CALIFORNIA Water Boards

Central Valley Regional Water Quality Control Board

Notice of Intent and Instructions for Category 5A, USFS Post-Fire Activities

(Application for General Order for Timberland Management Activities Order Number R5-2017-0061)

National Forest:

Project Name:

Ranger District Information:
Ranger District:
Address:
City: State: Zip Code:
Phone: Email:

Name, Phone Number, and Email Addresses of Contact Person(s):
Name: Name:
Phone: Phone:
Email: Email:

Project Location:
Township: Section(s): Range: Acreage:
Township: Section(s): Range: Acreage:
Township: Section(s): Range: Acreage:

Average Elevation: Total Acreage:

Geospatial file submitted: ☐ Yes ☐ No

Planning Watershed Name(s):

CalWater Number(s):

Average Annual Rainfall:

Has or will the watershed surpass the Threshold of Concern (TOC) as a result of this project? ☐ Yes ☐ No

Brief Project Description:

Notice of Intent for Category 5A

Project Name:

Yarding Method:
☐ Ground Based Acreage:
☐ Cable Acreage:
☐ Other (specify): Acreage:

Site Prep (check all that apply):
☐ Pesticides (if checked, check one of the boxes below):
  ☐ Will submit a Post-Fire Management and Reforestation Plan
  ☐ Will adhere to conditions in Part III.F.3.c.ii of Order
☐ Pile Burning
☐ Mechanical
☐ None
☐ Other (specify):

Burn Severity (fill in all that apply):
☐ Low Approximate acreage:
☐ Moderate Approximate acreage:
☐ High Approximate acreage:

Roads:

Road construction:	feet	Road reconstruction:	feet
Roads in RCA/SMZ:	feet	Road abandonment:	feet

Watercourses:
Watercourses within Project area (check all that apply):
☐ Fish-Bearing ☐ Perennial ☐ Intermittent ☐ Ephemeral

Domestic Water Supply intakes within one mile downstream of Project Area: ☐ Yes ☐ No

Work Proposed within RCAs/SMZs?: ☐ Yes ☐ No (If yes, include description of work in attached addendum)

Are **new or reconstructed permanent** watercourse crossings proposed within the Project area **not** associated with Significant Existing or Potential Erosion Sites:
☐ Yes ☐ No (If yes, include in Table 1 and map(s))

Are watercourse crossings planned for abandonment: ☐ Yes ☐ No (If yes include in map)

Notice of Intent for Category 5A

Project Name:

Erosion Sites:
Are there Significant Existing or Potential Erosion Sites located:
1.) Within the fire salvage area, including areas proposed for reforestation with pesticide applications:
☐ Yes ☐ No (If yes, include in Table 1 and map(s))

2.) On Project access roads that receive drainage from the burned area:
☐ Yes ☐ No (If yes, include in Table 1 or reference the information if submitted for another Project)

Certification:
Must be signed by Legally Responsible Official (Forest Supervisor or District Ranger.
I, the Legally Responsible Official, hereby certify under penalty of perjury that the timber harvesting Notice of Intent above accurately represents site conditions, meets all applicable provisions of the Central Valley Regional Water Quality Control Board's Order Number R5-2017-0061, including all eligibility criteria and conditions, and that any discharge resulting from the above activities will be in compliance with and is expected to comply with all requirements of applicable water quality control plans.

