



Sustainability Task Force Agenda

A Committee of the Chico City Council
Mayor Ann Schwab, Chair

Meeting of November 1, 2010 – 3:00 p.m. to 5:00 p.m.
Council Chamber Building, 421 Main Street, Conference Room No. 1

1. UPDATE ON THE RESIDENTIAL ENERGY CONSERVATION ORDINANCE (RECO)

The City Attorney has completed preparation of the ordinance to amend Chico Municipal Code Chapter 16.60 to include the additional energy and water conservation measures to be installed upon the sale of residential housing built prior to 1991 as previously recommended by the Task Force. The City Council will be considering the ordinance at its 11/2/10 meeting and a copy of the Council staff report is attached.

2. UPDATE ON THE “THIS WAY TO SUSTAINABILITY VI” CONFERENCE.

This year’s “This Way to Sustainability Conference” will be held at CSU, Chico and Butte College on November 4-6, 2010. Several members of the Task Force will be making presentations at the conference regarding various sustainability programs. A copy of the conference program is attached.

3. UPDATE ON THE “RIGHT 2 RECYCLE” PROGRAM

Task Force member Friedman and staff will provide an update on the “Right 2 Recycle” program.

4. REPORTS AND COMMUNICATIONS

- a. **Report from the Business Climate Partnership Ad-Hoc Committee** -The Committee will provide a report on its meeting held on 10/18/10 and the presentation to the Mayor’s Business Advisory Committee on 10/20/10.
- b. **Report from the Education/Outreach Ad-Hoc Committee** -The Committee will provide a report on its meeting held on October 25, 2010.
- c. **Update on the Diversity Action Plan Ad-Hoc Committee** - Chair Schwab will provide an update on the development of the City’s Diversity Action Plan.

5. BUSINESS FROM THE FLOOR

- a. Members of the public may address the Committee at this time on any matter not already listed on the agenda, with comments being limited to three minutes. The Committee cannot take any action at this meeting on requests made under this section of the agenda.

6. ADJOURNMENT – The meeting will adjourn no later than 5:00 p.m. to a meeting scheduled for 3:00 p.m. on Monday, December 6, 2010

ATTACHMENTS:

11/2/10 City Council RECO Report
This Way To Sustainability Conference Schedule

Distribution available in the office of the City Clerk:

Prepared: 10/27/10
Posted : 10/27/10
Prior to: 3:00 p.m.

Chico City Clerk’s Office
411 Main Street, Chico, CA 95928
(530) 896-7250



Please contact the City Clerk at 896-7250 should you require an agenda in an alternative format or if you need to request a disability-related modification or accommodation in order to participate in a meeting. This request should be received at least three working days prior to the meeting in order to accommodate your request.

Members:

Dwight Aitkens	BT Chapman	Tom DiGiovanni	Tim Dobbs	Trudy Duisenberg
Cliff Friedman	Chris Giampaoli	Ken Grossman	Jon Luvaas	Scott McNall
Jim Pushnik	Ann Schwab, Chair	Jon Stallman	Jim Stevens	Scott Wolf
				Julian Zener



City Council Agenda Report

Meeting Date: 11/02/10

DATE: October 19, 2010
TO: CITY COUNCIL
FROM: LINDA HERMAN, GENERAL SERVICES ADMINISTRATIVE MANAGER, 896-7241
RE: CONSIDERATION OF AN ORDINANCE AMENDING CHAPTER 16.60 OF THE CHICO MUNICIPAL CODE TO UPDATE THE RESIDENTIAL ENERGY CONSERVATION MEASURES REQUIRED UPON RESALE OF RESIDENTIAL HOUSING.

REPORT IN BRIEF:

In April 2010, the City Council conceptually approved (6-1, Wahl voting no) the Sustainability Task Force's recommendation to amend Chapter 16.60 of Chico Municipal Code (CMC) entitled "Energy Conservation Measures Required Incident to Transfers of Residential Housing" to update the energy conservation measures to reflect the more current energy efficient standards, to add some water conservation related items, and to refine the implementation process and effectiveness of the program. The Council recommended modifications to the proposed amendments and directed the City Attorney to prepare an ordinance for Council consideration.

Recommendation:

The Sustainability Task Force recommends (9-1-6) City Council approval of the ordinance as modified by Council.

ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHICO AMENDING CHAPTER 16.60 OF THE CHICO MUNICIPAL CODE, ENTITLED "ENERGY CONSERVATION MEASURES REQUIRED INCIDENT TO TRANSFERS OF RESIDENTIAL HOUSING".

FISCAL IMPACT:

Because the CMC provisions regarding housing resales already exist, the cost to ensure compliance with the additional CMC provisions proposed is expected to be minimal.

BACKGROUND:

Existing CMC Chapter 16.60 provides for the installation of ceiling insulation, weather stripping, and other energy conservation measures upon the resale of single-family and multifamily homes built prior to 1983. However, many of the code provisions refer to outdated energy conservation technology and do not address water conservation. This Code Section also provides for a maximum capital outlay for installation of the measures of \$500 for single-family units and \$350 per unit for multifamily properties. There are exemptions in the Code for homes sold to family members, through divorces, and in instances of foreclosure, or bankruptcy.

While discussing potential climate action plan measures, the Sustainability Task Force identified improving the energy efficiency in the existing housing stock as an important component in meeting the City's greenhouse gas (GHG) emissions reduction goals. It is estimated that approximately 60-70% of the homes in Chico were built before 1991, and before the Title 24 Building Energy Codes were fully effective. The City's Building Official suggested making reasonable and cost-effective revisions to the provisions of the City's already existing CMC Section 16.60 would be a good place to start in addressing this task.

Over several meetings and after consultation with the Chico Association of Realtors and the North Valley Property Owners Association (NVPOA), the Task Force recommended that the City Council approve the following:

1. Changing the applicability of these CMC provisions to single-family and multifamily dwellings constructed before 1991, instead of 1983.
2. Revising and prioritizing the conservation measures to be installed as follows listed in order of priority for installation as costs allow:

- a. Upgrading the ceiling insulation minimum requirement from a thermal resistance rating of R-19 to R-30, where feasible. **(updates existing Code requirement)**
 - b. Requiring weather stripping, caulking and sealing all cracks, doors, windows, etc. **(existing Code requirement)**
 - c. Adding installation of low-flow (1.6 gallon/flush) toilets. **(new requirement)**
 - d. Installation of programmable thermostats **(new requirement)**
 - e. Installing low-flow (3 gallon per minute) shower heads or flow restrictors, where feasible. **(existing Code requirement)**
 - f. Adding the installation of low-flow (2.75 gallons per minute flow) fixtures and/or aerators on all sink faucets, where feasible. **(new requirement)**
 - g. Adding the installation of R-3 insulation to exposed hot and cold water lines to water heaters that are within 5 feet of a water heater, where feasible. **(new requirement)**
 - h. Installing insulation blankets with a thermal resistance of R-6 on all water heaters, where applicable. **(existing Code requirement)**
 - i. Requiring a visual inspection of ducts to ensure they are intact and functioning properly. **(new requirement)**
3. Adjusting the current single-family maximum cost limitation from \$500 to \$800, and from \$350 to \$560/unit for multifamily dwellings to reflect current costs. The proposed increase represents the 60% increase in Engineering News Construction Cost Index since 1990. These cost limitations include the cost of ceiling insulation, so if the insulation costs more than the limit, no further conservation measures would be required. **(updates existing Code requirement)**
 4. Changing the provision to require another energy conservation inspection if a house is resold 10 or more years since the date of the last inspection. Under the existing Code, one inspection certificate is good for the life of the home. **(updates existing Code requirement)**
 5. Revising the exemption provisions to delete the exemption of government resales, and adding "short" or other "distressed" sales to the exemption list.

The City Council considered the Task Force's recommendations at its 4/20/10 meeting and also heard comments from the Association of Realtors and the NVPOA. The NVPOA expressed concerns regarding the installation of low-flow toilets and programmable thermostats, and the recommendation to eliminate the exemption for sales or transfers between co-owners. NVPOA also requested that the Council consider offering credits for the installation of other energy efficient measures, such as dual pane windows, and credit toward the maximum expenditure limit for any of the required measures that are installed within 18 months of the resale.

The City Council accepted the Task Force's recommendations and requested the following additional modifications:

1. That low-flush toilet and programmable thermostats be required only when feasible.
2. To continue to exempt the sales or transfers of property between co-owners.
3. That staff develop a mechanism to create credits for other conservation measures than those currently required.
4. To make sure that the staff looks at the 18-month period relative to the inspections to make sure that property owners are not disadvantaged for installing energy conservation measures over time and within the past 10 years.

DISCUSSION:

The City Attorney has prepared the ordinance to amend CMC Chapter 16.60 to include the Task Force's recommendations and the additional modifications requested by Council. For clarity and to make the process easier to follow, the City Attorney has rewritten and moved some of the sections and made minor language revisions. An annotated copy of the revised CMC 16.60 and the final version of the proposed ordinance are attached as Exhibit "A" and "B" respectively. Please note that the feasibility of installation of certain measures is addressed in Section 16.60.110 B. 3.

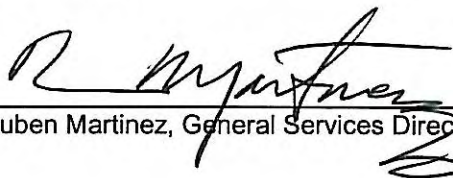
Staff provided copies of the proposed ordinance to both the Chico Association of Realtors and the NVPOA for review and comment. No comments were received at the time this staff report was prepared. Staff will provide any comments received subsequent to the posting of the Council agenda at the 11/2/10 meeting.

PUBLIC CONTACT:

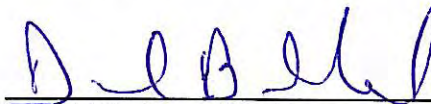
All of the agendas for the Sustainability Task Force and the City Council meetings in which this item was discussed were publicly posted, and distributed to the Task Force agenda distribution list. As stated above, the Ad-Hoc Committee also presented the Code revisions to the Board of the Chico Association of Realtors at its meeting on 2/11/10, and to the Legislative Committee of the NVPOA on 3/4/10.

