

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 03, 2004

Prepared on November 10, 2004

ITEM: 31

SUBJECT: SUMMARY OF TIMBER ACTIVITIES AND PROPOSED ACTIONS

SUMMARY:

Where have we been?

Since January 2003, the Regional Board has adopted twenty-two (22) individual, conditional waivers of waste discharge requirements (waiver) for timber harvest activities. The individual conditions in each waiver are similar but the monitoring and reporting requirements vary.

The Regional Board also approved enrollments for two (2) Non-industrial Timber Management Plans (NTMP) under Resolution Number R3-2002-0115, General Waiver for Specific Types of Discharges, Section C.2 (Inert Wastes) that have no associated monitoring requirements.

Where are we going?

Since January 2003, the Regional Board has reviewed a proposed timber harvest general waiver (February 2003), the timber harvest "Framework" (September 2003), and the above-mentioned individual timber harvest waivers. All of the waiver language considered has consistently contained similar findings and conditions. The existing waiver language establishes Regional Board authority, discusses the relationship between California Department of Forestry and Fire Protection (CDF) and the Regional Board, documents the conditions necessary for the protection of water quality and associated beneficial uses, and contains monitoring and reporting requirements to document compliance with waiver conditions. Currently, existing waiver language requires the implementation of management practices to prevent impacts to water quality and beneficial uses from timber harvest activities.

When issuing waivers, an area of compelling dissension exists in determining appropriate monitoring requirements to assure compliance with the conditions established in the waivers. This is substantiated by the numerous comments submitted to the Regional Board since January 2003 (see references), and was reinforced by the Timber Harvest Workshop on June 28, 2004.

Protection of water quality and associated beneficial uses is achieved through multi-faceted implementation efforts. Assessment of those efforts needs to recognize the dynamic nature of watershed monitoring, evaluate the complexity associated with the collection of appropriate data, and formulate questions to be answered with focused monitoring efforts. In the case of timber harvest activities, the overarching goal is for monitoring to demonstrate that the proposed activities comply with waiver conditions and that impacts to water quality and beneficial uses are prevented.

Assessment of watershed level effects is beyond the current emphasis of the timber harvest activities monitoring. Regional Board staff does not recommend establishment of additional watershed-scale monitoring at this time beyond the proposed TMDL numeric target monitoring. Our authorities and responsibilities are effectively implemented through regulating specific timber harvest activities. We need to focus our limited resources (currently 0.6 personnel years per year) on implementation of management actions to control discharge.

How do we get there?

Staff proposes to bring a new general waiver for timber harvest activities to the Regional Board for consideration on February 11, 2005. The proposed general waiver will be structured similarly to other general waivers and comply with Porter-Cologne sections 13269(a)(2) and 13267(b)(1). Applicants will submit a notice of intent (NOI) to be covered under the general waiver for timber harvest activities. Applicants will be required to comply with the terms of the waiver and implement management practices for the protection of water quality and beneficial uses. The general waiver will include monitoring requirements to confirm compliance with waiver conditions.

A general waiver for timber harvest activities would reduce staff time for the processing of waivers, allowing increased time for pre/post harvest inspections. One of the lessons learned at the June 28th monitoring workshop was that focusing on compliance inspections will improve protection of water quality and beneficial uses.

DISCUSSION

A. STATUS OF CURRENT WAIVERS

Since January 2003, the Regional Board has adopted twenty-two individual, conditional waivers of waste discharge requirements (Attachment 1) for timber harvest activities. Key waiver conditions include:

- Requirements to comply with applicable provisions of the Central Coast Region Water Quality Control Plan (Basin Plan) and other relevant State laws for the protection of water quality
- Prohibitions against the creation of conditions of pollution, contamination, or nuisance
- Monitoring and reporting requirements

The waiver conditions in all twenty-two individual, conditional waivers are similar. An example of waiver conditions can be found in Attachment 2. The waiver monitoring and reporting requirements vary. An example of the monitoring and reporting requirements can be

found in Attachment 3 (additional discussion of monitoring and reporting issues can be found below in item B. Waiver Process).

