



Welcome to Tehama County!

CIWMB Presentation, April 27, 2005

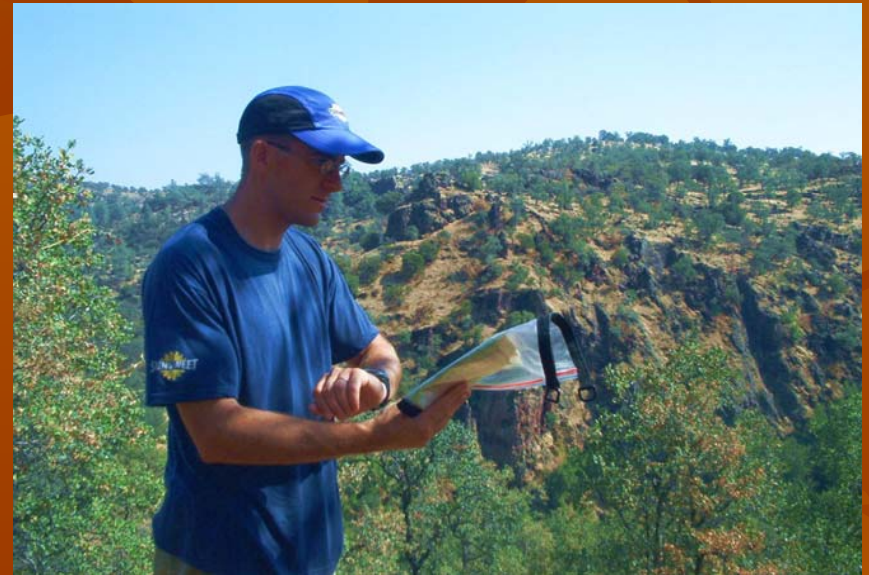


Our slogan is “Recreation Unlimited”



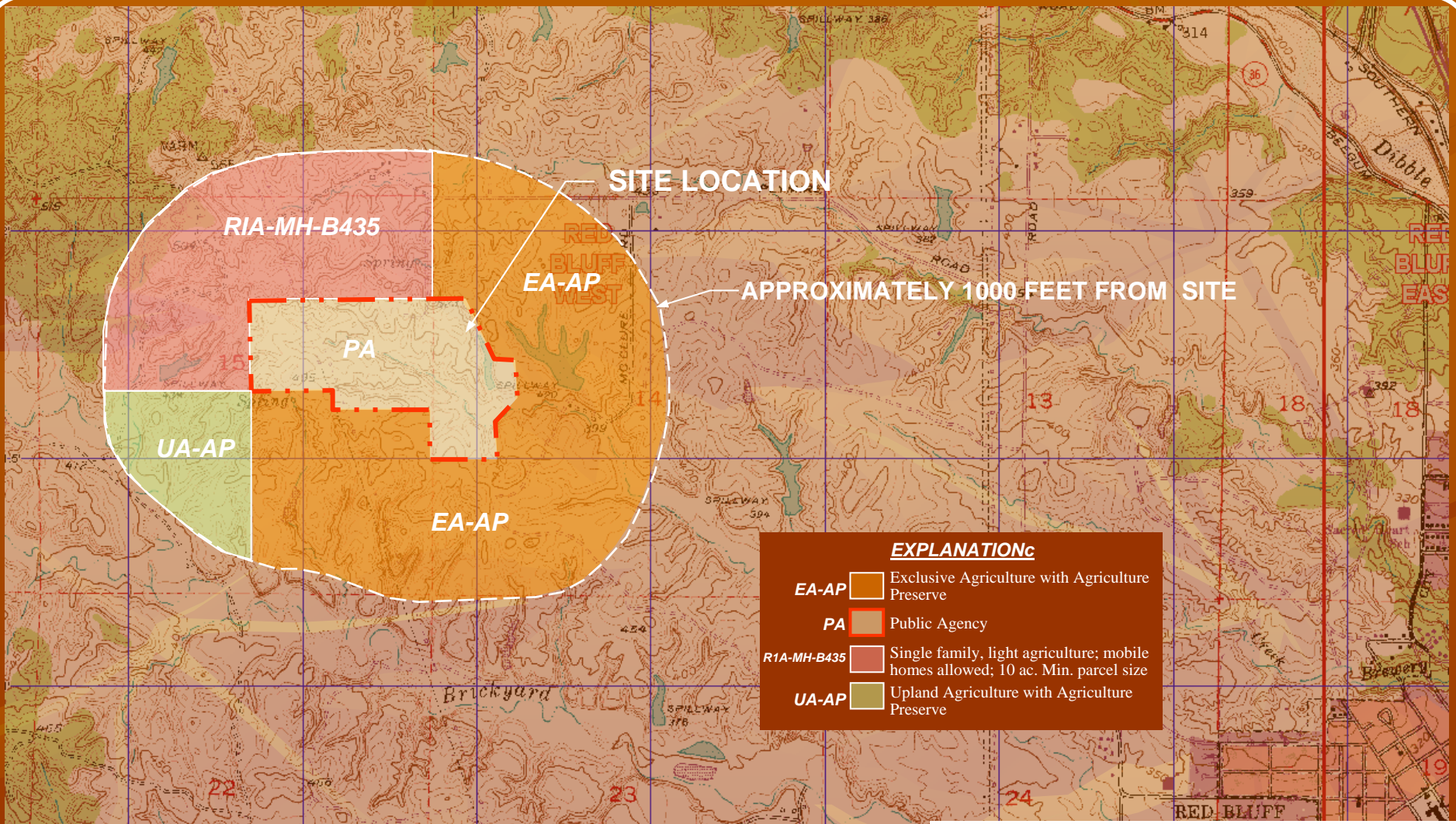
My name is Alan, and I will be your tour guide today