Reviewed by:

Approved by:



Ruben Martinez, General Services Director



David Burkland, City Manager

DISTRIBUTION:

City Clerk (18)
Sustainability Task Force (16)
Peggy Mead, Chico Association of Realtors
Jennifer Morris, North Valley Property Owners Association

ATTACHMENTS:

Exhibit A: Annotated copy of CMC 16.60
Exhibit B: Ordinance

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ORDINANCE NO. _____
(Codified)

**ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHICO AMENDING
CHAPTER 16.60 OF THE CHICO MUNICIPAL CODE, ENTITLED
“ ENERGY CONSERVATION MEASURES REQUIRED INCIDENT
TO TRANSFERS OF RESIDENTIAL HOUSING”**

BE IT ORDAINED by the Council of the City of Chico as follows:

Section 1. Section 16.60.080 of the Chico Municipal Code is amended to read as follows:

**16.60.080 Sales, exchanges, and other transfers of residential housing subject to chapter
Exceptions.**

This chapter shall not apply to the following transfers of residential housing:

- A. The sale, exchange, or other transfer of residential housing which ~~contains no more than two dwelling units and was constructed pursuant to a building permit issued on or after June 1, 1983, or residential housing containing three or more dwelling units which was constructed on or after June 1, 1984~~ July 1, 1991;
- B. The sale, exchange, or other transfer of residential housing which was constructed pursuant to a building permit issued before July 1, 1991, and which was previously inspected and certified within the ten year period immediately preceding the sale, exchange or transfer as being in compliance with the energy conservation standards adopted by this chapter ~~or included in Ordinance No. 1480 adopted by the city council on October 5, 1982~~;
- C.-G. [No change.]
- H. ~~Sales, exchanges, or other transfers of residential housing to or from any governmental entity.~~ which are short sales. Short sales are defined as sales in which the purchase price paid by the buyer of the property is less than the amount of the debt secured by the property.

1 **Section 2.** Section 16.60.100 of the Chico Municipal Code is amended to read as follows:

2 **16.60.100 Energy conservation standards to be complied with incident to the sale,**
3 **exchange or other transfer of residential housing.**
4

5 ~~Subject to the provisions in section 16.60.110 below,~~ no person shall sell, exchange, or
6 otherwise transfer residential housing subject to the provisions of this chapter unless and until the
7 building official has certified that such housing is in compliance with the following energy
8 conservation standards:

9 AA. Insulation. The ceilings of all inhabitable portions of such residential housing shall be
10 overlaid with insulation which has a minimum thermal resistance rating of at least R-19
11 except:

12
13 ~~1. Where such ceilings are overlaid with insulation having a thermal resistance rating of~~
14 ~~not less than R-13 which was installed prior to March 23, 1978; or~~

15 ~~2. Where R-30 except where the attic of such a buildings has a headroom of less than 30~~
16 inches at the attic peak.

17
18 ~~1. Where the thermal resistance rating of insulation within the water heater is at least~~
19 R-12; or

20 ~~2. Where it is impractical to wrap the water heater with an external insulating~~
21 ~~blanket by reason of the fact that the distance between the heater and an adjoining wall~~
22 is less than two inches; or

23
24 ~~3. Where the manufacturer's instructions for the water heater would preclude the water~~
25 heater from being fitted with an external insulation blanket.

26 ~~C. All shower fixtures shall be fitted with in-line shower restrictors or low flow shower heads~~
27 which restrict the maximum flow of water to not more than three gallons per minute
28 except:

1 ~~1. Where the shower head has an existing flow rate of less than three gallons per minute~~
2 ~~as a result of reduced water pressure behind the shower head; or~~

3 ~~2. Where the shower head and shower arm are of a ball joint type which is connected~~
4 ~~within a wall.~~

5
6 ~~D. All hinged doors exposed to the exterior or to unheated or uncooled areas shall be fully~~
7 ~~weather stripped or gasketed in a manner which effectively and reliably limits air~~
8 ~~infiltration.~~

9 ~~E.~~

10
11 B. Additional energy conservation measures.

12 1. All major cracks, joints, and other openings in building exteriors or portions of a
13 building exposed to unheated or uncooled uncontrolled areas, and all openings from
14 heated or air conditioned spaces into an attic; or under floors including, but not limited
15 to, openings around doors, windows, plumbing vents, pipes, electrical wiring, or
16 furnace flues, shall be caulked, weather stripped, or otherwise sealed to limit air
17 infiltration.

18
19 2. All sink and lavatory faucets shall be fitted with low-flow faucets with a maximum
20 flow rate of 2.75 gallons per minute or an aerator.

21 3. All shower fixtures shall be fitted with in-line shower restrictors or low flow shower
22 heads which restrict the maximum flow of water to not more than three gallons per
23 minute except:

24
25 a. Where the shower head has an existing flow rate of less than three gallons per
26 minute as a result of reduced water pressure behind the shower head; or

27 b. Where the shower head and shower arm are of a ball joint type which is connected
28 within a wall.

- 1 4. All toilets shall be low-flow toilets rated at 1.6 gallons per flush or less.
- 2 5. Thermostats shall be programmable.
- 3
- 4 6. All exposed hot and cold water lines connected to and within five feet of existing
- 5 water heaters shall be insulated at a minimum thermal resistance rating of R-3.
- 6 7.

7 B.—All electric resistance domestic water heaters, and all natural gas or other fossil fueled
8 domestic water heaters, shall be fitted with external insulation blankets with a minimum
9 thermal resistance rating of R-6 except:

- 10
- 11 a. Where the thermal resistance rating of insulation within the water heater is at least
- 12 R-12; or
- 13 b. Where it is impractical to wrap the water heater with an external insulating blanket
- 14 by reason of the fact that the distance between the heater and an adjoining wall is
- 15 less than two inches; or
- 16 c. Where the manufacturer's instructions for the water heater would preclude the
- 17 water heater from being fitted with an external insulation blanket.
- 18
- 19 8. All ducts in accessible areas shall be visually inspected to determine if they are intact
- 20 and functioning properly.

21 **Section 3.** Section 16.60.110 of the Chico Municipal Code is amended to read as follows:

22 **16.60.110— Cost limitations on and priority for compliance with energy conservation**
23 **standards.**

24

25 ——— In order to comply with the ceiling insulation standards set forth in Subpart A of Section
26 16.60.100 of this chapter, the

27 A. Insulation. The owner of residential housing subject to the provisions of this chapter shall
28 be required to install all of the insulation necessary to comply with such standards the

1 standard set forth in section 16.60.100.A., above, without regard to the cost of such
2 compliance. However, ~~in order to comply with the remaining~~

3 B. Additional energy conservation standards set forth in Section 16.60.100 of this chapter,
4 ~~the owner of residential housing subject to the provisions of this chapter~~measures.

5
6 1. An owner shall not be required to make an expenditure in excess of the following
7 sums during the 18-month period prior to the dateinstall any additional energy
8 conservation when the required insulation has been installed within the 18 month
9 period immediately preceding the sale, exchange, or other transfer of such residential
10 housing occurs:

11
12 ~~A. In the case of residential housing which consists of a detached single-family dwelling unit,~~
13 ~~the sum of \$500.00, including~~transfer of the property and the cost of installing ceiling
14 ~~insulation, if necessary, and~~

15 ~~B. In the case of~~the insulation was \$800 or more for a detached, single family residence, or
16 \$560 or more per dwelling unit for residential housing which consistsconsisting of two or
17 more multifamily dwelling units, the sum of \$350units.

18
19 2. An owner shall be required to install additional energy conservation measures when
20 any of the following apply:

21 a. The required insulation is present and was installed prior to the 18 month period
22 preceding the sale, exchange or transfer;

23 b. The insulation is not required because the attic of a building has a headroom of less
24 than 30 inches at the attic peak; or

25 c. The required insulation was installed within the 18 month period preceding the
26 sale, exchange, or transfer, at a cost of less than \$800 for a detached, single family
27 residence, or less than \$560 per dwelling unit, including for residential housing
28

1 consisting of two or more units.

2 3. Priority of additional energy conservation measures. The additional energy
3 conservation measures to be installed shall be those set forth in section 16.60.100.B,
4 and they shall be installed in the order listed in that section unless a different priority is
5 approved by the building official. The building official may approve implementation
6 in a different priority when it is determined that doing so would achieve better overall
7 energy conservation or that the implementation of one or more of the items listed in
8 section 16.60.100.B would not be feasible.

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11 4. Maximum expenditure. When the installation of additional energy conservation
12 measures is required pursuant to paragraphs B.2.a or B.2.b of this section, the
13 maximum amount that an owner shall be required to spend on additional energy
14 conservation measures shall be \$800 for a detached, single family residence, or \$560
15 per dwelling unit for residential housing consisting of two or more units. When the
16 installation of additional energy conservation measures is required pursuant to
17 paragraph B.2.c of this section, the maximum amount that an owner shall be required
18 to spend on additional energy conservation measures shall be the difference between
19 \$800 and the cost of installing ceiling insulation, if necessary.

20
21 ~~Accordingly, if in complying with all of the remaining~~the required insulation for a
22 ~~detached, single family residence, or the difference between \$560 per dwelling unit and the cost~~
23 ~~of installing the required insulation for residential housing consisting of two or more units. The~~
24 ~~cost of the installation of any of the additional energy conservation standards set forth~~items listed
25 ~~in Ssection 16.60.100; the owner of residential housing subject to the provisions of this chapter~~
26 ~~would be required to spend a sum in excess of the amounts set forth in this section, the owner of~~
27 ~~such housing shall comply with those~~.B. which occurred during the 18 months preceding the sale,
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1 exchange, or transfer shall count toward meeting this requirement.

2 C. Credit for energy conservation standards set forthmeasures not listed in Section
3 16.60.100, ~~in addition to ceiling insulation, which the owner of the residential housing~~
4 ~~deems to be cost effective and for which the total cost does not exceed the sums set forth~~
5 ~~in this section.~~

7 .B. The building official may grant an owner a credit toward some or all of the additional energy
8 conservation measures listed in section 16.60.100.B that would otherwise be required to be
9 installed upon the owner providing the building official with documentation that the owner has
10 made other improvements to the building, or buildings, which resulted in a documented energy or
11 water savings and that such improvements were installed within the ten year period immediately
12 preceding the sale, exchange, or transfer of the property. Examples of the types of improvements
13 for which such credits may be granted include, but are not limited to, replacement of single with
14 dual pane windows or the replacement of HVAC or water heater systems with more efficient
15 systems.

