



# Sustainability Presentation



**Peralta Community College District  
Department of General Services**

**Presented to the Board of Trustees**

**By: Dr. Sadiq B. Ikharo, Vice Chancellor and  
Charles Neal, Energy & Environmental Sustainability Manager**

**June 9<sup>th</sup>, 2015**

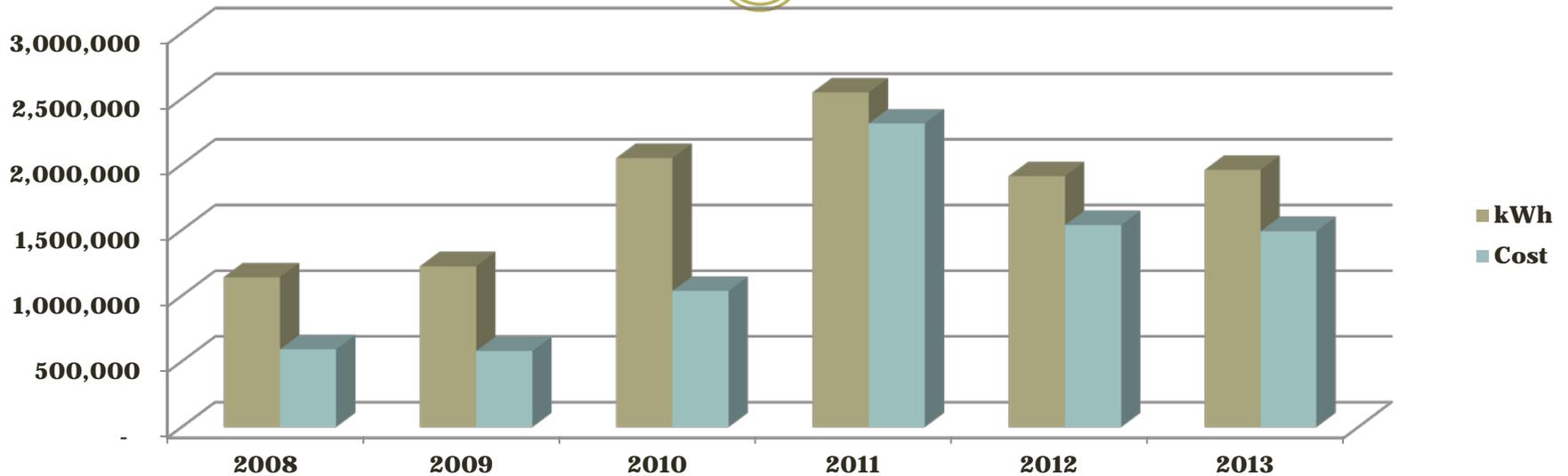
# INTRODUCTION

2

The Peralta Community College District continues its progress toward a sustainable future. This presentation is a progress report of the District's efforts to provide an environment that is ecologically sound for teaching and learning and conducive for work by reducing the District's carbon footprint.