- Solid Waste Director since Aug 2001
- Env/Technical Mgr at paper mill prior to Aug 2001
- Learned it all “the hard way.”



Let's head out to the Landfill...





3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS



DATE: JUNE 200
DWN: S.E.R.
APPR: _____
REV: _____
PROJECT NO. 792526

FIGURE 5
GREEN WASTE OF TEHAMA
TEHAMA COUNTY, CALIFORNIA
TEHAMA COUNTY LANDFILL ZONING

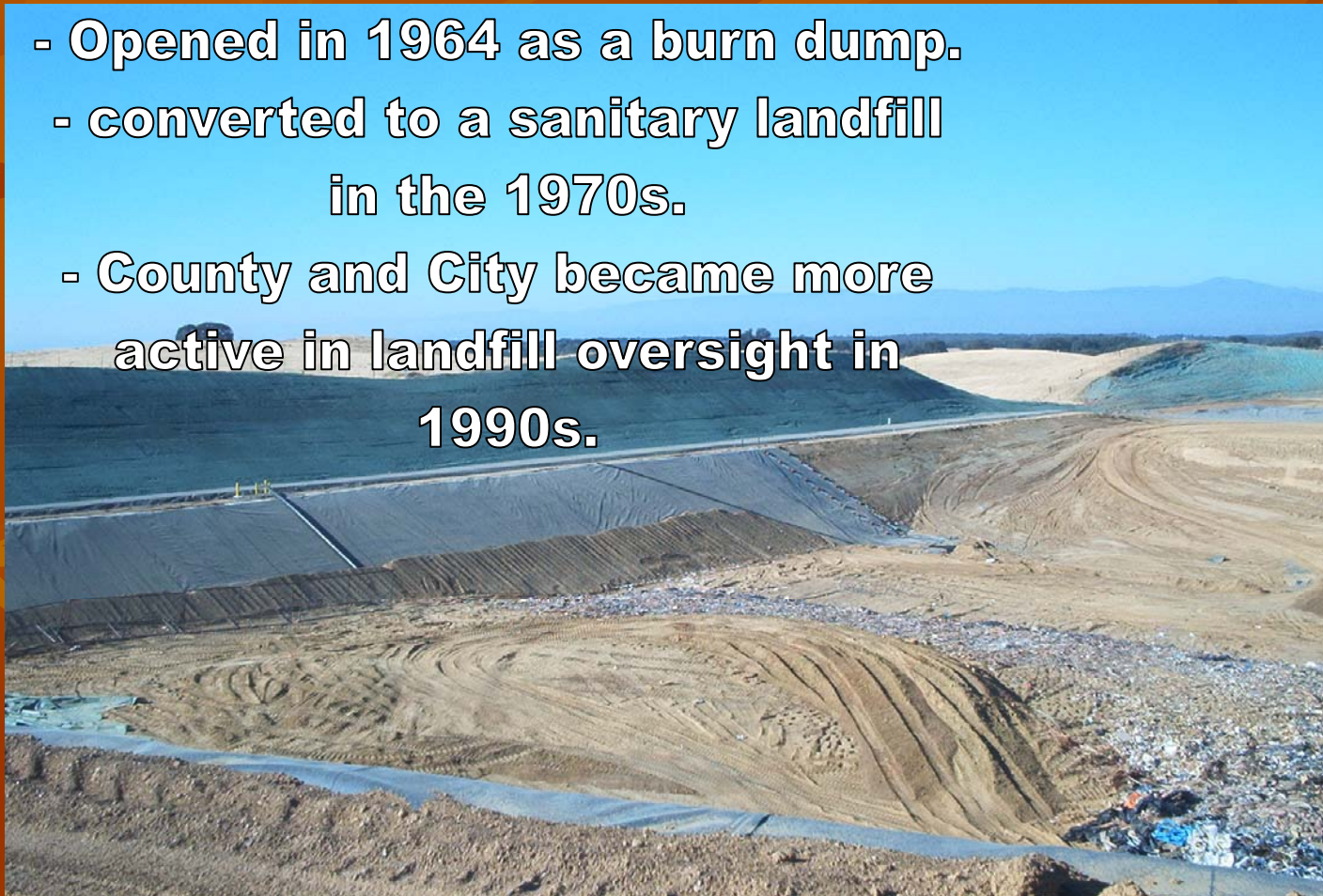
Landfill Facts

- Landfill and other programs managed by 2 JPAs
- County and Red Bluff curbside collection by Waste Connections
- Corning curbside by Waste Management
- Landfill accepts about 50,000 tons per year.



Landfill Facts

- Opened in 1964 as a burn dump.
- converted to a sanitary landfill in the 1970s.
- County and City became more active in landfill oversight in 1990s.



More Landfill Facts

**1997- Landfill operation awarded
to GreenWaste of Tehama**

**1998- GreenWaste begins
curbside collection for county
and Red Bluff**

1999- First detection of gas

2000- Parcel Assessment removed



More Landfill Facts



2001- Received FC Loan

2002- Began Staffing Reorg

**2003- Transferred contract
to Waste Connections**

2004- Completed Staffing Reorg

The Result

- Agency employment reduced from 5 to 2.
- Operator pays accrued liabilities for Closure and Postclosure.
- Operator responsible for providing household hazardous waste programs, and landfill diversion programs.
- Reduced Agency costs for liability for personnel, and more money available for public outreach.

