

Landfill Bio-Technology for McCommas Bluff Landfill



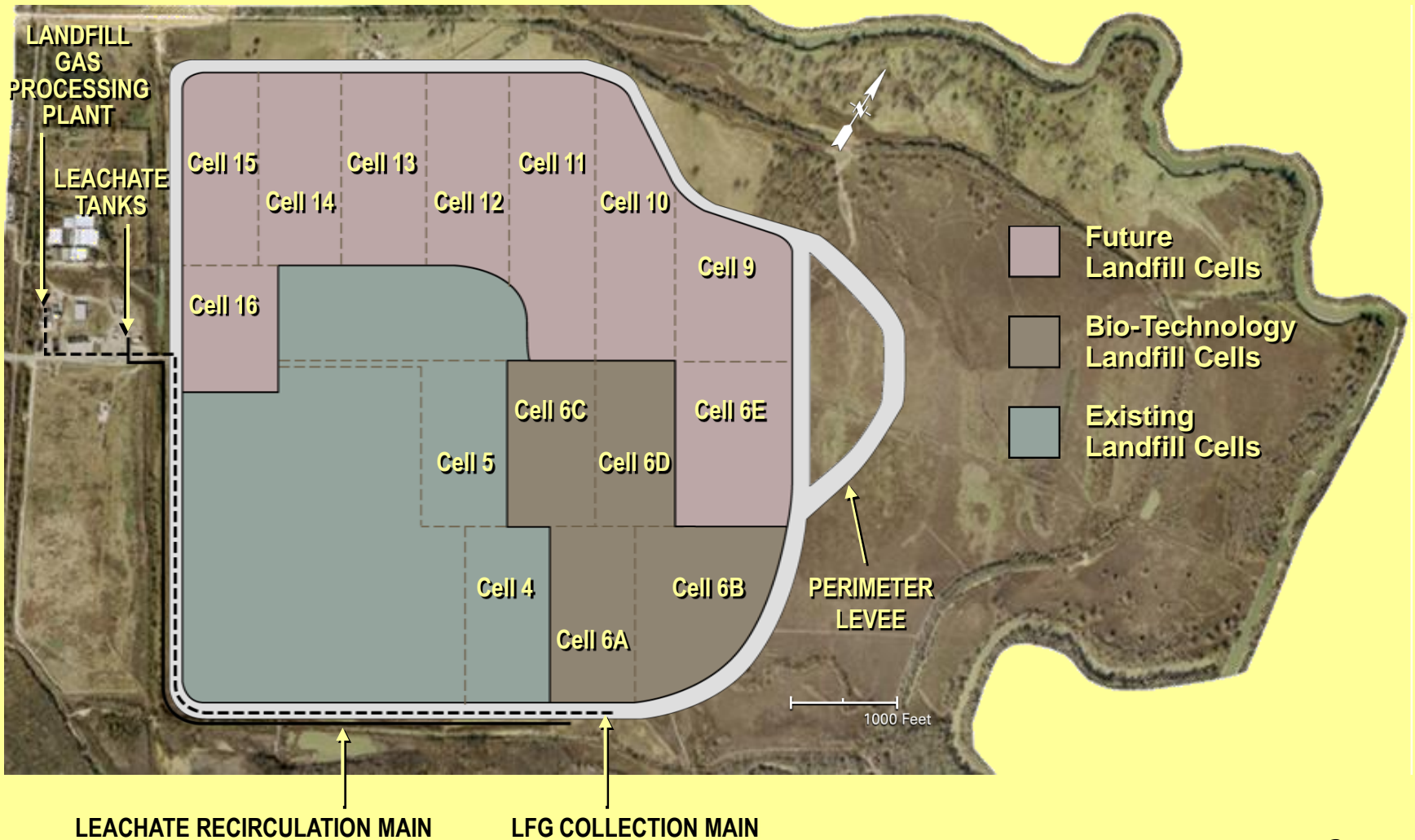
**Sustainable Communities
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Sanitation Services**

