-03 EXHIBIT "A" July 28, 2008

### **Economic Incentives and Support Initiatives**

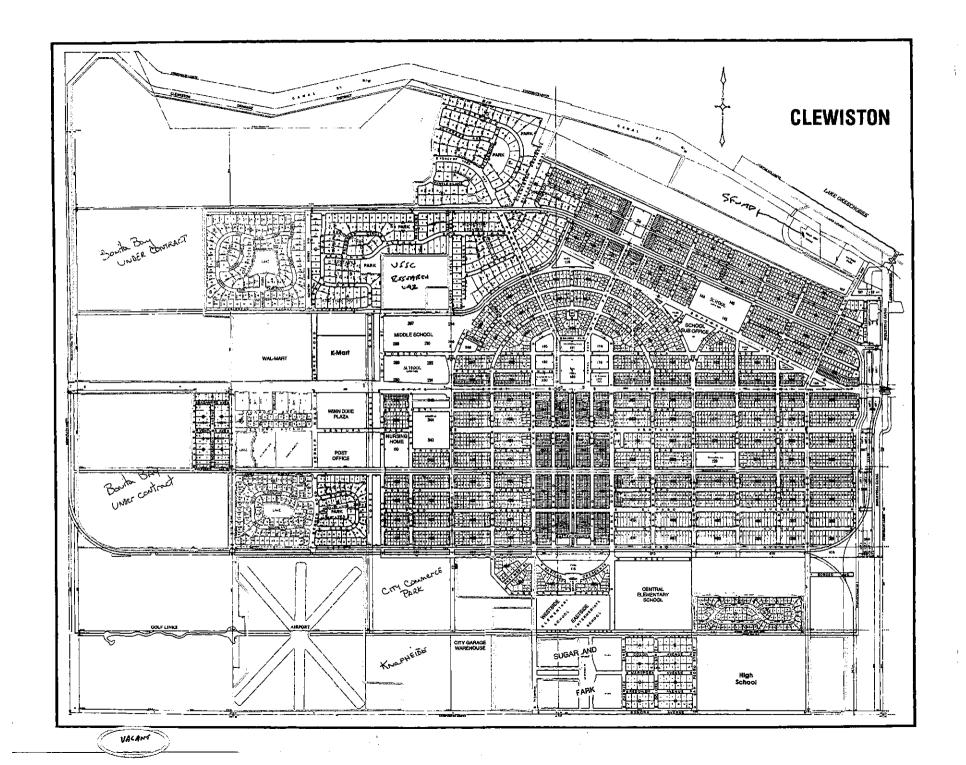
- 1) A "customized" Economic Support Fund (ESF) as an extension of existing DCA and OTTED economic development programs. Funding level should be correlated to the realistic cost for full development of the City of Clewiston Commerce Park. (Estimated at \$6 million). The first phase (35 acres) of the park will be completed in August 2008 at a cost of \$1.3 million which was funded through a combination of CDBG, EDTF, and RIF Grants from the State.
- 2) Land ownership of the 95-acre Clewiston Airport (owned by USSC and inactive since 1998) conveyed to the City of Clewiston. The abandoned Clewiston Airport parcel is contiguous to the existing 35-acre Clewiston Commerce Park and was planned for commerce park expansion. This land mass is vital to continued "industrial" development opportunities within the City. Negotiations with USSC for this property has been ongoing since 2004 and its acquisition is essential to "any" job creation potential for the City.
- 3) All vacant parcels within City limits presently owned by USSC conveyed to City ownership and/or dedicated for private development. (Estimated at less than 100 acres)
- 4) Land conveyed at no cost to City for Waste Water Treatment Plant (WWTP) spray field expansion. The City's WWTP capacity is presently at 85% threshold and preliminary engineering is complete for plant expansion. (Estimated need at less than 300 acres)
- 5) Funding support from State DEP and SFWMD for City WWTP expansion and seven mile force main extension to Hendry County Air Glades Industrial Park. (Estimated at \$12 million)
- 6) Funding support from State DEP and SFWMD to extend City sewer services to 300 residential and industrial customers on septic systems. (Estimated at \$6 million)
- 7) Immediate annexation of USSC Refinery and adjoining lands into City of Clewiston. The City's current Gross Taxable Land Value is less than \$250 million. Annexation of the Refinery would approximate a 100% increase in advalorem revenue to the City. (\$1.5 million annually)
- 8) Assurance of continued operations of USSC Clewiston Refinery and Southern Gardens Plant for six years and transition plan with guarantee of continued operations at current levels for 10 years- not sold to close.
- 9) Assurance of perpetual Payment in Lieu of Taxes for all lost City Advalorem taxes resulting from the sale of USSC lands.
- 10) Water use rights for future development within City, vested to City; current permitted water allocations of agricultural lands vested to City.

11) Transfer of Density Rights of all designated conservation land vested to City.

# RESOLUTION 2008-03 EXHIBIT "A" July 28, 2008 Economic Incentives and Support Initiatives Page 2

- 12) C20 and C21 storm water area expedited for City/County along with Clewiston Trailhead Funding (Involves 728 acres of existing state-owned land)
- 13) Assurance of continued access for local farmers to Clewiston Refinery for cane processing.
- 14) Assurance that lands immediately west of Clewiston City Limits to CR 720 dedicated for future development and expansion of City of Clewiston.
- 15) Assurance that the Clewiston Bonita Bay "Gateway" project will be allowed to continue and expedited with infrastructure funding support provided by State and SFWMD. Bonita Bay has existing contract with USSC for this 600 acre development project.
- 16) State and SFWMD consideration to locate a USDA research lab for citrus greening and ethanol production at the former site of the USSC Research Lab.
- 17) Relocation of SFWMD Engineering and Research division to Hendry County.
- 18) State and SFWMD Hospital Subsidy Job Retention
- 19) Deed existing USSC easements for power lines and WWTP lines to City of Clewiston.
- 20) Release all USSC reverters for City owned land.





# **Hendry County**

# Holland+Knight

Tel 850 224 7000 Fax 850 224 8832

Holland & Knight LLP 315 South Calhoun Street, Suite 600 Tallahassee, FL 32301-1872 www.hklaw.com

S. Curtis Kiser 850 425 5632 curt.kiser@hklaw.com

August 25, 2008 2008-191

Mr. Eric Buermann Chairman South Florida Water Management District Post Office Box 24680 West Palm Beach, Florida 33416-4680

Re:

Hendry County

Dear Chairman Buermann:

Thank you for taking the time to meet with me, Commissioner Kevin McCarthy and Ms. Judi Kennington-Korf (interim Hendry County administrator). You and the staff of the South Florida Water Management District have been very cooperative and helpful as we have been trying to get our concerns heard regarding the purchase of US Sugar's assets by the District.

Hendry County and the City of Clewiston will be the most impacted areas as a result of the Governor's imitative to create a better for flowway for the Everglades. Obtaining some of US Sugar's property that is adjacent to the city limits of Clewiston is critical and timing is also important.

Hendry County is in a strategic location for the proposed "Inland Port" and wants to submit several locations for consideration and we might need to use some of the US Sugar land for a location. Please keep this open as an option to help Hendry County weather the "economic shock" we might experience if the projected loss of jobs occurs.

Thank you for your offer to come to Hendry County. I will be calling you soon to make arrangements for your visit. On a final note, please consider signing the contract with US Sugar to be executed in Hendry County. We appreciate your efforts and I know you and the Board will carefully

Chairman Eric Buermann August 25, 2008 Page 2

weigh the requests contained in the County's Resolution (copy attached).

Sincerely yours,

**HOLLAND & KNIGHT LLP** 

Cut

S. Curtis Kiser

SKC/rb

Attachment

Cc: Judi Kennington-Korf

Kevin McCarthy

# 5565879\_v1

#### COUNTY OF HENDRY, STATE OF FLORIDA

RESOLUTION NO. 2008 - 96

RECORDED IN RESOLUTION BOOK XI , PAGE 213

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF HENDRY COUNTY, FLORIDA DECLARING THE CRITICAL NEED FOR AN ECONOMIC TRANSITION AND SUPPORT PLAN IN RESPONSE TO THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT INITIATIVE TO PURCHASE ASSETS OF THE UNITED STATES SUGAR CORPORTATION; PROVIDING FOR COOPERATION WITH THE STATE OF FLORIDA AND THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT; AND PROVIDING FOR DISTRIBUTION OF THIS RESOLUTION TO DESIGNATED AGENCIES.

WHEREAS, the United States Sugar Corporation (USSC) has been the economic backbone of eastern Hendry County for over 70 years and provided an agricultural livelihood for thousands of people in this region; and

WHEREAS, the South Florida Water Management District (SFWMD) has announced an initiative to purchase all assets of the USSC and the impact of the purchase will result in a direct loss of 1,700 agricultural jobs and incalculable service and contractor related jobs, along with significantly reduced residential and commercial property values and the related revenue base within Hendry County; and

WHEREAS, by Executive Order of the Governor, Hendry County was previously designated as a Rural Area of Critical Economic Concern and this vast purchase by the SFMWD will further degrade the County's already critical economic condition; and

WHEREAS, Hendry County contains the largest Enterprise Zone in the State of Florida; and

WHEREAS, the County urges that all lands being purchased from the USSC that are not necessary for the water storage and treatment area from Lake Okeechobee to the Everglades be

### RECORDED IN RESOLUTION BOOK XI PAGE 214

sold to private entities in order to sustain and expand the agricultural and industrial base of the County; and

WHEREAS, the County conveys to the Governor and the SFWMD a critical need to provide an Economic and Support Plan (*The Plan*) which is deemed essential to the economic sustainability and growth of the County, and appeals for *The Plan* to be finalized prior to signing of the SFWMD agreement for purchase of USSC's assets.

# NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF HENDRY COUNTY, FLORIDA, that:

The County urges the Governor and the SFWMD to develop *The Plan* prior to signing the SFWMD agreement for purchase of USSC's assets.

