

NON-CHEMICAL TECHNIQUES BEST MANAGEMENT PRACTICES TRAINING

Richard C. Trudeau Center, 11500 Skyline Blvd., Oakland, CA 94619, 25 Feb 2020

JP Marié

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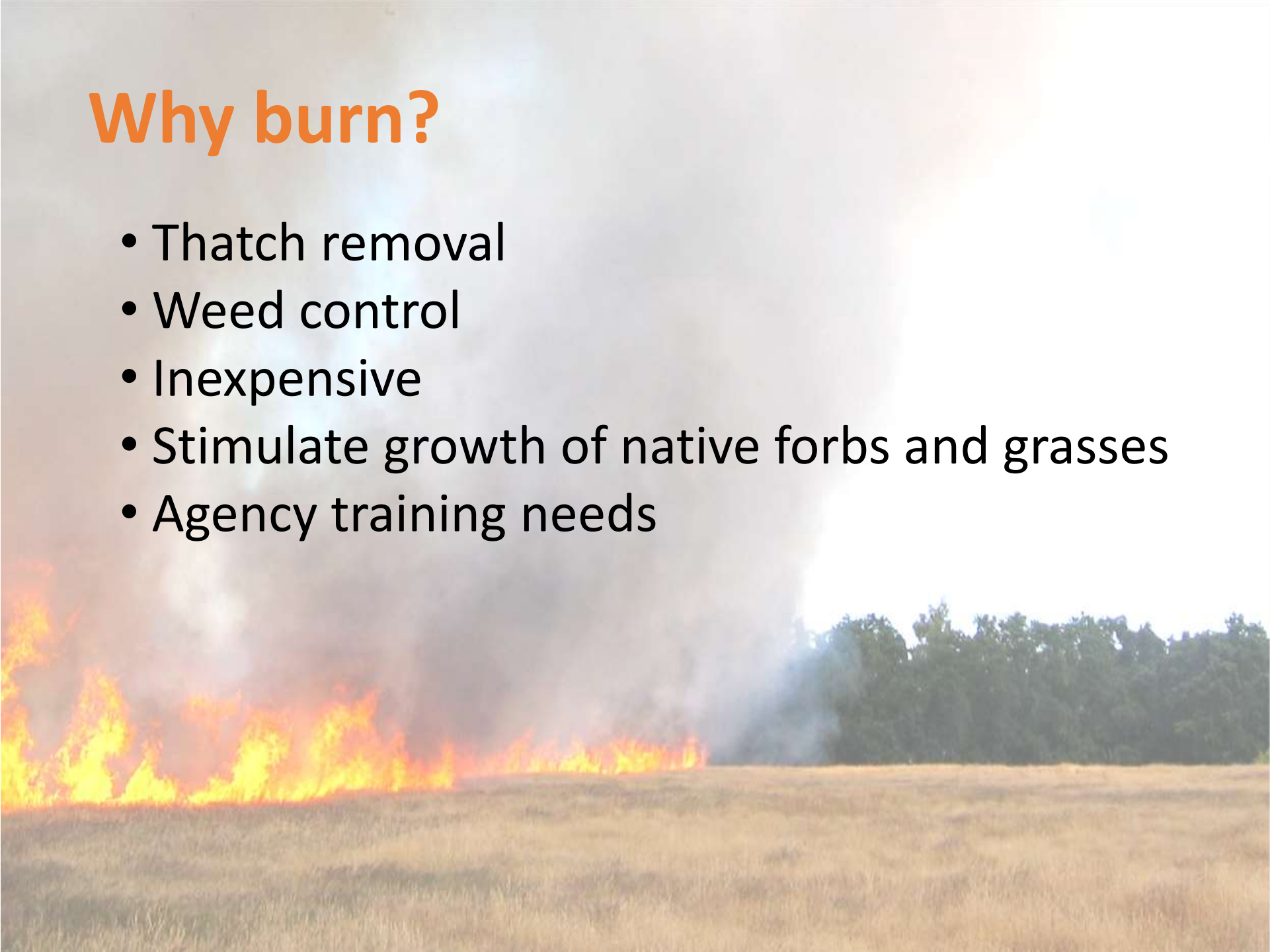


Fire as a Grassland Management Tool



Why burn?

