# MONITORING AND REPORTING PROGRAM FOR TIMBER HARVEST REQUIREMENTS (GENERAL CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS) MRP NO. R3-2005-0066

## Prepared June 29, 2005

All Timber Harvest activities regulated by these Timber Harvest Requirements are required to have a California Department of Forestry and Fire Protection (CDF) approved Timber Harvest Plan (THP) and/or Non-industrial Timber Management Plan (NTMP) and comply with the CDF Forest Practice Rules. The Discharger shall perform the monitoring applicable to the approved THP and/or NTMP as determined by the Executive Officer.

The Executive Officer shall determine which monitoring tier applies to a THP or NTMP after considering the THP or NTMP, information from the pre-harvest inspection or other site inspections, the Notice of Intent, and the Eligibility Criteria (attached as Exhibit 1). The Executive Officer may eliminate or add monitoring requirements for a specific THP or NTMP, regardless of what tier applies to the THP or NTMP.

#### TIER I

## MONITORING AND REPORTING REQUIREMENTS

## SECTION I - MONITORING

Rules Compliance Monitoring: California Department of Forestry and Fire Protection (CDF) conducts Forest Practice Rules compliance monitoring.

Road Inventory Program: The Discharger shall develop and implement a Roads Management Program (similar to the Big Creek Lumber Company's "Protocol for Conducting Company Road Inventories & Maintenance" (see Attached May 23, 2001 document)) within the THP area.

# FORENSIC MONITORING REQUIREMENTS

- a. If at any time during implementation or effectiveness monitoring, a discharge is observed, the Discharger shall conduct forensic monitoring to identify failed management measures and/or source of discharge. Management measure failure is defined as: 1) whenever an implemented management measure creates a condition of pollution, contamination, or condition of nuisance, as defined by CWC Section 13050, or 2) when lack of implementation of a necessary management measure creates a condition of pollution, contamination, or condition of nuisance, as defined by CWC Section 13050.
- b. If management measures fail (this includes failure to implement appropriate management measures) as determined by CDF and documented by CDF as a violation of the Forest Practice Rules the Discharger shall photo¹ document them

Monitoring photos need to be of sufficient quality to record the effectiveness of the implemented management practice.

- and shall implement management practices immediately to prevent discharge and impacts to water quality.
- c. If timber activities cause a discharge (sediment, soil, other organic material, etc.) into waters of the State, the Discharger shall measure in-stream turbidity (using grab samples) at the point of discharge into waters of the state. If there is a discharge into a Class III watercourse and water is no longer flowing, the Discharger shall measure in-stream turbidity in the closest Class I or Class II watercourse downstream of the discharge.
- d. If at any time during implementation or effectiveness monitoring, the Discharger observes a discharge (sediment, soil, other organic material, herbicides, pesticides, fluids [oil, hydraulic fluid, etc], from timber equipment, etc.), the Discharger shall notify the Central Coast Water Board within 24 hours.
- e. The Discharger shall submit to the Central Coast Water Board a written report, including photo documentation, water quality data, and the management measures or corrective actions and a description of their effectiveness within 10 working days. Upon review of the report, the Central Coast Water Board Executive Officer will determine completeness of the report and the need for additional actions necessary for the protection of water quality and beneficial uses.

Frequency: The frequency of Forensic Monitoring is coincident with CDF Forest Practice Rules compliance monitoring, or at any time a failed management measure and/or discharge is reported or observed.

## FORENSIC MONITORING AREAS OF CONCERN

The following areas must be addressed during forensic monitoring if water diversion, feral pig activity, or trespass activity are causing or threatening to cause impacts to water quality.

Water Diversion: The Discharger shall monitor the water diversion point(s) for total daily water usage when water is being diverted. The Discharger shall monitor the creek to ensure no more than 10 % of the creek flow is diverted.

Feral Pig Activity: During any inspection, the Discharger shall document all evidence of feral pig activity near watercourses that may be contributing discharges to waters of the state.

Trespass Activity: During any inspection, the Discharger shall document all evidence of trespass activity near watercourses that may be contributing discharges to waters of the state.