- The County pledges its cooperation to the Governor's Office of Tourism, Trade and Economic Development (OTTED) and to the SFMWD and will work diligently with their designated representatives to prepare, agree upon and implement *The Plan* to the mutual benefit of all parties concerned.
- 2. The County proposes that *The Plan* include, but not be limited to, the elements set forth in "Exhibit A" attached hereto.
- This Resolution will be distributed to the Governor, OTTED, the SFMWD, United States Army Corps of Engineers, the County's Congressional delegation and the County's State Legislative delegation, and the Cities of the impacted area.

| This   | Resolution | adopted | after | motion. | second | and  | majority, vote, | Ale Le | 10.1 |     |    |
|--------|------------|---------|-------|---------|--------|------|-----------------|--------|------|-----|----|
| August |            | , 2008. |       |         |        | MILL | majorny, voie,  | tnis   | 1261 | day | of |
|        |            | _       |       |         |        |      |                 |        |      |     |    |

ATTEST:

BOARD OF COUNTY COMMISSIONERS OF HENDRY COUNTY, FL

Barbara Butler, Clerk

Janet B. Taylor, Chair

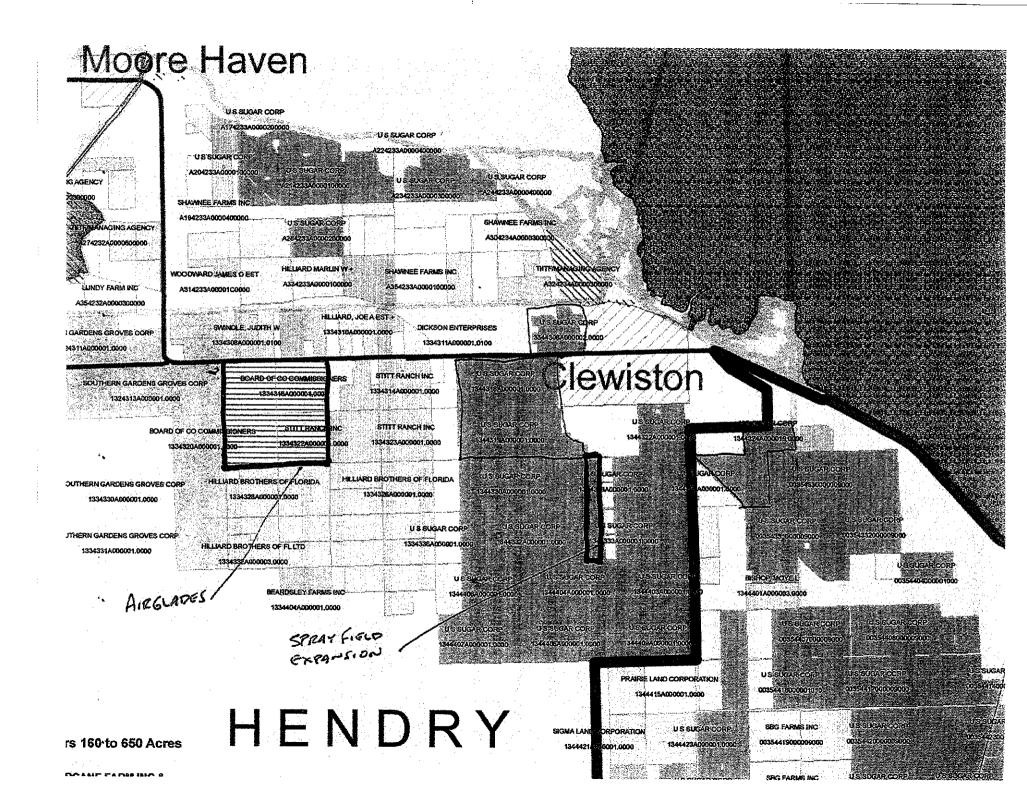
#### RESOLUTION 2008- 96 EXHIBIT "A"

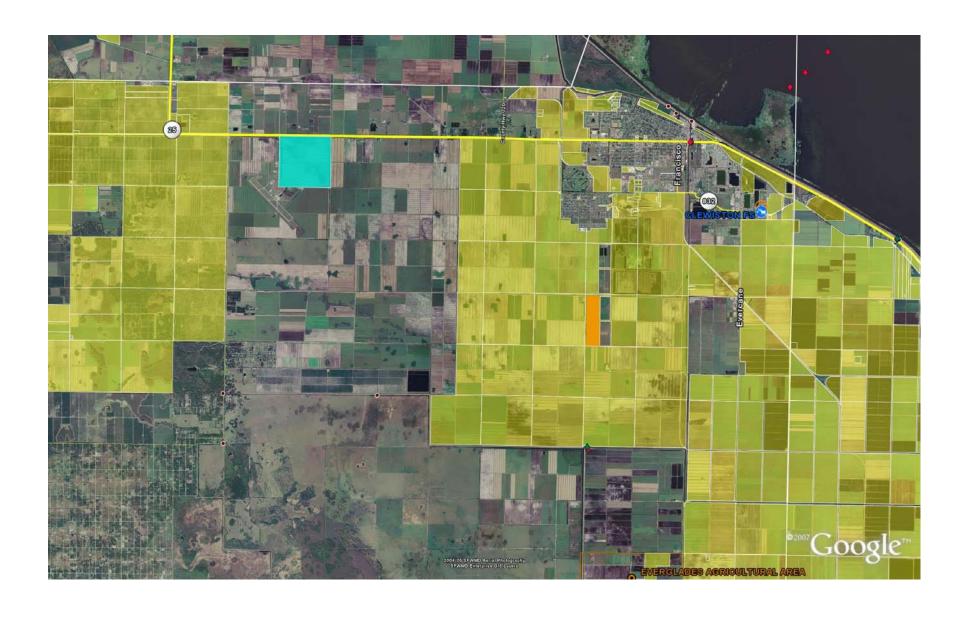
- Guarantee that all lands not part of the proposed water storage and freatment
  area, between the Miami Canal and the New River Canal, be sold or traded to
  private entities concurrent with the transfer of passession, with the exception of
  the lands identified by Hendry County and the City of Clewiston needed for
  development, jobs, and parks be transferred to the City and County and School
  Board concurrent with the signing of the contract.
- Funding of an Economic Development/Community Trust Fund, funded at \$25
  million per year for 10 years by the SFWMD, controlled by the County and City,
  used for infrastructure development, job creation and retention, and community
  development.
- Creation of a Green Energy Research and Manufacturing Park. Infrastructure funding by the State with State funded incentives, expertise, and assistance in bringing Companies, Universities, and Research groups to the Park, Strong consideration to locating all or part of the Inland Port in Hendry County.
- Locating the Engineering, Research, and Operations Division of SFWMD responsible for the water storage and treatment area to Hendry County, prior to transfer of possession.
- Assistance with the Corp of Engineers in relocating the \$169 structure to the west and dredging of the C21 canal to match the depth of the locks.
- State Road 80 right of way donated to FDOT, reinstate Hendry County's projects in this year's work plan, and move SR80 four-laning into the 10-year plan.
- SFWMD insure that current water allocations be transferred to Hendry County and Clewiston and Labelle Utilities as land is removed from agriculture.
- Guarantee by the Purchaser of the Mill, juice plant, and railroad, of continued operations as operating facilities, for 10 years.
- Agreement to fund Payment in Lieu of Taxes for all lost taxes and special
  assessments in perpetuity or until population reaches 150,000, regardless of
  changes in law.

#### RECORDED IN RESOLUTION BOOK XI PAGE 216

- Funding of currently proposed water and wastewater infrastructure projects in Hendry County.
- Assurance of expedited permitting for projects that require state agency approval.
- Assurance of preferential consideration for projects eligible for grant funding through state agencies.
- Assure that local businesses will receive preferential consideration for work generated by the WMD associated with Everglades Restoration.
- Restructure economic development grants to ensure the highest credit available for infrastructure projects. Provide fast-track application process for each grant in the impacted area.
- Release of all USSC reverter clauses on County owned land.
- Assurance that any land transferred to third parties does not prevent the community of Harlem from expanding.

STATE OF FLORIDA
HENDRY COUNTY
THIS IS TO CERTIFY THAT THE FOREGOING
PAGES ARE 19UE AND CORRECT COPIES OF THE ORIGINAL BARBARA'S BUTLER CLERK





Hendry Cty request- Blue\_Air Glades, Orange spray field expansion, only the spray field is on USSC land

# **Tri City Resolutions**

#### **RESOLUTION NO. 2008-01**

A RESOLUTION OF THE TRI-CITIES, BELLE GLADE, PAHOKEE, AND SOUTH BAY, FLORIDA DECLARING THE NEED FOR AN ECONOMIC TRANSITION AND SUPPORT PLAN IN RESPONSE TO THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT'S INITIATIVE TO PURCHASE ALL UNITED STATES SUGAR CORPORATION ASSETS; PROVIDING FOR MUTUAL COOPERATION WITH THE STATE OF FLORIDA AND THE SFWMD PROVIDING FOR DISTRIBUTION OF THIS RESOLUTION TO ALL INTERESTED PARTIES; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the South Florida Water Management District has publicly announced its initiative to purchase all assets of the US Sugar Corporation and the acquisition of these assets as proposed will have a devastating effect on the future economy and well-being of the Tri-Cities area; and

WHEREAS, the economic impact will include the closure of a major industry in the Glades and the loss of 1,700 direct jobs and upwards of 2,000 service related jobs in the Glades area; additionally, residential and commercial property values in the Glades and the related revenue base within the Tri-Cities will be greatly reduced; and

WHEREAS, to enhance and protect the future interests of the Tri-Cities area, an Economic Transition and Support Plan must be prepared and mutually agreed upon by the SFWMD, the State of Florida, and the Glades area communities, including the Cities of Belle Glade, Pahokee and South Bay.

# NOW, THEREFORE, BE IT RESOLVED BY THE TRI-CITIES, BELLE GLADE, PAHOKEE, AND SOUTH BAY, FLORIDA THAT:

- 1. The Tri-Cities of Belle Glade, Pahokee and South Bay pledges their mutual cooperation with the Governor's Office of Tourism, Trade, and Economic Development (OTTED), with Florida's Rural Economic Development Initiative (REDI) and will work diligently with OTTED and REDI and with the SFWMD to prepare and implement an Economic Transition and Support Plan which will be beneficial to all parties concerned and will support the economy of the Glades area.
- 2. OTTED, REDI, and SFWMD must implement measures to ensure that the Cities of Belle Glade, Pahokee, and South Bay and all Glades area communities will be an integral part of this process and will be kept fully informed as to the issues surrounding this purchase. As the SFWMD negotiates the purchase of the US Sugar Corporations' assets, regularly scheduled informational meetings shall be conducted to which the Cities of Belle Glade, Pahokee and South Bay and all Glades area communities should be invited and at which the input of the Glades area communities shall be solicited and duly considered.
  - 3. All levels of government, businesses and residents of the Glades area

communities should be made whole as it relates to lost revenues, jobs and taxes. The economic impact to the entire region shall be determined and this information shall be used as a basis for making the Glades area communities whole due to this purchase.