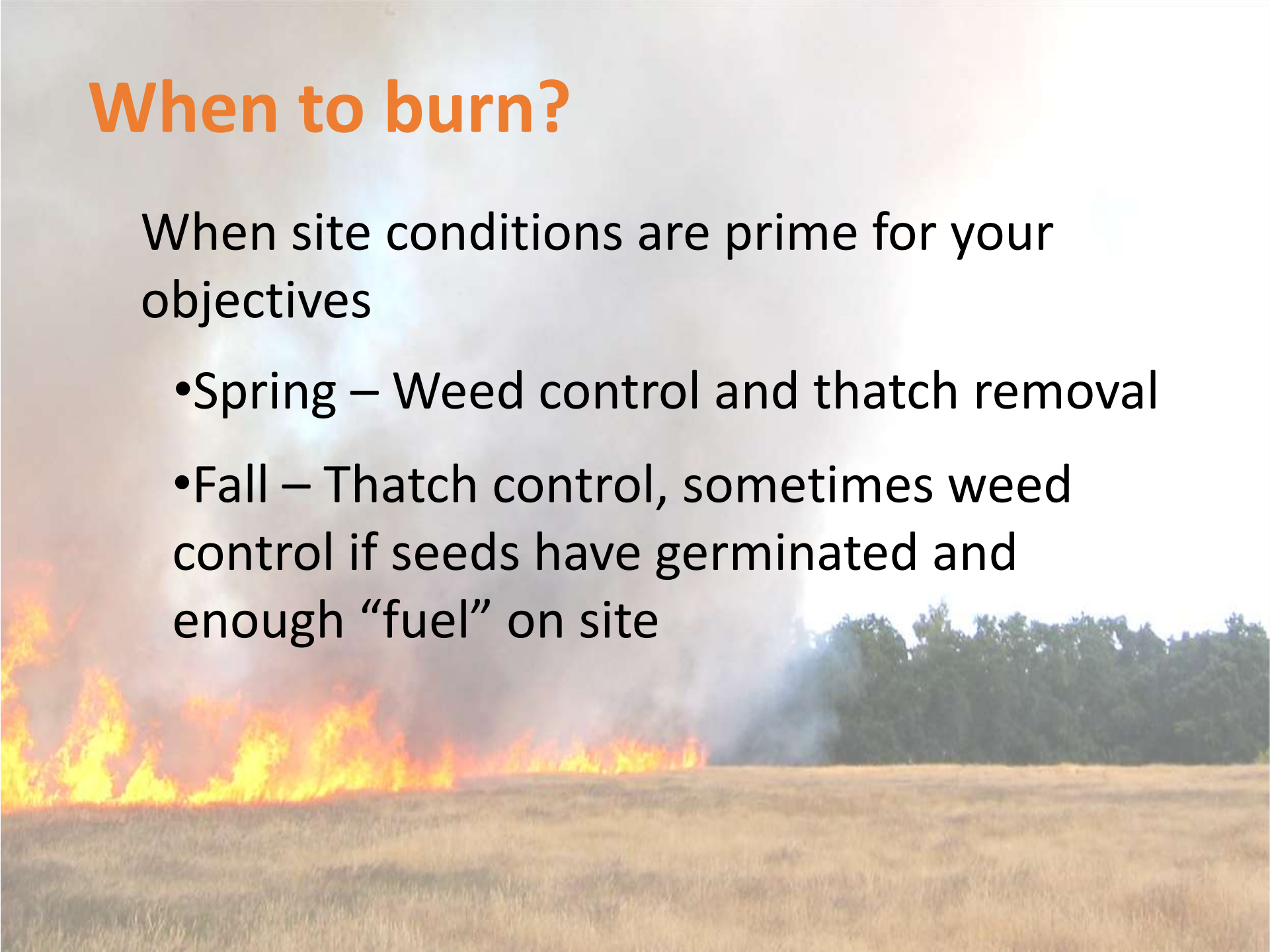
- Thatch removal
- Weed control
- Inexpensive
- Stimulate growth of native forbs and grasses
- Agency training needs



When to burn?