18 **Section 4.** Section 16.60.120 of the Chico Municipal Code is amended to read as follows:

19 **16.60.120 Certification of compliance with energy conservation standards.**

20 The building official shall issue a certificate evidencing that residential housing subject to
21 the provisions of this chapter is in compliance with the energy conservation standards adopted by
22 this chapter if:

- 24 A. The building official or a city building inspector has inspected such housing and found it
25 to be in compliance with such standards; or
- 26 B. A person authorized to make energy conservation inspections in the manner hereinafter
27 provided by this chapter has filed a declaration with the building official, in a form
28 prescribed by the building official, stating that such person has inspected such housing and

1 found it to be in compliance with such standards.

2 **Section 5.** Section 16.60.140 of the Chico Municipal Code is amended to read as follows:

3 **16.60.140 Authorization of other persons to conduct energy conservation inspections.**

4 The building official shall authorize other persons to conduct the energy conservation
5 inspections which are necessary in order to certify compliance with the energy conservation
6 standards adopted by this chapter if such person is certified as a building inspector by the
7 International Conference of Building Officials, holds a license as a general contractor or
8 insulation contractor issued by the Contractors' State License Board, holds a license as a
9 structural pest control operator issued by the Structural Pest
10 Control Board, or is otherwise determined by the building official, on the basis of education
11 and/or experience, to be qualified to conduct such inspections. Applications for such authorization
12 shall be filed with the building division, shall be in a form and contain the information prescribed
13 by the building official, and shall be accompanied by a fee in an amount established by resolution
14 of the council.

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18 If, after authorizing a person to conduct energy conservation inspections necessary in order
19 to certify compliance with the energy conservation standards adopted by this chapter, the building
20 official determines that such person misrepresented such person's qualifications for such
21 authorization, no longer holds the certification or license relied upon by the building official as
22 the basis for granting such authorization, or filed a declaration certifying that such residential
23 housing is in compliance with such energy conservation standards without having inspected such
24 housing or when it is clear that the housing did not comply with such standards, the building
25 official shall revoke the authorization granted to such person. However, the building official shall
26 not revoke an authorization to conduct energy conservation inspections unless the building
27 official has given reasonable prior notice of the building official's proposed action to the person
28

1 granted such authorization and given to such person an opportunity to appear before the building
2 official and be heard on the proposed revocation.

3
4
5 The ordinance was adopted by the City Council of the City of Chico at its regular
6 meeting held on _____ by the following vote:

7 AYES:

8 NOES:

9 DISQUALIFIED:

10 ABSENT:

11
12
13 ATTEST:

APPROVED AS TO FORM

14
15 _____
16 Deborah R. Presson
City Clerk

15 L.J.B. 10/26/2010
16 Lori J. Barker
City Attorney

1
2 ORDINANCE NO. _____
3 (Codified)

4 **ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHICO AMENDING**
5 **CHAPTER 16.60 OF THE CHICO MUNICIPAL CODE, ENTITLED**
6 **“ENERGY CONSERVATION MEASURES REQUIRED INCIDENT**
7 **TO TRANSFERS OF RESIDENTIAL HOUSING”**

8 BE IT ORDAINED by the Council of the City of Chico as follows:

9 **Section 1.** Section 16.60.080 of the Chico Municipal Code is amended to read as follows:

10 **16.60.080 Sales, exchanges, and other transfers of residential housing subject to chapter**
11 **- Exceptions.**

12 This chapter shall not apply to the following transfers of residential housing:

13 A. The sale, exchange, or other transfer of residential housing which was constructed
14 pursuant to a building permit issued on or after July 1, 1991;

15 B. The sale, exchange, or other transfer of residential housing which was constructed
16 pursuant to a building permit issued before July 1, 1991, and which was previously
17 inspected and certified within the ten year period immediately preceding the sale,
18 exchange or transfer as being in compliance with the energy conservation standards
19 adopted by this chapter;

20 C.-G. [No change.]

21 H. Sales which are short sales. Short sales are defined as sales in which the purchase price
22 paid by the buyer of the property is less than the amount of the debt secured by the
23 property.

24 **Section 2.** Section 16.60.100 of the Chico Municipal Code is amended to read as follows:

25 **16.60.100 Energy conservation standards to be complied with incident to the sale,**
26 **exchange or other transfer of residential housing.**

27 Subject to the provisions in section 16.60.110 below, no person shall sell, exchange, or
28 otherwise transfer residential housing subject to this chapter unless and until the building official
has certified that such housing is in compliance with the following energy conservation standards:

A. Insulation. The ceilings of all inhabitable portions of such residential housing shall be

1 overlaid with insulation which has a minimum thermal resistance rating of R-30 except
2 where the attic of a building has a headroom of less than 30 inches at the attic peak.

3 B. Additional energy conservation measures.

- 4 1. All major cracks, joints, and other openings in building exteriors or portions of a
5 building exposed to unheated or uncontrolled areas, and all openings from heated or
6 air conditioned spaces into an attic or under floors including, but not limited to,
7 openings around doors, windows, plumbing vents, pipes, electrical wiring, or furnace
8 flues, shall be caulked, weather stripped, or otherwise sealed to limit air infiltration.
- 9 2. All sink and lavatory faucets shall be fitted with low-flow faucets with a maximum
10 flow rate of 2.75 gallons per minute or an aerator.
- 11 3. All shower fixtures shall be fitted with in-line shower restrictors or low flow shower
12 heads which restrict the maximum flow of water to not more than three gallons per
13 minute except:
 - 14 a. Where the shower head has an existing flow rate of less than three gallons per
15 minute as a result of reduced water pressure behind the shower head; or
 - 16 b. Where the shower head and shower arm are of a ball joint type which is connected
17 within a wall.
- 18 4. All toilets shall be low-flow toilets rated at 1.6 gallons per flush or less.
- 19 5. Thermostats shall be programmable.
- 20 6. All exposed hot and cold water lines connected to and within five feet of existing
21 water heaters shall be insulated at a minimum thermal resistance rating of R-3.
- 22 7. All electric resistance domestic water heaters, and all natural gas or other fossil fueled
23 domestic water heaters, shall be fitted with external insulation blankets with a
24 minimum thermal resistance rating of R-6 except:
 - 25 a. Where the thermal resistance rating of insulation within the water heater is at least
26 R-12; or
 - 27 b. Where it is impractical to wrap the water heater with an external insulating blanket
28 by reason of the fact that the distance between the heater and an adjoining wall is

1 less than two inches; or

2 c. Where the manufacturer's instructions for the water heater would preclude the
3 water heater from being fitted with an external insulation blanket.

4 8. All ducts in accessible areas shall be visually inspected to determine if they are intact
5 and functioning properly.

6 **Section 3.** Section 16.60.110 of the Chico Municipal Code is amended to read as follows:

7 **16.60.110 Cost limitations on and priority for compliance with energy conservation**
8 **standards.**

9 A. Insulation. The owner of residential housing subject to the provisions of this chapter shall
10 be required to install all of the insulation necessary to comply with the standard set forth in
11 section 16.60.100.A., above, without regard to the cost of such compliance.

12 B. Additional energy conservation measures.

13 1. An owner shall not be required to install any additional energy conservation when the
14 required insulation has been installed within the 18 month period immediately
15 preceding the sale, exchange, or transfer of the property and the cost of installing the
16 insulation was \$800 or more for a detached, single family residence, or \$560 or more
17 per dwelling unit for residential housing consisting of two or more units.

18 2. An owner shall be required to install additional energy conservation measures when
19 any of the following apply:

20 a. The required insulation is present and was installed prior to the 18 month period
21 preceding the sale, exchange or transfer;

22 b. The insulation is not required because the attic of a building has a headroom of less
23 than 30 inches at the attic peak; or

24 c. The required insulation was installed within the 18 month period preceding the
25 sale, exchange, or transfer, at a cost of less than \$800 for a detached, single family
26 residence, or less than \$560 per dwelling unit for residential housing consisting of
27 two or more units.

28 3. Priority of additional energy conservation measures. The additional energy

1 conservation measures to be installed shall be those set forth in section 16.60.100.B,
2 and they shall be installed in the order listed in that section unless a different priority is
3 approved by the building official. The building official may approve implementation
4 in a different priority when it is determined that doing so would achieve better overall
5 energy conservation or that the implementation of one or more of the items listed in
6 section 16.60.100.B would not be feasible.

7 4. Maximum expenditure. When the installation of additional energy conservation
8 measures is required pursuant to paragraphs B.2.a or B.2.b of this section, the
9 maximum amount that an owner shall be required to spend on additional energy
10 conservation measures shall be \$800 for a detached, single family residence, or \$560
11 per dwelling unit for residential housing consisting of two or more units. When the
12 installation of additional energy conservation measures is required pursuant to
13 paragraph B.2.c of this section, the maximum amount that an owner shall be required
14 to spend on additional energy conservation measures shall be the difference between
15 \$800 and the cost of installing the required insulation for a detached, single family
16 residence, or the difference between \$560 per dwelling unit and the cost of installing
17 the required insulation for residential housing consisting of two or more units. The
18 cost of the installation of any of the additional energy conservation items listed in
19 section 16.60.100.B. which occurred during the 18 months preceding the sale,
20 exchange, or transfer shall count toward meeting this requirement.

21 C. Credit for energy conservation measures not listed in section 16.60.100.B. The building
22 official may grant an owner a credit toward some or all of the additional energy
23 conservation measures listed in section 16.60.100.B that would otherwise be required to
24 be installed upon the owner providing the building official with documentation that the
25 owner has made other improvements to the building, or buildings, which resulted in a
26 documented energy or water savings and that such improvements were installed within the
27 ten year period immediately preceding the sale, exchange, or transfer of the property.
28 Examples of the types of improvements for which such credits may be granted include, but

1 are not limited to, replacement of single with dual pane windows or the replacement of
2 HVAC or water heater systems with more efficient systems.