The Regional Board also approved enrollments for two (2) Non-industrial Management Plans (NTMP) under Resolution Number R3-2002-0115, General Waiver for Specific Types of Discharges, Section C.2 Inert Wastes. Both of these waivers (included in Attachment 1) apply to timber harvest operations that were completed during the summer of 2004 (confirmed by inspection) and additional operations will require the applicants to apply for new waivers.

Reporting 2004

All required monitoring reports have been received. Staff has reviewed all submitted monitoring reports. Responsible parties reported no impacts to water quality. Some implemented erosion control practices required routine maintenance and several foresters addressed additional erosion concerns outside, but adjacent to harvested areas.

Several reports included turbidity monitoring data. Staff reviewed the data and turbidity was elevated down stream of one abandoned road crossing (19 NTU up stream and 25 NTU down stream) for one set of measurements. No additional investigations were conducted regarding these turbidity levels. This is consistent with the required monitoring program that states a change of 50 percent or greater in up/down stream readings must be observed before additional investigations are conducted.

Several reports included temperature-monitoring data. Staff reviewed the submitted data and found no temperatures reported in excess of 65° Fahrenheit. Additionally, staff data review did not find any timber operation that contributed to an increase in temperature greater than 5° Fahrenheit in monitored water bodies.

Pre-harvest inspections

On October 6, 2004, Regional Board staff (Howard Kolb) attended a pre-harvest inspection for Timber Harvest Plan (THP) 1-04-207 for timberland owned by Roger and Michele Burch. The pre-harvest inspection participants included

representatives of the California Department of Forestry and Fire Protection, California Geological Survey, Santa Cruz County, and foresters from Redwood Empire Sawmills. The Review Team for the proposed project raised no water quality issues of concern that are not appropriately addressed in the proposed THP.

On October 29, 2004, Regional Board staff (Julia Dyer, Howard Kolb, and Drew Perkins) attended a pre-harvest Inspection of THP 1-04NTMP-011SCR in the Santa Cruz Mountains, Santa Cruz County. The pre-harvest inspection participants included representatives of Big Basin Water Company (property owner), California Department of Forestry and Fire Protection, Santa Cruz County and foresters for Big Creek Lumber Company. The Review Team for the proposed project raised no water quality issues of concern that are not appropriately addressed in the proposed NTMP.

A complete list of pre-harvest inspections performed since January 2003 can be found in Attachment 1.

Post-harvest inspections

On October 6, 2004, Regional Board staff conducted post-harvest inspections for THP's 1-99-492SCR, Ramsey Helicopter (completed 2000); 1-03-173SCR, Pryce Fork (completed 2004); and 1-02-064SCR, Ramsey II (completed 2003). The post-harvest inspection participants included representatives of the California Department of Forestry and Fire Protection, California Geological Survey, Santa Cruz County, and foresters from Redwood Empire Sawmills.

On October 6, 2004, Regional Board staff and a forester from Redwood Empire Sawmills also conducted two additional post-harvest inspections for THP's 1-95-095SCR, Eureka Gulch (completed 1996) and 1-02-190SCR, Mac Lean (completed 2004).

On October 29, 2004, Regional Board staff attended a post-harvest Inspection of THP 1-98-009 SCR in the Santa Cruz mountains, Santa Cruz County. The post-harvest inspection participants included representatives of Big Basin Water Company (property owner), California Department of Forestry and Fire

Protection, Santa Cruz County, and foresters for Big Creek Lumber Company.

Each inspection visually evaluated implementation, maintenance, and effectiveness of management measures. No evidence of significant sediment movement was observed at inspected sites. Regional Board staff did not inspect all portions of each harvest area.

For those THP's finished prior to 2004, application of appropriate management practices (required under CDF harvest plan approval) appeared to prevent discharge and appeared to avoid impacts to water quality and associated beneficial uses. Observed management practices included water-bars, slash packing, hay, and seed. Staff will illustrate some of these typical practices with photos at the Board meeting.