# Districtwide Aggregate Electricity

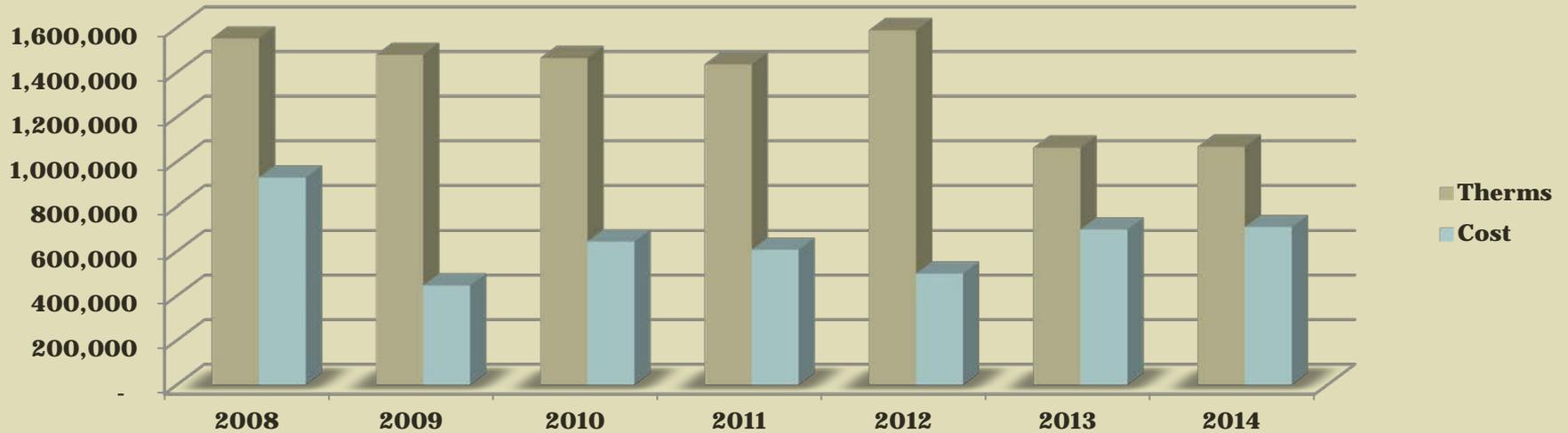
3



	kWh	Cost
2008	1,140,728	591,640
2009	1,223,973	578,760
2010	2,047,752	1,036,360
2011	2,547,642	2,312,110
2012	1,909,753	1,538,193
2013	1,957,469	1,491,119