- 4. A copy of this resolution will be distributed to all interested parties and appropriate agencies of record.
- 5. This Resolution shall take effect immediately upon adoption and shall remain in full force and effect until duly amended by the Tir-Cities.

DONE AND RESOLVED at Regular Session of the Tri-Cities of the Glades, Florida, this 16<sup>th</sup> day of July, 2008.

Belle Glade Mayor Steven B. Wilson Pahokee Mayor Wayne Whitaker

South Bay Mayor Shirley Walker Turner

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

Glen J. Torcivia, Tri-Cities Attorney

#### **RESOLUTION NO. 2008-02**

A RESOLUTION OF THE TRI-CITIES, OF BELLE GLADE, PAHOKEE AND SOUTH BAY, FLORIDA SUPPORTING THE ESTABLISHING OF A MULTI-MODAL LOGISTICS COMPLEX (INLAND PORT) IN THE GLADES.

WHEREAS, the Port of Palm Beach has proposed developing a Multi-Modal Logistics Complex (Inland Port) in the Glades region; and

WHEREAS, the South Florida Water Management District has publicly announced its initiative to purchase all assets of the US Sugar Corporation and the acquisition of these assets as proposed will have a devastating effect on the future economy and well-being of the Tri-Cities area; and

WHEREAS, the economic impact will include the closure of a major industry in the Glades and the loss of 1,700 direct jobs and upwards of 2,000 service related jobs in the Glades area; additionally, residential and commercial property values in the Glades and the related revenue base within the Tri-Cities will be greatly reduced; and

WHEREAS, the economic impact of an Multi-Modal Logistics Complex (Inland Port) would be a major asset to the Glades region; and

WHEREAS, the Multi-Modal Logistics Complex (Inland Port) would lead to the creation of much needed jobs; and

NOW, THEREFORE, BE IT RESOLVED BY THE TRI-CITIES OF BELLE GLADE, PAHOKEE AND SOUTH BAY FLORIDA THAT:

1. The Tri-Cities of Belle Glade, Pahokee, and South Bay support the establishment of a Multi-Modal Logistics Complex (Inland Port) in the Glades region.

DONE AND RESOLVED at Regular Session of the Tri-Cities of the Glades, Florida, this 16<sup>th</sup> day of July, 2008.

Belle Glade Mayor Steven B. Wilson

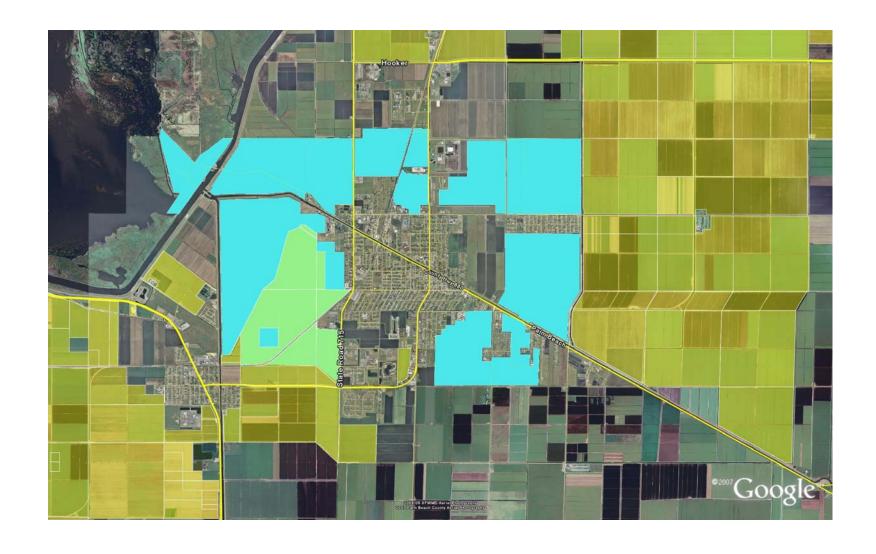
South Bay Mayor Shirley Walker Turner

Pahokee Mayor Wayne Whitaker

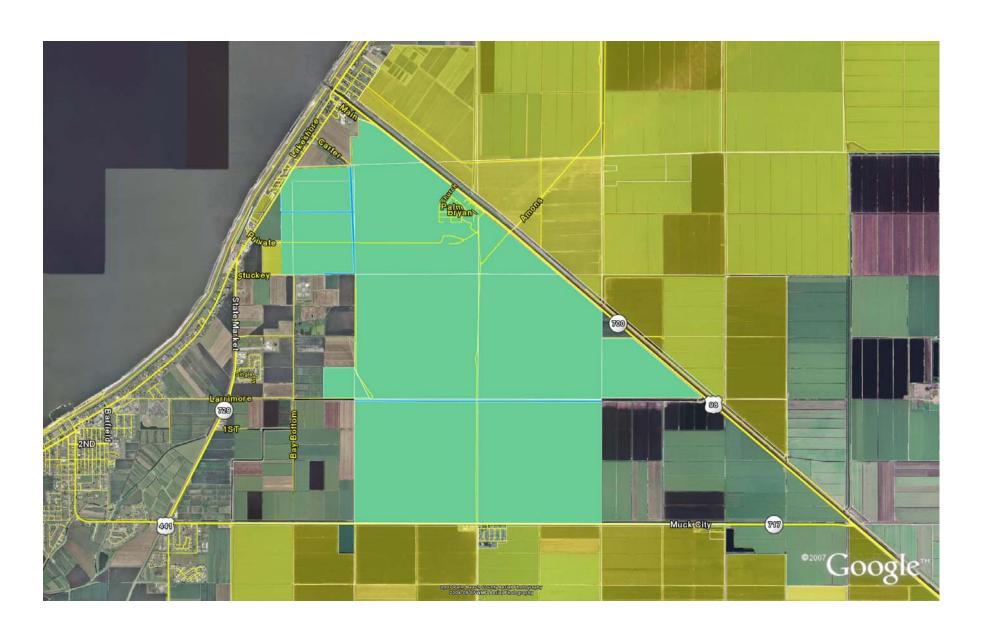
Secretary for the Tri-Cities

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

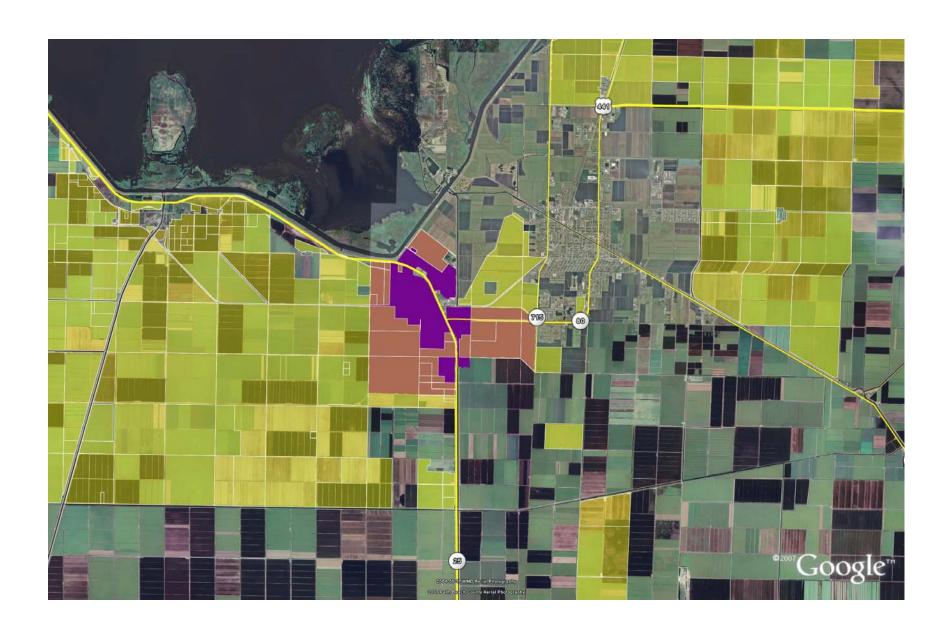
Glen J. Torcivia, Tri-Cities Attorney



Belle Glade Request- Light Green- on USSC land Light Blue- non- USSC land

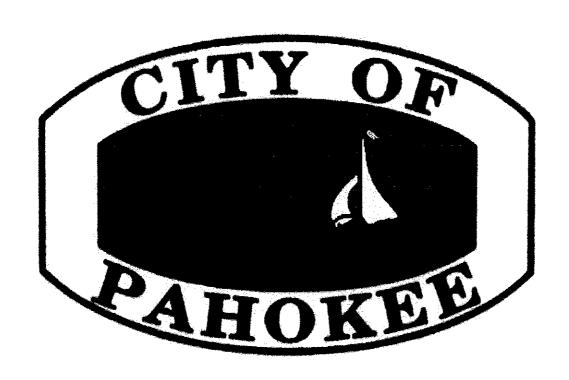


Pahokee Request- area in green- all on USSC property



South Bay- Light purple on USSC land, Purple is on non-USSC land

# City of Pahokee



# City of Pahokee



CITY HALL • 171 N. LAKE AVENUE • PAHOKEE, FLORIDA 33476 • PHONE (561) 924-5534 • FAX (561) 924-7301

July 29, 2008

Wayne Whitaker

Mayor

Federal, State, County and Local Officials:

Keith W. Babb. Jr Vice Mayor

Allie Biggs Commissioner Re: Land Apportionment to the City of Pahokee

Henry Crawford Jr. Commissioner

Thank you for your recent offer to assist the City of Pahokee. It is very nice of you to take time from your busy schedule to spend a few minutes to discuss this matter further with me.

Diane Walker Commissioner

Matthew Brock City Manager

Raquel Diaz City Clerk

Walton Lantaff et al City Attorney

Art Cobb, Jr. **Public Services** Director

Herbert Crawford Parks & Recreation Director

Art Ivester Port Mayaca Memorial Gardens Director

Derrek Moore Finance Director

Ted Roberts Community Development Director

The City of Pahokec is a small community located in Palm Beach County, Florida on the eastern shore of Lake Okeechobee. Pahokee is within the Glades Region of Palm Beach County characterized by extensive agricultural uses, mainly sugar cane, as you know.

Population and economic growth in the Glades Region has been relatively modest in the past 20 years. During the same period the county, as a whole, has experienced considerable growth in its coastal and central portions. As a result, the agricultural economy of the Glades Region and its population of large land holders and farm workers presents a significant contrast with the much more diversified economy of the county as a whole.