## **SECTION II - DATA LOGGING AND REPORTING**

a. LOGBOOKS: The Discharger shall maintain logbooks for recording all visual and water analysis data. Logbooks shall include documentation of maintenance and repair of management practices. These logbooks shall be available for inspection to the Central Coast Water Board staff

b. SEDIMENT RELEASE REPORTING: The Discharger shall report to the Central Coast Water Board within 48 hours whenever at least one cubic yard of soil is released to a waterway due to anthropogenic causes or at least five cubic yards of soil is released to a waterway due to natural causes, or when turbidity is noticeably greater downstream compared to upstream (of a crossing or the Plan area). The Discharger shall submit a written report to the Central Coast Water Board within 10 days of detection. The Discharger shall investigate source areas of sediment. If sources are found, the Discharger will locate and document the source and size of the release. If sources related to timber harvest activities are found, the Discharger shall immediately correct the source if possible, or schedule corrective action at an appropriate time given the site conditions.

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- c. ROAD INVENTORY PROGRAM: The Discharger shall develop and implement a Roads Management Program (similar to the Big Creek Lumber Company's "Protocol for Conducting Company Road Inventories & Maintenance" (see Attached May 23, 2001 document)) within the THP area. After each storm event that triggers an inspection, the Discharger shall perform a field inspection and prepare a field form as described in the Protocol. The Discharger shall enter the data into a logbook (same as described in item a. above) and database or spreadsheet which tracks observations, work completed, and dates of last review. If the need for repair is immediate, the Discharger shall promptly develop an appropriate treatment so that the Discharger can complete corrective action as soon as practical.
- d. VIOLATION REPORTING: The Discharger shall report any violation of the Forest Practice Rules, to the Central Coast Water Board within 48 hours. The Discharger shall provide the report in writing to the Central Coast Water Board within 10 working days of the violation. The written report shall include photo documentation and water quality data (if discharge enters waters of the state) before and after remedial action. Upon review of the report, the Central Coast Water Board Executive Officer will determine completeness of the report and the need for additional actions necessary for the protection of water quality and beneficial uses. The Discharger shall complete any additional monitoring the Executive Officer determines is necessary.
- e. ANNUAL REPORT: By November 15 of each year, The Discharger shall submit an Annual Report to the Central Coast Water Board that addresses the following:
  - i. A status of active timber harvest operations

    Previous year activities, wet weather problems observed, etc.

    Planned activities
  - ii. A summary of all violations.
  - iii. Submittal of all data and photos<sup>2</sup> in electronic format, and a summary of the water quality monitoring performed during the previous year.
  - iv. Documentation of rainfall measurement procedures and locations.
  - v. With the first annual report, a copy of the road management program.
  - vi. A summary of the road management program<sup>3</sup> and actions implemented for the protection of water quality and beneficial uses.

Monitoring photos need to be of sufficient quality to record the effectiveness of the implemented management practice.

<sup>&</sup>lt;sup>3</sup> Big Creek's Road Inventory Program may be used as a model.

- vii. Recommendations for improving the monitoring and reporting program.
- f. The Discharger is responsible for ensuring that all monitoring is done in a safe manner. If any monitoring point is too dangerous to sample, then the Discharger shall report this circumstance to the Central Coast Water Board within 48 hours.

The Central Coast Water Board Executive Officer may modify or rescind this Monitoring and Reporting Program at any time, or may modify or rescind the monitoring and reporting program as to a specific discharger. Any such modification or rescission must comply with California Water Code section 13269.

#### STANDARD PROVISIONS

- 1. The Central Coast Water Board shall be allowed:
  - a. entry upon premises where timber harvest activities occur;
  - b. access to copy any records that must be kept under the conditions of these requirements;
  - c. to inspect any timber harvest activity, equipment (including monitoring and control equipment), practices, or operations regulated or required under these requirements; and,
  - d. to photograph, sample, and monitor for the purpose of showing timber harvest requirements compliance.
- 2. The Discharger shall maintain records of all monitoring information and results. Records shall be maintained for a minimum of three years. This period may be extended during the course of any unresolved litigation or when requested by the Board.
- 3. Any person signing a report shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Order No. R3-2005-0066