When site conditions are prime for your objectives

- Spring – Weed control and thatch removal
- Fall – Thatch control, sometimes weed control if seeds have germinated and enough “fuel” on site



How to burn?

Administrative

- Cooperate with local fire district or department on training burns





How to burn?

Administrative

- Burn permit from local air quality district.
- Burn permit from local Fire Department, if necessary.

BURN PERMIT NO. _____

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT
1947 Galileo Ct, Ste. 103; Davis, CA 95618
APPLICATION AND PERMIT FOR AGRICULTURAL BURNING
Ag Burn Line (530) 757-3660 or Toll-Free Within 916, 530 & 707 (800) 246-3660

This form can be filled in on-line but cannot be submitted on-line. Print, sign and mail with check to the above address.

If filling in by hand, please print clearly and use ink. For additional information, procedures and instructions go to:

www.ysaqmd.org/burn-ag.php

FIRE DISTRICTS (list all applicable districts): West Plainfield Fire Protection District, UC Davis Fire Department
NAME OF APPLICANT: Andrew Fuls TELEPHONE#: (530) 752-0763
OWNER OF OPERATION, IF DIFFERENT THAN APPLICANT: UC Davis, Putah Creek Riparian Reserve
ADDITIONAL TELEPHONE #S: Cellular: (530) 219-7618 Pager: () - -
MAILING ADDRESS: One Shields Ave. 376 Mrak Hall Davis CA 95616
(STREET OR P.O. BOX) (CITY) (STATE) (ZIP CODE)
LOCATION OF BURN SITE(S): Russell Ranch, Russell Blvd and Road 95A, UC Davis between Old Davis Road and Road 98 along Putah Creek.
(LIST COUNTY RD'S, NEAREST CROSS RD. (ANY INFORMATION TO ESTABLISH THE EXACT LOCATION))

ACREAGE/FEE COST:	Total Acreage	Per Acre Charge	Total Due
Base Fee:	n/a	n/a	\$ 30.00
Field Stubble:	<u> </u> X	\$1.25 =	\$ <u> </u>
Rice Stubble:	<u> </u> X	\$1.50 =	\$ <u> </u>
Orchard:	<u> </u> X	\$.85 =	\$ <u> </u>
Misc. Burning:	<u>126</u> X	\$1.00 =	\$ <u>126</u>
TOTAL DUE:			\$ <u>156</u>

CONDITIONS: READ THESE CONDITIONS PRIOR TO BURNING (continued on page 2)

1. This permit is valid only on those days which are not prohibited by the Air Resources Board pursuant to Section 41855 of the Health & Safety Code or by the Yolo-Solano Air Quality Management District (Y-S AQMD).
2. All burning must be approved and scheduled by the Y-S AQMD office. Call number listed above.
3. All field crop stubble must be placed on the "ready to burn" list. Call number listed above.
4. On any day that burning is to be done, the fire district must be notified before ignition and the burning is to be conducted in accordance with the conditions specified below. Note: If your fire district is not a manned station, contact Yolo County Fire Control at (530) 666-8920 or Solano County Fire Control at (707) 421-7090 or Dixon area at (707) 678-7080. For east Davis call (530) 747-5400.
5. Burning ignition hours are 10:00 a.m. to 5:00 p.m. for field stubble material (Sept. through Jan. 10 a.m. to 3 p.m.) and 8:00 a.m. to 5:00 p.m. or 1 hour before sunset, whichever is earlier, for other agricultural burning, unless otherwise specified by State Law, Fire District, or the Y-S AQMD.

How to burn?

Administrative

- State Air Resources Board requires a Smoke Management Plan.