For those plans finished in 2004, application of appropriate management practices (required under CDF harvest plan approval) was evident. Observed management practices included water-bars, slash packing, hay, and seed. Regional Board staff did request that some additional maintenance take place where necessary and that some areas be watched to ensure protection of water quality and associated beneficial uses.

A complete list of post-harvest inspections performed since January 2003 can be found in Attachment 1.

Enforcement

On October 22, 2004, The California Department of Forestry and Fire Protection (CDF) issued a Notice of Violation (NOV) to Manson Creek THP 1-00-247 SCR for not complying with the Timber Harvest Plan or the Forest Practice Rules. On November 4, 2004, Regional Board staff inspected the Manson Property and found the site to be in violation of Resolution No. R3-2003-0082, Waiver of Waste Discharge Requirements (Waiver), for the timber harvest. Regional Board staff observed management practices were in need of repair at many locations throughout the property. Regional Board staff concurred with the findings in the CDF NOV and issued a Regional Board NOV on November 8, 2004 (Attachment 4).

The NOV states, "Compliance with the waiver is required. Please inform the Regional Water Quality Control Board in writing when all BMPs are implemented. Please submit photo documentation of installed BMPs." Regional Board staff will remain in contact with CDF to ensure compliance and conduct another post harvest inspection after the next significant rain event.

Clarification regarding how the Regional Board regulates tree falling

The Regional Board received two letters (Redwood Empire and Big Creek Lumber Company) requesting clarification of the process for obtaining a waiver for timber harvest operations¹. The request for clarification asked specifically how the Regional Board regulates tree falling. Regional Board staff sent two letters (Attachment 4A) stating if a timber harvest operation "propose(s) to engage in a timber activity that does not discharge or threaten to discharge waste into waters of the state, then the Regional Board does not need a report of waste discharge, nor will the Regional Board issue waste discharge requirements or a waiver of waste discharge requirements." The letter was very clear that "proposed activities in any areas that have potential to discharge or threaten to discharge waste into waters of the state, or that are within the Water and Lake Protection Zone (WLPZ), are likely to require waste discharge requirements or a waiver." Finally, Regional Board staff encouraged that monitoring be performed if operations occur and that our letter is not to be construed as approval for any activity that has potential to discharge waste into waters of the state and/or impact water quality and associated beneficial uses. There is also no guarantee the THP will qualify for a waiver.

B. WAIVER PROCESS

The Regional Board has an internal process for issuing individual waivers that has been referred to as the timber "Framework." The individual waiver process has been evolving since February

2003, when waiver conditions and monitoring requirements were discussed during review of a proposed general timber harvest waiver. The "Framework" concept was presented to the Regional Board September 12, 2003 for review and discussion.

The "Framework" describes a process for the regulated public to obtain an individual waiver of waste discharge requirements or waste discharge requirements for proposed timber harvest activities. The goal of the "Framework" is to implement an effective and efficient process for regulating timber harvest operations and to provide information to the public to assist them with the process. The "Framework" is not binding guidance, but general information about how staff develops waiver recommendations. The general components of the "Framework" are:

- An application process (this collects information necessary to process a waiver)
- Development of necessary waiver conditions (includes requirements for the implementation of management practices for the protection of water quality)
- Development of appropriate monitoring and reporting requirements

Discussion and public comment from the September 12, 2003 "Framework" presentation covered a wide array of issues. A summary of comments and concerns that were similar for regulated and non-regulated parties and that were the focus of Regional Board discussion follows:

General Timber Issues – The Regional Board expressed concern:

- Regarding limited Regional Board staff resources.
- That CDF oversight may not fully address water quality protection.
- That Regional Board staff is not actively participating in the CDF-led Monitoring Study Group.

Waiver Issues – The Regional Board:

¹ No timber operations are allowed to proceed without a THP approved by CDF.

- Prefers individual waivers, but will issue waste discharge requirements as necessary.
- Supports individual waivers to enable more fieldwork.
- Encourages evaluation of the process for oversight of timber harvest plans.
- Said the individual timber waiver requirements must be connected to protection of beneficial uses of water.