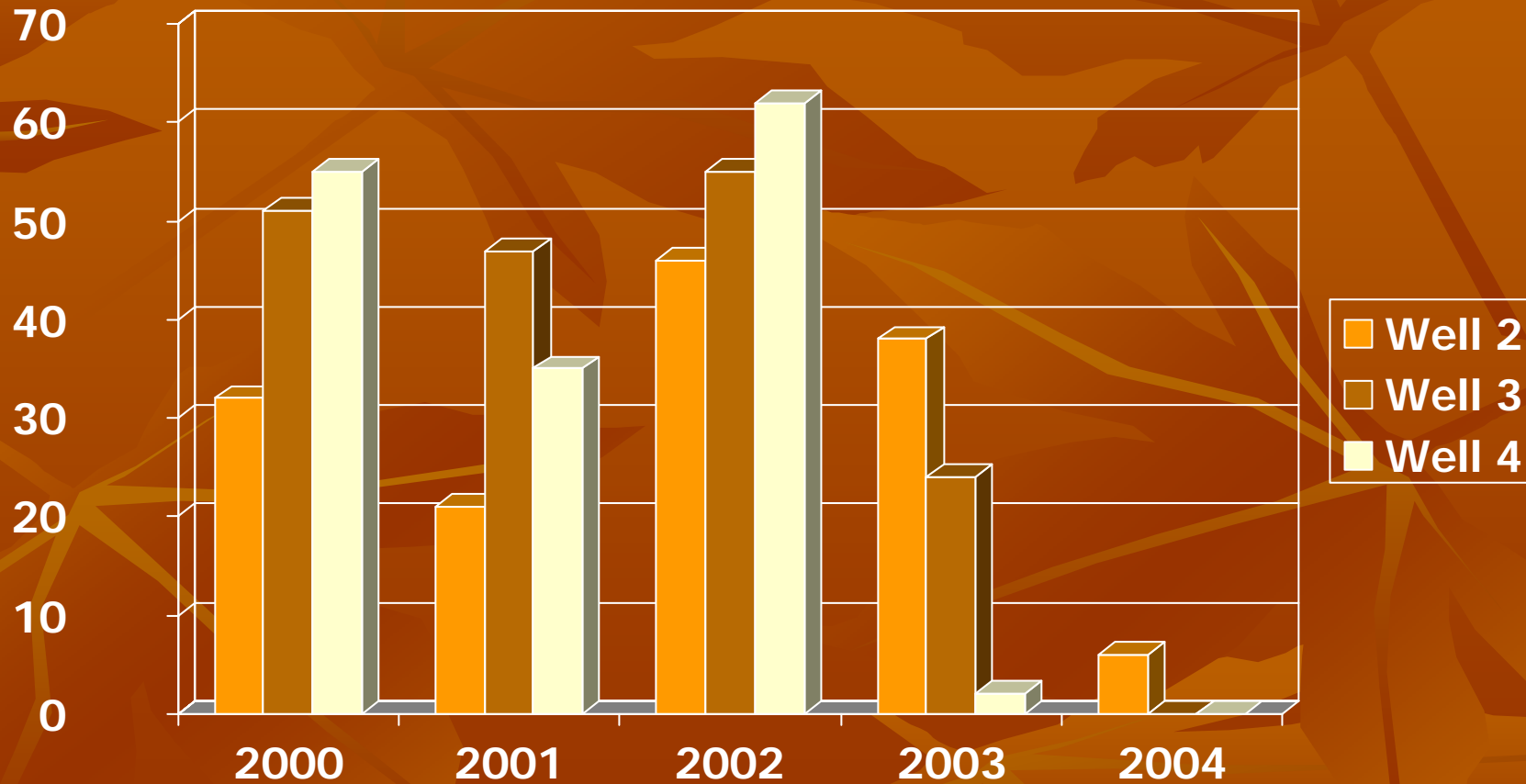
Methane Gas Extraction

- CIWMB FCLP provided almost \$500,000
- Construction occurred In Summer 2002
- Startup in Jan 2003



Methane Gas Extraction

Percent Methane at Problem Wells



Methane Gas Extraction

- Removed from State Minimum Standards Violators list in March 2005.
- System still operating at lowered flow to prevent oxygen intrusion.
- Continuing to look at ways to harness lowered flow for energy.

Anticipation for Opening of New Landfill



Phase 2 Landfill

- HDPE and GSL Liners
- Additional compacted clay
- Leachate collection
- Ready for connection to methane gas system