Name:

Title:

Signature: _____ Date:

Project Name:

Table 1. Erosion Site Table for Significant Existing or Potential Erosion Sites (SEPES) and New/Reconstructed Watercourse Crossings (attach 100-year crossing calculations where applicable)

ID[1]	**GPS Coord**[2] (optional)	**New WC Crossing** (Y/N)	**Erosion Type**[3] (check applicable)	**WC Class**[4]	**Site Description**	**Existing Sediment Discharge** (yd^3)[5]	**Potential Sediment Discharge** (yd^3)[6]	**Proposed Treatment and/or Implementation Priority** (H, M, L)[7]
		☐ Yes ☐ No	☐ R, ☐ LD, ☐ WC ☐ L, ☐ CI, ☐ G					
		☐ Yes ☐ No	☐ R, ☐ LD, ☐ WC ☐ L, ☐ CI, ☐ G					
		☐ Yes ☐ No	☐ R, ☐ LD, ☐ WC ☐ L, ☐ CI, ☐ G					
		☐ Yes ☐ No	☐ R, ☐ LD, ☐ WC ☐ L, ☐ CI, ☐ G					
		☐ Yes ☐ No	☐ R, ☐ LD, ☐ WC ☐ L, ☐ CI, ☐ G					
		☐ Yes ☐ No	☐ R, ☐ LD, ☐ WC ☐ L, ☐ CI, ☐ G					
		☐ Yes ☐ No	☐ R, ☐ LD, ☐ WC ☐ L, ☐ CI, ☐ G					

[1] Unique crossing ID created by Discharger for mapping purposes

[2] GPS coordinates in decimal degrees (optional)

[3] (R, LD) Road, Landing Drainage; (WC) Watercourse Crossing; (L, CI, G) Landslide, Channel Initiation, Gullying

[4] Watercourse Classification (WC) – Indicate (P) Perennial, (I) Intermittent, (E) Ephemeral and whether it is fish bearing (FB)

[5] Provide an estimate of **existing erosion** discharge

[6] Provide an estimate of **potential** erosion discharge

[7] Default prioritization key is as follows: High (H) – Treat prior to upcoming winter period, Medium (M) – Treat within 365 days from approval of NOI, Low (L) – Treat prior to termination of Order coverage, None (N) – No treatment proposed (include explanation why no treatment)

Notice of Intent for Category 5A

Project Name:

Addendum (attach to Notice of Intent as necessary):

Name:

Title:

Signature: _____ Date:

Instructions for Completion of Notice of Intent for Category 5A
USFS Post-Fire Activities

The Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board), in Order Number R5-2017-0061, adopted the "Waste Discharge Requirements General Order for Discharges Related to Timberland Management Activities for Federal and Nonfederal Lands" (Order).

For post-fire timberland management activities on federal lands that qualify for enrollment under Category 5A of the Order, the Central Valley Water Board waives the requirement to submit a Report of Waste Discharge and obtain Waste Discharge Requirements. Dischargers wishing to enroll their projects under the Order are required to submit a Notice of Intent to the appropriate Central Valley Water Board office.

NOTE: If any of the following are not provided on the Notice of Intent (NOI) form, the NOI will be returned and a corrected version must be submitted immediately to the Central Valley Water Board.

National Forest: Enter the name of the National Forest.

Project Name: Enter the name of the Project.

Ranger District Information: Enter the ranger district, mailing address, phone number (including area code), and email. If more than one district, attach additional pages.

Contact Person(s): List the primary person(s) responsible for on-site operations and include phone number and email. Central Valley Water Board staff will contact the person(s) prior to conducting on-site compliance inspections.

Location: List the township, range, section(s) and associated acreage planned for salvage operations. If available, provide a geospatial file of the salvage boundary in approved format (SHP, KML, KMZ).

List the average elevation, planning watershed name(s), and CalWater number(s) for the Project area; watershed names and numbers can be found at: http://egis.fire.ca.gov/watershed_mapper/

Indicate whether or not a geospatial file has been submitted

Include the average annual rainfall and identify if the Project is in a watershed that is over the threshold of concern.

Project Description: Include a brief description of the Project; focus on aspects that have the potential to impact water quality.

Yarding Method: Indicate the type of yarding method to be employed and include an estimation of acreage for each method.

Site Preparation: Indicate site preparation method(s) that will be used. If pesticides will be applied, check one of the boxes below pesticides to indicate if a Post-Fire Management and Reforestation Plan will be developed or if conditions outlined under Part III.F.3.c.ii. of the Order will be adhered to.