3 **Section 4.** Section 16.60.120 of the Chico Municipal Code is amended to read as follows:

4 **16.60.120 Certification of compliance with energy conservation standards.**

5 The building official shall issue a certificate evidencing that residential housing subject to
6 the provisions of this chapter is in compliance with the energy conservation standards adopted by
7 this chapter if:

- 8 A. The building official or a city building inspector has inspected such housing and found it
9 to be in compliance with such standards; or
10 B. A person authorized to make energy conservation inspections in the manner hereinafter
11 provided by this chapter has filed a declaration with the building official, in a form
12 prescribed by the building official, stating that such person has inspected such housing and
13 found it to be in compliance with such standards.

14 **Section 5.** Section 16.60.140 of the Chico Municipal Code is amended to read as follows:

15 **16.60.140 Authorization of other persons to conduct energy conservation inspections.**

16 The building official shall authorize other persons to conduct the energy conservation
17 inspections which are necessary in order to certify compliance with the energy conservation
18 standards adopted by this chapter if such person is certified as a building inspector, holds a license
19 as a general contractor or insulation contractor issued by the Contractors' State License Board,
20 holds a license as a structural pest control operator issued by the Structural Pest Control Board, or
21 is otherwise determined by the building official, on the basis of education and/or experience, to be
22 qualified to conduct such inspections. Applications for such authorization shall be filed with the
23 building division, shall be in a form and contain the information prescribed by the building
24 official, and shall be accompanied by a fee in an amount established by resolution of the council.

25 If, after authorizing a person to conduct energy conservation inspections necessary in order
26 to certify compliance with the energy conservation standards adopted by this chapter, the building
27 official determines that such person misrepresented such person's qualifications for such
28 authorization, no longer holds the certification or license relied upon by the building official as

1 the basis for granting such authorization, or filed a declaration certifying that such residential
2 housing is in compliance with such energy conservation standards without having inspected such
3 housing or when it is clear that the housing did not comply with such standards, the building
4 official shall revoke the authorization granted to such person. However, the building official shall
5 not revoke an authorization to conduct energy conservation inspections unless the building
6 official has given reasonable prior notice of the building official's proposed action to the person
7 granted such authorization and given to such person an opportunity to appear before the building
8 official and be heard on the proposed revocation.

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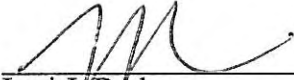
The ordinance was adopted by the City Council of the City of Chico at its regular meeting held on _____ by the following vote:

- AYES:
- NOES:
- DISQUALIFIED:
- ABSENT:

ATTEST:

APPROVED AS TO FORM

Deborah R. Presson
City Clerk



Lori J. Barker
City Attorney



THURSDAY SCHEDULE CHICO STATE

9:30–10:30 CONCURRENT SESSIONS, CHICO STATE



Sustainability Education and Practices in CA
[BMU 204]

Scott Terrell

The presentation will be an overview of Scott's experience and success in implementing effective sustainability education and energy and water efficiency programs in three CA communities. He will focus on his efforts in Truckee, CA; which is becoming the Greenest Small Town in America. Truckee cost-effectively saved 3% community-wide electric energy savings in 2008 and 2.5% in 2009 through sustainability programs.



Enhancing Collaboration Beyond the inbox
[BMU 209]

Dave Stevens, Peter DiFalco

This session will focus on the benefits of using online tools for increasing efficiency, collaboration, and creativity in group-centered advocacy movements or project management. Discussion will also center on the net benefits of online collaboration versus traditional mechanisms, as well as taking into account learning curves for group members. Participants will be encouraged to develop criteria that will aid choosing an appropriate tool or platform for a specific project. Facilitators will provide resources for further exploration and demonstrate effective use in higher education and social contexts.



Addressing The Social Pillar Of Sustainability In Higher Education
[BMU 210]

Mimi Riley, Brad Zuniga, Yvette Zuniga, Tony Gamboa, Nena Anguiano, Debbie McCurry

Social sustainability is focused on the development of programs and processes that promote social interaction and cultural enrichment. It emphasizes protecting the vulnerable, respecting social diversity, and ensuring that we all put priority on social capital. Community colleges naturally provide rich environments for supporting the diverse needs and cultures of their students.



The Sustainable Recycling And Waste Facility
[BMU 303]

Steve Rodowick, Bill Mannel, Evan Edgar

The panel will present the current state of today's landfills and the challenges facing these facilities in the era of changing patterns of waste management in today's business climate.



Sustaining the Family Farm
[BMU 314]

Rod Carter

How does business succession planning create sustainability? Why is it so important in today's economy? What are conservation easements, and how can they be used to sustain agricultural businesses? Rod Carter will answer all these questions and more in this powerful presentation that shows how intergenerational succession planning is essential if we wish to sustain our family farms, ranches, and agricultural businesses for future generations.



Use Water Wisely. It's Essential
[BMU 312]

Pete Bonacich, Ken Jenkins

Cal Water is committed to being the leader in promoting water-use efficiency. Our presentation focuses on water conservation programs, potential partnerships, and an overview of our plan to achieve a 20 percent reduction in per capita water use by 2020. Advanced Audience and Beginners.



Students in the LEED Rating System: Passing the Exam and Project Experience

[SSC 490]

Lori Brown

Since 2007 Brown has impacted the U.S. construction industry in a very progressive and positive way. She will discuss her successes in not only preparing students and industry professionals for the LEED AP exams, but also how she has collaborated on and off campus to provide students with the LEED project experience necessary to succeed.



The Power Of Transparency: How The Carbon Disclosure Project Is Harnessing The Power Of

Transparency To Change Corporate Behavior.
[MLIB 027B]

Keith Littlejohns

A summary of the recently published results of CDP's 2010 Investor program, with detailed climate change data disclosed by 200 of the world's largest companies. An update on CDP's other programs in Supply Chain, Public Procurement, Water and Cities. How CDP partners with the leading vendors of Carbon management software and other service providers to improve the quality of sustainability data.



Sustainability in the Private Sector: Making sustainable initiatives a part of your business strategy.

[BMU 304]

Jeff Miller, Jack Harris, Kirstin Smith

Pacific Living Properties strives to promote sustainable living practices in the communities in which we live and work. Through an ongoing commitment to provide our time and resources, we are making a difference in the lives of our residents and local communities. We work with local government, universities, non-profits, and the private sector to help create sustainable lifestyles and business practices to protect our environment.





11:00–NOON CONCURRENT SESSIONS, CHICO STATE



Educating for Sustainability: Searching for Solutions and Finding the Good

[BMU 303]

Debra Weistar, Tom Weistar

This workshop introduces a new way to learn that takes youth out of the classroom and into the world to learn about viable solutions. By studying and documenting working models of sustainability, students are empowered to investigate and engage solutions that support life systems, rather than destroy them.



We're Importing Cabbage from the Soviet Union?! The Emergence of Urban Community Gardens in Cuba.

[BMU 304]

Ann Sittig

This presentation gives a historical overview of Cuba, explaining how the urgent need for urban community gardens arose. In spite of limited supplies and resources due to the U.S. blockade, Cuba developed the largest program of organic and sustainable agriculture ever undertaken and implemented it by educating in schools, families, and the community.



Deep Down Things: The Earth in Celebration & Dismay

[BMU 312]

Lin Jensen

There's much in what's happening in our environment now that gives cause for dismay. Join Lin in a conversation that explores our intimate connection to the land, to the specificities of place, and to the living earth itself, uncovering our deepest nature, the true heart of what it means to be human.



Green Seal: 3rd Party Certification

[MLIB 031]

Linda Chipperfield

Learn about Green Seal's 3rd party certification process, challenges, and wins. This panel will highlight the efforts of the Green Seal city program working to promote sustainability in a community's businesses and government through certification and partnership programs.



Journey to Zero

[BMU 210]

Julia Sabin

We will discuss why sustainability is important to our business and why we got started. We will share our accomplishments and results in waste and energy reduction, and how this has been achieved through total employee involvement. We will also speak about our future opportunities to continue our Journey to Zero.



Recycling Myth Busting

[BMU 314]

Wayne Jackson

Learn techniques that will help you bust the recycling myths. Recycling innovation and collaboration will change the future of business and residential waste solutions. Join us to challenge the status quo!



Northern Sacramento Valley Integrated Regional Water Management

[BMU 204]

Vickie Newlin

This presentation will tell the story of the Northern Sacramento Valley Integrated Regional Water Management Group. Realizing

that water and other natural resources often involve more than one local jurisdiction, six counties in the Northern Sacramento Valley have come to work on water-related issues. We want to ensure the sustainability of the economic and environmental value of water and other natural resources.



How to Tame the Bag Monster.

[BMU 209]

Andy Keller

The Bag Monster is a growing beast of excess that is trashing our planet. If you are trying to tame your Bag Monster attend this workshop to learn to eliminate single-use bags from your life, local community, and environment. Learn about alternative solutions to plastic bags for clean up.



Environmental Effects Of Reusable Plastic, Single-Use Plastic, And Single-Use Paper Bags Were Evaluated Using Life Cyclefuture."

[BMU 314]

Joseph Greene

Reusable bags are more environmentally sustainable than single-use plastic bags if they are used more than eight times. Reusable bags use less energy, emit less pollution, release less green house gases, and create less solid waste than single-use plastic bags and single-use paper bags.



1:00–3:00 SPECIAL SESSION, CHICO STATE



Green Cleaning Workshop for Institutions and Businesses

[SSC 304]

Wayne Murray

Curious about Green Cleaning and Green Cleaners, but worried they won't do the job? Come and learn how to screen for suitable green products for use in your facility. Implement a staff Green Cleaning training

program that works with a high-turnover employee population. Wayne will discuss resources and how to get started with your own program. The latter half of the workshop will be at the Wildcat Recreation Center where strategies will be introduced and green cleaning products will be demonstrated.



2:00–3:00 CONCURRENT SESSIONS CONTINUED, CHICO STATE



It's Time to Go—Student Adventure in Switzerland and Costa Rica
[BMU 204]

Ted Kromer

This presentation will discuss the purpose of California Kids To Kids (CKK), how to travel, life-changing adventures in Europe and Costa Rica, the service of sustainability to the program, and the many lessons students learned.