Monitoring and Reporting Program
Timber Harvest Activities

### TIER II

#### MONITORING AND REPORTING REQUIREMENTS

#### SECTION I - MONITORING

## IMPLEMENTATION AND EFFECTIVENESS MONITORING POINTS

- a. VISUAL MONITORING POINTS Visual monitoring points shall include roads, watercourse crossings, landings, skid trails, water diversions, watercourse confluences, known landslides, and all mitigation sites (as documented the CDF approved THP and/or NTMP) in the timber harvest plan area. Visual monitoring points shall be at locations within the timber harvest plan area where timber harvest activities have the greatest risk of potential discharge (sites may be established by the Central Coast Water Board Executive Officer during or after the pre-harvest inspection). All visual monitoring points shall be documented in the CDF approved THP and/or NTMP.
- b. PHOTO-POINT MONITORING POINTS Photo-point monitoring points shall be at locations within the timber harvest plan area where timber harvest activities have the greatest risk of potential discharge (sites may be established by Central Coast Water Board Executive Officer during or after the pre-harvest inspection). All photo-point monitoring points shall be documented in the CDF approved THP and/or NTMP. Photo-point monitoring points shall include up and down stream of each newly constructed or reconstructed Class I and Class II watercourse crossings and landings within a Class I or II Watercourse or Lake Protection Zone (WLPZ). Monitoring photos need to be of sufficient quality to record the effectiveness of the implemented management practice.

Every Discharger shall:

- i. Utilize the attached document titled "Standard Operation Procedure 5.2.3 Photo Documentation Procedure" (including any subsequent revisions to SOP 5.2.3) as the protocol for all photo-point monitoring (attached).
- ii. Utilize flagging, rebar, or another method of establishing the photo-point site locations.
- iii. Utilize all photo-point locations until this Monitoring and Reporting Program is rescinded.

#### MONITORING FREQUENCY

- a. VISUAL MONITORING: Every Discharger shall monitor all visual monitoring points established by Central Coast Water Board Executive Officer during or after the pre-harvest inspection for existing or potential sources of erosion. The Discharger shall perform visual monitoring within 12 to 24 hours of storm events of two inches of rain of greater within a 24-hour period.
  - Year 1 Monitoring shall occur a minimum of three times over each 12 months during Year one monitoring. Year one monitoring will continue through the first winter after a timber harvest is completed. Year two monitoring begins one year after a timber harvest is completed.

Monitoring Event One - The Discharger shall perform the first monitoring event within 12 to 24 hours of the first storm event that includes two inches of rain or greater within a 24-hour period.

Monitoring Events Two and Three - The Discharger shall perform the next two monitoring events within 12 to 24 hours of the next two storm events (one monitoring event each storm) that include two inches of rain or greater within a 24-hour period and soil saturation (the wet season begins October 15 of each year)).

Years 2-5 – In the second year of monitoring following completion of timber harvest operations and a determination by Central Coast Water Board Executive Officer (as documented by information contained in the annual report) that implemented management practices are functioning to protect water quality and beneficial uses, visual monitoring shall be implemented according to the Road Management Program (attached).

Summary of Visual Monitoring frequency:

Year 1 = 3 events (minimum)

Year 2 - 5 = consistent with a Road Management Program

**b. PHOTO-POINT MONITORING:** The Discharger shall monitor all photo-point monitoring points:

Year 1 - Year one monitoring will continue through the first winter after a timber harvest is completed. Monitoring shall occur a minimum of three times over each 12 months during Year one monitoring.

Year two monitoring begins one year after a timber harvest is completed.

- Following the first significant storm event (First Storm) (One Photo Set).
- Following completion of timber harvest activities (One Photo Set).
- Following a significant storm event during the month of April (April Storm) (One Photo Set). A significant storm event means any storm with two inches of rain or greater within a 24-hour period and soil saturation (the start of the wet season (October 15)).

Additionally, the Discharger shall photograph new or reconstructed Class I and Class II water crossings:

• Before construction begins, after construction is completed, and after the crossing structure is removed (if crossing is temporary).

Photo-point monitoring shall occur within seven days of all of the following:

- 1. The first storm
- 2. Completion of timber harvest activities
- 3. April storm events. If no significant storm event occurs in the month of April, the Discharger shall complete photo-point monitoring by April 30 of the same year.

Years 2 and 5 - In years two and five, following completion of timber harvest operations and a determination by Central Coast Water Board Executive Officer (as documented by information contained in the annual report) that implemented management practices are

functioning to protect water quality and beneficial uses, the Discharger shall conduct the April storm photo-point monitoring.

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If implemented management practices are not adequately protecting water quality and beneficial uses, as determined by the Central Coast Water Board Executive Officer, the Discharger shall repeat year one monitoring.

