



MARSH MANAGEMENT FIRE SMOKE MANAGEMENT PLAN

(Please complete the following information)

1. Property Number & Name: _____ 2. Total Acreage to be burned: _____
3. Property Location: (Provide only one of the following location descriptions)
 Legal: Township _____ Range _____ Section(s) _____ **or**,
 Lat/Long: North Latitude _____ (deg.) _____ (min) _____ (sec)
 West Longitude _____ (deg.) _____ (min) _____ (sec)
4. Fire Agency: _____ 5. County: _____
6. Burner's Name: _____ 7. Phone Number _____
8. Burner's Address (street, city, zip code): _____

Note: Please include 3 copies of your property map with this document

9. Field Contact Name: _____ 10. 24-Hour Phone Number _____
11. Burn Season: Fall / Spring Year _____
12. Proposed maximum number of acres to be burned per day: _____
13. Specify number of people on burn site during burn: _____
14. Vegetation type(s) to be burned:

Tall Emergent (cattails, tules, phragmites, etc.)						Number of Acres: _____	
Average % cover	Average height						
	0 to 1 ft	1 to 5 ft	5 to 8 ft	8 to 10 ft	10 ft and over		
76-100%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
52-75%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
26-50%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
0-25%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Low Emergent (salt grass, baltic rush, cocklebur, etc.)						Number of Acres: _____	
Average % cover	Average height						
	0 to 1 ft	1 to 5 ft	5 to 8 ft	8 to 10 ft	10 ft and over		
76-100%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
52-75%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
26-50%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
0-25%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Upland Grasslands (Annual grass, rye, vetch, etc.)

Number of Acres: _____

Average % cover	Average height				
	0 to 1 ft	1 to 5 ft	5 to 8 ft	8 to 10 ft	10 ft and over
76-100%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
52-75%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26-50%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
0-25%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Describe the specific resource management objective(s) and goal(s) of burn:

- Eliminate pest weeds
- Open up seedbed for planting
- Other (specify): _____
- Change plant species composition to improve feed/cover
- Control invasive non-desirable vegetation

16. Have other activities (i.e., alternatives to burning) such as discing, mowing, or water management on the proposed burn site been considered or tried at achieving the desired habitat management objectives and goals of your property?

- YES
- NO

If no, explain why not (e.g., vegetation too thick to penetrate by mechanical means, soils are too wet, etc.)

If yes, explain the extent and success of your efforts. _____

17. Describe burn site preparation to be completed prior to burning to minimize potential adverse impacts:

- Create fire breaks
- Flood ditches prior to burning
- Minimize area to be burned with mowing and/or discing
- Other (specify): _____

18. Ignition technique and material to be used, Specify:

- Pressurized diesel torches
- Napalm or Blivets
- Fuses
- Commercial fuses
- Propane or LPG torches
- Commercial safety fuses
- Lighters or matches
- Commercial petroleum gel materials
- Commercial type ignition grenades
- Orchard Torches
- Drip Torches

19. Contingency actions or measures the burner will take in the event that smoke impacts begin to occur:

- Disc incremental firebreaks
- Flood fields and ditches
- Have water pump and hose readily available on-site
- Other (specify): _____

20. Contingency actions or measures the burner will take in the event that the burn is declared "out of control" and continues to advance after 3:00 p.m. or a peat fire is ignited and continues to burn after 3:00 p.m.:

- Disc incremental firebreaks
- Flood fields and ditches
- Other (specify): _____
- Attempt to extinguish fire with water pump and hose on-site
- Call 911 for fire department assistance

21. Range of surface wind conditions acceptable to burner for satisfactory burn:

Wind Speed _____ (minimum & maximum, miles/hour)

Wind Direction(s) _____

Note: depending on property location in the Suisun Marsh, a North wind blows smoke into Pittsburgh/Antioch, and a Southeast wind blows smoke into Fairfield and Cordelia.

22. Describe planned method(s) of estimation and interval of weather observations:

Method

- On burn site, visual
- Hand held anemometer
- Remote weather station (at clubhouse, etc.)
- Other (specify): _____

Frequency

- Every 30 min.
- Hourly
- Other (specify): _____

23. Identify all sensitive receptor areas within a 10-mile radius from the burn site and indicate the distance(s) and direction(s) from the burn site to each sensitive receptor area:

Smoke Sensitive Receptor Area	Distance (miles)	Direction From Burn Site

NOTE: Sensitive receptor areas are populated areas and other areas where smoke and air pollutants from a burn project can adversely affect public health and welfare. Examples of such areas include, but are not limited to, towns, cities, highways, major roads, hospitals, nursing homes, schools and airports.