SMP Project Description (Complete This Page for ALL PRESCRIBED BURNS)*	
1.1 Project Name: <u>Russell Ranch Field M</u>	Project Location: (Report at least one of the following location descriptions. Provide attachment as needed.)
1.2 Permittee Name: <u>UC Davis, Putah Creek Reserve</u>	1.8a Legal: T _____ R _____ S _____ M&B _____
1.3 Permittee Address: Street: <u>One Shields Ave, 376 Mark Hall</u> City: <u>Davis</u> State: <u>CA</u> Zip: <u>95616</u>	1.8b Lat/Long: Lat <u>38</u> (deg.) <u>34</u> (min) <u>41</u> (sec) Long <u>121</u> (deg.) <u>51</u> (min) <u>21</u> (sec)
1.4 Permittee/Field Contact: <u>Andrew Folks</u>	1.8c UTM: Zone: _____ N _____ m, E _____ m
1.5 24-hour Phone/Pager: <u>530-219-7618</u>	1.9 Project Elevation (msl feet): Top: _____ Bottom: _____
1.6 Project Location (Counties): <u>Yolo</u>	1.10 Land Owner Name: <u>UC Davis</u>
1.7 Nearest Town: <u>Davis</u>	Street: <u>One Shields Ave</u> City: <u>Davis</u> State: <u>CA</u> Zip: <u>95616</u>
1.11 Proposed Time of Year for Burn (Month/Year): <u>Nov. 2008</u>	
1.12a Is the Primary Purpose of the Burn for Fire Hazard Reduction? <u>no</u>	
1.12b Burn Type (Check one): <input type="checkbox"/> Forest Management: <input type="checkbox"/> Range Improvement <input checked="" type="checkbox"/> Wildland Vegetation Management <input type="checkbox"/> Natural Ignition (see General Information on page 3 for description of these burn types)	
1.13 For Range Improvement Burns, Check Vegetation Management Objective: <input type="checkbox"/> Wildlife or Game Habitat Improvement <input type="checkbox"/> Livestock Habitat Improvement <input type="checkbox"/> Initial Establishment of an Agricultural Practice on Previously Uncultivated Land	
1.14 Vegetation Type (Percentage): <input type="checkbox"/> Brush <u>100</u> <input type="checkbox"/> Grass <input type="checkbox"/> Timber Litter <input type="checkbox"/> Timber Slash <input type="checkbox"/> Other (Describe): _____	
1.15 Vegetation Condition: <input type="checkbox"/> Machine Pile Burn <input type="checkbox"/> Hand Pile Burn <input type="checkbox"/> Understory <input type="checkbox"/> Landing Pile Burn <input checked="" type="checkbox"/> Broadcast	
1.16 Project Area: <u>14</u> (acres) 1.17 Number of Piles: _____ 1.18 Average Pile Size: _____	
1.19 Total Project Fuel Loading: <u>28</u> (tons vegetation) 1.20 Particulate Matter Emissions: <u>0.196</u> (tons PM10) (Use Emissions Factors Tables on pages 7-8 for assistance with emissions calculation)	
1.21 Emission Factor Table Used or EPA-Approved Calculation Method: <u>Pages 9, 10 of this form</u>	
1.22 Preferred Ignition Hours for the Fire: <u>9am - 2pm</u>	
1.23 Expected Burn Duration (ignition to complete extinction): _____ Total Time: <u>2</u> (hours or days)	
1.24 Fuel Drying Time and Conditions prior to ignition: <u>dry grass, morning dew or recent rain</u>	
1.25 Ignition Conditions to Minimize Smoke (complete as appropriate): No More Than _____ Piles At One Time, and No More Than _____ Piles Per Hour, or _____ Piles Per Day (pile burning) No More Than <u>14</u> Acres Per <u>1</u> Hour, and No More Than <u>14</u> Acres Per Day (non-pile burning) No Less Than _____ Hours Between Ignitions. Other: _____	
1.26 Ignition Technique: <u>drip torch</u>	
1.27 Expected Fire Intensity: _____ High <input checked="" type="checkbox"/> Low	
1.28 It is the responsibility of the permittee to ensure that conditions of the SMP are met on the day of the burn. The permittee will obtain authorization to burn from the Air District contact listed below no more than 24 hours prior to ignition.**	
1.29 Air District Name: <u>Yolo Solano Air Quality</u>	1.31 Contact: <u>Dave Smith</u>
1.30 Address: <u>1947 Galileo Ct. Suite 103</u> <u>Davis, CA 95618</u>	1.32 24-hour Telephone: <u>530-757-3670</u>
	1.33 Fax: <u>530-757-3670</u>
	1.34 Email: <u>dsmith4@ysaqmd.org</u>

The permittee will report public smoke complaints to the Air District per the procedures described in the General Information section of this SMP on page 3.