### **Summary of Photo Sets:**

Year 1 = 3 photo sets

Year 2 = 1 photo set

Year 5 = 1 photo set

## FORENSIC MONITORING REQUIREMENTS

- a. If at any time during implementation or effectiveness monitoring, a discharge is observed, the Discharger shall conduct forensic monitoring to identify failed management measures and/or source of discharge. Management measure failure is defined as: 1) whenever an implemented management measure creates a condition of pollution, contamination, or condition of nuisance, as defined by CWC Section 13050, or 2) when lack of implementation of a necessary management measure creates a condition of pollution, contamination, or condition of nuisance, as defined by CWC Section 13050.
- b. If management measures fail (this includes failure to implement appropriate management measures as determined by CDF and documented by CDF as a violation of the Forest Practice Rules the Discharger shall photo<sup>4</sup> document them and shall implement management practices immediately to prevent discharge and impacts to water quality.
- c. If timber activities cause a discharge (sediment, soil, other organic material, etc.) into waters of the State, the Discharger shall measure in-stream turbidity (using grab samples) at the point of discharge into waters of the state. If there is a discharge into a Class III watercourse and water is no longer flowing, the Discharger shall measure in-stream turbidity in the closest Class I or Class II watercourse downstream of the discharge.
- d. If at any time during implementation or effectiveness monitoring, the Discharger observes a discharge (sediment, soil, other organic material, herbicides, pesticides, fluids from timber equipment (oil, hydraulic fluid, etc), etc.), the Discharger shall notify the Central Coast Water Board within 24 hours.
- e. The Discharger shall submit to the Central Coast Water Board a written report, including photo documentation, water quality data, and the management measures or corrective actions and a description of their effectiveness within 10 working days. Upon review of the report, the Central Coast Water Board Executive Officer will determine completeness of the report and the need for additional actions necessary for the protection of water quality and beneficial uses.

<sup>&</sup>lt;sup>4</sup> Monitoring photos need to be of sufficient quality to record the effectiveness of the implemented management practice.

Frequency: The frequency of Forensic Monitoring is coincident with implementation and effectiveness monitoring, or at any time a failed management measure and/or discharge is reported or observed.

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# FORENSIC MONITORING AREAS OF CONCERN

The following areas must be addressed during forensic monitoring if water diversion, feral pig activity, or trespass activity are causing or threatening to cause impacts to water quality.

Water Diversion: The Discharger shall monitor the water diversion point(s) for total daily water usage when water is being diverted. The Discharger shall monitor the creek to ensure no more than 10 % of the creek flow is diverted.

Feral Pig Activity: During any inspection, the Discharger shall document all evidence of feral pig activity near watercourses that may be contributing discharges to waters of the state.

Trespass Activity: During any inspection, the Discharger shall document all evidence of trespass activity near watercourses that may be contributing discharges to waters of the state.

## SECTION II - DATA LOGGING AND REPORTING

- a. LOGBOOKS: The Discharger shall maintain logbooks for recording all visual and water analysis data. Logbooks shall include documentation of maintenance and repair of management practices. These logbooks shall be available for inspection to the Central Coast Water Board staff.
- b. SEDIMENT RELEASE REPORTING: The Discharger shall report to the Central Coast Water Board within 48 hours whenever at least one cubic yard of soil is released to a waterway due to anthropogenic causes or at least five cubic yards of soil is released to a waterway due to natural causes, or when turbidity is noticeably greater downstream compared to upstream (of a crossing or the Plan area). The Discharger shall submit a written report to the Central Coast Water Board within 10 days of detection. The Discharger shall investigate source areas of sediment. If sources are found, the Discharger will locate and document the source and size of the release. If sources related to timber harvest activities are found, the Discharger shall immediately correct the source if possible, or schedule corrective action at an appropriate time given the site conditions.
- c. ROAD INVENTORY PROGRAM: The Discharger shall develop and implement a Roads Management Program (similar to the Big Creek Lumber Company's "Protocol for Conducting Company Road Inventories & Maintenance" (see Attached May 23, 2001 document)) within the THP area. After each storm event that triggers an inspection, the Discharger shall perform a field inspection and prepare a field form as described in the Protocol. The Discharger shall enter the data into a logbook (same as described in item a. above) and database or spreadsheet which tracks observations, work completed, and dates of last review. If the need for repair is immediate, the Discharger shall promptly develop an appropriate treatment so that the Discharger can complete corrective action as soon as practical.

d. VIOLATION REPORTING: The Discharger shall report any violation of the Forest Practice Rules, to the Central Coast Water Board within 48 hours. The Discharger shall provide the report in writing to the Central Coast Water Board within 10 working days of the violation. The written report shall include photo documentation and water quality data (if discharge enters waters of the state) before and after remedial action. Upon review of the report, the Central Coast Water Board Executive Officer will determine completeness of the report and the need for additional actions necessary for the protection of water quality and beneficial uses. The Discharger shall complete any additional monitoring the Executive Officer determines is necessary.