Landowner's Certification:

A Marsh Management Fire may be conducted by the designated burn applicant above for this property in accordance with all applicable rules and regulations. By signing below, I certify that the information submitted in this Smoke Management Plan is complete and accurate to the best of my knowledge.

Landowner's Signature _____ Date _____

Print Name _____ Phone Number () _____ FAX () _____

Mailing Address (street, city, zip code): _____



BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGULATION 5: OPEN BURNING

INSTRUCTIONS FOR COMPLETING A MARSH MANAGEMENT FIRE SMOKE MANAGEMENT PLAN (FORM MM-1) AND PAYMENT OF OPEN BURNING FEES

GENERAL INFORMATION & APPLICABILITY

Marsh Management fires are open, outdoor fires set for the purpose of improvement of marshland for wildlife habitat. A "marshland" is defined as a type of wetland periodically or permanently covered to a depth of up to 2 meters (6.6 feet) that supports low or tall emergent vegetation. Some examples are diked wetlands, seasonally managed wetlands, unmanaged tidal wetlands, sloughs and open bays.

All Marsh Management fires, irrespective of size, must be certified by the California Dept. of Fish & Wildlife (DFW), previously known as the CA Dept. of Fish & Game (DFG); require a Smoke Management Plan (SMP) approved in writing by the Air District; and require fee payment to the Air District **prior to burning**. In addition, a local fire agency burn permit is required prior to burning in the Suisun Marsh. For burns conducted outside of the Suisun Marsh, contact the local fire agency with jurisdiction at the burn site to determine how to comply with any requirements.

Smoke Management Plan (SMP) Submittal - Completed SMPs should be submitted to:

The CA Department of Fish and Wildlife
2548 Grizzly Island Road
Suisun, CA 94585

Submit your completed SMP as soon as possible prior to the desired burn season to optimize your opportunities to burn. Remember: Regulation 5 **requires** that the plan be received by the Air District at least 30 calendar days prior to the burn.

The SMP must include 3 copies of a detailed property map that identifies the area(s) to be burned (burn site and any interior unit contingency cutoff lines), and all access roads and gates to the property. Also, include an additional map showing the property's location within the marshland.

Marsh Management Fire (Marsh Burning) Operation Fee Payment – required prior to burning

Upon receipt of a completed SMP from the DFW, the Air District will send you an operation fee payment invoice. The operation fee amount will be based on the proposed "Total Acreage to be Burned" as indicated in Item #2 of the SMP and the corresponding fee in the new open burning operation fee schedule (See Table 1). The operation fee payment invoice will be sent to the landowner's mailing address or by FAX using the landowner's facsimile number as provided in the Landowner's Certification section of the completed SMP.

Operation Fee Payment – two options available

- **MAIL** a check, cashier's check or money order in the invoiced amount to BAAQMD, ATTN: Accounting, 375 Beale Street, Suite 600, San Francisco, CA 94105. Be sure to write the invoice number on your check.
- **PAY ONLINE** using VISA, MasterCard, American Express, Discover, debit card or pre-paid debit cards at: www.baaqmd.gov/payments.

MARSH MANAGEMENT FIRE SMP INSTRUCTIONS

Please read and follow these instructions.

Clearly write or print the requested information on the SMP (Form MM-1) and on any attachment as needed. **Completing all fields speeds up the evaluation and approval of your SMP.**