Monitoring – The Regional Board supports:

- Monitoring plans that are site specific and consider cost.
- Assessment of other sources of sediment and pollutants in a watershed.
- Watershed level monitoring.
- Continued use of the “Bar”² monitoring.
- Standardized photo monitoring.

Additional issues raised by the interested parties during the discussions included:

- The Regional Board should not duplicate the CDF’s existing oversight of THPs.
- Monitoring should be based on scientific principles.
- Inspections by Regional Board staff are encouraged and important.
- The cost of the Board’s requirements, especially on small landowners can be significant and should be considered as an important decision factor.
- Enforceable standards are needed to properly regulate timber harvesting.
- Rigorous monitoring of individual THPs is needed to assess compliance.

The “Framework” presentation concluded with the following direction for Regional Board staff:

- Continue to refine the existing process for obtaining an individual waiver (“Framework”).
- Increase field presence of Regional Board staff (inspections).

² The “Bar” refers to a set of monitoring recommendations established by the Regional Board in March, 2003.

- Include photo documentation of timber harvest sites as a component of Regional Board staff inspections.
- Refine monitoring efforts as the Board considers future waivers.
- Assess effectiveness of water quality monitoring efforts.

Evolution of Monitoring Requirements

The evolution of waiver monitoring and reporting requirements has been driven by concerns focused on the necessity and usefulness of the data collected. Since January 2003, monitoring required for each waiver has been a central issue of discussion. In March 2003, the Regional Board established guidance for waiver monitoring requirements to be considered as setting the “Bar” for Regional Board staff to use as a template when developing all future waiver-monitoring programs. The “Bar” monitoring requirements are summarized in Attachment 5. Regional Board staff considered the “Bar” in developing waivers issued on or before May 3, 2003. Each waiver contains monitoring and reporting requirements, adjusted as necessary for each individual site.

- Turbidity measurements up/down stream of plan (if Class I water course in harvest area) and up/down stream of all Class I/II water course crossings by roads
- Temperature measurements up/down stream of plan on all Class I water courses from June 1 through November 1 each year³
- Visual inspections for existing or potential sources of erosion
- Sediment release reporting
- Violation reporting
- Annual reporting⁴

Waivers issued after May 3, 2003, also considered the “Bar” but contain varied monitoring and reporting requirements. Some of

³ The “Bar” recommended temperature monitoring. For ten waivers approved May 2003, foresters were required to make determinations regarding need for temperature monitoring and submit letters to the Regional Board confirming proposed monitoring actions.

⁴ The “Bar” recommended reporting twice annually.

the reasons for variation from the “Bar” are documented below:

- Two waivers (THP No. 1-03-082SCR, March 2004 and THP No. 1-03-042SCR, May 2004), both on San Vicente Creek, contain requirements for temperature, turbidity measurements, visual inspections for existing or potential sources of erosion, and photo-point monitoring. The inclusion of photo monitoring made requirements on these plans more stringent than the “Bar” requirements.
- One waiver (THP No. 1-04-083SCR, July 2004) contains requirements for temperature measurements, visual inspections for existing or potential sources of erosion, and photo-point monitoring. This waiver did not include turbidity monitoring requirements.

At the July 2004 Regional Board meeting, the registered professional forester (RPF) for this THP suggested using the Big Creek Road Inventory process instead of monitoring in stream turbidity. The Regional Board approved this change, however this specific monitoring methodology was confined to this THP and was not available to all other proposed timber operations.

- Eight waivers contain requirements for visual inspections for existing or potential sources of erosion and photo-point monitoring. These waivers did not include turbidity or temperature monitoring requirements.

All of these waivers include sediment release reporting, violation reporting, and annual reporting.

Finally, for the two approved Non-industrial Timber Management Plans (NTMP) enrolled under Resolution Number R3-2002-0115, no monitoring was required under the General Waiver for Specific Types of Discharges, Section C.2 Inert Wastes. This is consistent with Porter-Cologne Section 13269(a)(3) (Attachment 6) that allows the Regional Board to waive monitoring requirements for discharges that it determines do not pose a significant threat to water quality.