Much discussion has taken place regarding the economic impact on surrounding communities of the recent purchase of US Sugar by South Florida Water Management District.

It is critical to the long term financial health of the City of Pahokee that the land surrounding Pahokee (see attachment 1) be deeded to the City. Doing so will provide the opportunity for the City of Pahokee to grow and prosper economically, through job enhancement, industry, housing and increased tax base.

A second project now receiving much recent thought and discussion is the proposed Inland Port. Initial estimates indicate jobs in excess of several thousand. The City of Pahokee has a high rate of unemployment which could be addressed by location of this facility nearby.

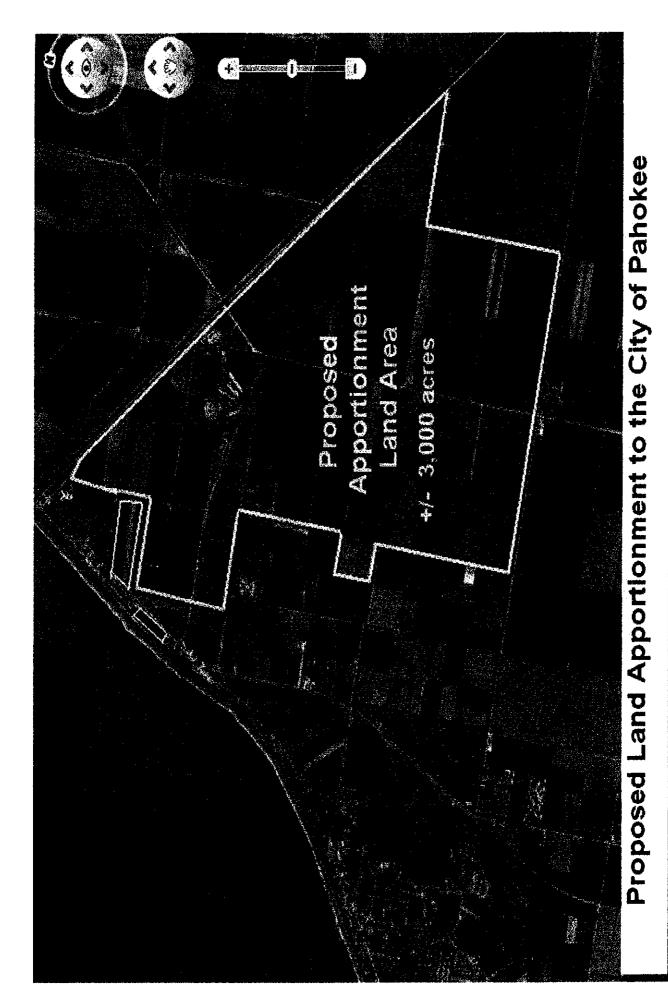
In summary, we believe these two issues to be vital to the long term stability and the financial health of the City of Pahokee. The City would be most grateful and indebted to you for any assistance that you or your office might be able to provide.

Sincerely.

ages lets Wayne Whitaker Mayor, City of Pahokee

Matthew Brock

City Manager, City of Pahokee



#### **RESOLUTION 2008-61**

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF PAHOKEE, FLORIDA, SUPPORTING THE ACQUISITION OF 10,000 ACRES OF U.S. SUGAR LAND ON THE OUTSKIRTS OF PAHOKEE.

WHEREAS, U.S. Sugar has announced that it intends to sell all of its land to the State of Florida, and to cease operations within the next six years; and

WHEREAS, the closure of U.S. Sugar could have a devastating impact on the economic condition of Pahokee and the surrounding Glades area; and

WHEREAS, the City of Pahokee needs to grow and prosper economically, through job enhancement, industry, housing and an increased tax base; and

WHEREAS, it has been historically difficult to acquire any of the surrounding farmland for the City's future growth; and

WHEREAS, it is critical to the long term financial health of the City of Pahokee that some of the U.S. Sugar land be deeded to the City.

THEREFORE, IT IS HEREBY RESOLVED BY THE CITY COMMISSION OF THE CITY OF PAHOKEE, FLORIDA, THAT:

Section 1. The City Commission of the City of Pahokee hereby supports the acquisition of 10,000 acres of U.S. Sugar land for the City of Pahokee.

Section 2. The Mayor is hereby authorized and directed to lobby the State, the South Florida Water Management District, Palm Beach County and all other relevant government agencies for the purpose of acquiring approximately 3,000 acres of U.S. Sugar land surrounding the City of Pahokee.

PASSED AND ADOPTED by the City Commission during the regular meeting on 12th of August, 2008.

ATTESTED: RAQUEL DIAZ, CYTY CLERK

MAYOR WHITAKER
VICE MAYOR BABB
COMMISSIONER CRAWFORD
COMMISSIONER BIGGS
COMMISSIONER WALKER

APPROVED AS TO LEGAL SUFFICIENCY

MIMI K. MCANDREWS, CITY ATTORNEY

#### **RESOLUTION 2008-62**

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF PAHOKEE, FLORIDA, SUPPORTING THE LOCATION OF THE INLAND PORT IN THE GLADES AREA.

WHEREAS, U.S. Sugar has announced that it intends to cease operations within the next six years; and

WHEREAS, the closure of U.S. Sugar could have a devastating impact on the economic condition of Pahokee and the surrounding Glades area; and

WHEREAS, the entire Glades area is in desperate need of economic growth and sustainability; and

WHEREAS, the Inland Port is critical to the long term financial health of the City of Pahokee and the entire Glades area.

THEREFORE, IT IS HEREBY RESOLVED BY THE CITY COMMISSION OF THE CITY OF PAHOKEE, FLORIDA, THAT:

Section 1. The City Commission of the City of Pahokee hereby pledges its support for the Inland Port to be located in the Glades area.

Section 2. The Mayor is hereby authorized and directed to lobby the State, the South Florida Water Management District, Palm Beach County and all other relevant government agencies for the purpose of locating the Inland Port in the Glades area..

PASSED AND ADOPTED by the City Commission during the regular meeting on the 12th of August, 2008.

HITAKER, MAYOR

MAYOR WHITAKER VICE MAYOR BABB

**COMMISSIONER CRAWFORD** 

**COMMISSIONER BIGGS** 

COMMISSIONER WALKER

APPROVED AS TO LEGAL SUFFICIENCY

## **Glades County**

# County County Board County County Sciences

# **US SUGAR BUY-OUT**

Revision #1

August 12, 2008

# Glades County Board of County Commissioners

Preliminary Request for Short-term and Long-term Projects to Offset Impacts of the South Florida Water Management District's Acquisition of U.S Sugar

#### Mission Statement:

It is the desire of the Glades County Commission to take an honest look at the impacts of the acquisition and provide to our state and federal partners a realistic vision of how we can address the impact on our community in both a short range and long range manner and create a vital sustainable community.

We have created the attached list with this goal in mind. We believe there are short term necessities that are within the purview of the state which are achievable and which will ameliorate to some degree the initial impacts but they are followed by long term needs which are necessary to achieve the stated goals of our state and federal partners of assisting the affected communities, maintaining and securing a replacement tax base for continued community viability, maintaining and securing the population base and redeveloping and enhancing local economies and communities

We look forward to working with our partners to make their stated goals and our mission statement and vision for our community a reality.

This is a working document, which represents the current situation as of August 12<sup>th</sup>, 2003 subject to the ongoing process and the inclusion and exclusion of additional priorities as we move forward.

## Short-term necessities:

- 1) Providing funding of at least \$1,000,000 for infrastructure at the Glades County Business and Commerce Park to put in place the last pieces necessary for interested parties to locate new enterprises that will add additional jobs to the area.
  - 2) Providing Funding for the construction of a new health department facility on lands provided by the county. This construction should be fully funded and the requirement of a local match should be waived for this facility. We ask that this be placed in the Department of Health's LBR for the next fiscal year and that the Governor include it in his budget recommendation to the legislature.
- 3) That in addition to continued support for currently allocated funding, we request that the Governor direct the appropriate state agencies to begin the process of the improving and upgrading of the existing South Central Florida Express Railroad and for its expansion to link that rail to assist in providing freight transportation and passenger services from Miami to Tampa. We would like to work with you to give you our ideas as to the specifics of how this can be accomplished and the priorities of the pieces of this project as they relate to the greatest opportunity for expanded economic development in Glades County.
- 4) Expedite with all available resources the Moore Haven Canal project already committed to by the water management district over the next five years. We would like to see it done as quickly as possible. In addition, we would like to have the district look at Harney Pond and other areas with similar needs but to focus on expediting our existing commitments first.
- 5) That at some point 589 Acres of TIFF land around Lake Hickpochee be dredged to restore water flow to the lake so that an inland port for sea barges could be developed and connected to US 27 only one mile away. And that during that process based on discussions between the state and the county that the land be transferred to the county.

### Long-term Goals

- 1) Return all lands possible not needed for restoration projects back to agricultural uses and to surplus out other agricultural infrastructure back into the economy so that those processing facilities can continue to serve the local agricultural economy.
- 2) Promote Eco-tourism on Lake Okeechobee in Glades County and on the trailheads around it as well as along the Caloosahatchee River Area.
- 3) Any surplus lands not necessary to restoration or needed for agricultural production should be surplused to the county and OTTED and Enterprise Florida should be directed to making it a top priority to locate a large manufacturer of environmentally friendly products to the area such as, a hybrid or hydrogen cell automobile manufacturer, a solar film or other solar technology enterprise or a wind turbine systems manufacturer and the state will provide the needed infrastructure such as roads water and sewer for the facility and OTTED would provide the needed job training to transition workers to the new enterprise.
- 4) That the state assist in using lands in the area to expedite permitting and construction of a variety of clean energy facilities which our area is uniquely positioned to accommodate.
- 5) That the state consider legislation related to the PILT program for environmental land acquisition just recently passed for a provision to apply only to lands acquired in this acquisition to create the series of reservoirs for Everglades restoration. PILT is based on the tax rate paid on the property prior to its acquisition for purposes of this acquisition PILT payments would be based on its end use by the district which is a more industrial related purpose and the local governmental entities would receive PILT payments based on that rather than the current agricultural use. This would offset the tax base losses and the loss of future changes in development.



6) That to insure a competitive environment for future development that natural gas lines are run into Glades County from the surrounding area. One of the options would be to run down from existing lines in Highlands County. This is very important for Glades and Hendry County for future development.



7) Target our area for bio fuel production.