1. Property Number & Name: Give the Suisun Resource Conservation District (SRCD)-designated ownership property number(s) and the property or club name, if applicable. A single SMP may be used for more than one property number when the properties are adjacent and have the same owner.
2. Total Acreage to be Burned: Enter the total number of acres you are proposing to burn in the Burn Season indicated below. This amount will determine the corresponding Marsh Management Fire operation fee, which must be paid prior to burning.
3. Property Location: Give the property address (the actual physical location, not mailing address), and the legal description (township, range, and sections) **or** the north latitude and west longitude (in degrees, minutes, and seconds) of the property where the burn will be conducted.
4. Fire Agency: Provide the name of the fire agency that has jurisdiction at the burn site. The three fire agencies with jurisdiction in the Suisun Marsh are the Cordelia, Montezuma, and Suisun Fire Protection Districts.
5. County: Enter the county where the burn will be conducted.
6. Burn Applicant's Name: Provide the complete name of the person who will be conducting the burn.
7. Burn Applicant's Phone Number: Enter the phone number of the person who will be conducting the burn.
8. Burn Applicant's Address: Enter the mailing address of the person who will be conducting the burn.
9. Field Contact Name: Provide the name of the person who can be reached by phone at the burn site or on the property during the burn.
10. 24-Hour Phone Number: Provide the phone number of the field contact or person responsible for the burn who can be reached at any time on a day when burning occurs.
11. Burn Season: Indicate whether you plan to burn during the fall burning period (September 1 through October 15) or the spring burning period (March 1 through April 15), and during what calendar year.
12. Proposed Maximum Number of Acres To Be Burned Per Day: Enter the maximum number of acres you are proposing to burn on any given day.
13. Specify Number of People on Burn Site: Indicate how many people will be on the property prior to and during burning to document surface wind conditions, observe smoke behavior, and to ignite, maintain control of, and extinguish the fire.
14. Vegetation Types to Be Burned: (a) enter the estimated number of acres to be burned by vegetation type (i.e., tall emergent, low emergent, and upland grasslands). (b) for each vegetation type, characterize the arrangement of the vegetation, expressed as average percent cover and average height.

Example: Let's say that you are planning to burn 20 acres of tall emergent vegetation, and you estimate that 25% of the acreage is covered with vegetation with an average height of 5 feet and the remaining 75% is covered with vegetation with an average height of 9 feet. To

provide the information from this example, enter '20' as the number of acres in the "tall emergent" vegetation type section of the SMP form. Then, in the same section, check the "1 to 5 ft" box on the line that indicates 0-25% coverage and the "8 to 10 ft" on the line that indicates 52-75% coverage.

15. Specific Resource Management Objective(s) and Goal(s) of Burn: Describe the resource management objectives and goals of the burn you are proposing.
16. Consideration of Non-Burning Alternatives: Indicate whether any alternatives to burning have been considered or tried to achieve the resource management objectives and goals of your property. If "yes", explain the extent and success of your efforts. If "no", explain why alternatives to burning were not considered or tried.
17. Burn Site Preparation: Describe what preparations to the burn site you will complete prior to burning to minimize the risk of an "out of control" fire, adverse smoke impacts, and of exceeding burn acreage and burn hour limits.
18. Ignition Technique To Be Used: Describe the technique and materials you are planning to use to ignite the fire.
19. Contingency Actions or Measures - Smoke Impacts: Describe what actions **will be taken** if smoke from the fire adversely impacts any sensitive receptor area. This information may include your ability to extinguish the fire with equipment on the property or with assistance from a fire protection agency.

Note: "Sensitive receptor areas" are populated areas such as towns or cities, major roads, hospitals, schools and airports.
20. Other Contingency Actions or Measures: Describe what actions **will be taken** if the fire is declared "out of control" or continues to advance after 3:00 p.m., or a peat fire is ignited and continues to burn after 3:00 p.m.
21. Range of Surface Wind Conditions: Provide a proposed range of surface wind directions and a minimum and maximum wind speed range for the time of year under which burning is to be conducted. Note: This weather prescription **must be present** prior to ignition and the prescription **must be verified** during any burning.
22. Method of Estimation and Interval of Weather Observations: (a) describe the method you are planning to use to determine the surface wind speed and wind direction prior to ignition; and (b) indicate how frequently you will verify the wind conditions at the burn site during the fire (hourly, ½ hour, etc.).
23. Distance and Directions to Sensitive Receptor Areas: (a) identify **all** sensitive receptor areas within a 10-mile radius from the burn site; and (b) provide the distance(s) in miles and the compass direction(s) from the burn site to **each** sensitive receptor area identified.
24. Landowner's Certification: To complete the SMP, a landowner of the property where the burn is proposed must certify that the information submitted is complete and accurate. To certify the information, the landowner should sign and print their name, include their phone number and facsimile (FAX) number, mailing address and the certification date.

Table 1: Marsh Management Fire (Marsh Burning) Fees

Proposed Acreage to be Burned	Operation Fee
≤50 acres	\$495
> 50 but ≤150 acres	\$673
> 150 acres	\$849