Burn Severity: Provide estimates of burn severity in acres within the Project area from available Soil Burn Severity maps or estimation of burn severity from field observations and/or measurements.

Roads: Provide estimates of road length in linear feet for new roads, roads that will be reconstructed, roads within the riparian conservation area (RCA) and streamside management zones (SMZ), and roads to be abandoned/decommissioned.

Watercourses:

- Indicate if there are any fish-bearing, perennial, intermittent, and/or ephemeral watercourses within the Project area. See definitions in the *National Best Management Practices for Water Quality Management on National Forest System Lands, Volume 1: National Core BMP Technical Guide, April 2012*.
- Indicate if there are any domestic water supply intakes within 1 mile downstream of the Project area that receive drainage from the operational area.
- Indicate if there is any work proposed within the RCAs and/or SMZs.
- Indicate if there are any **new or reconstructed** permanent crossings proposed within the Project area that are **not** associated with a Significant Existing or Potential Erosion Site. An example is new road construction with watercourse crossings. If yes, include information in Table 1 and map and **include sizing design calculations** as appropriate.
- Indicate if any watercourse crossings will be abandoned or deactivated. If yes, include in map.

Erosion Sites:

- Indicate whether there are any Significant Existing or Potential Erosion Sites (SEPES) (see guidance below) within the fire salvage area, including areas proposed for reforestation with pesticide applications. If SEPES exist, include specific information about each site in **Table 1**.
- Indicate whether there are SEPES on Project access roads that receive drainage from the burned area. If SEPES do exist, include site specific information in **Table 1** or reference the Project/BAER report if information has been submitted previously.

Indicators of SEPES on the Existing Road Network
The California Code of Regulations, title 14, Board of Forestry Technical Rule Addendum Number 5: Guidance on Hydrologic Disconnection, Road Drainage, Minimization of Diversion Potential, and High Risk Crossings (1st Edition), Section B, **Indicators of Significant Exiting or Potential Problems,** states the following:

Indicators of significant existing or potential problems with the existing road drainage conditions include, but are not limited to:

- *Evidence of direct sediment entry into a watercourse or a flood prone area from road surfaces or drainage structures and facilities (e.g., ponded sediment, sediment deposits, delivery of turbid runoff from drainage structures during rainfall events).*
- *Ditch scour or downcutting resulting from excessively long undrained ditches with infrequent ditch drain (relief) culverts or other outlet structures or facilities. This condition can also result from design inadequacies (e.g., spacing not altered for steep ditch gradient), inadequate erosion prevention practices (e.g., lack of armoring), or ditches located in areas of erodible soils.*
- *Gullies or other evidence of erosion on road surfaces or below the outlets of road drainage facilities or structures, including ditch drain (relief) culverts, with transport or a high likelihood of transport to a watercourse.*

Additionally, if a road and/or ditch runoff is hydrologically connected to a watercourse, the following factors elevate the risk of sediment delivery to a watercourse:

- *Existing or high potential for cutbank sloughing or erosion into inside ditches.*
- *Native-surfaced road exhibiting erosion.*
- *Native-surfaced road composed of erodible soil types (e.g., granitic soils).*
- *Rilled, gullied, or rutted road approaches to crossings.*
- *Existing ditch drain (relief) culverts or other road drainage structures with significant plugging from sediment and/or small woody debris.*
- *Existing ditch drain (relief) culverts or other road drainage structures with decreased capacity due to damage or impairment (e.g., crushed or bent inlets, flattened dips due to road grading).*
- *Decreased structural integrity of ditch drain (relief) culverts, waterbreaks, or other road drainage structures (e.g., excessive culvert corrosion, breached waterbreaks, or rutted road segments).*

SEPES in the Post-Fire Environment

For post-fire salvage areas, and areas not salvage logged but proposed for reforestation with pesticide applications, the Discharger shall evaluate SEPES considering the factors listed below that elevate the risk of sediment delivery to watercourses. The intent of this expanded SEPES evaluation is to identify existing or the potential for upslope erosional features (e.g., landslides, debris flows, significant gully networks, channel initiation and other mass wasting features) within the burned/logged area that have the potential to significantly influence the downslope road network. Documentation of hillslope level SEPES is only required where there is, or there is the potential for, an interaction of that feature with the below road network that will result in significant erosion and sediment delivery to a watercourse.