**Cell 1 (of 4) completed in Aug 2004.
Cell 2 construction begins Spring 2005.
Landfill life estimated at 20 years.**



**Old Landfill has 3 months of space left.
Planned filling from July-Sept 2005.
Begin Closure Process in 2006.**

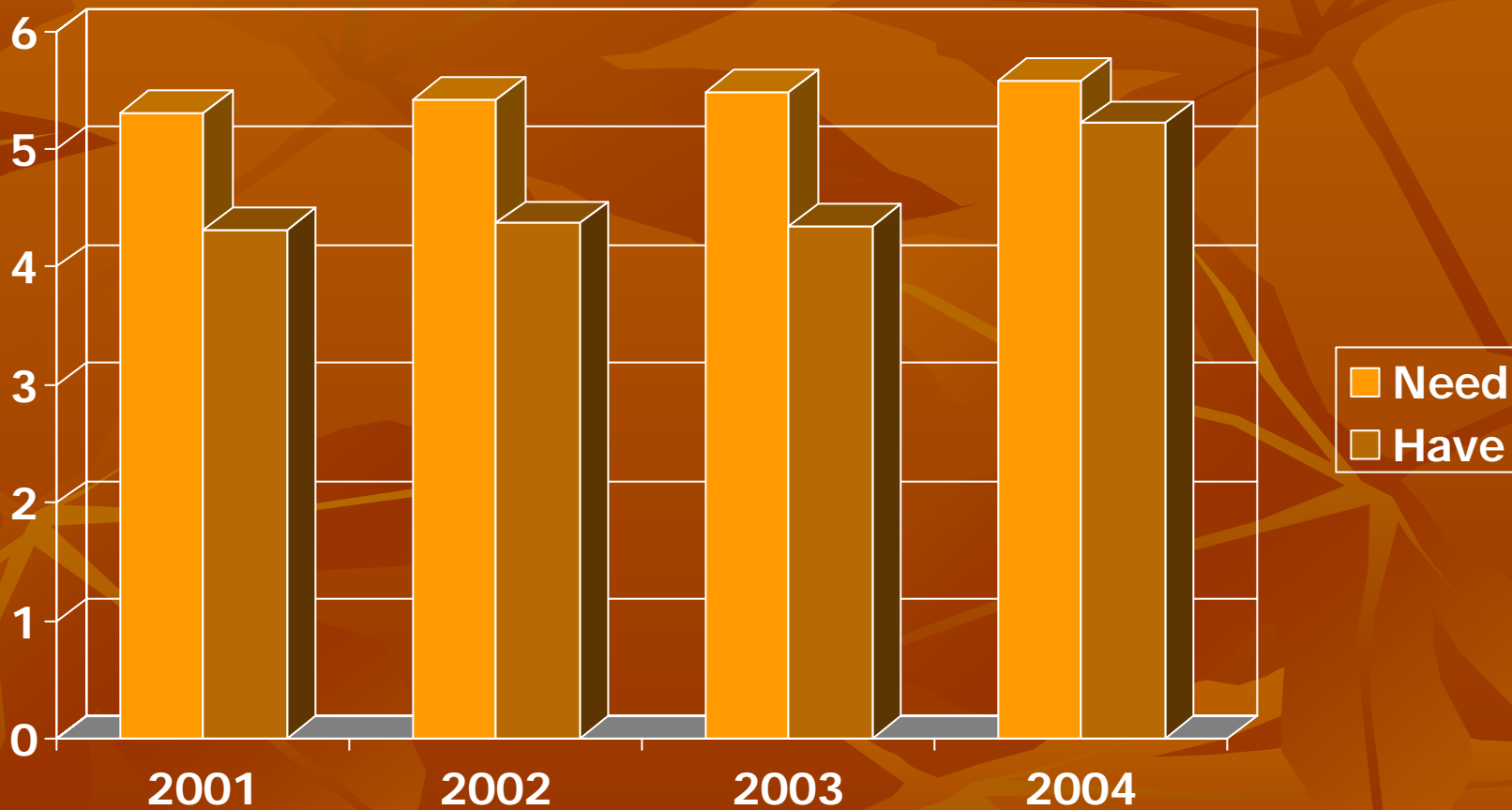


Phase 1 Closure

- Agency was collecting parcel assessment from property owners to pay for closure and postclosure of Phase 1.
- Parcel assessment rescinded in 2000, leaving Agency \$1,000,000 short towards long term liabilities.
- Low interest rates limited interest revenue.
- Combination of cost cutting and contract negotiation has almost bridged the shortfall in 4 years.

Closure/Postclosure Funding

Millions of dollars





Other Programs

Putting my wife to work at Tire Amnesty Day!

7 Tire Collection Events since 2001.

Collection of almost 10,000 tires during one event!

2 events so far specifically for Ag tires.



Used Oil/Filter Recycling

- Approx \$26,000 received per year through pooled block grants.
- 2002/2003- 13,000 gal of oil and 2,500 filters collected.
- 2003/2004- 17,150 gal of oil and 4900 filters collected.
- 2004/2005 (through March)- 11,000 gal and 3850 filters.



Household Hazardous Waste

- Facility completed in 2002 through grant, but unfunded for operation.
- Agencies set aside \$40,000 in 2003/2004 budgets for weekly operation in summer, and semi-monthly in winter.
- 2004/2005 budget- \$40,000, with 2005/2006 budget set at \$50,000.
- Budget includes latex paint reuse program, and costs associated with Feb 2006 Universal Waste rules.
- Agency has applied for \$270,000 grant to build two additional HHW facilities along I-5 corridor to handle population growth and provide convenient disposal.



Material Recovery Facility

- Pre-April 2003: All curbside recyclables shipped offsite for sorting.
- April 2003: MRF opened with 6 employees.
- August 2004: Self-haul loads sent to MRF for removal of wood, paper, metal, and CRV material.



Material Recovery Facility



Material Recovery Facility

Cardboard goes North, everything else goes South.