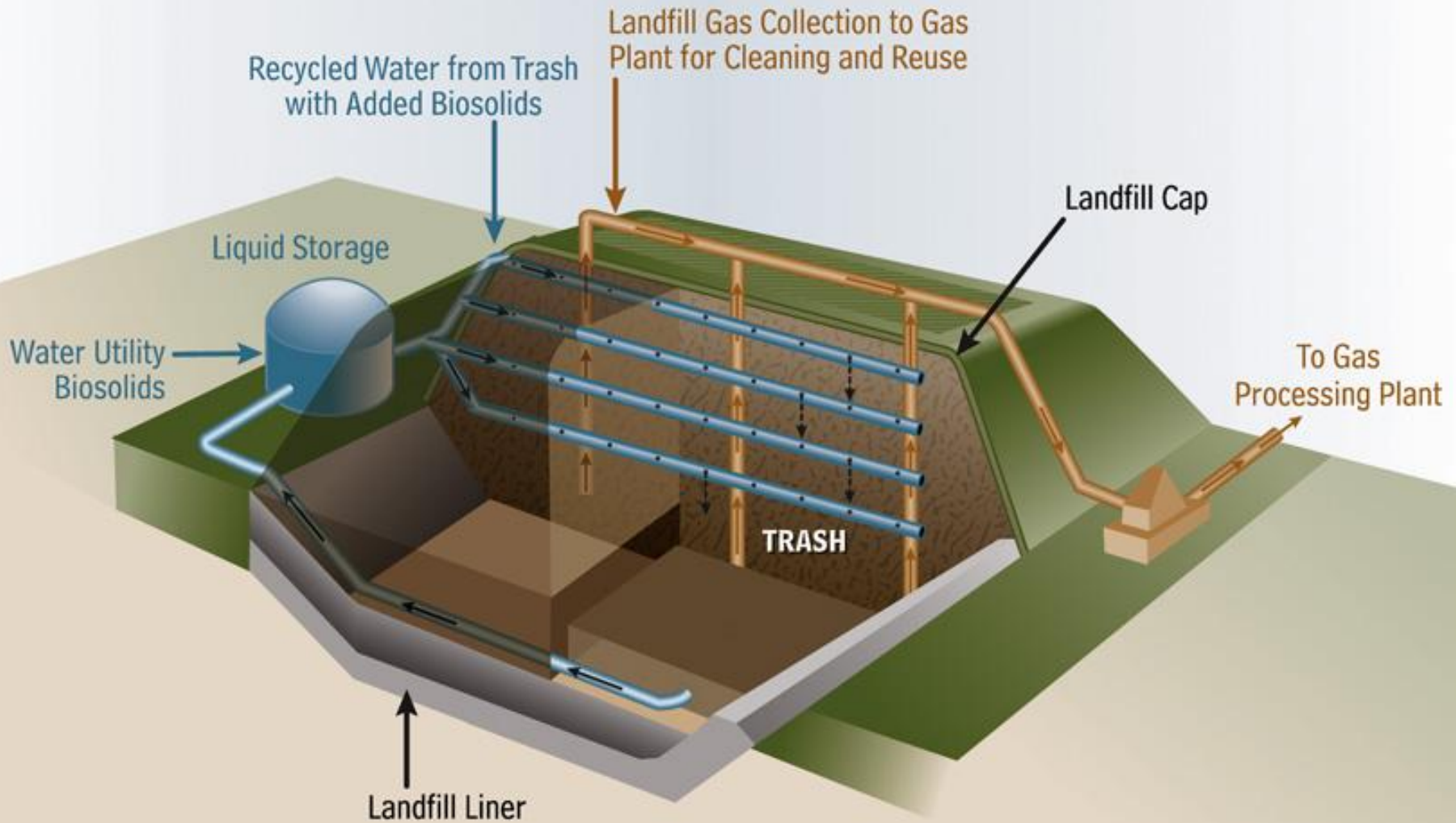
What do we do with our Waste?

- Landfills are the primary waste management solution
- Can landfills be safer / better / smarter ?
 - Adapt and advance composting principles - as **“landfill biotechnology”**
 - Collect and Process LFG for reuse/sale

Site Plan McCommas Bluff Landfill



What is a BioTech Landfill?



What is

Enhanced Leachate Recirculation ?

- Restricts from other features
 - No offsite waste fluids may be introduced
 - No more than 250,000 gals/day
 - Does not tie permit to EPA Bioreactor criteria
- Additional requirements for operator
 - Provide a “Leachate Management Plan” showing provisions for ample recirculation equipment and site monitoring
 - Upgrade the “Landfill Gas Monitoring Plan” for projected increases in gas production

Why Do It ?

- Change image of landfills from “burying the waste problem” to ***“using waste as a sustainable resource”***
- Benefits are numerous; cost is relatively modest
 - Rapidly stabilizes waste – lowers both the short-term and long-term risk to environment
 - Accelerates gas production for energy needs
 - Re-use landfill airspace
 - Promotes recycling of non-organics
- It’s a proven technology
- It has regulatory support