- Increased runoff and associated sediment/debris in high/moderate burn severity areas originating at mid to upper, convergent slope within the fire salvage area; or in areas outside the salvage area that contribute increased runoff to watercourse crossings and drainage structures within the fire salvage area or to appurtenant roads.
- Rilling and gullying along existing or proposed skid trails and water bars within the fire salvage area that have potential for sediment delivery to a watercourse;

- Existing watercourse crossings, particularly those with a structure (i.e. culvert, bridge), that are now undersized and at an elevated risk of failure due to any of the bulleted items listed above

Table 1. Erosion Site Table for Significant Existing or Potential Erosion Sites and New/Reconstructed Watercourse Crossings

The **Erosion Site Table** (Table 1) shall be completed if SEPES have been identified: within the salvage area, on Project access roads to the salvage area, within the post-fire reforestation area, and/or if new/reconstructed watercourse crossings are proposed. The Discharger shall amend the **Erosion Site Table** when conditions or management objectives change.

ID: Create a unique identification number for each SEPES site or new/reconstruction watercourse crossing construction. ID may include some portion of the Project or Section number for easy identification and tracking.

GPS Coordinates (Optional): Submit for each SEPES site or new crossing the GPS coordinates in decimal degrees.

New Watercourse Crossing: Indicate whether site is new watercourse crossing construction (i.e. road construction with new watercourse crossings). If a new watercourse crossing, skip **Erosion Feature Type and Description** (shaded boxes) and fill out **Proposed Treatment and Implementation Priority**.

Erosion Feature Type and Description: For each SEPES site, check the erosion type that best describes the feature - road (R), landing (LD), watercourse crossing (WC), landslide (L), channel initiation (CI), or gullying (G).

If the SEPES site is at a watercourse crossing, check **WC** under **Erosion Type** and include the following minimum information under **Site Description**:

- Crossing Type (i.e. culvert, bridge, Humboldt) and size (if applicable);
- Indicate whether there is diversion potential at the crossing. If there is diversion potential, address under “Proposed Treatment”;
- Describe the condition of the existing crossing (e.g., culvert plugged, culvert damaged (melted, inlet/outlet crushed, etc.), culvert undersized, culvert outlet shotgunned, log stringer bridge damaged/ burned, fish passage issue, erosional issue of fill, etc.).

If the SEPES site is associated with a road, landing, landslide, channel initiation, or gullying, include a description of issue and current condition.

Indicate the watercourse classification affected/potentially affected (Fish-bearing, Perennial, Internment, or ephemeral).

Existing and Potential Sediment Discharge: Provide an estimate of **existing (past) and potential (future) sediment discharge** at each SEPES site from ocular estimates or taped measurements in feet of Width, Depth, and Length and convert to cubic yards.