Interested parties have raised numerous concerns regarding the timber harvest monitoring and reporting requirements. These concerns have played a role in departing from the “Bar” requirements. Summarized below are comments received during the individual waiver process discussions that are similar to the issues discussed at the “Framework” presentation:

1. Monitoring programs in previously approved waivers do not appear to be focused on answering specific questions.
2. Monitoring contained in currently approved waivers is costly.
3. Beneficial uses must be maintained and/or enhanced.
4. The monitoring programs associated with these waivers must be consistent with Porter-Cologne sections 13269(a)(2) and 13267(b)(1).
5. Scientifically defensible monitoring that is reasonably accurate and reflects the effects of land use (logging) should be developed and utilized to evaluate the influence of timber harvest activities on waters of the state.
6. Cumulative impacts need to be assessed.

Monitoring issues were also the focus of attention at the June 28th 2004 Regional Board Timber Harvest Workshop (Attachment 7). The workshop emphasized:

1. Develop questions that can be answered through appropriate monitoring (monitoring strategies depend on question you need to answer).
2. In Santa Cruz watersheds there are multiple and diffuse sources of impacts, not just timber.
3. Identification and interpretation of data collected in watersheds with multiple and diffuse sources of impacts is complex.
4. Within timber harvest activities there is variability in impacts and effectiveness of BMP implementation.

The need for monitoring and the complexity associated with monitoring was reiterated in follow up letters written after the Timber Harvest Workshop from Richard R. Harris Ph.D., Betsy Herbert Ph.D., and Dennis O. Hall,

Staff Chief, Forest Practice, CDF (Attachment 8).

Addressing Monitoring Needs

The monitoring issues discussed above are best addressed by focused monitoring efforts. By defining what is to be documented through information collected, appropriate monitoring efforts can be directed towards answering specific questions. Defined questions will also assist the Regional Board selection of appropriate monitoring to evaluate impacts associated with timber harvest activities.

For timber harvest activities, the following monitoring types⁵ may be considered relative to the questions being asked (Attachment 9 contains additional information regarding these monitoring types):

1. **Implementation Monitoring** - used to determine whether activities, including management measures, are carried out as planned.
2. **Forensic Monitoring** - used to detect significant pollutant sources (e.g., failed management measures) in the field for purposes of timely remedial action.
3. **Effectiveness Monitoring** - used to determine whether particular land management prescriptions (e.g., erosion control measures, riparian buffers) are effective at achieving desired results.
4. **Water Quality Compliance Monitoring** - used to determine whether pollutant discharges from land use activities are in compliance with water quality standards.
5. **Assessment Monitoring** - used to characterize existing water quality conditions, usually as a “snapshot” in time.
6. **Trend Monitoring** - used to characterize water quality conditions over time.

Timber monitoring questions tend to group into two categories. The first group, site level, pertains to site-specific effects resulting directly from timber harvest activity. The second group,

⁵ Monitoring types were defined by the State Monitoring MOU Workgroup.

watershed level, pertains to the off-site effects of timber harvest activity combined with all other watershed activities. Examples of some questions to be considered for timber harvest activities may include:

Site level

- Are management practices being implemented?
(Implementation Monitoring)
- Is sediment leaving the timber harvest area?
(Forensic Monitoring)
- Are water temperatures being altered by timber harvest activities?
(Water Quality Compliance Monitoring)

Watershed level

- Is the sediment leaving the timber harvest area impacting water quality?
(Effectiveness Monitoring)
- Can sediment leaving the timber harvest area be differentiated from other sediment sources?
(Assessment Monitoring)
- Are water temperatures or other parameters (dissolved oxygen, habitat reduction, hydrology, etc.) being altered by timber harvest activities?
(Water Quality Compliance Monitoring)
- Is water quality changing over time?
(Trend Monitoring)

The proposed general waiver will refine the site level questions that will be appropriately addressed by those who conduct timber harvest activities. Questions at the watershed level will require that the Regional Board look beyond the regulated timber community and involve other parties and stakeholders. Assessment of watershed level effects is beyond the current emphasis of the timber harvest activities monitoring, but is a worthy long-term goal.

