CONSIDERATIONS FOR IMPLEMENTING MONITORING AND REPORTING

UNDER THE
WASTE DISCHARGE REQUIREMENTS ORDER R5-2024-0059 FOR NONPOINT SOURCE DISCHARGES RELATED TO CERTAIN ACTIVITIES CONDUCTED BY THE UNITED STATES FOREST SERVICE AND THE BUREAU OF LAND MANAGEMENT
(FEDERAL NPS PERMIT/ORDER)

How do I identify impacts to water quality?

Pollutant plus Delivery to a Watercourse equals Impacts to Water Quality

Activities covered by the Federal NPS Permit have the potential to produce pollutants that can impact water quality. While sediment is the most common source of potential water quality impacts from covered activities, other potential pollutants include pesticides and petroleum products resulting from fuel, oil, and hydraulic line leaks. Note that the observable potential for pollutants to be delivered to a watercourse may also constitute a threat to water quality.

Implementation monitoring

Under the Federal NPS Permit is utilized to ensure that tangible site-specific measures have been put in place to protect water quality prior to wet weather. Implementation monitoring evaluates areas with the potential to impact water quality including the following:

Watercourse Crossings (constructed or reconstructed)

- All Types (culverts, rocked fords, native surfaced fords, culvert + rock crossings, etc.)
  - Is road runoff disconnected before it reaches the watercourse crossing?
  - If road surfacing (i.e., rock aggregate) is used at the watercourse crossing, is the rock aggregate large enough to remain in place for anticipated flows and continued use?
  - Has diversion potential been addressed? (to prevent road failure downslope should the crossing overtop/fail)
  - If fish are present, does the crossing provide passage?
  - If water flows from the crossing onto a fillslope, is the fillslope adequately armored to prevent erosion?
- Culverts
  - Is the culvert installed along the natural grade of the channel (on the vertical plane)?
  - Is the culvert aligned with the channel (on the horizontal plane)?
  - Does the culvert appear to be sized to accommodate the 100-year flood flow and associated debris? (Is it at least as wide as the bankfull channel above the inlet?)
  - Is there a catch basin or potential for pooling of water at the inlet?

- If inlet scour is a potential issue, is the inlet rock-armored or otherwise protected?

Watercourse Crossings (removed)

- All Types
  - Has material or bare soil excavated from the crossing been removed and bare soil and spoils piles been stabilized to prevent erosion?
  - Has the area of the removed crossing been widened enough to allow natural meandering and channel morphology to be re-established?
  - Have the road approaches been appropriately drained to ensure that discharges to the removed crossing do not occur?
  - Have the banks of removed crossing been stabilized and/or laid back to stable angles?
  - If a temporary crossing was removed, has the fill been excavated to form a channel that is as close to the natural water course grade and orientation?

Roads and Landings (constructed and reconstructed)

- Are waterbreaks/waterbars and/or rolling dips installed at a size and frequency to ensure adequate drainage of road runoff?
- Are inside ditches cross-drained at a frequency to prevent concentration of flow before being delivered to a watercourse?
- If road construction/reconstruction results in excess material (i.e., fill or sidecast), has the excess material been stabilized?
- If road drainage discharges runoff onto erodible soils or fill, are energy dissipators present to minimize sediment transport to downslope waters?

Heavy Equipment Operations (including skid trails, landings, etc.)

- Have temporary equipment crossings of watercourses been removed prior to the winter period?
  - If a temporary equipment crossing has been removed, has the fill been excavated to form a channel that is close to the natural watercourse grade and orientation?
  - Have the approaches to the temporary crossings been disconnected and stabilized?
- Are sufficient waterbreaks/waterbars installed on the skid trails?
- For bare mineral soil exposed by operations located in areas with the potential for stormwater runoff to transport sediment to a watercourse – have erosion and sediment controls been applied at a rate that ensures long term function?

Water Drafting Sites

- Have erosion and petroleum discharge prevention measures been implemented?
- Is the water drafting pad sloped away from the watercourse?
- Is a brow log or other vehicle barrier in place?

Fuels/Other Contaminants

- Are fuels, oils, and other potential contaminants stored in appropriate containers? Do they have secondary containment, where necessary? Do these containers have the potential to drain into a watercourse if they spill?
- Are materials on hand to clean up a spill should one occur?

Riparian Buffers

- Was a riparian buffer between the land management activities and the watercourse left in place?

Unstable Areas

- Were unstable areas avoided during land management activities?