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- e. ANNUAL REPORT: By November 15 of each year, The Discharger shall submit an Annual Report to the Central Coast Water Board that addresses the following:
  - i. A status of active timber harvest operations Previous year activities, wet weather problems observed, etc. Planned activities
  - ii. A summary of all violations.
  - iii. Submittal of all data and photos<sup>5</sup> in electronic format, and a summary of the water quality monitoring performed during the previous year.
  - iv. Documentation of rainfall measurement procedures and locations.
  - v. With the first annual report, a copy of the road management program.
  - vi. A summary of the road management program<sup>6</sup> and actions implemented for the protection of water quality and beneficial uses.
  - vii. Recommendations for improving the monitoring and reporting program.
- The Discharger is responsible for ensuring that all monitoring is done in a safe manner. If any monitoring point is too dangerous to sample, then the Discharger shall report this circumstance to the Central Coast Water Board within 48 hours.

The Central Coast Water Board Executive Officer may modify or rescind this Monitoring and Reporting Program at any time, or may modify or rescind the monitoring and reporting program as to a specific discharger. Any such modification or rescission must comply with California Water Code section 13269.

## STANDARD PROVISIONS

- 1. The Central Coast Water Board shall be allowed:
- e. entry upon premises where timber harvest activities occur;
- f. access to copy any records that must be kept under the conditions of these requirements;
- g. to inspect any timber harvest activity, equipment (including monitoring and control equipment), practices, or operations regulated or required under these requirements; and,

Monitoring photos need to be of sufficient quality to record the effectiveness of the implemented management practice.

<sup>&</sup>lt;sup>6</sup> Big Creek's Road Inventory Program may be used as a model.

- h. to photograph, sample, and monitor for the purpose of showing timber harvest requirements compliance.
- 2. The Discharger shall maintain records of all monitoring information and results. Records shall be maintained for a minimum of three years. This period may be extended during the course of any unresolved litigation or when requested by the Board.
- 3. Any person signing a report shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

# TIER III

### MONITORING AND REPORTING REQUIREMENTS

### **SECTION I – MONITORING**

## **IMPLEMENTATION AND EFFECTIVENESS MONITORING POINTS**

a. VISUAL MONITORING POINTS — Visual monitoring points shall include roads, watercourse crossings, landings, skid trails, water diversions, watercourse confluences, known landslides, and all mitigation sites (as documented the CDF approved THP and/or NTMP) in the timber harvest plan area. Visual monitoring points shall be at locations within the timber harvest plan area where timber harvest activities have the greatest risk of potential discharge (sites may be established by the Central Coast Water Board Executive Officer during or after the pre-harvest inspection). All visual monitoring points shall be documented in the CDF approved THP and/or NTMP.

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b. PHOTO-POINT MONITORING POINTS – Photo-point monitoring points shall be at locations within the timber harvest plan area where timber harvest activities have the greatest risk of potential discharge (sites may be established by Central Coast Water Board Executive Officer during or after the pre-harvest inspection). All photo-point monitoring points shall be documented in the CDF approved THP and/or NTMP. Photo-point monitoring points shall include up and down stream of each newly constructed or reconstructed Class I and Class II watercourse crossings and landings within a Class I or II Watercourse or Lake Protection Zone (WLPZ). Monitoring photos need to be of sufficient quality to record the effectiveness of the implemented management practice.

#### Every Discharger shall:

- iv. Utilize the attached document titled "Standard Operation Procedure 5.2.3 Photo Documentation Procedure" (including any subsequent revisions to SOP 5.2.3) as the protocol for all photo-point monitoring (attached).
- v. Utilize flagging, rebar, or another method of establishing the photo-point site locations.
- vi. Utilize all photo-point locations until this Monitoring and Reporting Program is rescinded.