Material Recovery Facility

- We're preparing for sustained increased flows to the MRF.
- Red Bluff introduction of Blue Recycling Bin Program increased daily flows by over 30% in March!
- Starting to see blue bins in unincorporated area of Tehama County, from residents willing to pay extra for recycling convenience.

E-Waste!

- Initial Skepticism with SB20/50.
- In January 2005, we just dropped all the extra fees, and contracted collection and handling to private businesses.
- Collection of E-waste increased 4 fold.
- Now we have businesses asking to provide free e-waste service.

...And, we got good publicity!



Our Website



- www.tehamacountylandfill.com
- Debuted in January 2004.
- Contains events calendars, landfill and curbside collection and recycling info, and general contact info.
- Over 6,000 visits so far.

Local Partnering

- Working with Glenn County to expand their Recycling Market Development Zone to include Tehama County.
- Developed Green Pages in phone book with Glenn County.



St. Elizabeth's Hospital

- 2003 H2E Partner for Change Award
- 2003 CIWMB WRAP Award
- 2003 EPA Region 9 Outstanding Achievement Award
- 2004 CIWMB WRAP Award
- 2004 Governors Environmental and Economic Leadership Award
- 2005 H2E Partner for Change





But, We Still Have Challenges...

- July 1, 2004 Fire

- Started offsite on private property

- Fire was contained on landfill



The aftermath

- About half of site burned



Including most of Phase 1 Landfill...



And most of the methane gas system



Nothing is ever easy...

- Winning contractor for repair bid couldn't provide bonding, and project was delayed for several months.
- County Public Works Department came through and performed repairs in December 2004 and January 2005.
- System restarted on February 1, 2005.
- Compliance happened soon thereafter.

Illegal Dumping

- Many places are easy to access for illegal dumping.
- Agency budgets \$20,000/year for cleanups
- Difficulty with Farm and Ranch Grant Program



Illegal Dumping

- Agency works with landowners to waive tipping fees for illegal dumping.
- Agency also works with Public Works departments, waste haulers, CDF and through community events.



The background of the slide features a repeating pattern of stylized autumn leaves in various shades of orange and brown, set against a darker orange gradient background. The leaves are scattered across the frame, creating a seasonal and warm atmosphere.

Some Things We're Anticipating

Conversion Technology

- Tehama County on the cutting edge of conversion technology movement.
- Tehama County chosen for site of InEnTec Medical Waste to Energy Facility
- Construction scheduled for Summer 2005, pending Air Pollution Control Board Authority to Construct.
- Facility designed to divert 6-10 tons of medical waste per day from landfilling or incineration.
- Waste will be converted to electricity or hydrogen gas for “Hydrogen Highway.”