- 8) Continue to completion the wastewater system located in Moore Haven and secure and develop a potable water supply for the city. Both are critical infrastructure for long-term economic development.
- 9) In conjunction with the new health department facility assist us in creation of a partnership with one of the state's medical schools to create a rural health initiative which would provide valuable educational internships for physicians at the school and provide much needed healthcare access to the citizens of the region.
- 10) Target assistance to our educational system, create something akin to the DCD ( the district cost differential) in the FEFP (Florida Education Finance Program) which adds additional dollars for urban school districts for higher costs of living purposes by creating a lets call it a SCD or sugar cost differential. This would provide that regardless of the impacts or loss of FTE's (Full-time equivalents or number of students) from the buyout proposal that the local districts would never be funded at less than the FTE levels of the year prior to the acquisition. In addition, we would like enhanced assistance with vocational training and real world business training we could serve as a pilot for rural areas with enhanced make these programs viable. to Any enhancements to the funding formula which would assist in dealing with the ever expanding overhead experienced by the district which it cannot offset with economies of scale like larger districts.
- 11) Look at locating state facilities in our community. For example, a DOT regional office or similar agency presence, which would bring additional diverse job opportunities to our community.

### Sustainability

- 1) Work with our EDC and other interested parties to expand the opportunities for new single and multifamily affordable housing.
- 2) Work to provide attractive community for our residents and to attract new citizens and employment opportunities. This can be done by riverfront improvements and along the US 27 corridor. One project that would be included in this would be the donation of 90 acres between Riverside Drive and the School Board property by the WMD for purposes of resort type development.
- 3) Assist the Main Street program in the acquisition of four buildings at cost of \$350,000 and support their application for \$1,000,000 from the Hope VI grant program to rehab those properties

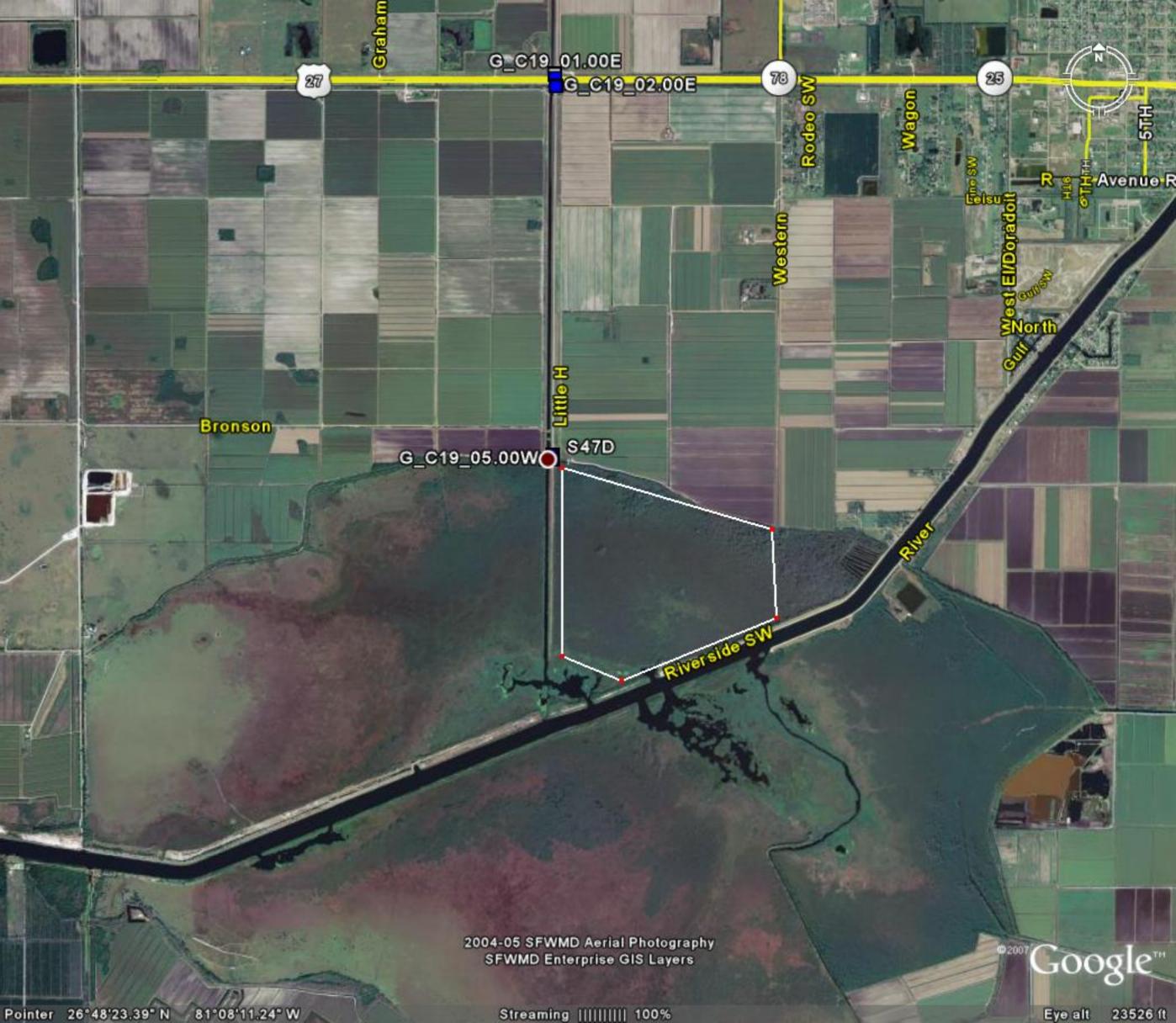


Assist us with our federal partners in designating Glades County as a federal empowerment zone.

- 5) Assist us in obtaining an EOC facility for the County.
- 6) Help with projects in the historic district such as the \$625,000 current proposal.

#### In Summary:

We believe that in order to allow for long term sustainability to be achieved an ongoing commitment to economic development, education and job training are vital elements of a three legged stool, which will support and make possible a viable and sustainable future for our community.



## 12. Inter-modal Logistics Center



# **Intermodal Logistics Complex**



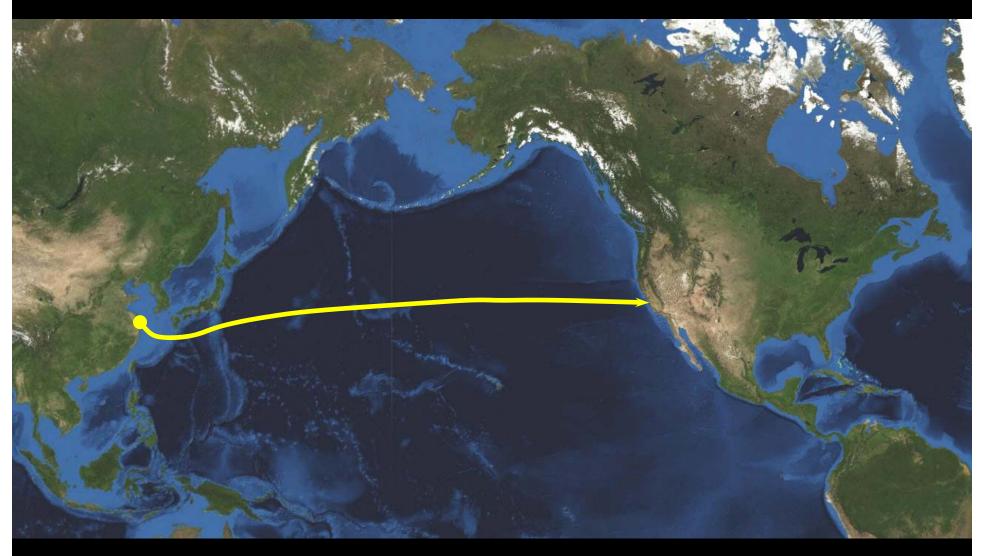
# Why Are We Here?

 In 2007, the container trade in North America totaled 29,530,027 TEU's

 By 2015, the container trade in North America is expected to increase to 72,000,000 TEU's