Regional Board staff are aware⁶ of monitoring efforts related to potential off-site effects of timber harvest activities and other potential causes of impacts to beneficial uses. For the Big Basin Hydrologic Unit, these efforts are described in Attachment 10. Each monitoring

⁶ Participation in these efforts is minimal.

effort considers specific questions relating to the status of beneficial uses and/or to potential causes of impacts to beneficial uses. Taken together, these efforts provide a more complete picture of existing and potential impacts to beneficial uses in the Santa Cruz mountain watersheds.

The assessment activities described in Attachment 10 are typically one-time projects to evaluate existing and new information about a particular watershed, biological community, or other resource issue (e.g., water supply, sedimentation from roads). As with the monitoring activities, the assessments vary in their objectives from very specific to more general. The status of salmonids (steelhead and Coho) has been the subject of long-term evaluation by several agencies in the San Lorenzo River Watershed — a consequence of the imperiled condition of these fisheries and the requirement to address that condition under state and federal endangered species regulations.

Attempts to synthesize findings or coordinate future efforts of monitoring and assessment activities have been challenging due to the wide range of issues addressed, the diversity of entities pursuing them, and limited resources. However, due to the substantial efforts already completed by many of these entities, their focus has shifted from on-going monitoring and continued assessments to implementing the recommendations of completed assessments. The Integrated Watershed Restoration Program (IWRP) represents the most significant effort in this regard and addresses five major watersheds throughout the Big Basin Hydrologic Unit. The San Lorenzo River Salmonid Enhancement Plan (Santa Cruz County, 2002) synthesizes existing biological and physical data into a comprehensive plan for enhancement and restoration of steelhead and coho populations, including recommendations for sediment, large woody material, stream flow, and fish passage. This plan also outlines a monitoring strategy that is not currently funded.

Some additional examples of efforts that address potential watershed level effects include:

- State Cumulative Watershed Effects Workgroup - The CWE Workgroup is

reviewing the process for adequately addressing cumulative watershed effects (CWEs) as part of the Timber Harvest Plan process and plans to propose ways to improve cumulative watershed effects assessment.

Regional Board staff attend meetings, and review, comment, and edit documents. Information from this group is currently under review and may be incorporated into the proposed new general waiver for timber harvest activities.

- State Monitoring MOU Workgroup – This group is working to establish cooperative efforts for monitoring of timber operations on non-federal lands to ensure that waste discharges from timber operations do not adversely affect the quality and the beneficial uses of the State's waters.

Regional Board staff attend meetings, and review, comment, and edit documents. Information from this group (Monitoring types) has been incorporated into this staff report and will be utilized when developing the monitoring programs for the proposed new general waiver for timber harvest activities.

- State Monitoring Study Group (CDF lead) - The Monitoring Study Group's (MSG's) Hillslope Monitoring Program intends to provide timely information on the implementation and effectiveness of forest practices related to water quality that can be used by forest managers, agencies, and the public in California.

Regional Board staff does not attend meetings, but reviews the information and documents generated by this group.

- Department of Fish and Game, Regional Water Quality Control Boards and State Water Resources Control Board Timber Harvest Review coordination group. The purpose of this group is to establish better communication, improve

cooperation, and avoid conflicts on timber harvest project review.

Regional Board staff attend meetings, and review, comment, and edit documents (Attachment 11).

- The Modified Completion Report Program (CDF led) – This program samples and evaluates post-harvest implementation and effectiveness using standardized protocol.

Regional Board staff does not attend meetings, but reviews the information and documents generated by this group.

Additionally, proposed Regional Board monitoring efforts that will address other water quality questions include:

- The San Lorenzo River Total Maximum Daily Load (TMDL) for Sediment - Monitoring efforts focus on assessing impacts to water quality and associated beneficial uses in the San Lorenzo River. Parameters of the monitoring effort include percent fine fines < 0.85 mm in spawning gravels, percent coarse fines < 6 mm in spawning gravels, Residual Pool Volume (V*), and median particle size diameter (D₅₀) from riffle crest surfaces. The numeric targets for these parameters are expected to indicate whether the impacted beneficial uses in the watershed are adequately protected. In order to fund this monitoring, staff will have to redirect resources during the remainder of this fiscal year or target TMDL or other staff resources for this effort next fiscal year.