# Districtwide -- Natural Gas Consumption

4

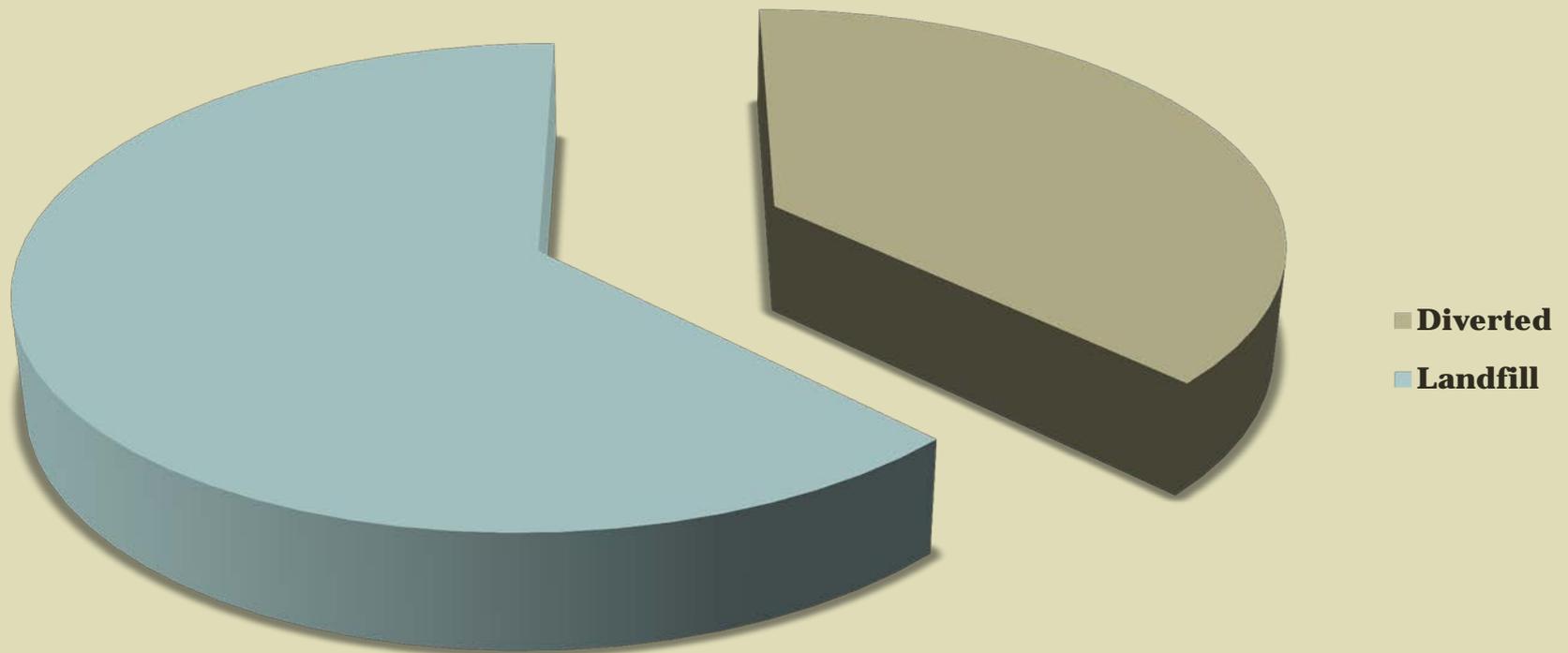


	Therms	Cost
2008	1,552,630	929,245
2009	1,479,115	447,294
2010	1,464,900	644,966
2011	1,436,980	608,050
2012	1,589,166	500,579
2013	1,062,995	698,615
2014	1,067,634	709,494