What is a CSA? How do they work and why?
[BMU 304]

Francine Stuelpnagl

What is a CSA? Community supported agriculture. How does it work and why is it important? Why and how can food change the world? How growing food can bring people together. How we run our CSA. How it can be a different type of business model to the norm.



Recology—Waste Zero
[SSC 150]
Jill Ortega

Our presentation will include information about our company and the services we provide including food waste composting, construction and demolition recycling, general recycling and materials recovery facilities waste, and our mission and philosophy of waste zero.



Building Pathways to Sustainable Future: A Curriculum Development Workshop

[BMU 209]

James Pushnik

We will explore the critical role of higher education in achieving a sustainable development pathway, transitioning to a discussion of how best to integrate sustainability principles across the curriculum. We will share the process by which we developed an interdisciplinary “sustainability thread” that crosses all colleges and potentially all departments.



Community Based Solar Energy Programs
[BMU 303]

Anne Marie Larsen, Julie D. Estep

A variety of community-based, municipal, and cooperative approaches are evolving to increase access to solar energy and to reduce upfront costs for participants. Based on comparative research and interviews with community solar program leaders, this presentation highlights recent developments in community-based solar energy programs, including political issues and challenges confronting these programs.



Growing a Green Giant: NetApp's Sustainability Evolution
[BMU 210]

Peter Perrault

This presentation will cover the evolution of NetApp's sustainability effort from its nascent stages to an established companywide program. The speaker, known as ‘Green Giant’, has helped develop and expand NetApp's sustainability program. The subject matter will cover corporate action and engagement, the companies green IT efforts, and the company's overall strategy for sustainability.



Green From The Ground Up!
[BMU 314]
Jon Stallman

Green building technologies and practices introduces beginning students to the theory, methods, and techniques behind modern, code compliant, green building concepts. Introduces beginners to the science and methods behind energy-efficient design, construction, and retrofits. A forum for best practices, discussion, and a round table introduction to instructing hands-on learners in the emerging fields of green building systems.



Sustainable Roof Case Study: Wildcat Glades
[SSC 490]

Patti Harburg-Petrich

The Wildcat Glades Conservation is located in a globally unique habitat that contains approximately half of the natural chert glades left in the world. Conservation is the function of the building, and therefore sustainability was a key design feature. The Center has a green-roof system of native plants, providing a habitat to indigenous species.



Closing the Loop on Waste Diversion
[BMU 312]
Mandi McKay

SNBC has adopted the “Closed Loop” philosophy in order to reduce waste, recover resources, and operate more efficiently. The company has been able to apply this concept to energy, water, solid waste, heat, CO₂, transportation, and agriculture. This presentation will discuss these examples and focus on their new HotRot composting system.

3:00–4:00 CONCURRENT SESSIONS, CHICO STATE



American Association of Community Colleges' Sustainability Education Economic Development (SEED) Center: A New Online Green Tool for Community Colleges
[BMU 204]

Todd Cohen

SEED is an initiative of AACC in partnership with ecoAmerica to help community, junior, and technical colleges develop quality green job training and education programs. The SEED Center consolidates practices and curriculum materials currently available across community colleges. The SEED Center will also allow faculty and staff to learn and explore green jobs curricula and sustainability.



Green Workforce Panel Discussion
[BMU 210]

Morgan King, Jon Stallman, Mark Stemen, Halli Bovia, Trevor Prater, Wen Lee

This panel discussion will focus on current trends in the emerging green economy, existing programs that develop skills and knowledge relevant to the green workforce, and strategies for landing a green job. Panelists will also share their experience within the green workforce and in assisting students gain green jobs.



Nurturing a Sustainable Paradigm: Challenging Dichotomy & Finding Power

[BMU 303]

Nikki Schlaishunt, Julia Murphy

Our current paradigm supports over-consumption, division, and a scarcity mentality. To achieve and maintain a healthy society we need to grow a new paradigm to replace the old. This workshop will explore the roots of the old and new paradigms and will offer some new tools that will help us nurture a sustainability paradigm.



3:00–4:00 CONCURRENT SESSIONS CONTINUED, CHICO STATE



Building Sustainability through Climate Action
[BMU 209]

Tabetha Willmon

All Californians contribute to the generation of greenhouse gases. California's greenhouse gas emissions requires a comprehensive, integrated, and ambitious plan. This presentation will focus on a variety of opportunities, benefits, and resources available for local governments, businesses, and residents to reduce costs along with emissions, and will share information on the Climate Generation program.



Business/Education Collaboration: Nurturing the Resources of the community

[SSC 150]

Timothy Shultz, Annie Rafferty, Ryne Johnson, The Chico Project

The session will include a panel discussion including a student/former student, faculty advisor/administrator from each college, and a Lundberg employee who has participated in these collaborations, focused on how these collaborations have benefited the institutions and individuals who have participated.



Certified Sustainability Manager
[BMU 312]

Angela Casler

CSU, Chico has formed a design team of professionals to create a certification examination for cross-sector professionals focused on business strategic management. The certification will validate professionals pioneering sustainability management. This panel will introduce members of the design team and the qualifications needed to qualify for the exam.



The Practioner's Perspective in Managing IT and Data Centers
[BMU 314]

Chad Lew

Overview of current IT trends and how IT organizations are responding to ever-increasing challenges. This presentation highlights and focuses on NetApp's approach and methodology. In this presentation NetApp showcases its thought leadership around designing green data centers as well as implementing IT best practices to maximize the use of IT and facility assets.



Alternative Waste Technologies: What Will Come in the Future?
[BMU 304]

Amanda Fairley, Patrick S. Sullivan

Waste Management has partnered with several companies that convert waste into energy. The technologies employed vary from capturing landfill gas and converting it to energy to using processes to produce syngas from waste. We will provide an overview of some of these technologies and review case studies that explore the feasibility of some of these developing waste technologies.

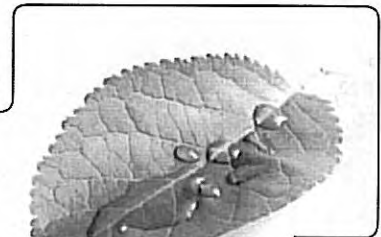
4:00–5:00 KEYNOTE SPEAKER, CHICO STATE—PAUL ROWLAND



Campus Sustainability: A National Perspective
[HARLEN ADAMS, PAC 144]

Paul Rowland

Campus sustainability has been growing at an incredible rate over the past half a decade. What is happening and what are its drivers will be described in this presentation that looks over the past five years that AASHE has been in existence. Dr. Rowland will also gaze into his crystal ball to predict what will happen over the next decade.





FRIDAY SCHEDULE CHICO STATE

9:00–10:00 KEYNOTE SPEAKER, CHICO STATE—JEROME RINGO



The Color of Green, The Next Inconvenient Truth [LAXSON AUDITORIUM]

Jerome Ringo explores the value of diversity in building an effective Sustainability Movement. As well, he gives a passionate wakeup call to all Americans of the sense of urgency we face with climate, energy, and economic challenges.



10:00–11:00 CONCURRENT SESSIONS, CHICO STATE



Alternative Solutions: Reducing Exposure to Toxics [BMU 304]

Maggi Barry, Julia Murphy

How much do you know about potential toxins in your environment? What do you know about toxins in your cleaning products, personal care products & who ensures their safety? We will explore these issues and provide ways to reduce your exposure to toxics by offering alternative solutions.



Change Does Not Have to Follow a Path of Environmental Destruction. [BMU 312]

Robin Huffman, Grace Marvin, Pamela Posey, Carol Perkins

Change does not have to follow a path of environmental destruction, and local development can be more sustainable. Unless developers make such proposals and local governments insists, environmental advocates will continue to have a large role to play in effecting more sustainable growth.

the story of transforming a paper-swamped office into a 95% paperless office over a two year period. We present realistic and money-saving changes a campus office can implement to align business practices with sustainable values. Transferring to paperless processes is not the end of our story; we'll discuss our hopes for future sustainable advancements.



City of Chico Climate Action Plan Phase I Presentation and Public Outreach [BMU 303]

Fletcher Alexander, Linda Herman

This presentation will provide an overview of the City of Chico's proposed Climate Action Plan, ready to begin implementation in 2011. The presentation will include a discussion of the city's approach to Climate Action, a summary of the plan time line and interim targets, and a breakdown of the projects and programs set to be included in Phase I.



Bibliographic Services Librarian [BMU 209]

Jim Dwyer

Stories are powerful because they speak to us on not just an intellectual, but also an emotional and even a spiritual level. They can inspire us to advocacy and action. This program will define eco-fiction, its history, and international scope. Both well known and more obscure books will be discussed.



Green Event Guide [BMU 314]

Monique Silva-Crossman

How to green your school events and how we made a guide and marketed information to our students and groups.



Exchanging Externalities & Practices; an International Forum for Small & Medium-Sized Businesses

Paolo Francesca Spadaro, Neil Schwartz, Maria Beatrice Ligorio
[BMU 204]

We aim to describe the project Di.Co.Te., a project of sustainability funded by the government of Italy. Di.Co.Te.'s is developing a platform to sustain the collaborative exchanges internationally. We will describe our results and our plans for step two and lay out plans for the expansion of Di.Co.Te.'s international partnerships.



Practice What You Preach: The Business Advising Office Leads Students into our Sustainable Future." [BMU 210]

Tessa Nichols, Amy Lance, Kalea Allen, Janel Irwin, Clare Cliffordr

This presentation takes listeners through

11:00–NOON CONCURRENT SESSIONS, CHICO STATE



City of Chico Climate Action Plan Workshop [BMU 303]

Fletcher Alexander, Linda Herman

Follow-up workshop for Climate Action Plan intended for community members to provide their feedback and ideas to the city, and to learn about a number of ways they can be involved in Climate Action in our community.



Can Gold be Green? Linking Sustainable Agriculture. [BMU 209]

Elizabeth Martin

For years agriculture in the United States was on an unsustainable path with a business model and philosophy that promoted gigantic chemical-based agribusiness. Organic food and sustainable farming creates a healthier alternative. Can the principles of "Sustainable Agriculture" be applied in such a way to create an environmentally sound mining industry?



