

# Purchase of Whistling Pines Ranch

By

David Richardson, P.E. AGM  
Water/Wastewater Systems

&

Rick Hutton, P.E.  
Supervising Utility Engineer

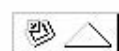
*Gainesville City Commission July 23, 2007*



# Biosolids



- Environmentally friendly alternative to chemical fertilizer
- Sustainable: recycles valuable nutrients
- Purchase site to ensure continued land application/mitigate risk
- \$6 million – FY07
- \$2 million – FY08
- \$2 million – FY09
- \$2 million – FY10



# Land Application at Whistling Pines Ranch

- ❑ 26 year operating history at WPR
- ❑ 2004 EPA Exemplary Biosolids Operation Award



# Biosolids Master Plan

- Ensure Long-Term Viability
  - Changing Regulations
  - Changing Land Uses in Alachua County
  
- Evaluated Multiple Alternatives
  - Environmental Benefits
  - Costs
  - Financial Risks

# Biosolids Alternatives Evaluated

- ❑ Mass Market Product (Class A)
  - Further treatment/drying
  - Market Product
  - Less Controlled Use
  
- ❑ Energy Production
  - Conventional
  - Innovative
  - Gasification Proposal Received May 2007
  
- ❑ Controlled Land Application
  - Secure property rights

# Mass Market Product (Class A)

## ☐ Technologies

- Composting
- Lime Stabilization
- Heat Drying

## ☐ Advantages

- Potential Marketability
- Reduced Land Requirement

## ☐ Disadvantages

- High Overall Cost -> **\$43Million Capital Cost**
- High Energy Requirements
- Marketability likely limited
- Inflexible

# Energy Production

## ❑ Conventional

- High Water Content
- Heat drying required
- Low Net BTU benefit
- Process Issues

## ❑ Innovative Technologies

- Gasification
- May (or may not) be Compatible w/ Future Deerhaven Expansion or other energy initiatives
- Leave Option Open

## ❑ Gasification Proposal Received May 2007



# Controlled Land Application Secure Property Rights

## ❑ Contract Agreement(s)

- Low Up-front Cost
- High Risk

## ❑ Long-Term Lease

- Moderate to high cost (depending on term)
- Little flexibility – No recoverable Asset

## ❑ Purchase Site

- High Up-Front Cost
- Recoverable Asset
- Low Risk
- High Flexibility



# Biosolids Alternative Costs

	Capital Cost	Net Present Value
Mass Market Product	\$30-43M	\$51-65M
Energy Production	?	?
Gasification Proposal	\$10M	\$36M
<u>Controlled Land Application</u>		
Continue Contract	NA	\$25- 43M
Purchase WPR	\$11.5M	\$25-30M

# Potential Biosolids Site Evaluation

## □ Site Evaluation Criteria

- Wetlands Buffer
- Soil Compatibility (Water table >2ft)
- Access/Travel Time
- Contiguous area
- Compatible Land Use

## □ Private Agricultural Sites

## □ Government Sites (City, County, State, UF)

# Biosolids Potential Application Sites Screening Analysis

0 2.5 5  
Miles

[ArcGIS Procedure]/Screening Method:






- 1) [Erase] all areas with Soil Hydrologic Groups D & B/D
- 2) [Erase] all areas classified as Wetlands
- 3) [Clip] = include only those areas classified as "Ag" in F.L.U. (this also excludes all incorporated areas)
- 4) [Select by Attribute] all remaining that are at least 10 acres