# Districtwide Percentage Diverted

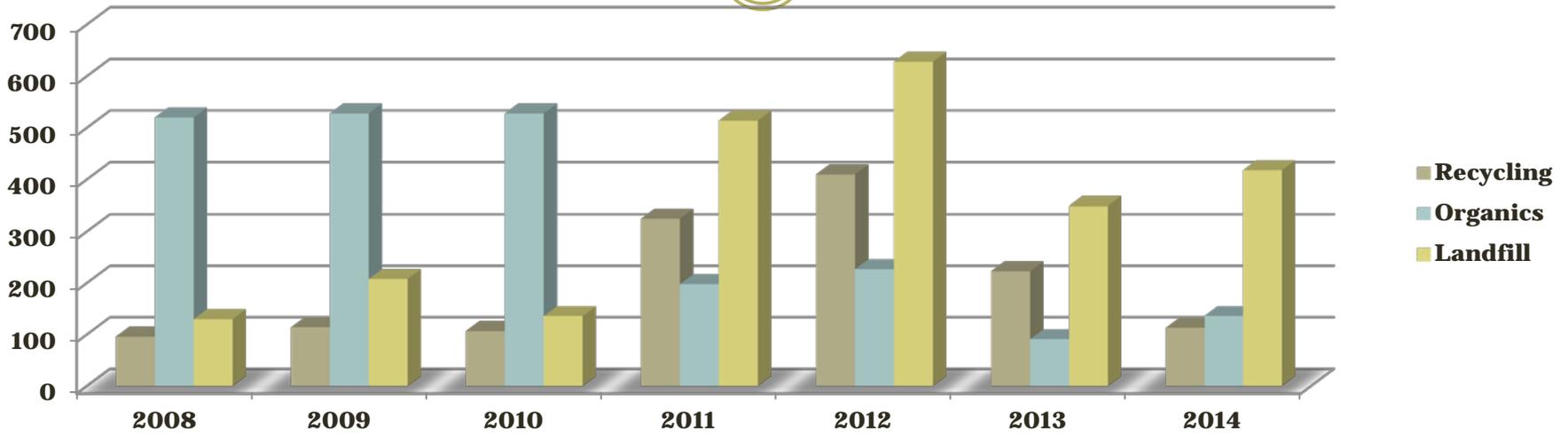
5

2014



# Districtwide Waste Management

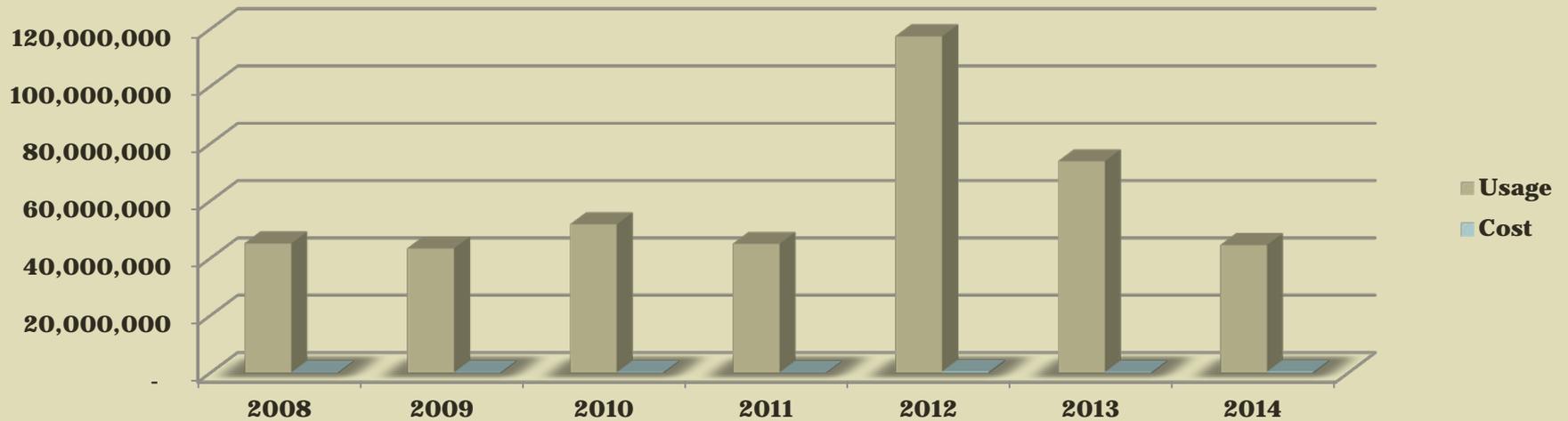
6



	Recycling	Organics	Landfill
2008	96	520	130
2009	114	528	208
2010	107	528	136
2011	325	198	514
2012	410	227	628
2013	223	91	349
2014	113	136	418

# Water Consumption

7



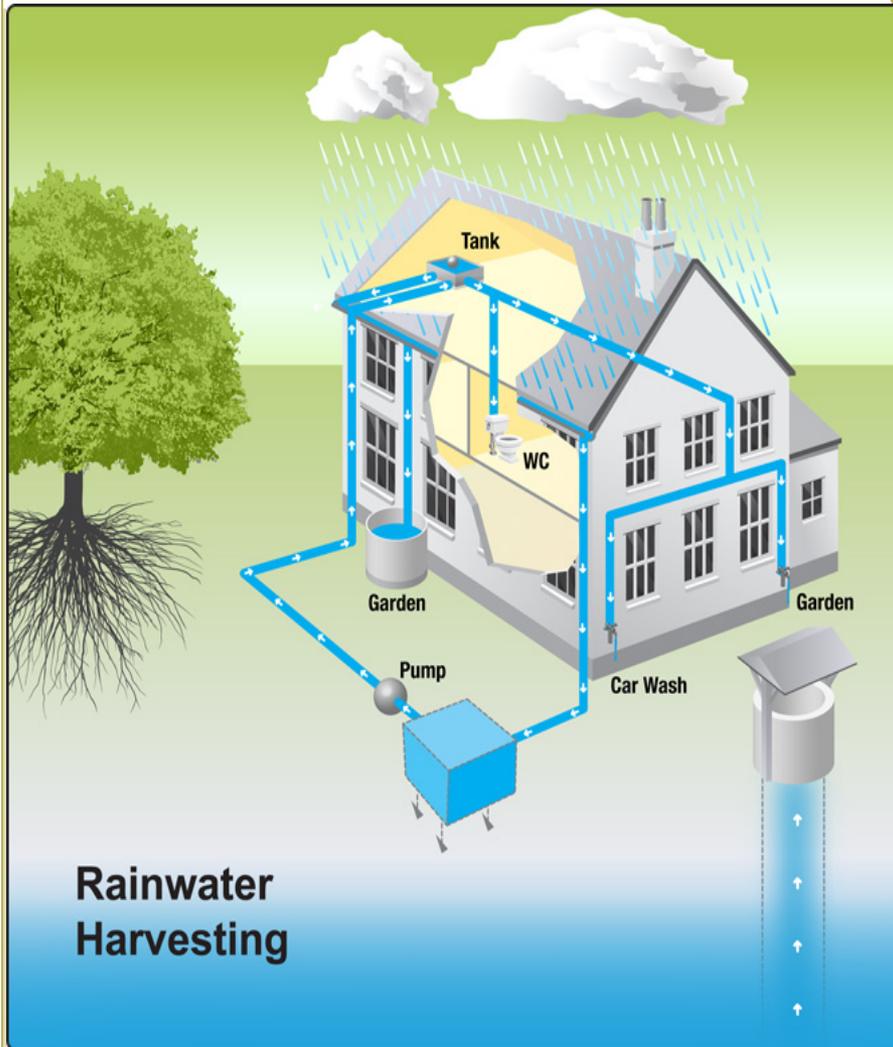
	Usage	Cost
2008	45,300,376	282,529
2009	43,538,836	297,422
2010	51,908,960	326,747
2011	45,136,047	234,385
2012	117,567,016	648,212
2013	73,980,192	406,045
2014	44,722,198	523,790