Check as Applicable:

- ☒ This burn could have an impact on smoke sensitive areas – I have filled out and attached all of Section A.
- ☒ This burn could have an impact on smoke sensitive areas and Air District policies require that information on meteorological conditions for ignition and contingency planning be provided – I have filled out and attached line items B.1 and B.2 of Section B.
- ☒ This burn is greater than 100 acres (or is estimated to produce greater than 10 tons of particulate matter) – I have filled out and attached all of Section B.

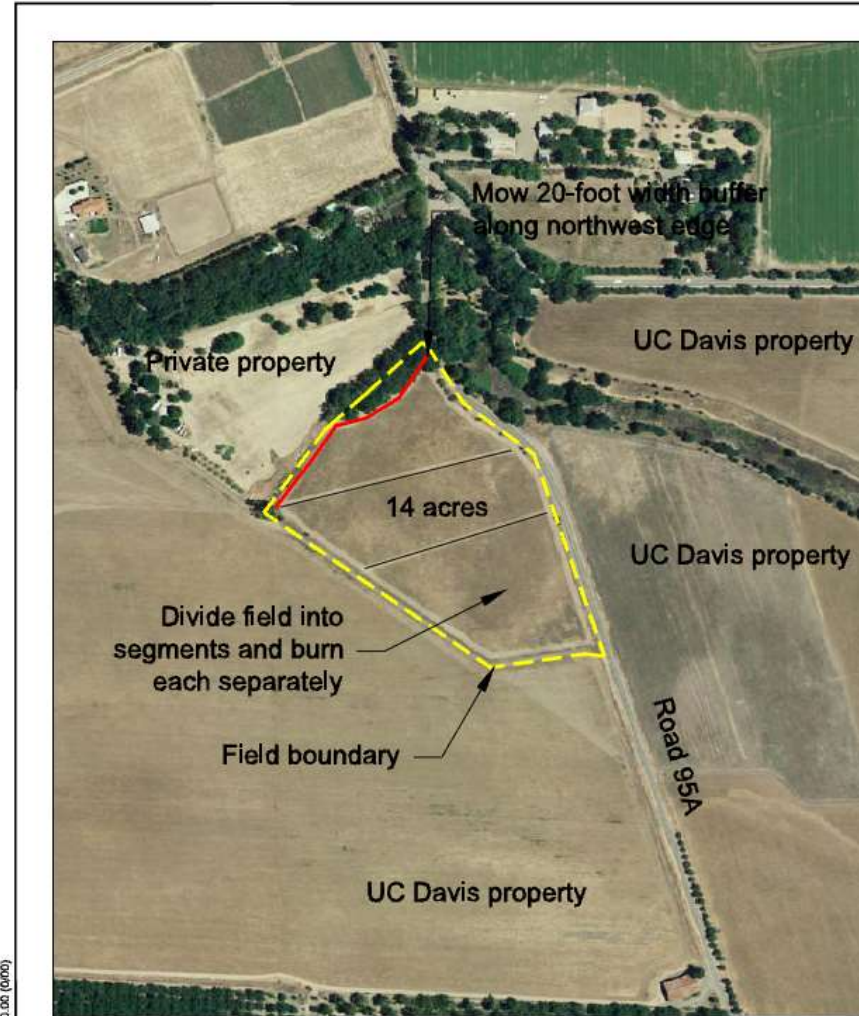
Preparer's Statement: To the best of my knowledge the information submitted in this application is complete and accurate.

SMP Preparation Date: 10/30/08
Preparer's Name (print): Andrew Folks Title: Putah Creek Reserve Manager
Preparer's Phone: (530) 752-0763
530 219-7618 cell
Preparer's Signature: Andrew Folks

Name of Authorized Representative in Control of the Property (if applicable): N/A

Permittee or Authorized Representative Signature: N/A
Signature Date: N/A

Burn plan



Russell Ranch Field M1 Fall 2008 Burn Plan.