Finally, there are other ongoing and proposed non-Regional Board monitoring efforts that will address other water quality questions:

- Little Creek - The Little Creek Study, in the Scott Creek Watershed, is ongoing under the direction of Dr. Brian Dietterick (Director Swanton Pacific Ranch, California Polytechnic University). The Little Creek watershed is privately held lands managed for

timber. This project collects event-based suspended sediment and turbidity data along with the associated hydrologic and climatic data needed to determine sediment loads and quantify the hydrologic response. The data set represents the most comprehensive event-based suspended sediment and turbidity data for a single watershed in the Central Coast Region.

This project is supported by grant funds and private donations. The Little Creek Study should be viewed as a pilot watershed monitoring effort for timber harvest activities in the Santa Cruz Mountains.

- Soquel Demonstration Forest (CDF) – As a component of the proposed Fern Gulch Timber Harvest Plan, THP No. 1-04-046 SCR, Santa Cruz County, CDF intends to implement a proposed turbidity monitoring study. This monitoring study will attempt to evaluate turbidity levels along the falling limb of the hydrograph.

C. PROPOSED GENERAL WAIVER

Staff proposes to bring a new general waiver for timber harvest activities to the Regional Board for consideration on February 11, 2005. The proposed general waiver will be structured similarly to other general waivers and comply with Porter-Cologne sections 13269(a)(2) and 13267(b)(1). Staff proposes the general waiver be approved by the Regional Board and include authority for the Executive Officer to enroll individual applicants under the general waiver.

There are options to consider in developing a General Waiver⁷. There may be a need to include multiple conditions based on:

- The individual watershed of the harvest
- The beneficial uses of the water bodies to be protected (COLD, RARE, etc.).

⁷ Staff is currently reviewing general waivers and WDRs developed by other Regional Boards to compare against the conditions in our existing waivers.

- Fisheries in the proposed harvest area
- Class of streams in the proposed harvest area
- Erosive nature of soils in the proposed harvest area

There are options, in addition to the general waiver, for regulating proposed timber harvest operations. If proposed timber harvest operations do not pose significant threat to water quality, the option exists to enroll the proposed operation under Resolution Number R3-2002-0115, General Waiver for Specific Types of Discharges, Section C.2 Inert Wastes.

If proposed timber harvest operations do pose threats to water quality that will not be covered by the conditions in the general waiver, waste discharge requirements can be issued.

For the general waiver, applicants will submit a notice of intent (NOI) to be covered under the general waiver for timber harvest activities. Applicants will be required to comply with the terms of the waiver and implement management practices for the protection of water quality and beneficial uses. The general waiver will include monitoring requirements to confirm compliance with waiver conditions.

Once an NOI is received, Regional Board staff will determine if the proposed operation is appropriate to be covered by the general waiver. The Executive Officer would then send a letter of coverage to the applicant. Staff will then provide the Regional Board with a list of approved THPs on the following agenda.

A general waiver for timber harvest activities will reduce staff time for the processing of waivers, allowing increased time for pre/post harvest inspections. One lesson learned from the June 28th monitoring workshop was that focusing on compliance inspections will improve protection of water quality and beneficial uses.

As stated earlier, the waiver conditions in all twenty-two (22) adopted individual, conditional waivers are similar. The main issues of disagreement are how to determine if the conditions contained in the waivers are

protective of water quality and how to best monitor to ensure compliance.

D. CONCLUSION

Since January 2003, the Regional Board has reviewed a proposed timber harvest general waiver (February 2003), the timber harvest "Framework" (September 2003), and the above-mentioned individual timber harvest waivers. All of the waiver language considered has consistently contained similar findings and conditions. The existing waiver language establishes Regional Board authority, discusses the relationship between California Department of Forestry and Fire Protection (CDF) and the Regional Board, documents the conditions necessary for the protection of water quality and associated beneficial uses, and contains monitoring and reporting requirements to document compliance with waiver conditions. Currently, existing waiver language requires the implementation of management practices to prevent impacts to water quality and beneficial uses from timber harvest activities.