# Water Conservation Measures

8

## Conservation Measures:

- Reduced Irrigation
- Leaks repair
- Awareness Signage
- Explore well drilling
- & Rain Water Harvesting



# Laney Swimming Pools: Thermal Blankets & Electric Winder

9



# Swimming Pools Thermal Blanket:

10

## Annual Savings After Thermal Blanket

- Capacity: 392,000 gals.
- Annual Savings:
  - 232,673 gallons
  - \$8,687

# Other Improvements

11

- **Bicycle Racks**
  - 17 Racks, College of Alameda
  - 34 Bicycles Total
- **Bicycle Tool Library**
- **Community Gardens**
  - Laney College
  - COA & ASTI
    - ✦ Alameda Science and Technology Institute



# Electric Vehicle Charging Stations

12

- 3 Level III Fast Chargers with energy storage
  - DAC Completed
  - Laney Completed
  - Merritt: Awaiting approval



# PROPOSITION 39 – Clean Energy Jobs Act

13

## State Chancellor's Office Allocation to the District

### Funding Cycle

- 2015-16 (Year 3)
  - Funding: \$404,245
  - Retrofit Swimming Pool Heating
  - Retrofit Theater Lighting
- 2014-15 (Year 2)
  - Funding: \$505,306
  - Projects
    1. Building Commissioning
    2. Interior Lighting Upgrade
      - Berkeley City College
      - College of Alameda (Library)
- 2012-13 (Year 1)
  - Funding: \$658,748
  - Projects:
    - Upgrade Districtwide Exterior LED Lights

# Prop. 39: Year 1 Projects District-wide Exterior LED Lighting Upgrade

14

Funding Cycle 1 (2013-2014)

Funding: \$658,748

- 1000 LED Fixtures
- 1000 Photocells
- 600,000 kWh conserved
- Estimated Local jobs:  
Eight (8)



# PROPOSITION 39 – Clean Energy Jobs Act

15

## Project

- 2014-15 (Year 2)
  - Funding: \$505,306
  - Projects
    1. **Building Commissioning (MBCx)**
    2. Interior Lighting Upgrade
      - Berkeley City College
      - College of Alameda (Library)

## Annual Savings

- MBCx (12 Buildings):
  - Laney, Merritt, COA, District Admin. Center
  - Annual Savings Est. of \$149,280
  - Energy usage reduction:
    - 690,000kWh
  - Gas usage reduction
    - 46,000 therms/year

# PROPOSITION 39 – Clean Energy Jobs Act

16

## Project

- 2014-15 (Year 2)
  - Funding: \$505,306
  - Projects
    1. Building Commissioning (MBCx)
    2. Interior Lighting Upgrade
      - Berkeley City College
      - College of Alameda (Library)

## Annual Savings

- Interior Lighting Upgrade:
- Berkeley City College:
  - Annual Savings Est. of \$38,900
  - Energy-use reduction:
    - 206,045 kWh
- Non-energy benefit
  - Maintenance labor savings

# PROPOSITION 39 – Clean Energy Jobs Act

17

## Project

- 2014-15 (Year 2)
  - Funding: \$505,306
  - Projects
    1. Building Commissioning (MBCx)
    2. Interior Lighting Upgrade
      - Berkeley City College
      - College of Alameda (Library)