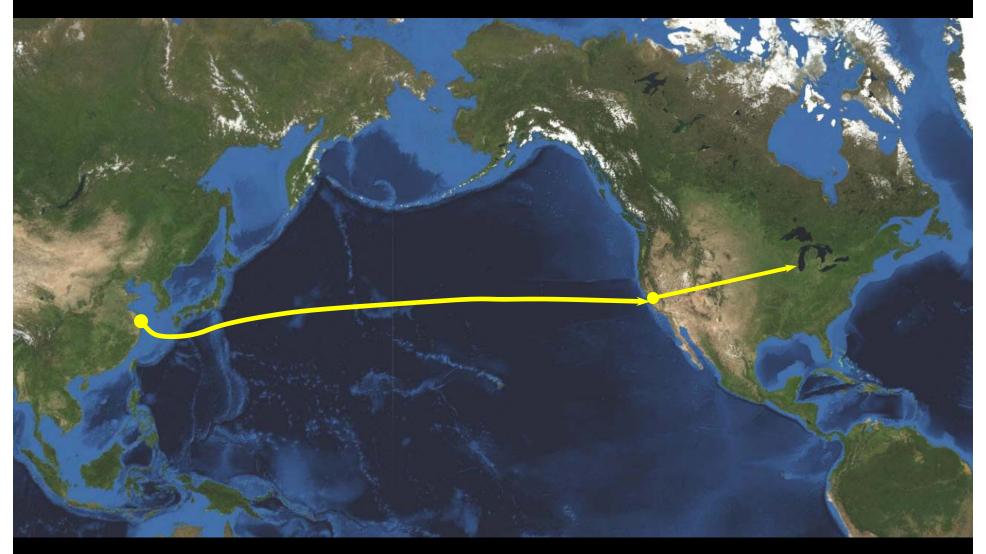


# Global Trade - 2008



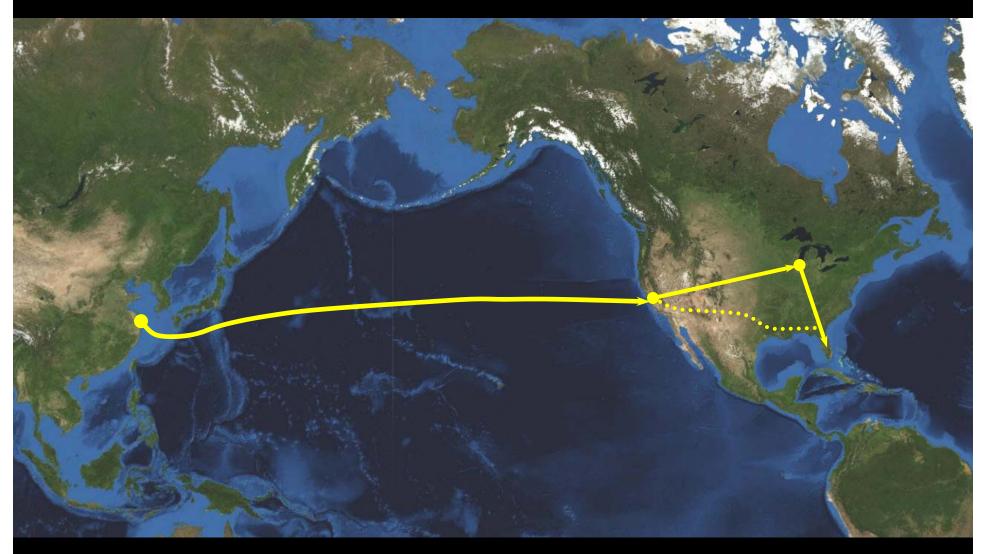
13 Day's

# Global Trade - 2008



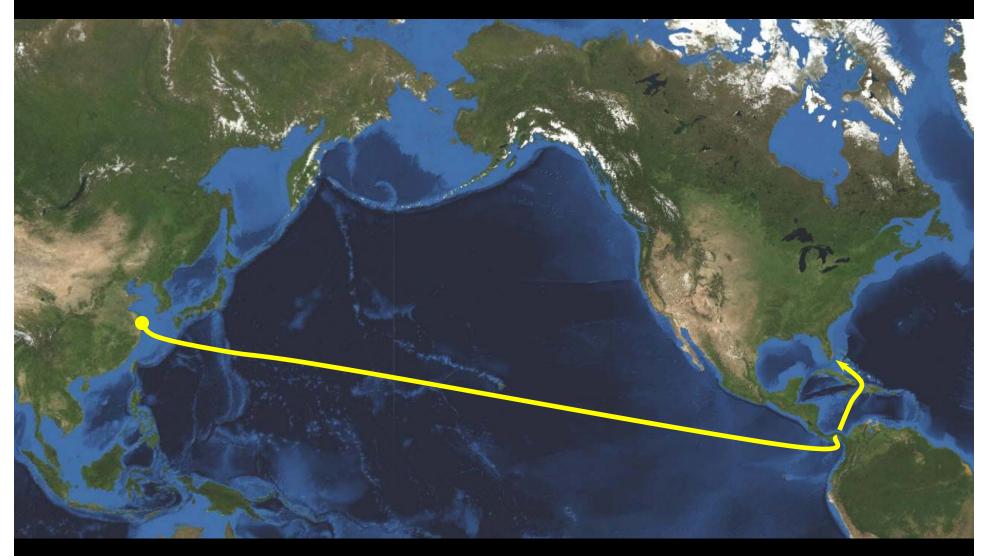
13 Day's + 6 Day's

## Global Trade - 2008



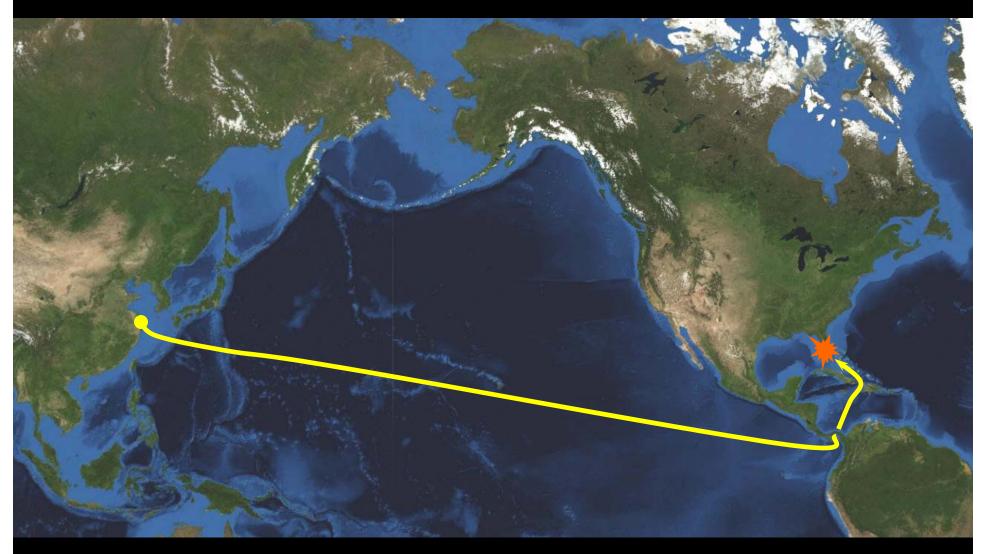
13 Day's + 6 Day's + 4 Day's = 23 Day's

# Global Trade - 2013



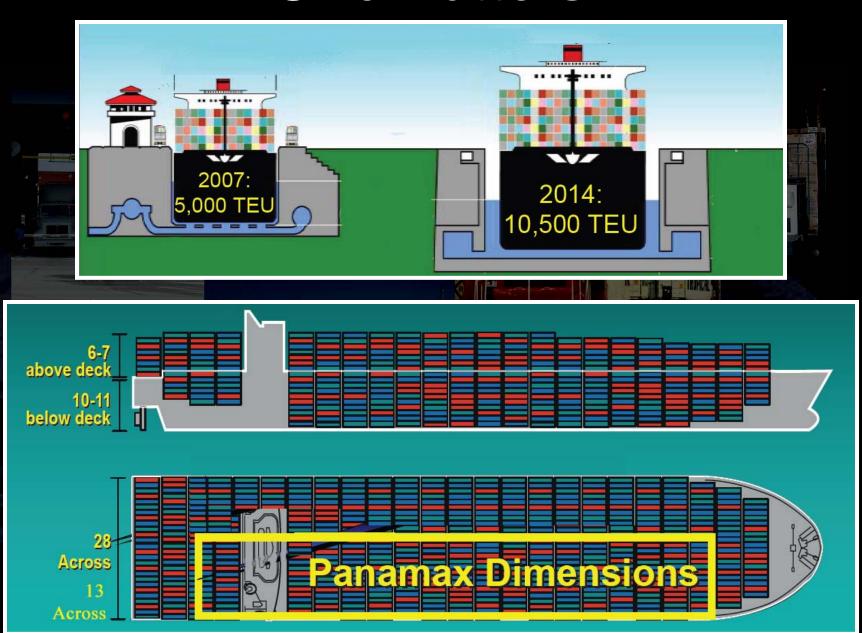
23 Day's

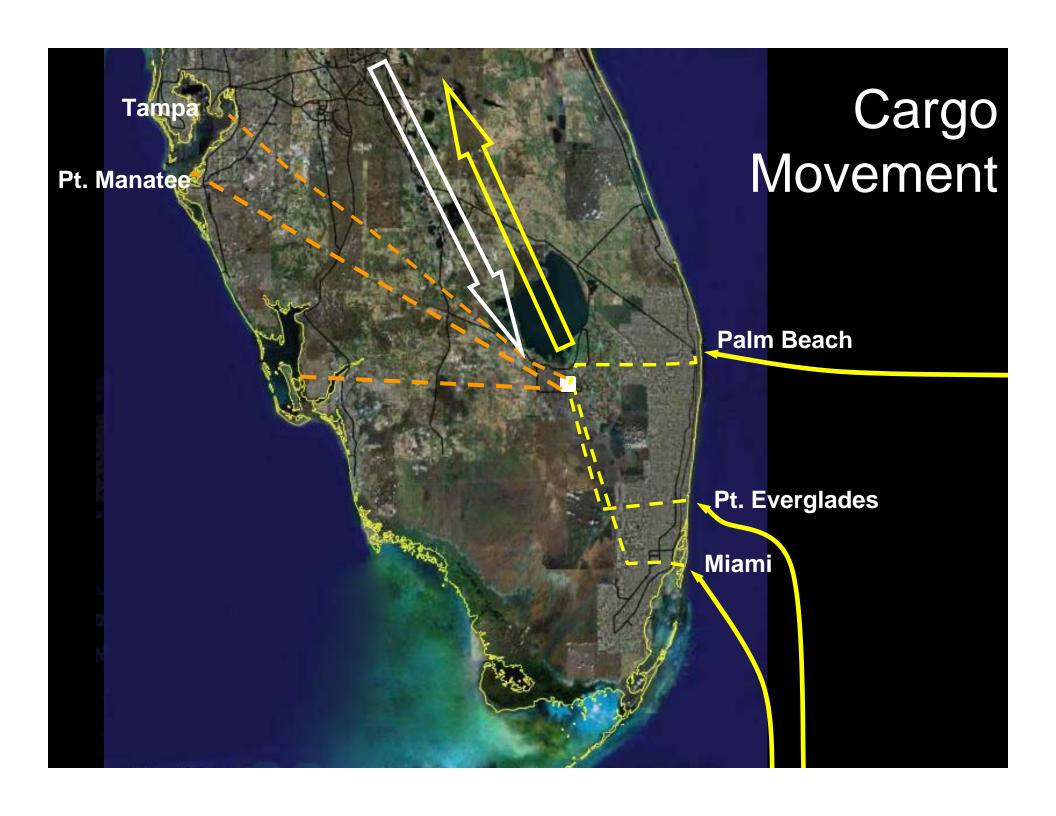
## Global Trade - 2013



23 Day's + 1 Day = 24 Day's

### **Size Matters**

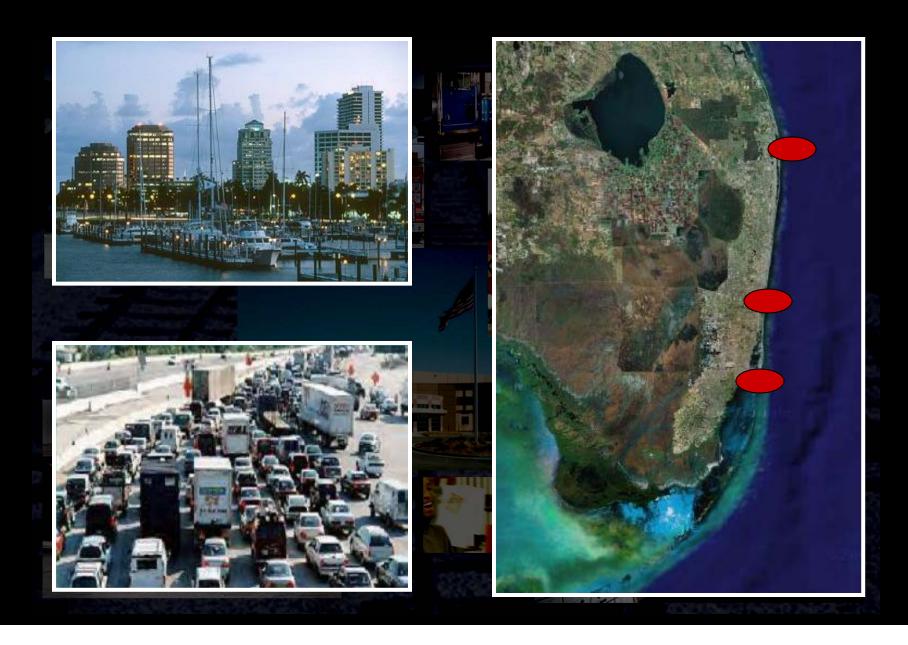




# Today



# Congestion



## Regional Approach

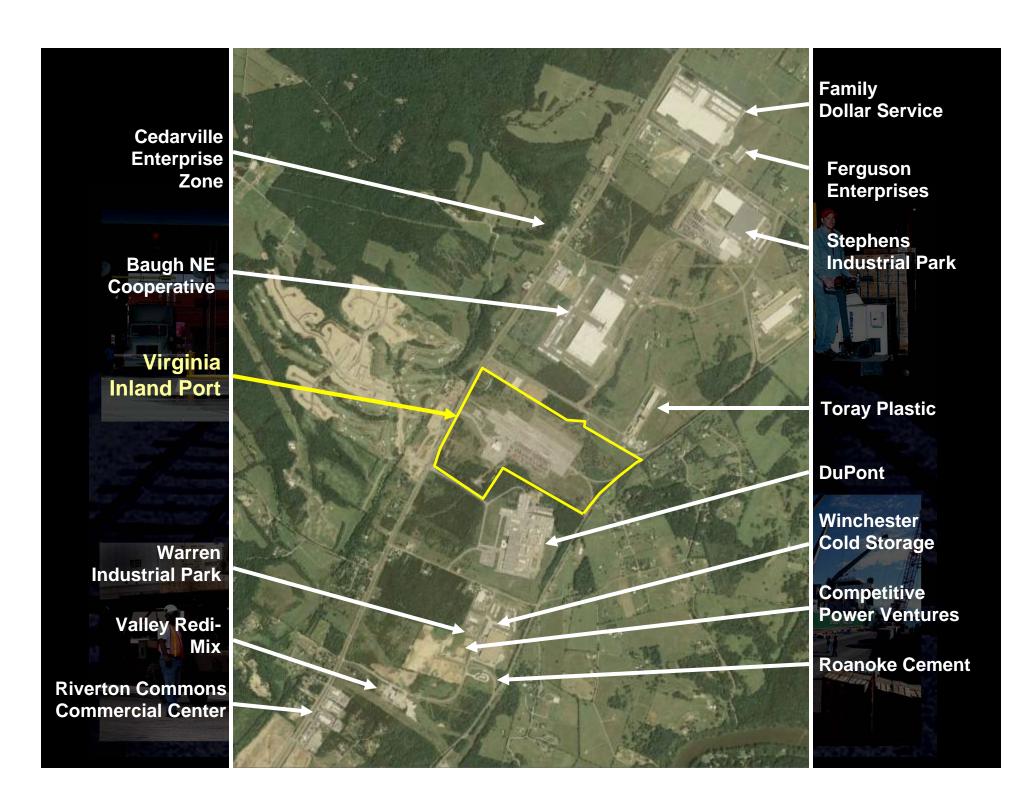
- A statewide improvement
- Connects five plus seaports
- Promotes connectivity utilizing existing transportation network
- Improves rail efficiencies
- Relocates freight off of I-95 & Turnpike corridors
- Frees up coastal rail for urban passengers

### Virginia Inland Port

Economic Engine for the Commonwealth of Virginia

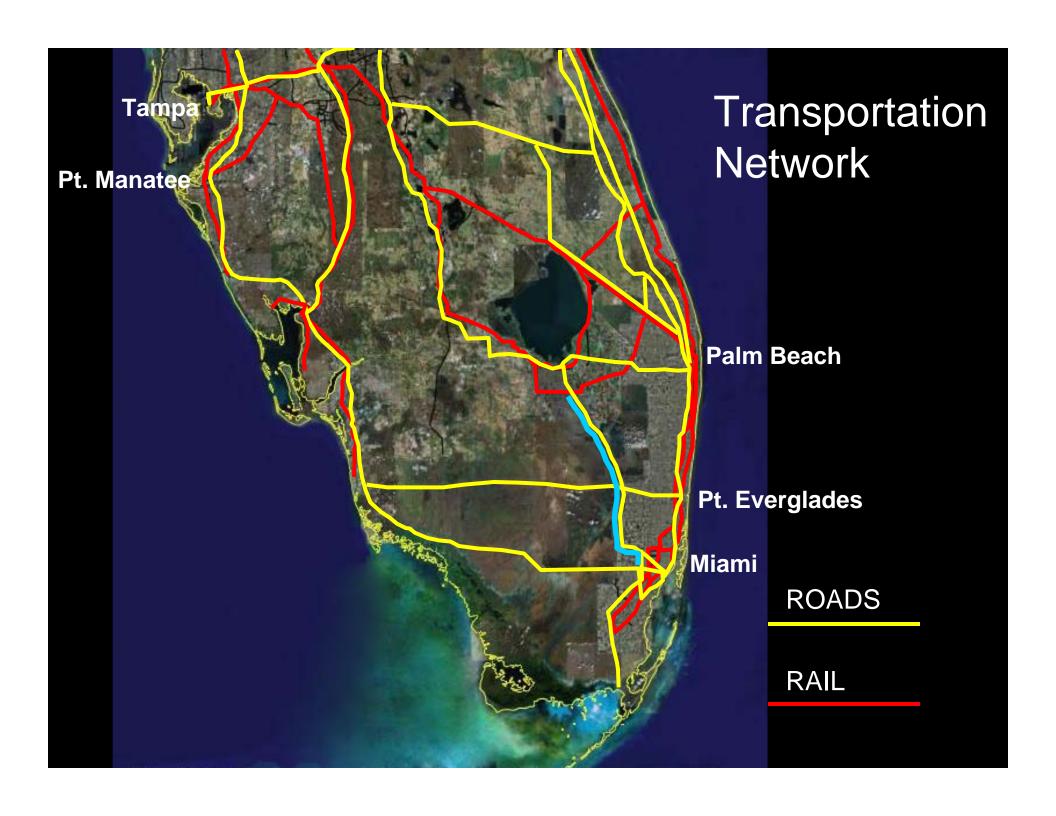
- Opened in 1989
- 24 Major Companies Have Located Near VIP
  - Investment of Over \$599 Million
  - Over 6 Million SF of Building
  - Employment of Over 7,000





#### **Inland Port Components**

- Up to 3,500 acres
- Warehouses, Distribution, Open Storage, Light Manufacturing
- Connectivity to Multiple Railroads
- Proximity to Port of Palm Beach
- Proximity to South Florida Regional Market to Include Port Everglades & Port of Miami
- Link to Port of Tampa and Port Manatee



#### Real Jobs

- Direct Construction, trucking, maintenance, warehouse, dispatch, management, parts, rail, heavy equipment operators & security
- Indirect Business opportunities to support shippers, distributors, freight forwarders, manufacturers, restaurants, fueling, retail & vocational training
- Numerous entry level & family wage, full time, year-round jobs
- Transportation jobs = higher level paying jobs