## **MONITORING FREQUENCY**

- a. VISUAL MONITORING: Every Discharger shall monitor all visual monitoring points established by Central Coast Water Board Executive Officer during or after the pre-harvest inspection for existing or potential sources of erosion. The Discharger shall perform visual monitoring within 12 to 24 hours of storm events of two inches of rain of greater within a 24-hour period.
  - Year 1 Monitoring shall occur a minimum of three times over each 12 months during Year one monitoring. Year one monitoring will continue through the first winter after a timber harvest is completed. Year two monitoring begins one year after a timber harvest is completed.

Monitoring Event One - The Discharger shall perform the first monitoring event within 12 to 24 hours of the first storm event that includes two inches of rain or greater within a 24-hour period.

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Monitoring Events Two and Three - The Discharger shall perform the next two monitoring events within 12 to 24 hours of the next two storm events (one monitoring event each storm) that include two inches of rain or greater within a 24-hour period and soil saturation (start of the winter period, October 15).

Years 2-5 — In the second year of monitoring following completion of timber harvest operations and a determination by Central Coast Water Board Executive Officer (as documented by information contained in the annual report) that implemented management practices are functioning to protect water quality and beneficial uses, visual monitoring shall be implemented according to the Road Management Program (attached).

# Summary of Visual Monitoring frequency:

Year 1 = 3 events (minimum)

Year 2 - 5 = consistent with a Road Management Program

- **b. PHOTO-POINT MONITORING:** The Discharger shall monitor all photo-point monitoring points:
  - Year 1 Year one monitoring will continue through the first winter after a timber harvest is completed. Monitoring shall occur a minimum of three times over each 12 months during Year one monitoring. Year two monitoring begins one year after a timber harvest is completed.
    - Following the first significant storm event (First Storm) (One Photo Set).
    - Following completion of timber harvest activities (One Photo Set).
    - Following a significant storm event during the month of April (April Storm) (One Photo Set). A significant storm event means any storm with two inches of rain or greater within a 24-hour period and soil saturation (i.e., soil saturation typically occurs after a minimum of four inches of precipitation during after the start of the wet season (October 15)).

Additionally, the Discharger shall photograph new or reconstructed Class I and Class II water crossings:

• Before construction begins, after construction is completed, and after the crossing structure is removed (if crossing is temporary).

Photo-point monitoring shall occur within seven days of all of the following:

- 1. The first storm
- 2. Completion of timber harvest activities
- 3. April storm events. If no significant storm event occurs in the month of April, the Discharger shall complete photo-point monitoring by April 30 of the same year.

Years 2 and 5 - In years two and five, following completion of timber harvest operations and a determination by Central Coast Water Board Executive Officer (as documented by information contained in the annual report) that implemented management practices are functioning to protect water quality and beneficial uses, the Discharger shall conduct the April storm photo-point monitoring.

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If implemented management practices are not adequately protecting water quality and beneficial uses, as determined by the Central Coast Water Board Executive Officer, the Discharger shall repeat year one monitoring.

#### **Summary of Photo Sets:**

Year 1 = 3 photo sets

Year 2 = 1 photo set

Year 5 = 1 photo set

#### FORENSIC MONITORING REQUIREMENTS

- a. If at any time during implementation or effectiveness monitoring, a discharge is observed, the Discharger shall conduct forensic monitoring to identify failed management measures and/or source of discharge. Management measure failure is defined as: 1) whenever an implemented management measure creates a condition of pollution, contamination, or condition of nuisance, as defined by CWC Section 13050, or 2) when lack of implementation of a necessary management measure creates a condition of pollution, contamination, or condition of nuisance, as defined by CWC Section 13050.
- b. If management measures fail (this includes failure to implement appropriate management measures as determined by CDF and documented by CDF as a violation of the Forest Practice Rules the Discharger shall photo<sup>7</sup> document them and shall implement management practices immediately to prevent discharge and impacts to water quality.
- c. If timber activities cause a discharge (sediment, soil, other organic material, etc.) into waters of the State, the Discharger shall measure in-stream turbidity (using grab samples) at the point of discharge into waters of the state. If there is a discharge into a Class III watercourse and water is no longer flowing, the Discharger shall measure in-stream turbidity in the closest Class I or Class II watercourse downstream of the discharge.
- d. If at any time during implementation or effectiveness monitoring, the Discharger observes a discharge (sediment, soil, other organic material, herbicides, pesticides, fluids from timber equipment (oil, hydraulic fluid, etc.), etc.), the Discharger shall notify the Central Coast Water Board within 24 hours.
- e. The Discharger shall submit to the Central Coast Water Board a written report, including photo documentation, water quality data, and the management measures or corrective actions and a description of their effectiveness within 10 working days. Upon review of the report, the Central Coast Water Board Executive Officer will determine completeness of the report and the need for

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additional actions necessary for the protection of water quality and beneficial uses.