## Annual Savings

- Interior Lighting Upgrade:
- Berkeley City College:
  - Annual Savings Est. of \$49,581
  - Energy-use reduction:
    - 250,989 kWh
- Non-energy benefit
  - Maintenance labor savings

# PROPOSITION 39 – Clean Energy Jobs Act

18

## Project

- 2015-16 (Year 3)
  - Funding: \$404,245
  - Projects
    1. Heating System Upgrade, Laney Swimming Pool
    2. Interior Lighting Upgrade
      - Laney's Odell Johnson Theater

## Annual Savings

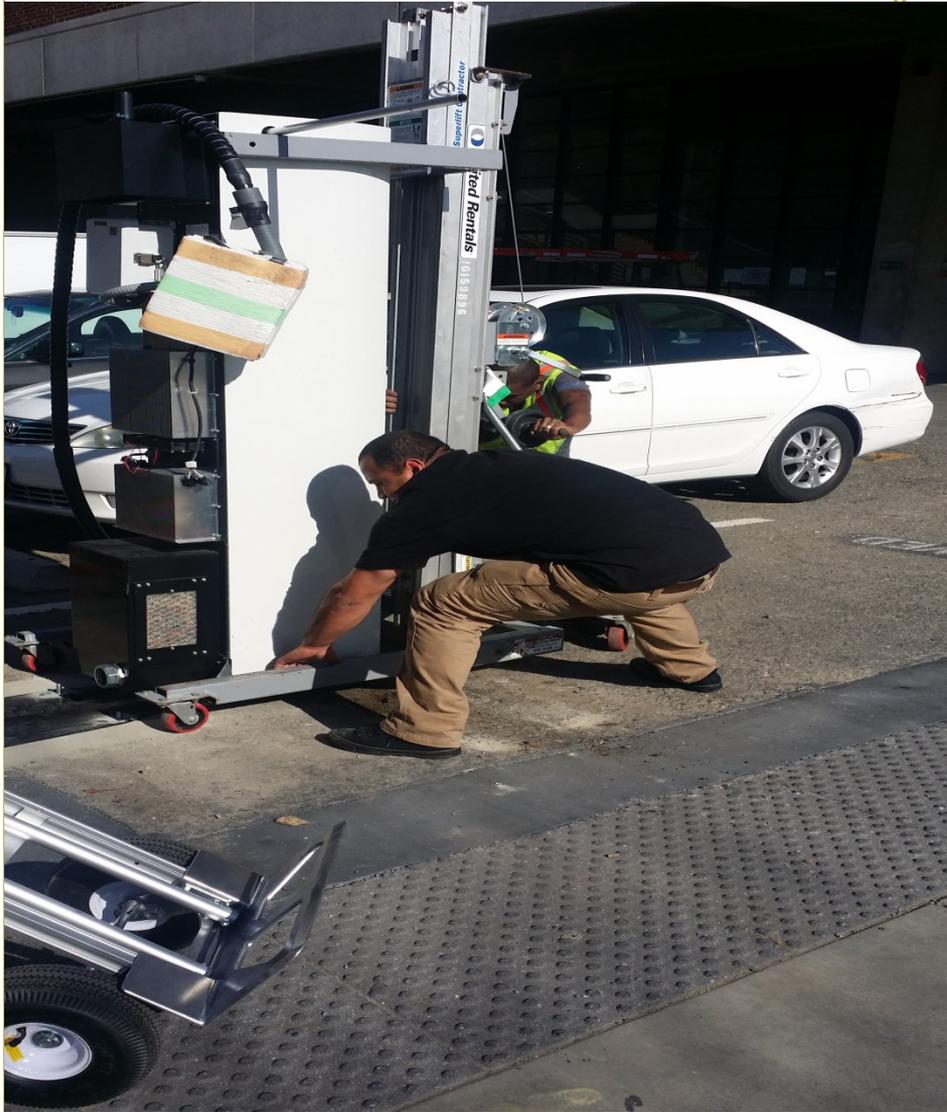
- Swimming Pool
  - Annual gas savings est.:
    - \$4,823
  - Maintenance savings est.:
    - \$8,679
  - Gas Usage Reduction
    - 12,057 therms
- Theater Lighting Retrofit:
  - Annual electricity savings Est. of \$6,010
  - Electricity-use reduction:
    - 38,159 kWh