1. Mow 20-foot width buffer along northwestern edge. All other edges have pavement or dirt ranch roads bordering the field.
2. Fill out burn checklist and have pre-burn inspection with Fire Department.
3. On day of burn, burn blackline on 20-foot mowed strip. Extinguish blackline with water truck.
4. Divide site into three sections (angle based on wind direction) and burn into the wind.
5. When burning site, start with a single ignition location, burning into the wind and near the end of the desired burn. This objective is to burn small sections of the parcel individually, rather than burning the entire parcel at the beginning of the burn operation. This, in cooperation with burning into the wind, will keep small the fire size at any one time.
6. Check for any remnant hot spots and extinguish with water truck. Remain on site for one hour after burn to ensure complete extinguishing of fire.



Day of Burn...

•Go/No-Go Checklist

UC Davis Putah Creek Reserve Prescribed Burn Checklist

Contacts:

Andrew Fulks, Reserve Manager, at 530-752-0763 or
JP Marié, Reserve Steward, at 530-304-3251.

Prior to conducting prescribed burns on the UC Davis Putah Creek Reserve, Reserve staff will meet at the burn site with a representative of the UC Davis Fire Department or West Plainfield, to review the checklist for pre and post-burn requirements. Once the requirements have been reviewed, the UC Davis Fire Department or local fire jurisdiction representative will then approve or deny initiation of the prescribed burn.

Site name Russel Ranch – Field M4

Site location Russell Ranch – south of Russell blvd.

Acreage 15

Date 9/17/09

Proposed date of burn November, 2009

Purpose of the burn

- ☐ Site preparation
- ☐ Weed control
- ☒ Thatch removal
- ☐ Grassland management
- ☐ Pruning disposal

Description of the burn unit Restored grassland, with thatch build-up from the last 3 years

Number of acres to be burned 15

Description of the fuels on the burn unit:

- ☒ Grass
- ☐ Thistles/other weeds
- ☐ Shrubs/brush
- ☐ Trees
- ☐ Slash/prunings

Pre-Burn

- ☐ Site plan prepared which outlines location to be burned.
 - ☐ Wind direction is suitable for burn
 - ☐ Appropriate fire breaks in place as needed
- Locations and treatment (eg. Mowing, disking, blackline, etc.)

Day of Burn...

Davis, California
Local Time: 5:20 PM PDT on October 15, 2009 (GMT -07) — [Set My Time](#)
Tropical Weather: [Tropical Depression Twenty-E](#) (East Pacific) to

Current Conditions
Davis, California (PWS)
Updated: 3 sec ago

 **73.6 °F**
Partly Cloudy

Humidity: 70%
Dew Point: 63 °F
Wind: 2.2 mph from the NNW
Wind Gust: 2.2 mph
Pressure: 29.86 in (Falling)
Heat Index: 76 °F
Visibility: 10.0 miles
UV: 1 out of 16
Clouds: Few 2300 ft (Above Ground Level)
Elevation: 60 ft

Rapid Fire Updates:
☒ Enable ☐ Disable

Source for Current Conditions:
☒ PWS & Airport ☐ Airport Only

[Weather History for This Location](#)
Select a source for your current conditions:
Davis, CA

[Raw METAR](#) **Aviation** [Weather Radio](#)

Flight Rule: VFR (KSMF)
Wind Speed: 11.0 kts.
Wind Dir: 337° (NNW)
Ceiling: Unlimited

[Full Report](#) — [Pilot Maps](#)

Radar [Webcam](#)

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[Trip Planner](#)
[Weather Stations](#)



Day of Burn...

Personal
Protection
Gear

NOMEX fire suit,
helmet, goggles,
gloves



Backpack
'smokechaser'
water bag

2-Way radios



Day of Burn...

Wildfire
Prevention
Equipment



Burning...



Spring Burn



Burning...



Spring Burn



Burning...



Fall Burn



Burning...



Fall Burn



Results



Results