Frequency: The frequency of Forensic Monitoring is coincident with implementation and effectiveness monitoring, or at any time a failed management measure and/or discharge is reported or observed.

## FORENSIC MONITORING AREAS OF CONCERN

The following areas must be addressed during forensic monitoring if water diversion, feral pig activity, or trespass activity are causing or threatening to cause impacts to water quality.

Water Diversion: The Discharger shall monitor the water diversion point(s) for total daily water usage when water is being diverted. The Discharger shall monitor the creek to ensure no more than 10 % of the creek flow is diverted.

Feral Pig Activity: During any inspection, the Discharger shall document all evidence of feral pig activity near watercourses that may be contributing discharges to waters of the state.

Trespass Activity: During any inspection, the Discharger shall document all evidence of trespass activity near watercourses that may be contributing discharges to waters of the state.

# WATER QUALITY COMPLIANCE MONITORING

D.1 - Temperature - The Discharger shall monitor temperature continuously ("Hobo temps" shall be used for continuous temperature monitoring) in Class I watercourses (during the months of May 1 through October 15) upstream, near the upper extent of timber operations, and downstream, near the lower extent of timber operations (sites may be established by the Central Coast Water Board Executive Officer during or after the pre-harvest inspection). Continuous water temperature monitoring is required. Temperature monitoring shall be conducted beginning May 1 through October 15 when water is present in the Class I or II watercourse. The Discharger shall monitor temperature when timber harvest operations occur in Class I or II WLPZ.

If no Class I watercourse exists on the parcel where timber harvest activities occur, and there is water in the Class II during the months of May 1 through October 15, the Discharger shall conduct temperature monitoring in the Class II watercourse when timber harvest operations occur in Class II WLPZ.

Year 1 - Year one monitoring shall continue through the first winter after a timber harvest is completed. Year two monitoring begins one year after a timber harvest is completed.

## Monitoring Frequency:

Temperature - The Discharger shall monitor temperature during the months of May 1 through October 15.

Years 2 and 5

## Monitoring Frequency:

Temperature - The Discharger shall monitor temperature during the months of May 1 through October 15 in year two and five following completion of timber harvest operations and a determination that implemented management practices are adequately protecting water quality and beneficial uses.

If implemented management practices are not adequately protecting water quality and beneficial uses, as determined by the Central Coast Water Board Executive Officer, the Discharger shall repeat year one monitoring. In addition to supplementary monitoring, the Central Coast Water Board Executive Officer will determine additional management measure implementation required.

## **Summary of Temperature Data Sets:**

Year 1 = 1 data set

Year 2 = 1 data set

Year 5 = 1 data set

D.2 Turbidity - The Discharger shall monitor all newly constructed or reconstructed Class I and II crossings within the timber harvest plan area in place after October 15th for turbidity (a hand held turbidimeter is acceptable for this purpose). The Discharger shall measure turbidity approximately 25 feet upstream and downstream of all newly constructed or reconstructed Class I and II road crossings (sites may be established by the Central Coast Water Board Executive Officer during or after the pre-harvest inspection). The Central Coast Water Board Executive Officer may require turbidity monitoring if no newly constructed or reconstructed crossings exist within a proposed timber harvest plan and the plan has activity within a Class I or II WLPZ.

#### **Monitoring Frequency:**

Turbidity - The Discharger shall monitor turbidity within 12 hours of a storm event with two inches or more of rain within a 24-hour period. If a storm terminates or two inches is reached between the hours of 3:00 pm (1500 hour) and 9:00 pm (2100 hour) turbidity monitoring shall occur within 18 hours.

Year 1 – The Discharger shall monitor a minimum of three times in year one. Year one monitoring will continue through the first winter after a timber harvest is completed. Year two monitoring begins one year after a timber harvest is completed.

Monitoring Event One - The Discharger shall perform the first monitoring event within 12 hours of the first storm event that includes two inches of rain or greater within a 24 hour period.

Monitoring Events Two and Three - The Discharger shall perform the next two monitoring events within 12 hours of the next two storm events (one monitoring event each storm) that include two inches of rain or greater within a 24 hour period and soil saturation (start of the winter period, October 15).