# 2014-2015 Photo Essay

# Laney College EV Stations

20



# Laney College EV Stations Conduit Trenching

21



# Laney College EV Stations

22



# PG&E Laney Campus Electricity Shutdown



# Laney College EV Stations

24



Campus-wide electricity shutdown, at 12Kv substation, required high-voltage experts and special protective gear.

# EcoFest Sustainability Festival

25



# EcoFest Sustainability Festival

26



# Laney Dance Department

27





# TradePal and Sustainable Fashion Show

29



# Dance Program, College of Alameda

30



# Drum Circle

31



# Presenting Sponsor, Allana Buick and Bers

32



# MC Larry Lionel

33



# Peralta Family

34



# Musical Entertainment

35



# Peralta Family

36



# Leadership In Energy & Environmental Design (LEED)

37

Location	Building	LEED Certification
Merritt College	Barbara Lee Science & Allied Health Center	Gold
College of Alameda	Building D	Gold
Laney	Student Center	Gold
Laney College	Building Efficiency for a Sustainable Tomorrow Center (BEST)	Platinum
Berkeley City College	Berkeley City College Campus	Silver



38



# Barbara Lee Allied Science Health Center

39



# Barbara Lee Allied Science Health Center

40



Ox Blue®

# Barbara Lee Allied Science Health Center

41



# Barbara Lee Allied Science Health Center

42



# Barbara Lee Allied Science Health Center

43



# Barbara Lee Allied Science Health Center

44



# Barbara Lee Allied Science Health Center

45



# Barbara Lee Allied Science Health Center

46



# Barbara Lee Allied Science Health Center

47



# Barbara Lee Allied Science Health Center

48



# Barbara Lee Allied Science Health Center

49



# Barbara Lee Allied Science Health Center

50



# Barbara Lee Allied Science Health Center

51



# Barbara Lee Allied Science Health Center

52



# Barbara Lee Allied Science Health Center

53



# Educational Programs

54

1. Urban Agroecology
2. Greening the Urban Environment
3. Horticulture
4. Advance Manufacturing
5. Environmental Control Technology
6. Black Farmers and Urban Gardener Conference

1. Laney College Campus, October 16-18<sup>th</sup>, 20



# Education and Professional Development

55

- Sustainability Festival
  - 120 Exhibitors
  - 2,000 Attendees
- Lecture Series: Benefits of Organic Food
- Black Farmers and Urban Gardeners Conference



# National Conference: Black Farmers and Urban Growers

56

Date: October 16-18, 2015

Organizers:

Location: Laney College

Organizers:

1. Acta Non Verba
2. Victory Gardens

Supporting Partners:

1. Laney College
2. PCCD



# National Conference: Black Farmers and Urban Growers

57

## Organizer & Presenter:

- Kelly Carlisle, Founder & Executive Director of Acta Non Verba
- Youth Urban Farm Project
- Farm Stands and CSA
- Spring Break Mini Camps



**BLACK  
FARMERS  
& URBAN  
GARDENERS**

CONFERENCE  
**THIS FALL**  
OAKLAND • CA

BUGsOakland2015@gmail.com  
FB: black urban growers  
#BUGsOakland2015  
510•972•FARM



# National Conference: Black Farmers and Urban Growers

58

## Organizer & Presenter:

- Victory Lee, Founder, Victory Garden Foundation
- Education
- Financial & Technical Assistance
- Advocacy



**BLACK  
FARMERS  
& URBAN  
GARDENERS**

CONFERENCE

**OCTOBER  
16TH - 18TH**

OAKLAND • CA  
LANEY COLLEGE



# National Conference: Black Farmers and Urban Growers

59

## Presenter:

- Bryant Terry: EcoChef & Cookbook Author
- Nutrition Education
- Cooking Demonstrations