Catalyzing Campus Sustainability [BMU 210]

Ross Levy, Crodd Chin

The De Anza College Mediated Learning Center, awarded Best Overall Sustainable Design (2010 CHESC), is more than a LEED platinum building. It is a set of environmental and social systems that inform pedagogy and redefine the educational setting as the college develops in response to evolving cultural and climatic norms.



11:00–NOON CONCURRENT SESSIONS CONTINUED, CHICO STATE



Biodiesel Production Advances: Latest News on Development
[BMU 312]

Mark Roberts

Topics to include: latest technological advances and efficiencies, the latest on feedstock's and emissions, progress in the United States vs. Internationally, case studies of groups that are benefiting economically and environmentally, anecdotes, and more.



An Overview of Small-Scale Wind Electric Systems "Small Wind for the Agriculture Element"

[BMU 304]

Scott Jackson

Large-scale commercial wind energy development began in California in the early 1980s, and the most common image of modern wind energy is a large array of turbines. Less familiar is a single turbine, much smaller

than the utility-scale models but much more efficient than the old-fashioned windmill.



2:00–3:00 CONCURRENT SESSIONS, CHICO STATE



How to Save the Earth and Fall in Love With Everything
[BMU 314]

Ryan Laine, Quinn Comendant, Liksa Kieran

The simple joy of riding a bicycle makes a big difference. We will explore how a bike challenges values, localizes regions, supports healthy food, and creates more happiness. Facilitated by local bicycle tour guides, this engaging conversation includes a brief "how to" create your own bicycle movement workshop.



Why What We are Doing is Not Enough. Preparing for a Climate Changed World.

[BMU 209]

Jeff Price

The effects of climate change are evident on every continent on the planet. It is imperative for professionals and agencies to begin thinking about the impacts of climate change on the missions of their organizations and how this will affect their work in the future.



CSUC Research at the Oroville Cleantech Innovation Center
[BMU 312]

Greg Kallio, Katie Milo, Christina Archer, Adel Ghandakly, Christine Lewis

Three Chico State faculty have established research projects and laboratories at the new Cleantech Innovation Center at the Airport Business Park in Oroville, California. The research topics cover renewable energy technologies and building energy efficiency. Another Chico State faculty member has established a workforce training program in geospatial technology for unemployed workers.



Motivation for a Sustainable Future
[BMU 204]

Tyler Hartrich

Focuses on ways individuals can live more sustainably by making "green" decisions within their day-to-day lifestyles. The talk is inspirational with the intent of empowering the audience about the future that lies ahead, demonstrating how we can play a part in devising sustainability throughout our lifestyles and in our careers.



Cultural Sustainability: Mechoopda Maidu Documentary
[BMU 304]

Kimberly Ornellas, Avery Beck, Sydney Kerhove

The Mechoopda Maidu Film Project is an anthropological documentary that highlights cultural sustainability and explores the rich cultural history of the Mechoopda Maidu in Chico through oral tradition. Join us for a preview of the film and a discussion about sustainability from the Native American perspective.



Poison Gifts: People and Pollution in The Arctic
[BMU 210]

Jesse Dizzard

Circumpolar cultures have existed for thousands of years but are currently threatened not only by global climate change but also by persistent organic pollutants produced in industrialized countries far from the Arctic. Globalizing consumer culture is poison.



Green Funds on Campus: How to Start One on Your Campus
[BMU 303]

Robyn DiFalco, Katherine Walsh, James Robinson

Many campuses now have "Green Initiative Funds" available for student-driven projects in sustainability. If your campus is trying to launch a campaign to get this kind of funding set up on your campus, this session is for you! Student organizers from campuses across California will discuss campaign strategies and how to begin the process of adding a sustainability fee on your own campus.





3:00–4:00 CONCURRENT SESSIONS, CHICO STATE



Green Funds on Campus: Best Practices & Lessons Learned
[BMU 312]

Robyn DiFalco, Katherine Walsh, James Robinson

This session will present different models of student fee-based “Green Initiative Fund” programs at various campuses across California. Come learn how each campus developed its application process, funding committee, and review process. Find out what important lessons have been learned from these various campus programs.



Sustainability in the North Central Valley of CA
[BMU 304]

Earl Bloor, Candace Byrne, Noelle Ferdon

This session will focus on the people who engage in growing and processing the food within our local region and the opportunities that exist for all of us to support our local food sheds.



Growing the Green Workforce: Developing Green Jobs
[BMU 210]

Morgan King

To meet the demand for a burgeoning green-collar workforce, we need strong education and training programs that are integrated into existing institutions and school curriculum. This session outlines how to integrate educational institutions and local partnerships with a strong vision for community sustainability to launch innovative community-based green-collar training programs.



Residential Solar: Does Efficiency Matter?
[BMU 303]

Paul Sullivan

In any residential solar inquiry, the topic of module efficiency rears its head. We will explore the generalities of solar panel efficiency, what it means and how it affects the long term production of clean and renewable electricity. Further, we will glance in to the future of developing technologies.



Complimentary Alternative Medicine
[BMU 204]
Adam Moes

Complementary and Alternative Medicine is a way to keep general healthcare costs down and provide more individualized care. Combined with sustainable agricultural practices, the delivery of Acupuncture and Chinese herbs represents one of the most effective and cost-effective ways to maintain health and wellness.



Rivers of Ice: Are the Glaciers of the Himalayas Melting?
[SSC 150]

Orville Schell & David Breashears

How climate change will effect the frozen reservoirs in the Greater Himalaya and influence the rivers of Asia. This discussion by two experts in the field will concern the downstream consequences of the glacial melt. It will be a great introduction to their evening presentation in Laxson Auditorium which will focus on the causes and the possible solutions.



Creating Positive Change to the Built Environment.
[SSC 122]

PJ Santos

Sustainability is often viewed with a scorecard, a LEED merit badge. The pursuit for greatest sustainability isn’t something our planet cares about. Each of us has a role, but our returns, our utility, must be in balance and equitable to all stakeholders: the client, the users, the consultants, the investors, and the planet.



Zero Trash Chico, Pick it up
[BMU 209]

Lindsay McDonnell, Leesha Tennes

Zero Trash will be presenting on the basic principles that fueled its grassroots movement. Roadside litter is not only unsightly, but can be prevented through proper placement of trashcans and ashtrays. We will share with you how we are working toward achieving a solution to these problems.



Businesses Increasing Profitability Through Embrace
[BMU 314]

Janelle Wallace, Kevin Foley, Kevin Coleman Lisk, Ashley Dutra

Learn how to save money and our environment simultaneously. As future leaders of the new economy, businesses are empowered through knowledge to be the agents of change. Spreading this knowledge and inspiring others is a step in creating future business sustainability.

7:30–8:30 KEYNOTE SPEAKERS, CHICO STATE—SCHELL & BREASHEARS

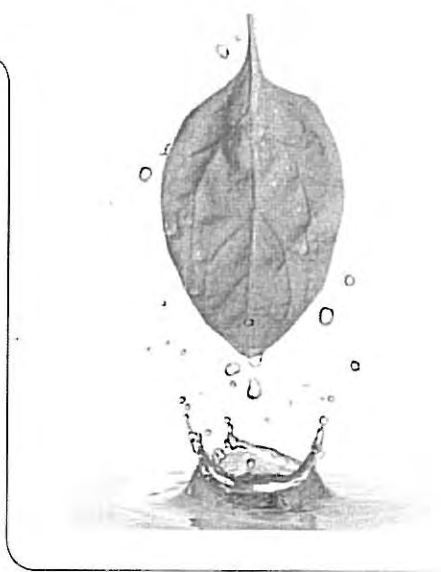


Climate Change in the Himalayas
[SSC 150]
\$25 PREMIUM | \$20 ADULT

\$18 SENIOR | \$12 STUDENT/CHILD

Orville Schell & David Breashears

Join author and journalist Orville Schell and filmmaker and adventurer David Breashears in an evening entitled: Climate Change and the Melting Glaciers of the Himalayas: Why It Matters. This multimedia event is part of Chico State’s On the Creek Lecture series. Stunning photography and videography will accompany expert opinions on the topic of our world’s melting glaciers.





FRIDAY SCHEDULE BUTTE COLLEGE



8:30–10:00 KEYNOTE SPEAKER, BUTTE COLLEGE—DR. DEBRA ROWE



President of the U.S. Partnership for Education for Sustainable Development

[BUTTE COLLEGE, GYM]
Dr. Debra Rowe

Northern California is often looked upon by the rest of the country as a hotbed for sustainability ideas and initiatives. This presentation will focus on honoring the existing local sustainability initiatives, catalyzing the

next steps, and ramping up the impacts to the national level. Dr. Rowe will share resources to leverage local efforts to increase both local and national impacts. Specific strategies and opportunities will be discussed.

10:00–11:30 CONCURRENT SESSIONS, BUTTE COLLEGE



Education, Business, and Community Actions for a Sustainable Future—Next Steps

[BUTTE COLLEGE, ARTS 130]
Debra Rowe

This workshop will focus on how core pedagogy of sustainability education can be used to improve the quality of learning and assist government, businesses, NGOs and the campus in their sustainability efforts. Workshop participants will discuss strategies and successful precedents from evolving trends in sustainability education that connect the learners with real world sustainability challenges and solution building to benefit all.



Water Efficiencies [BUTTE COLLEGE, LRC 145] *Greg Melton, Don Franklin*

Life Cycle of Water—Local water supply, Tuscan aquifer, Cal Water, and our water supply. Gain understanding of AB1881 including who is responsible to meet the requirements, how agencies and development and design communities are handling the changes in water regulations and what are the key elements to meeting the regulations.

Following the Governor's lead, California's State Architect has focused on incorporating green concepts into the design, construction, maintenance, and operations of California's K-12 schools and community colleges. From the State Architect's efforts came the concept of grid neutral—a site that produces as much electricity as it uses in a year—a measurable goal that community colleges are working to achieve. This presentation will quickly highlight some of the green policies introduced during the Schwarzenegger administration that led to the development of the grid neutral concept, including the codification of grid neutral in the new CAL Green code. Following the presentation, there will be a short panel discussion encouraging the audience's participation in exploring strategies for achieving grid neutral including the notion of cost neutral campuses



Taking FAFCO the Oldest and Largest Solar Water Heating Company through Lean Enterprise Implementation

[BUTTE COLLEGE, LRC 142]
Jes Vargas, Brian Smith

FAFCO is the oldest and largest solar water heating manufacturer in the US which has experienced rapid growth in our domestic solar hot water heating product which can save homeowners significant amounts of energy. Overall, it's allowing FAFCO to more efficiently deliver energy saving products while simultaneously reducing our own waste and carbon footprint.