## **Intermodal Logistics Complex**

 By 2025, studies suggest that there will be a demand for 40 to 80 million sq ft of additional distribution space in South Florida alone

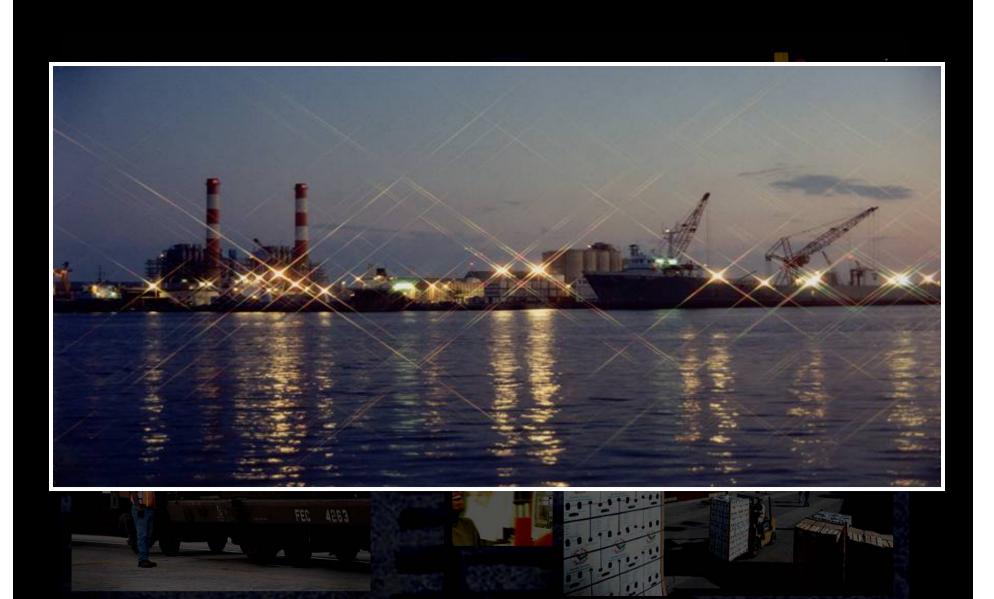


## **Intermodal Logistics Complex**



#### Where Do We Go From Here?

- Wait for outcome of Everglades Restoration / SFWMD / US Sugar deal
- Determine private sector interest
  - Develop general project description material
  - Issue Request for Information (RFI)
- Evaluate options based on level of interest
- If appropriate, move forward with Request for Qualifications (RFQ)
- Enter into agreement with selected partner(s)



#### 13. Stakeholder Correspondence

09/04/2008 13:31 863298/988



#### THE FLORIDA SENATE

#### COMMITTEE ON GENERAL GOVERNMENT APPROPRIATIONS

Location 201 The Capitol

Mailing Address 404 South Monroe Street Tallahassee, Florida 32399-1100 (850) 487-5140

Senator JD Alexander, Chair Senator Alfred "Al" Lawson, Jr., Vice Chair Professional Staff: Jamie DeLoach, Staff Director Senate's Website: www.fisenate.gov

September 3, 2008

Mr. Eric Buermann, Chairman South Florida Water Management District 3301 Gun Club Road West Palm Beach, FL 33406

Dear Mr. Buermann,

Pursuant to the provisions of section 373.536, F.S., the intent of this correspondence is to provide official comments regarding the South Florida Water Management District's Tentative Budget Submission for the 2008-09 fiscal year. After reviewing the district's budget, I have concerns related to the reallocation of revenue sources and funding from the current Comprehensive Everglades Restoration Program (CERP) projects to the planned acquisition of lands in the Everglades Agricultural Area (EAA), as well as the impacts to the Northern Everglades restoration program. Further, the economic impacts related to job losses in the south and central regions of the state is of major concern.