## Legend

-  Municipalities
-  Urban Services Line
-  Urban Cluster

## Potential Sites

### CALC\_ACREAGE

-  10-50
-  50-100
-  100-200
-  200-400
-  400-638

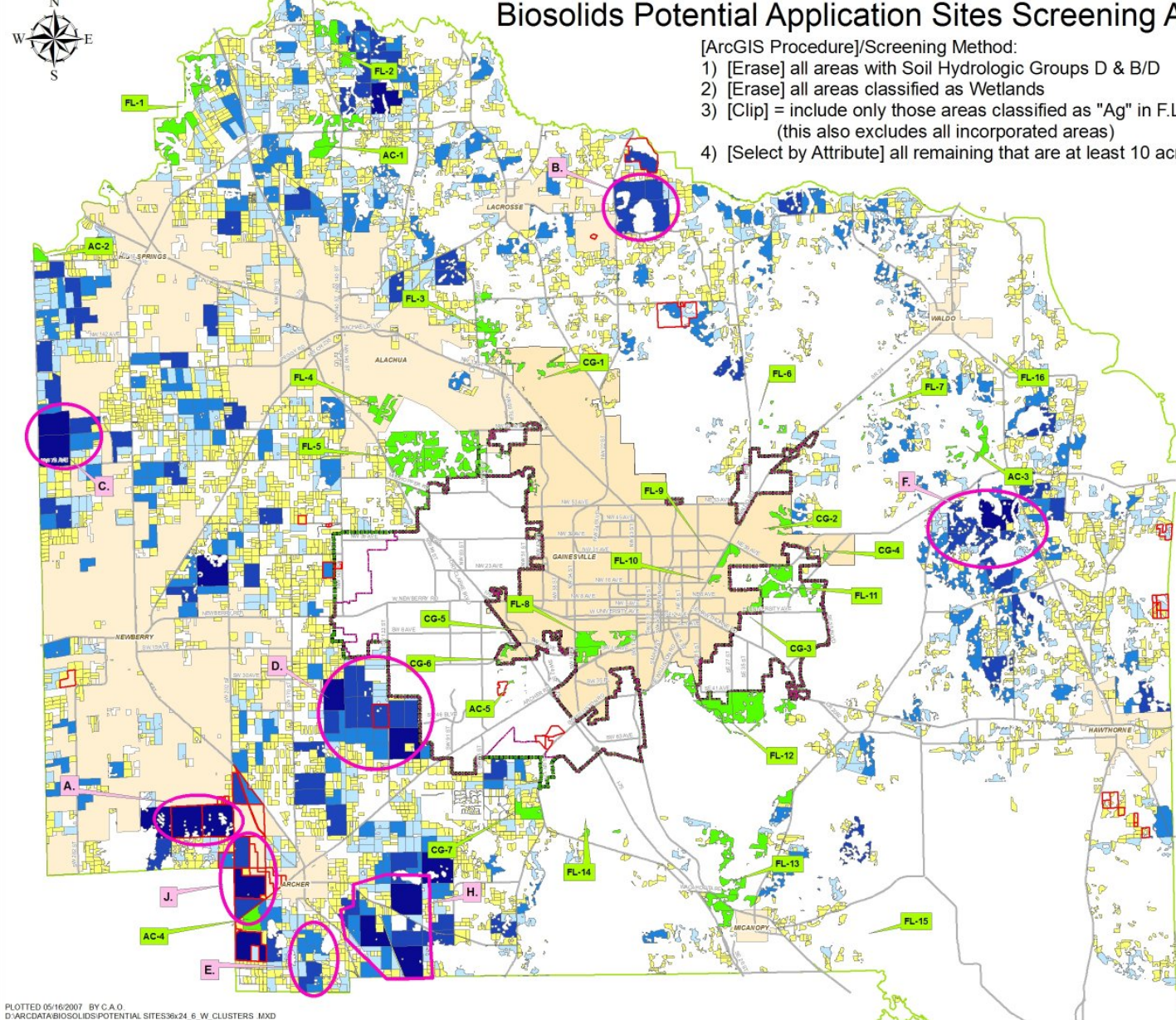
-  Other Sites of Interest
-  Screened Gov't Parcels
-  Potential Site Parcel Clusters

### Data Source Notes:

If used  
Wetlands and Municipality data are from Alachua County GIS Division, Dept. of Growth Mgmt., December 2006  
<http://growth-management.alachua.fl.us/gis/warehouse.php>

Wetlands data is a composite of various data sources that may include the following:  
St. John's River WMD  
Suwannee River WMD  
Southwest Florida WMD  
USGS 1:24,000 Hydrography  
SSURGO Specific Soils  
National Wetlands Inventory

Soils data, if used, were obtained from the FGDL (Florida Geographic Data Library) at the following URL:  
<http://www.fgdl.org/download/>  
and is a digital representation of the County Soil Survey maps published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) as the Soil Service Geographic (SSURGO) data set.



PLOTTED 05/16/2007 BY C.A.O.  
D:\ARC\DATA\BIOSOLIDS\POTENTIAL SITES\30x24\_6\_W\_CLUSTERS.MXD

# Purchase of WPR

- Appraised Value = \$9,010 /ac
- Negotiated Price = \$10,000 /ac fixed Price

2007	~600 ac	~\$6M
2008	~200 ac	~\$2M
2009	~200 ac	~\$2M
2010	~150 ac	~\$1.5M
<b>Total</b>	<b>~ 1,150 ac</b>	<b>~ \$11.5M</b>

# Recommendations & Next Steps

- ❑ Purchase Whistling Pines Ranch
  - Current (2007) Budget: \$6M for Land Rights
  - Proposed 2008 Budget: \$5.5M (2008-2010)
- ❑ Special Use Exception
- ❑ On-Going Operation of Site