(Length (feet) X Width (feet) X Depth (feet)) / 27=approximate fill volume (yd^3)

Discharge volumes should be estimated based on percent of total volume of sediment that delivered/or may deliver to a watercourse. **Potential erosion sites can also have no delivery to date but may have the potential to discharge in the future**. Examples are as follows:

- A 100 yds^3 landing failure has delivered approximately 75% of the total volume of the feature to a watercourse. **Total existing erosion = 75 yds^3.** Poor road drainage continues to saturate the landing fill material and there is visual evidence (tension cracks and slumping) that an additional 25 yds^3 may fail and deliver to the watercourse below. **Total potential erosion and sediment delivery = 25 yds^3.**
- A gully originating from poor road drainage delivers directly into a watercourse. The dimensions of the feature and volumetric calculation are approximately (1(ft) x 1(ft) x 500 (ft))/27 = 18 yds^3. **Total existing erosion = 18 yds^3**. If hydrologic connectivity is not addressed, it may be reasonable to assume that potential/future erosion at this site may be equal to or greater than the past erosion volume. **Total potential erosion and sediment delivery ≥ 18 yds^3.**
- A watercourse crossing has a 24” culvert that is approximately 50% plugged with sediment. There is evidence that the pipe has overtopped resulting in approximately 5 yds^3 of crossing failure at the base of the fill and outlet of the pipe. **Total existing erosion = 5 yds^3**. The total volume of the crossing is 100 yds^3. Pipe calculations for the drainage area above the crossing indicate that a 48” culvert is a more appropriate size for this location. Considering the current condition and size of the existing pipe, and past evidence of overtopping and erosion, it is reasonable to assume that this crossing may fail if left untreated. **Total potential erosion and sediment delivery = 95 yds^3**.
- Following a wildfire, a severely undersized and damaged culverted watercourse crossing is evaluated as part of the evaluation for the Category 5A NOI **Erosion Site Table**. Field observations by the RPF indicate that the crossing may be at risk of failure based on the following factors: the large drainage area and increased run-off rates above the crossing; the burn severity or EHR upslope of the crossing; increased amounts of debris or sediment in the channel; increased risk from debris slides or debris torrents originating from channel incision, unstable areas, or channel initiation in headwall swales. There is no evidence of past erosion. **Total existing erosion = 0 yds^3.** The approximate volume of fill is 50 yds^3. Given a combination of above factors, the RPF determines that the likelihood of failure at this crossing is high during the first winter period following the fire. It is assumed that the entire

crossing volume may fail. **Total potential erosion and sediment delivery = 50 yds^3**

Proposed Treatment and Implementation Priority: Describe the proposed treatment and/or crossing design and the timeline for implementation (if different or more detailed than the "Treatment Priority" options below). Include information regarding crossing type/size, road approaches, road surfacing, armoring, etc. Attach watercourse crossing size calculations to **Table 1** for new/reconstructed crossing designs as applicable.

Treatment Priority - Default prioritization key is as follows:

High (H) – Treat prior to the upcoming winter period,
Medium (M) – Treat within 365 days of enrollment under Order,
Low (L) – Treat prior to termination of Order coverage,
None (N) – No treatment proposed (include explanation why no treatment).

*An alternative treatment prioritization key may be developed and proposed by the Discharger and must be clearly labelled on **Table 1**.

Map(s): The NOI shall include a titled USFS or equivalent topographic map(s) of a scale not less than 2" to the mile (access road maps may utilize an alternative legible scale) that contains the following information:

a. Boundaries of Project area;
b. Boundaries of yarding method, if more than one method is to be used;
c. Location of all **roads** (including Project access roads) to be used for the Project; including road construction, road reconstruction, roads in the RCA/SMZ, abandonment, deactivation (include a separate identifier in the legend for each road type);
d. Location of domestic water supply intakes within one mile downstream of the Project;
e. Location of all watercourses and lakes (P) Perennial, (I) Intermittent, or (E) Ephemeral waters within the Project and on access roads;
f. Location of all watercourse crossings to be abandoned;
g. Location of all water drafting sites to be used for the Project operations;
h. Location of all SEPES and new watercourse crossings identified in the **Erosion Site Table**;
i. Known slides or other unstable features, including potential upslope sources of sediment to watercourse crossings that could contribute significant amount of additional debris to the crossing;
j. Burn Severity areas derived from available burn severity maps or estimation of burn severity from field observations and/or measurements.