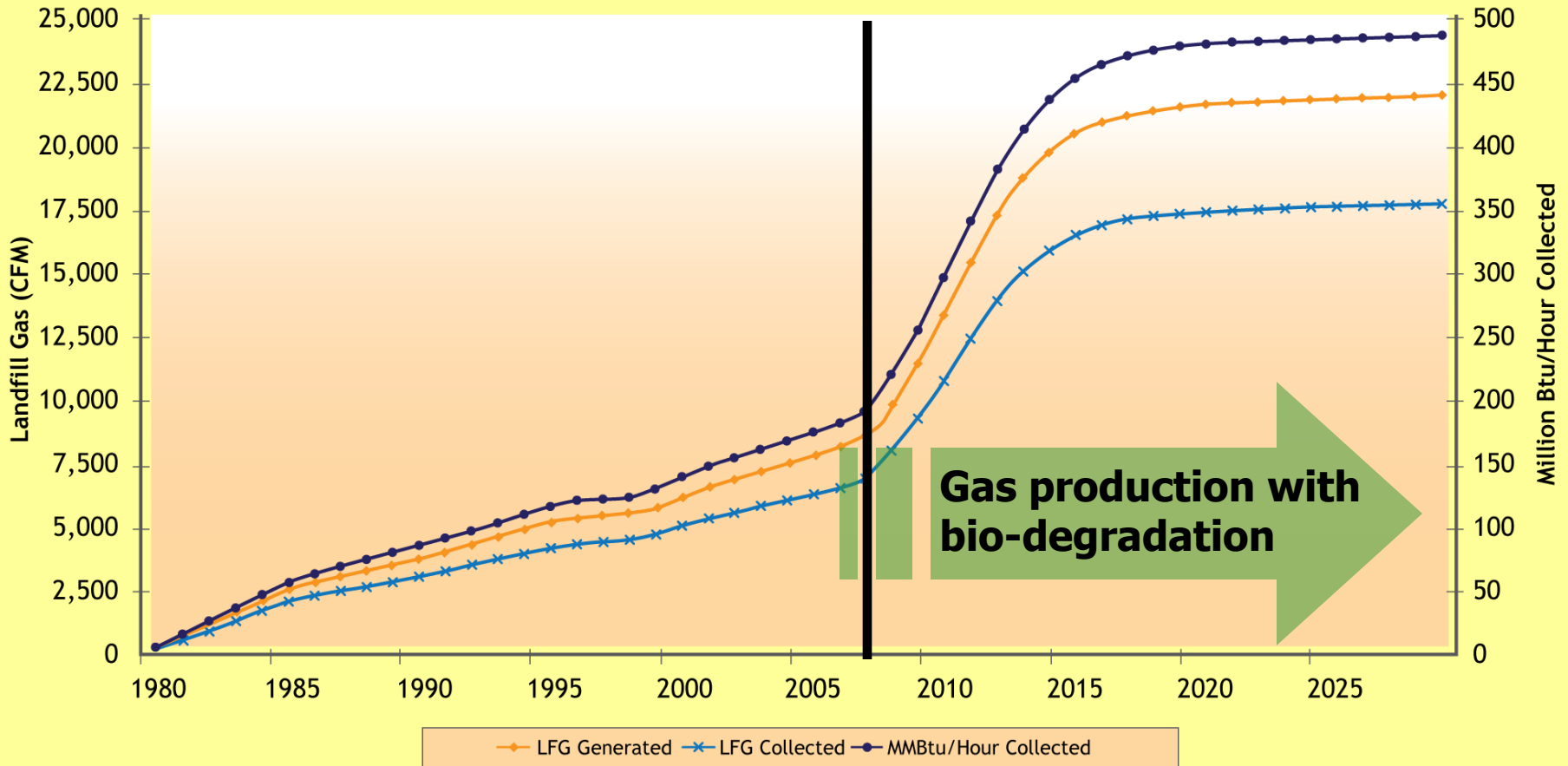


LFG Plant Facts

- 300 vertical wells currently installed
- Currently receiving 5.5 Mcfd
- Processing for sales 2.5 Mcfd
- Cell 6A projected to add 2 Mcfd for processing
- First cell to use horizontal collectors

Dramatic Increase in Usable Gas Production

Landfill Gas Collected vs. Time



Future Plans

- Possible LFG-CNG fueling station located at McCommas Bluff Landfill
- New construction of Landfill Offices
- Pursue LEEDs Platinum status by:
 - Use gas to provide heat
 - To fuel micro-turbines for electricity

Dallas' forward focus

- **2007 2008 and onward**
 - Construct first cell at McCommas Bluff using “enhanced leachate recirculation” in 2007
 - Begin accepting waste in 2008
 - Monitor initial performance
 - Modify, develop, proceed with next cell
 - Measure benefits achieved

Dallas' forward focus

- **2007 2008 and onward**
 - Get the message out to the community – public outreach
 - Support TCEQ in developing a rule package to encourage Biotechnology across state
 - Offer our site as academic forum to foster university research (SMU, UTA, UNT)
 - Serve as model for other landfills

Questions ?