**BLACK  
FARMERS  
& URBAN  
GARDENERS**

CONFERENCE  
**THIS FALL**  
OAKLAND • CA

**BUGsOakland2015**  
[@blackurbangrowers.org](https://twitter.com/blackurbangrowers)  
FB: black urban growers  
**#BUGsOakland2015**  
**510•972•FARM**



# Freedom Farmers' Market

60

## Freedom Farmers Market 13-Week Pilot Program

- Spearheaded by, Gail Myers, Ph.D., Founder & Executive Director, Farms To Grow, Inc.
- Helps underserved California farmers
- Teaches farming, nutrition, & management
- Community Supported Agriculture Program
- Harvest Box Program



# Freedom Farmers Market

61

## Cooperative Values



- **Profits remain in the community**
- **Fair** - mutually beneficial to all members
- **Inclusive** - accessible to the whole community
- **Interactive** - creates opportunities for community interaction
- **Empowering** - enables respectful work and positive cultural experiences
- **Educational** - develops an informed community whose focus is health, wellness, and holistic development of local community,

# Four-Part Lecture Series: Benefits of Organic Food

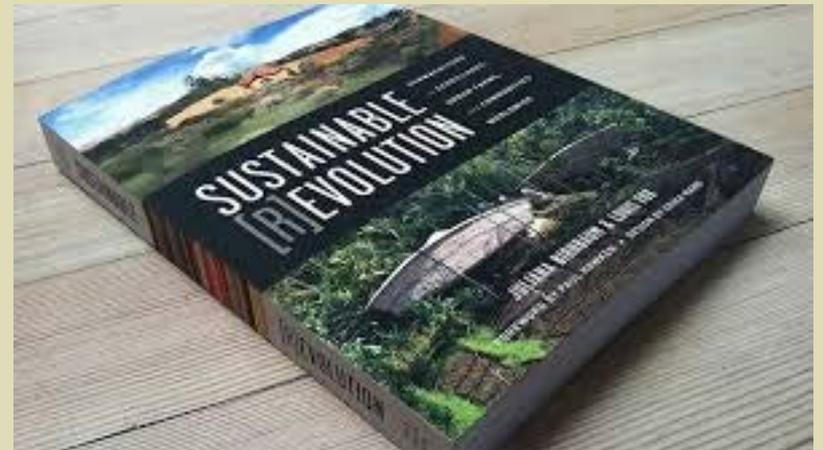
62

- Session 1: ***Going Local and Organic: The Possibilities***
  - *Juliana Birnbaum, Cultural Anthropologist & Author of the Sustainable Revolution*
- Session 2: ***Reframing The Discussion of Organic Food For Broader Acceptance***
  - *Kelly Carlisle, Founder & Executive Director, Acta Non Verba, Inc.; (Youth Urban Farming)*
- Session 3: ***Organic Food & Health***
  - *Lisa Miller, Nutrition Consultant, Principal, Ocean View Nutrition; Nutrition Director, Kitchen on Fire*
- Session 4: ***Gardening, Nutrition, & Garden Networks***
  - *Victory Lee, Alameda Master Gardener & Founder, Victory Gardens, Inc.*

# Lecture Series: Benefits of Organic Food

63

**Presenter, Juliana Birnbaum, Author and Cultural Anthropologist**



# Lecture Series: Benefits of Organic Food

64

**Presenter, Kellie Carlisle, Founder & Executive Director,  
Acta Non Verba**



# Lecture Series: Benefits of Organic Food

65

**Presenter, Victory Lee, Master Gardener, Founder & Executive Director, Victory Gardens**



# Lecture Series: Benefits of Organic Food

66

**Presenter, Lisa Miller, Principal, Ocean View Nutrition;  
Program Director, Kitchen on Fire Cooking School**



# 11. ROADMAP GOING FORWARD

67

- Comprehensive Sustainability Plan
- Large Integrated Audits
- Water Management (Irrigation Wells)
- Swimming Pool Heating System Retro
- Laney Theater Lighting & Controls Upgrade
- Solid Waste Diversion
  - **Reduce overall waste**
  - **Divert minimum of 50%**



# QUESTIONS

68