Clean Energy Work Force Development [BUTTE COLLEGE, LRC 116] *Annie Rafferty, Jon Stallman,*

Butte College; David Villarino, FIELD; Brian Boyer, NoRTEC
This panel will share best practices and results of design, development and implementation of Clean Energy Workforce Training including Solar PV Design & Installation, Solar Thermal, Water Conservation, Green Building, Energy Efficiencies, Team Building, and Communication. Key learning including pre-training development for optimal NABCEP and HERS certification and testing results.



Global Business: Top Models of Sustainability [BUTTE COLLEGE, LRC 118]

Rob Holmes

This presentation showcases the most successful and leading global business models revolving around cutting-edge sustainability practices. Unique stories illustrated with HD-video and photography explore the top sustainable business projects around the globe. Green Living Project has documented over 50 projects in 14 countries. Popular for business professionals and students.



"The Grid Neutral Campus" and "The Top 5 Items to Watch for in a PPA Contract"

[BUTTE COLLEGE, LRC 144]
Theresa Townsend, David F. Thorman

1:30–2:30 CONCURRENT SESSIONS, BUTTE COLLEGE



Your Building Management System [BUTTE COLLEGE, LRC 144] *Bernard Keister*

This session will cover topics including sensor calibrations, alarms, benchmarking and trending for good operation, LEED-EBOM and your BMS and Automated Functional Testing. We will also discuss strategies to either improve your system or your training so that the BMS can assume its rightful place in the Educational Facilities Management Toolbox.



Think Locally, Act Globally? Fair Trade and Local Economic Development from Uganda to Chico

[BUTTE COLLEGE, ARTS 232]
Jenais Zarlin, Ben Corey-Moran, Amy Louis, Mandy Johnson

Fair Trade takes its inspiration from decades of development around the world, and also from local models that connect farmers and consumers in equitable and mutually sustaining relationships. Join Chico's Six

Degrees Coffee and Mendocino County's Thanksgiving Coffee Company to learn more about how Fair Trade supports local communities at home and around the world.



1:30–2:30 CONCURRENT SESSIONS, BUTTE COLLEGE



Lean to Green in your Office
[BUTTE COLLEGE, ARTS 234]
Jes Vargas

Move from Lean to Green by recognizing the difficulty in seeing waste and in applying appropriate steps to reduce or eliminate it. Workshop activities will introduce “Lean Thinking” as a methodology for identifying and eliminating non-value-added or wasteful elements in office and service operations. Conducted in partnership with Sierra College under CACT Grant #10-302-027.

description of the resources available to faculty and teachers for sustainability education in all academic disciplines. National and international trends in sustainability education will be discussed. The workshop will interactively explain effective strategies to catalyze and institutionalize sustainability education across all disciplines and degrees.



Solar Training Best Practices
[BUTTE COLLEGE, ARTS 142]
Jon Stallman, Rob Foster, Greg January

Round table discussion connecting the experience of experts in the field of training for Solar PV. This open forum of discussion will help training programs work together and calibrate to produce prepared students with similar knowledge. Training programs with experience in this field should bring their methods and experiences to the session.



Planting SEEDS Resources for Faculty and Curricula Builders (1:30–3:30)
[BUTTE COLLEGE, ARTS 130]

Debra Rowe and Todd Cohen

This workshop will start with a specific



Private Sector Building Partnerships
[BUTTE COLLEGE, ARTS 116]
Mike Miller, Mark Cirksena,

Norm Nielsen, Richard Hawkins

From the private sector, building partnerships to deliver quality large scale projects at the lowest cost to the consumer, adopting private sector thinking in the public sector.

2:30–3:30 CONCURRENT SESSIONS, BUTTE COLLEGE



Building Partnerships to Create the Nations First Grid Positive College
[BUTTE COLLEGE, LRC 142]

Richard Hawkins

The Butte College Phase 3 Grid Positive Project will be used as a backdrop for this presentation on building partnerships: companies partnering to deliver quality large-scale projects at the lowest cost to the consumer by adopting private sector thinking in the public sector.



Life Cycle Cost Analysis of Solar & LEED Projects
[BUTTE COLLEGE, ARTS 130]

Christopher Madden, Nick Blomquist

Life cycle cost analysis of campus solar and LEED projects, and understanding the true cost benefits of sustainable projects.



The Corporate Role in Promoting Sustainability
[BUTTE COLLEGE, ARTS 246]

Timothy Sisson

The discussion will include sustainability as a business imperative, goals of the Center for Energy Efficiency and Sustainability, innovation, collaboration, demonstration, Governance Model, Community Outreach and Education. An example will be shared of how a single product can be leveraged into a system that has a lasting positive effect on the community.



Sustainable Food Systems
[BUTTE COLLEGE, ARTS 234]

Bruce Hicks, Tip Wilmarth, Steve DeMaggio, Megan Luke

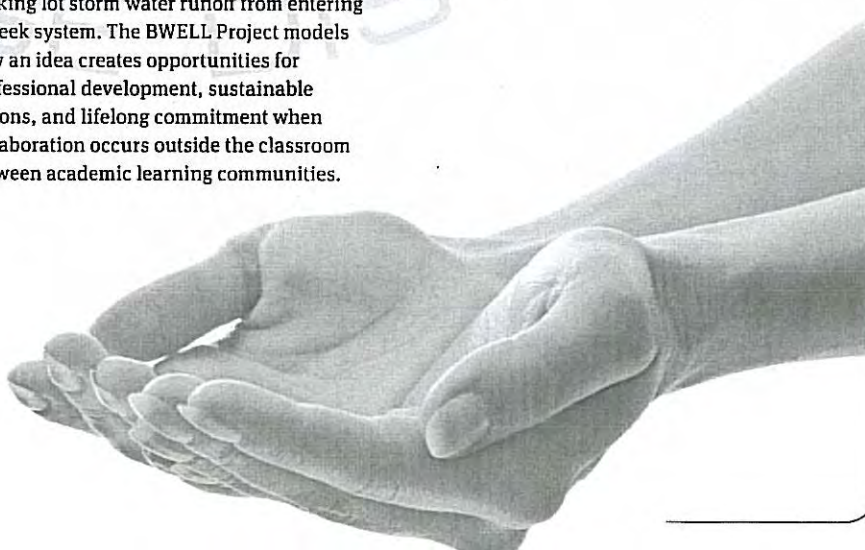
This panel will showcase the curriculum and campus programs that embrace organic farming methods, and waste stream management programs on campus, as well as feature dining service's efforts to support local businesses and serve natural choice items and student-run efforts to produce food and educational events on campus.



Parking Lot Pollution–The MESA BWELL Project
[BUTTE COLLEGE, LRC 116]

Dr. Mike Williams, Nena Anguiano

The Biofiltration Wetland Education Learning Laboratory (BWELL) Project was designed to examine solutions to prevent parking lot storm water runoff from entering a creek system. The BWELL Project models how an idea creates opportunities for professional development, sustainable actions, and lifelong commitment when collaboration occurs outside the classroom between academic learning communities.





3:30-4:30 TOURS, BUTTE COLLEGE [UNLESS OTHERWISE STATED MEET AT ARTS BUILDING]



Sustainable Food Systems
[BUTTE COLLEGE, ARTS]
Bruce Hicks, Tip Wilmarth,

Steve DeMaggio, Megan Luke

The Butte College Agriculture Department has several ongoing projects with a focus on sustainable practices; Certified Organic Grapes, Composting of cafeteria and other organic waste materials, Certified organic fruit orchard, and more.

college recently received approval from its Board of Trustees to complete its Phase III solar project, which adds approximately 15,000 solar photovoltaic panels or 2.7 MW DC to its current 1.85 MW or 10,000 solar panels. This project will ultimately make the college the largest solar producing college in the world—for a system total of 4.55 MW DC of clean renewable energy generation capability. The college will generate over 6.381 million kW hours per year—enough electricity to power over 9,200 average-sized homes, or the equivalent of removing over 6,000 passenger cars from the roadways.

most recent and exciting area of development.



Sustainability Resource Center Grand Opening
[BUTTE COLLEGE, SSG 101]

Dr. Debra Rowe

The Sustainability Resource Center is a place for students, staff, and faculty to further educate themselves on sustainability issues and become involved in the efforts at Butte College, the community, and beyond. The Center has a small library of books, DVDs, magazines, and other publications related to sustainability. It also provides support to students on writing assignments and presentations relating to sustainability. The Sustainability Resource Center is located in Swing Space G (SSG) Room 101.



Scenario Village and Solar Training Systems Tour
[BUTTE COLLEGE, ARTS]

Jon Stallman

The Scenario Village will be a state-of-the-art hands-on training facility for police, fire, building inspection, clean energy, and green construction students. The area is designed with twelve buildings themed with Healthy Home, Energy Efficiency, and Green Building Design and Materials. This life-like community including streets, a composting toilet, green buildings, and sustainable landscaping is completely designed, developed, and constructed by Butte College students for ongoing use within those departments. The project is a work in process with three of the twelve buildings under construction. Included in this tour is a look at our solar training roof and ground mount systems for hands-on practice and industry readiness. Come join us for a walk around our



AS, CSU RARE Exhibit at Recology
[BUTTE COLLEGE, ARTS]
Marley Zelay

The Recycling and Rubbish Exhibit (RARE) is a Butte County program that teaches elementary school students about trash and our environment. R.A.R.E. focuses on the 4 R's (Reduce, Reuse, Recycle, and Rot) and how these four words can help us live a healthier lifestyle and create a healthier environment. Come explore the Exhibit yourself and our over twenty interactive displays, such as the walk-through compost pile, the history of trash display, and the 6 ft. tall trash can!

Bus from Butte to RARE Exhibit. RARE Exhibit is located: 3097 Suite #2 Southgate Ln. Chico.