Effectiveness monitoring

Under the Federal NPS Permit is utilized to determine whether applied management measures were effective in preventing impacts to water quality after the winter period and runoff events have occurred. Effectiveness monitoring evaluates areas with the potential to impact water quality including:

Watercourse Crossings (constructed and reconstructed)

- All Types (culverts, rocked fords, native surfaced fords, culvert and rock crossings, etc.)
  - Did road runoff (beyond the approaches) reach the watercourse crossing?
  - If road surfacing (i.e., rock aggregate) is used at the watercourse crossing, did the rock aggregate remain in place?
  - Did the crossing overtop? If so, did it divert down the road?
  - Are there signs of scour above the inlet or below the outlet?
  - Has material aggraded (gathered/been deposited) in the channel above the inlet?
  - If fish are present, does the crossing still provide passage?
  - If water flows from the crossing onto a fillslope, did the fillslope armor prevent erosion?
- Culverts
  - Are there signs of overtopping?
  - Is the culvert plugged?
  - Is the culvert damaged?
  - Is erosion (scour, rilling, etc.) apparent on road surface or on either side of the crossing?
- Bridges
  - Are bridge footings exhibiting scour?

Roads and Landings (constructed or reconstructed)

- Do the roads, landings, or adjacent fillslopes show signs of erosion? (rilling or gullying)
- Do any drainage structures (rolling dips, waterbars, ditch-relief culverts) show signs of failure?

Heavy Equipment Operations (including skid trails, landings, etc.)

- Do the waterbreaks/waterbars appear to have functioned properly?
- Are there rills/gullies on the skid trails?
- Where temporary equipment crossings of watercourses were removed:
  - Do the approaches to the temporary crossings show evidence of erosion?
  - Were spoils piles sufficiently protected to prevent erosion?

- Were waterbreaks/waterbars installed on skid trails effective at breaking up overland flow prior to reaching a watercourse?
- For bare mineral soil exposed by operations located in areas with the potential for stormwater runoff to transport sediment to a watercourse – were erosion and sediment controls effective at preventing erosion and sediment discharge to a watercourse?

Unstable Areas

- Did land management activities cause runoff to drain into unstable areas?

What is the Annual Reporting Period?

The annual reporting period under the Federal NPS Permit is August 16 through August 15. Annual reports for covered projects are due by September 30th.

What do I include in my Annual Monitoring Report?

A list of all Category A and B projects and Project Status (Pending, Active or Completed)

For Category B:

- Updated project map(s) showing where operations took place during the reporting period and the location of all Controllable Sediment Discharge Sources (CSDS)
- Updated project-specific CSDS inventory table(s)
- Effectiveness Monitoring Report with site-specific information about the locations where water quality impacts (threatened or actual) associated with inadequate management measures or failure to implement management measures were identified. This must include:
  - Project Name
  - Site Identification and Site Location (GPS coordinates or Map)
  - Water Quality Impacts: Date the deficiencies were identified, description of site conditions, and volume estimates of sediment delivered or threaten to deliver
  - Description and timeline of implemented or planned corrective actions
  - Photo point monitoring where required or where used to illustrate site conditions
- Signature and Certification

For Emergency Response Actions:

- Name and nature of the emergency
- Date emergency began
- A summary of the response actions conducted during the reporting period
- Description of emergency response actions that have caused (or threaten to cause) water quality impacts. This must include:
  - Location of the actions
  - Description of the water quality impacts (including constituent and estimated concentration and/or volume of discharge)
  - Date the water quality impact occurred OR was observed OR reported

    - Description of proposed corrective actions, timeline of completion, and contact information of the person(s) responsible for follow-up
    - Any reports, including maps and accompanying data, that were prepared as a result of the emergency
    - Name, title and contact information of person(s) responsible for incident follow-up
- Signature and Certification

What is Discharge Incident Reporting?
The intent of the Discharge Incident Report is to notify the Central Valley Regional Water Quality Control Board when waste, including sediment, is currently discharging or threatens to discharge to surface or ground waters in quantities and/or concentrations that exceed Water Quality Objectives or result in significant individual or cumulative adverse impacts to the beneficial uses of water.

If you suspect a discharge incident has occurred:

- Report the discharge by phone or email within 24 hours of detection to the Central Valley Regional Water Quality Control Board.
    - After you have reported the incident by phone or email, a separate report is due within 14 days of detection.
    - Required report contents can be found in the Monitoring and Reporting Program, Attachment B for Order No. R5-2024-0059, page B.6.