As you are aware, the state and district in partnership have contributed significant resources for CERP, and have also authorized and provided resources for the Northern Everglades Initiative passed in 2007. In the proposed budget, it is unclear how the anticipated acquisition will impact the district's ability to continue and complete these major initiatives, as well address the long-term financial outlook with the issuance of \$1.7 billion in debt. It is essential that the financial and economic impacts of this acquisition be thoroughly reviewed by the public and the Legislature to ensure this action benefits the citizens of the state.

In order to gain a better understanding of the tentative budget and the impacts of the proposed EAA acquisition, I am requesting that the district address the following:

- How the acquisition will impact the district's ability to meet current resource needs and project schedules;
- Impacts to the district's efforts in reducing nutrient loading to Lake Okeechobee, specifically related to the Kissimmee River watershed;

KEN PRUITT
President of the Senate

LISA CARLTON
President Pro Tempore

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#### September 3, 2008 Page 2

- What input has been received from the federal government concerning the potential acquisition and the impacts to our CERP partnership;
- Debt service analysis and long-term financial outlook; and
- What studies or efforts have been undertaken to determine the economic impact of this acquisition to the regions for related job losses.

The district is a multi-faceted agency tasked with enormous challenges, from providing flood control to developing and implementing water supply plans. I appreciate the continued hard work and ongoing accomplishments to these challenges, and I look forward to reviewing the details of the EAA land acquisition proposal as they become available.

Sincerely,

enator JD Alexander, Chair

cc: Carol Wehle Mike Sole Eric Eikenberg



Decision Makers Forum Inc., 2432 Edgewater Drive, West Palm Beach, FL 33406, 561-965-9409

#### Martha Musgrove President

Sept. 3, 2008

The Honorable Gov. Charles Crist
The Capitol PL 05
400 S. Monroe St.
Tallahassee, FL 32399-0001
Via e-mail Charlie.Crist@MyFlorida.com

Re: Request that State of Florida join the South Florida Water Management District in pledging its credit to back Certificates of Participation or other bond instruments to buy out U.S. Sugar for Everglades Restoration.

Dear Gov. Crist:

I appreciate your leadership and wholeheartedly support the proposed buyout of U.S. Sugar to advance Everglades Restoration. I also believe this should be done expeditiously and prudently using long-term financing to spread costs.

For the South Florida Water Management District alone to issue \$1.75 billion in Certificates of Participation would be an extraordinary burden that has been estimated to require as much as 30 percent of the district's ad valorem and "related revenue" (whatever that is) annually for many years.

Notwithstanding plans to re-sell some of the assets purchased, I want to remind you that in recent years the district has incurred other Everglades Restoration related debt and is committed to a number of other environmental initiatives and responsibilities, including maintaining and operating the regional drainage system. Equally important given present market conditions, the district --- should it be going alone -- is likely to pay higher interest rates than if the securities to be sold were issued jointly with the State of Florida.

For a number of reasons, Wall Street markets are currently in turmoil. Bond insurers, such as Ambac, are in distress, the credibility of rating services is in question, and the Treasury is stretched and challenged to support Fannie, Freddie and the national

banking system. This has prompted a "flight to safety" by investors to "muni's," which might create a good market for the SFWMD were it not for newly growing concerns about the safety of local issues. I am attaching a copy of a column by Gretchen Morgenson of The New York Times, which springs from the potential delinquency of Jefferson County, Ala., but goes on to suggest reasons why investors in general should be concerned. The column becomes particularly interesting and pertinent at paragraph 15, which I have used marked with >> to save you a little reading time.

As a taxpayer, whose family has survived a number of boom-and-busts in Florida, I would like to see the state and district's reputations and credit well protected. To me that means state taxpayers should be sharing the risk with taxpayers of the South Florida Water Management District. It is also incumbent upon you and the Legislature to ensure the district has the authority to *raise* ad valorem tax rates to finance the acquisition and maintain its other programs if necessary. I am sure land that is not needed for Everglades Restoration can be resold to retire part of the debt, but I am not sure when it can be resold at a fair price. I see no merit, or glory, in proposing restoration initiatives and programs and then withholding or denying realistic and prudent means to finance them.

I also ask you to look closely at how best to manage the leases on state-owned land that are held and presumably part of the assets to be sold by U.S. Sugar. Some of these lands are adjacent to or within the municipal boundaries of rural communities around Lake Okeechobee. What happens to these lands will have an impact on the ability of these communities to diversify their economies and increase their tax base to provide basic services, such as police, fire protection, water and sewer services. These lands may also be the "hook" by which the State of Florida can justify participating with the district in financing the acquisition and/or reimbursing the district by "buying back" the leases and using the land to realize goals set in the Rural Economic Development Initiative.

The Governing Board of the district and the staff of the district are committed to carrying out your direction. I do not know if they have freely discussed with you the merits of jointly packaging state and district securities to obtain the best interest rates when selling these certificates, bonds or other securities. Compared to other states, Florida has a very narrow tax base. As a result coffers overflow in good times and dry up in bad times. I am well aware of the state's current "budget crisis," but I'm suggesting a way of financing an important long-term capital project while protecting needed operating funds. Debt-financing is the preferred means of financing land purchases, and given the size of the overall state budget, the money involved -- while significant for the South Florida Water Management District -- is minimal for the state of Florida.

If the U.S. Sugar deal is to be consummated, the issue of financing must be faced squarely and openly with the state and district acting as partners. If the deal is not consummated, we should all recognize that everyone on Wall Street has now been alerted that U.S. Sugar is for sale and at what price. Sooner or later private equity will make a deal -- without concern about the consequences to Everglades Restoration or the rural communities around Lake Okeechobee.

Respectfully,

MM

Copied from The New York Times Website

August 31, 2008

**FAIR GAME** 

#### **Muni Bonds' No-Tell Habits**

#### By GRETCHEN MORGENSON

GIVEN the sound and fury ripping through the credit markets over the last year, the relative calm in the municipal bond arena has been remarkable.

Sure, municipal bond guarantors like MBIA and Ambac Financial have had their problems, and the auction-rate securities debacle involved notes issued by cities, hospitals, turnpikes and other tax-exempt entities. But municipal bond holders haven't experienced the roller-coaster ride endured by owners of mortgage securities.

Municipal investors probably shouldn't expect their quiet ride to continue. With tax revenues declining and operating conditions strained, local governments are encountering strong headwinds. One straw in those winds: Jefferson County of Alabama.

Recently, the sewer authority there has repeatedly been on the verge of default. On Friday it got a one-month reprieve to renegotiate \$3.2 billion in debt; without the agreement it would have been the biggest municipal default in American history. (Anyone care to recall the alarms that rang out when Orange County, Calif., defaulted on its debt back in the mid-1990s?)

While Jefferson County's problems clearly offer a warning sign, investors who hold municipal securities — whether individually or in a mutual fund — have little way of recognizing when trouble is brewing. That's a result of a severe lack of financial disclosure by municipal issuers, which had \$2.6 trillion of debt outstanding at the end of 2007.

Most of that debt is held by individual investors. Amazing as it is in this day and age, the municipal bond market is a place where disclosure is pretty much voluntary. As such, investors depending on interest and principal payments from entities issuing these bonds receive only spotty financial reports. >> The municipal bond market is enormous, not just in dollars, but also in the number of issuers. Mr. Schmitt calculates that there are roughly 54,000 municipal issuers with debt outstanding, and 25,000 of those issue debt about every two years. A comparison: shares of just under 4,000 companies trade on the <a href="New York Stock Exchange">New York Stock Exchange</a>.

Not all municipal issuers must make financial or other material disclosures. The Securities and Exchange Commission exempts small issuers, those with \$10 million or less of debt outstanding, for example. Issuers of short-term securities — those with terms of nine months or less — need not make annual filings. None of those issuers were included in the DPC study; it covered 35,235 bond issues.

Mr. Schmitt concluded that disclosure delinquency in the municipal securities market is not an anomaly concentrated among a few rogue issuers. Neither is it a problem limited to small issuers.

"There are large proportions of delinquent obligors in all size ranges of issues, including those who came to market with single issues over \$1 billion," the study said. "It is a much broader problem common to all issue size categories, all sectors of the market, and all geographic regions of the country."

Issuers almost seem indifferent to the need to keep investors apprised of their operations and results, Mr. Schmitt said. One explanation for this may be that there are few consequences for issuers who don't disclose. "There hasn't been any enforcement to speak of that really governs this sort of thing," he said.

Indeed, legislation from the 1970s restricts the S.E.C. from going after issuers that do not make the types of disclosures required by their bond covenants. The commission can pursue only issuer fraud.

On disclosure issues, the S.E.C. can regulate only brokerage firms that underwrite muni bonds, holding them to a requirement that no issuer can sell debt without being up to date on filings for the most recent five years.

This is why Mr. Schmitt says it is common to see years' worth of filings emerge from an issuer all at once; this often signals that the

municipality wants to raise money through a new debt issue and needs to get its disclosures in order.

Mr. Schmitt says he hopes that his study's findings create a discussion about how to remedy disclosure failings.

THE trouble in Jefferson County may also help bring attention to delinquent filers. The county filed financial statements regularly until Sept. 30, 2007. After that, interim financial filings stopped.

The next thing investors knew from the county's filings was a February 2008 disclosure related to a ratings downgrade. The downgrade created a need for the county to put up additional collateral, and the default threat loomed shortly thereafter.

"It's hard to believe that a market this deep and actively traded would put up with this sort of thing," Mr. Schmitt said. "The right of investors to know material facts on a timely basis is the foundation of a fair market, enabling them and their advisers to take rational actions to protect their financial interests."

Right now, it seems, those interests are dangerously unprotected.