Sustainable Art & Architecture Exhibition
[BUTTE COLLEGE, ARTS 106]

Alexandra O'Neil

Sustainability Conference participants and community members are invited to Sustainable Art and Architecture, an exhibition juried by the community and held in the Butte College Art Gallery (ARTS 106) from 3:30-6:00 PM. The exhibition reflects on the role of the arts in fostering a sustainable society. Refreshments will be served.



Tour of the Butte College Campus Solar Arrays
[BUTTE, COLLEGE, ARTS]

Butte College Facilities Staff

This session will tour the campus solar arrays from Solar Phase I and Phase II, and will discuss the start of Solar Phase III. The

TOUR BUS SCHEDULE

TAKE THE BUS TO THE BUTTE COLLEGE CAMPUS

Bus#	Departure	School	Location	Arrival	School	Location
1	7:45 am	Chico	SSC	8:15 am	Butte	1—GYM
2	8:00 am	Chico	SSC	8:30 am	Butte	1—GYM
Van Shuttle	9:45 am	Butte	1—GYM	9:55 am	Butte	3—LRC
3	9:15 am	Chico	SSC	9:45 am	Butte	4—Loading Zone
4	12:00 pm	Butte	SSC	12:30 pm	Chico	SSC
5	12:40 pm	Chico	SSC	1:15 pm	Butte	2—ARTS
Recology/R.A.R.E. Tour	3:30 pm	Butte	2—ARTS	12:30 pm	Recology	Recology
Recology/R.A.R.E. Tour	4:15 pm	Recology	Recology	4:45 pm	Chico	SSC
6	5:00 pm	Butte	2—ARTS	5:30 pm	Chico	SSC
7	5:30 pm	Butte	2—ARTS	6:00 pm	Chico	SSC

SSC Location: Student Services Center—Ivy Street Loading Zone

Recology: 3097 Southgate Lane—Chico

Location Key: 1—GYM, 2—ARTS, 3—LRC, 4—Bus Loading Zone/SAS

Driving a Car?—Use Parking Lot 1 near the GYM



SATURDAY SCHEDULE CHICO STATE



9:00–10:00 KEYNOTE SPEAKER, CHICO STATE—DAVID COBB



How “Corporate Personhood” Legalizes Environmental Destruction and What We Can Do About It

[BMU 210]
David Cobb

Sustainability is achievable, but too often large multinational corporations prevent us

from achieving it. Cobb will provide a historical and legal analysis for how corporations have hijacked our social and political institutions.

10:00–11:00 CONCURRENT SESSIONS, CHICO STATE



What is it to Live a Good Life? What Might the Role of Wilderness Be in Living a Good Life?

[BMU 312]

Randy Larsen

What is important? What do you value? What is a good life? How ought you to live? This discussion considers John Muir’s conception of the Good Life and the central role of Nature in living it.



Celebrating Living and Educating Sustainability

[BMU 204]

Jessica Jones

This presentation will highlight the club, “Students for Sustainable Communities,” efforts in bringing sustainability onto our Community College Campus, how we are integrating and working with our surrounding community and how we are reaching toward becoming a statewide organization.



Community Gardens in Chico

[BMU 304]

Stephanie Elliot, Max Kee

Come learn how we are helping Chico grow food from front yard gardens to converted basketball courts.



Resource Depletion and Population Growth as Barriers to Sustainability

[BMU 303]

Peter M.J. Hess, Richard J. McDonald

We will examine oil as the first of several critical resources that will decline dramatically. Discussion of other resources will show that the “electric economy” is equally unsustainable. We will discuss how the population will decline, either by resource wars, famine, and disease, or by comprehensive sustainability education and population reduction through natural attrition.



Personal Lifestyle & Motivation

[BMU 314]

Tyler Hartrich

The talk focuses on ways that individuals can live more sustainable by making “green” decisions within their day-to-day lifestyles. The talk demonstrates how we can play a part in devising sustainability throughout our lifestyles and in our careers.



Children in the Fields: Social Equity

[BMU 209]

Brandon Louie

Social equity is a key facet of sustainable agriculture, yet it often receives the least amount of attention. This session will focus on the issues that farmworker youth are currently facing in the United States and efforts being undertaken to make “fair food” as popular as organic and local food.



Sustainable Paths for the Future – Student Session

[BMU 210]

Debra Rowe

Student session with Deb Rowe.

11:00–12:00 CONCURRENT SESSIONS, CHICO STATE



Challenging Corporate Rule, Creating Democracy—An Introductory Workshop

[BMU 314]

David Cobb

Corporations have become the dominant institution of our time. A movement is growing to claim our sovereign power, make corporations subordinate and put ‘We the People’ back in charge. This workshop teaches the history and context for corporate power and will help participants gain skills and knowledge necessary to reclaim our democracy.

By working with AS Sustainability, local waste removal companies, as well as the City of Chico, we hope to aid both tenants and landlords in their efforts to improve recycling habits.



CoFed: Creating Sustainable, Community-Run Foodservice on Your Campus

[BMU 304]

Roger Tuan

We’ll be talking about a new initiative that is training students across the West Coast to build hubs for sustainability on their campus - and student-run cafes that sell sustainable food at affordable prices! Come be inspired by the success stories and learn more about how you can bring this model to your campus.



Concrete—The Sustainable Building Material

[BMU 312]

Tim Hostettler, Greg Guercia

Concrete has been around for thousands of years, making it exceedingly sustainable by virtue of its lifecycle—in addition, new technologies have improved concrete to the point where it is one of the most sustainable building materials available.



Right to recycle

[BMU 209]

Cliff Friedman

Chico’s Municipal Code states that multi-family residences must provide one 64-gallon recycling receptacle for every 10 units, however many offer no recycling services whatsoever.



Project Implementation Strategies by Chico State Green Campus

[BMU 210]

Jacquelyn Mercure, Natalie Streiffer, Jeff Kell

A look at recent projects implemented by the Chico State Green Campus team and the strategies students can use to implement similar projects on their campuses. Also includes an interactive session where participants will brainstorm projects.



11:00–12:00 CONCURRENT SESSIONS CONTINUED, CHICO STATE



Job Creation Through Flood Plan Habitat Restoration
[BMU 204]

Jessica Bourne

River Partners discusses the economic impact of its mission-driven work and how, as an environmental nonprofit, it brings jobs to the region and generates demand for local goods and services. As a case study, it supports

recent research positing that investment in the restoration/reforestation sectors is an effective strategy for jobs creation.



Veggie Voyagers
[BMU 303]

Chris Nelson, Michael Pike

The veggie voyage was a 9 1/2 month journey

around the US and Canadian wild lands. The workshop will detail wild areas along the loop, explain threats to wild habitat and detail how to use waste vegetable oil to travel in a diesel vehicle, based on our extensive experience.

2:00–3:00 CONCURRENT SESSIONS, CHICO STATE



Intentional Living- Where We Are at Year Two
[BMU 303]

Sherri Scott, Sammey Zangrilli, Chris Weever, Katrina Djberof

The GRUB Cooperative has just completed year two. There are 14 of us living together and trying to do great things for ourselves, the land on which we live, and our greater community. We live on 40 acres just outside of town. Come learn how we live day-to-day.

to electronics. This presentation focuses on a return to engagement with our world through disengaging ourselves from devices and re-engaging with the world. This presentation will argue that only through a return to these focal practices and engagement can we begin to achieve sustainability.

systemwide Chancellor's Office, to obscure student research projects at individual campuses. The public and the legislature are finally receptive to hearing about them. How can we get the word out?



Implementing Sustainability in the Business and University Community –(SCOOP)

[BMU 304]

Christopher Murphy, Eli Crispi, Evanne St. Charles, Ashley Dutra, Tony Capone

Learn how sustainability can be implemented in your work environment whether it is on campus or a business in the community. You will hear from two initiatives, which perform departmental assessments as a way to increase awareness of and action toward sustainable practices.



Is The Chico General Plan Sustainable?
[BMU 210]

Robin Huffman, Grace Marvin, Pamela Posey

Sustainable growth is smart growth. Presenters will discuss the challenges of impressing elected officials and governmental staff with what a sustainable general plan would really look like. Find out what these advocates recommend and how you can help influence the process of local development.



Small Manageable Tasks- Advocating Being the Change You Wish to See in the World

[BMU 312]

Anthony Gamboa

It is often heard that changing the world, or even changing interpersonally may be "too hard" or "too time consuming." This lecture/workshop will provide the basic tools for starting potentially life-altering changes that don't come across as intimidating for those who wish to embrace change.



Growing Grebes at Thermalito Afterbay
[BMU 204]

Scott Huber

Thermalito Afterbay is home to the fourth largest breeding colony of aechmophorus grebes in Northern California. Settlements from California oil spills have funded restoration projects focused on increasing breeding success of these declining species. Learn about grebes, their elegant courtship rituals, and how a local group is working to help.



Sustainable life habits: returning to focal practice
[BMU 314]

Ronda Levine

Often, we rush through our days connected



Communicating About Sustainability Throughout the CSU: A Message Whose Time Has Come

[BMU 209]

Robert Hartman

Numerous sustainability initiatives have been and are now being undertaken throughout the CSU System, from capital projects coordinated by the

3:00–4:00 CONCURRENT SESSIONS, CHICO STATE



Chico Based Green Home Design. Building Company
[BMU 209]

Todd Harris and Bill Yoskowitz, SiPerior Homes

Located in Chico, California, SiPerior Homes serves Northern California. We are composed of two environmentally concerned home builders who over the years have realized the short-comings of traditional stick-and-batting construction, who have scrutinized various alternative construction methods, and who have identified Structural Insulated Panels as the superior home building material with which to promote green building.



Solo Female Cyclist Seeks Couch
[BMU 312]

Michelle Wurlitzer

Wearing a bluebird costume and pedaling a steel-framed bicycle with yellow fenders and handmade recycled fire hose saddlebags, Michelle Wurlitzer explores California at human speed. She will tell the story of how bicycle travel changed her outlook on life.



2010 Sustainable Business Action Plan
[BMU 303]

CJ Kalin

The purpose of the Contra Costa County Business Collaborative is to inspire and support businesses in their effort to focus on the triple bottom line: people, planet, profit. It provides resources such as education, sustainable purchasing policies, joint purchasing agreements, and financial incentives.