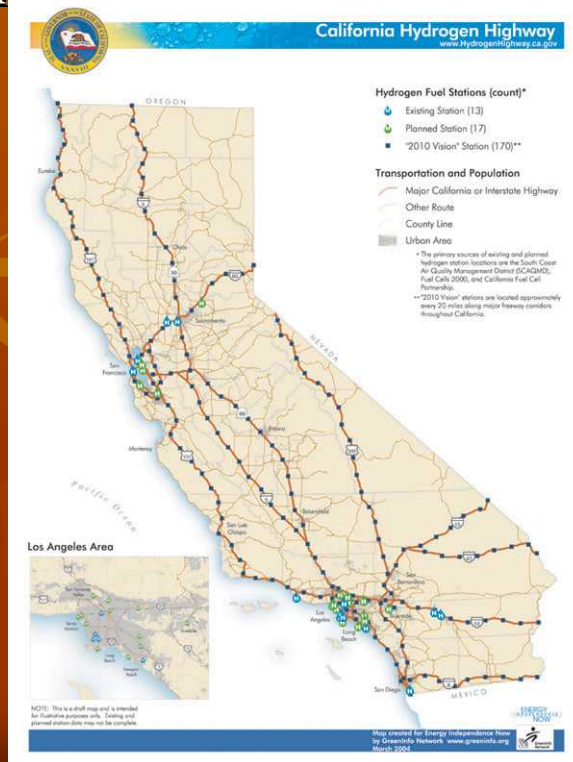
Proposed Gasification Facility



PEM Environmental Benefits

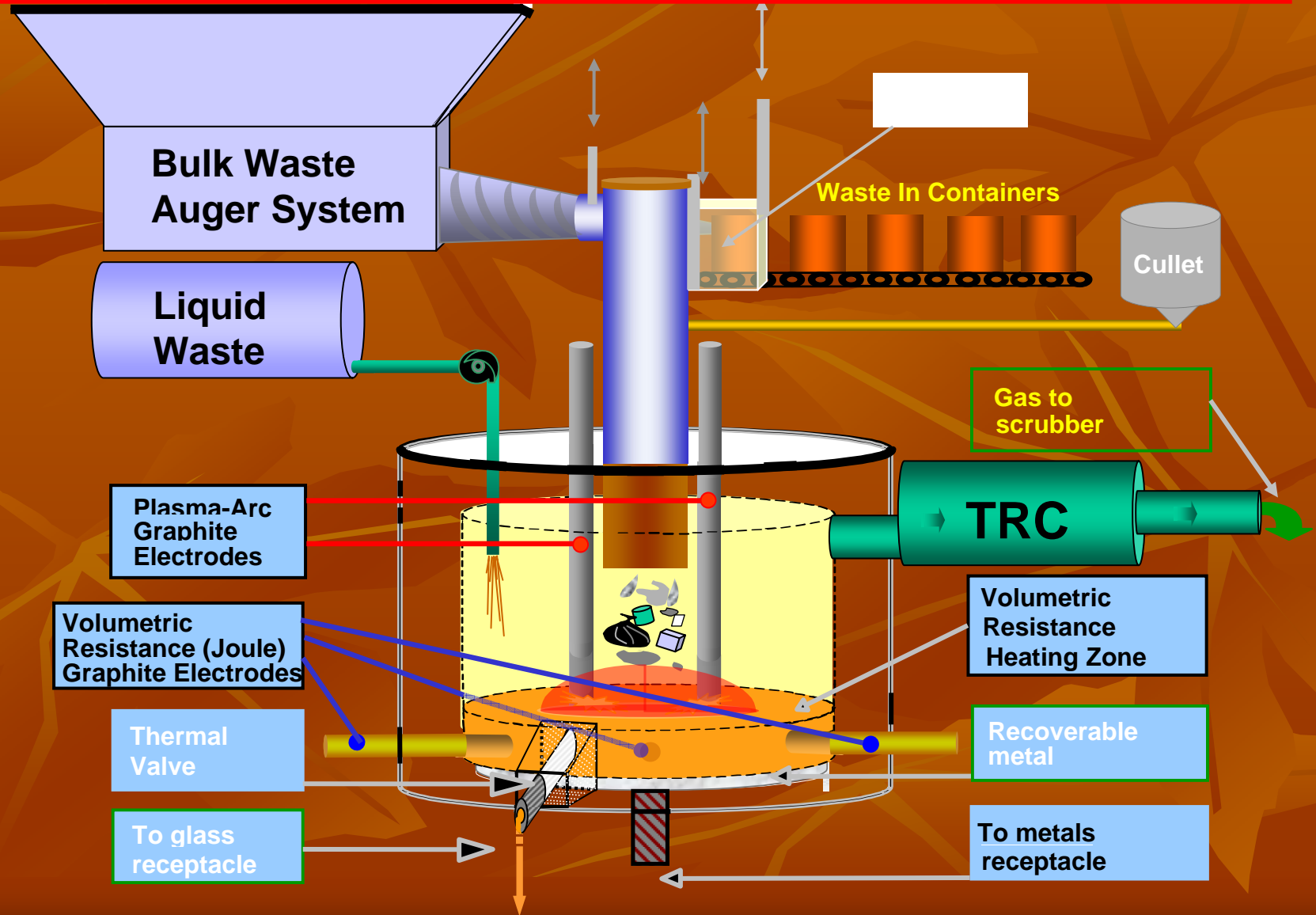
Hydrogen generated provides:

- 95% NO_x reduction in electric generation
- “Green” power
- Next Stop on the “Hydrogen Highway”

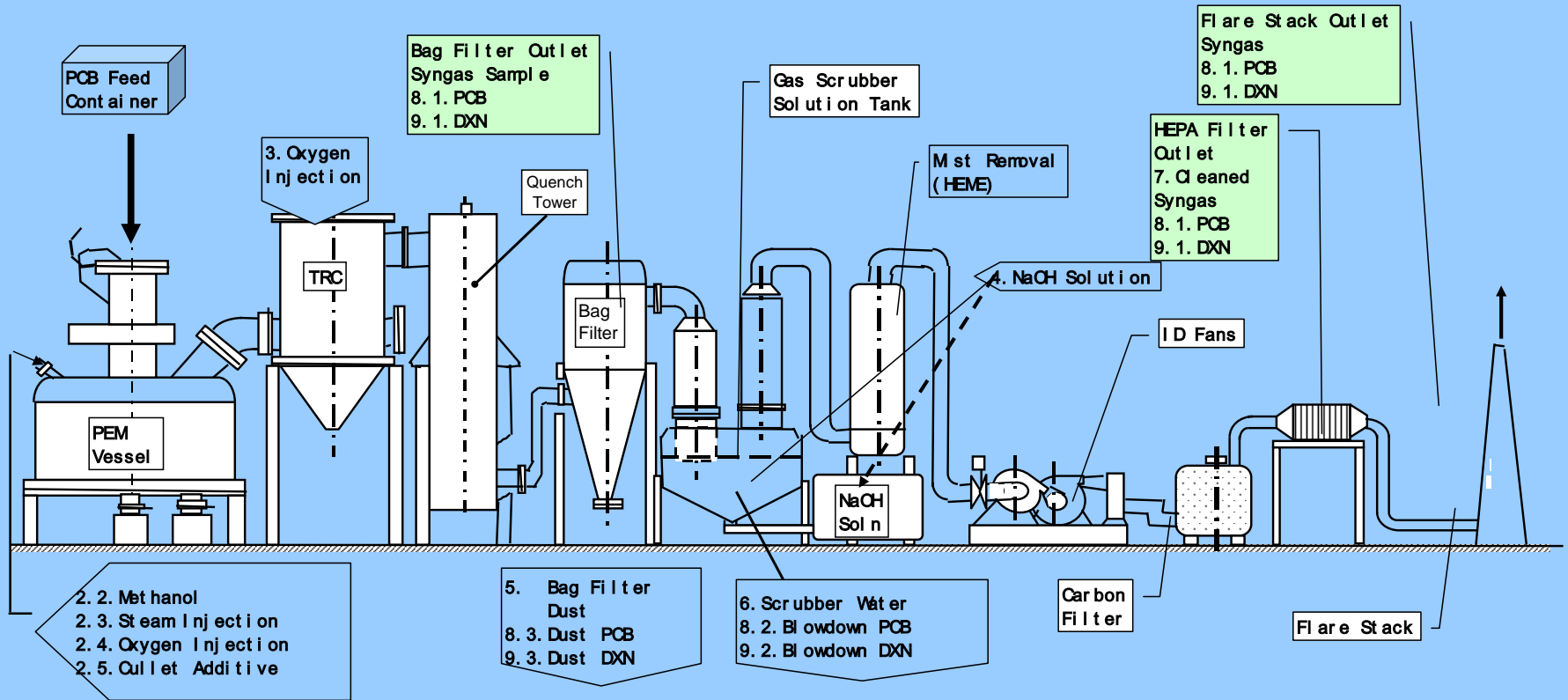


**“Vision 2010”
Governor Arnold Schwarzenegger’s
California Hydrogen Highway Network
Action Plan**

Schematic of Plasma Vessel and Feed Systems



System Sampling Points



Plasma Enhanced Melter Process Schematic

Conversion Technology

- Conversion Technology may be an economical way for low population regions to manage solid waste streams.
- Requires coordination between multiple regulatory agencies to establish fair guidelines.
- Conversion Technology can flourish while maintaining reuse and recycling infrastructures, as well as air quality.

Rapid Development

- Building permits (and associated values) have more than doubled throughout the county.
- Proposed 4,000 home Del Webb community in northern part of county.
- Siting of large retail establishments.
- Development could affect daily tonnage flows at landfill.
- Looking at impacts to solid waste programs due to development, and potential for impact fees.

Input For the Future

- Provided input for Long Term Gas Regulations.
- Tehama County is actively involved in assessment of AB939, Disposal Reporting System changes, and Diversion Accuracy Indicators.
- Also assisting the Regional Council of Rural Counties through 2005 with technical assistance and regulatory input.

Wrapping it all up

- We've straightened out compliance and financial issues.
- We're being proactive and not reactive.
- We're ready to be a resource for other rural areas.
- We couldn't have done it without the support from RCRC/ESJPA, Waste Board, Water Board, and the Agency's elected officials!



- Any questions?