When issuing waivers, an area of compelling dissension exists in determining appropriate monitoring requirements to assure compliance with the conditions established in the waivers. This is substantiated by the numerous comments submitted to the Regional Board since January 2003 (see references), and was reinforced by the Timber Harvest Workshop on June 28, 2004.

Protection of water quality and associated beneficial uses is achieved through multi-faceted implementation efforts. Assessment of those efforts needs to recognize the dynamic nature of watershed monitoring, evaluate the complexity associated with the collection of appropriate data, and formulate questions to be answered with focused monitoring efforts. In the case of timber harvest activities, the overarching goal is for monitoring to demonstrate that the proposed activities comply with waiver conditions and that impacts to water quality and beneficial uses are prevented.

Multiple lines of evidence and information should be considered, aside from waiver compliance, for the Regional Board to develop a complete picture of the potential or existing impacts to water quality and associated

beneficial uses in Santa Cruz mountain watersheds. However, the role of the regulated timber community in providing and/or developing that information should be proportional to their anticipated effects.

As stated earlier, assessment of watershed level effects is beyond the current emphasis of the timber harvest activities monitoring. Regional Board staff do not recommend establishment of additional watershed-scale monitoring at this time beyond the proposed TMDL numeric target monitoring. Our authorities and responsibilities are effectively implemented through regulating specific timber harvest activities. We need to focus our limited resources (currently 0.6 personnel years per year) on implementation of management actions to control discharge. However, through participation and tracking of existing monitoring efforts such as the Little Creek Study, the San Lorenzo River TMDL for Sediment, the Regional Sediment Assessment Framework, and statewide monitoring initiatives, staff will be able to make progress toward the longer term goal of watershed monitoring.

E. RECOMMENDATION

Direct staff to bring a new general waiver for timber harvest activities to the February 11, 2005 Regional Board meeting for Regional Board consideration.

ATTACHMENTS

1. List of 24 approved individual waivers and pre/post timber harvest inspections conducted by Regional Board staff
2. Example of waiver conditions in existing waivers
3. Example of monitoring and reporting requirements in existing waivers
4. Enforcement Actions
- 4A. Clarification regarding how the Regional Board regulates tree falling
5. Monitoring "Bar" program
6. Porter-Cologne sections
7. Timber Harvest Workshop Summary
8. Follow up Letters to the Timber Harvest Workshop
9. Monitoring types defined by the State Monitoring MOU Workgroup
10. Summary of Monitoring and Assessment Activities Related to Aquatic Life Beneficial Uses In the Big Basin Hydrologic Unit
11. Meeting notes Department of Fish and Game, Regional Water Quality Control Boards and State Water Resources Control Board Timber Harvest Review coordination group.

References:

1. July 17, 2003 letter and attachments, "Proposal for regulating discharges of sediment from timber harvest operations" representing The Ocean Conservancy, Citizens for Responsible Forest Management, Sierra Club – Santa Cruz Group and the Lompico Watershed Conservancy
2. August 20, 2003 letter "Framework for Timber Harvest Regulation", Stephen R. Staub, Forester and Environmental Consultant
3. September 2, 2003 letter from Redwood Empire

4. January 30, 2004 letter representing the Ocean Conservancy, Citizens for Responsible Forest Management, Sierra Club – Santa Cruz Group and the Lompico Watershed Conservancy, RMC Timber Harvest (THP No. 1-03-082 SCR), the Smelt-Locatelli Timber Harvest (THP No. 1-04-008 SCR SCR), and the Bartlebaugh Timber Harvest (THP No. 1-03-071 SCR).
5. February 12, 2004 letter regarding waiver process, Big Creek Lumber Company
6. February 18, 2004 letter “Conditional Waiver of Waste Discharge Requirements for Discharges related to Timber Harvest Activities”, Santa Cruz County Farm Bureau
7. March 15, 2004 letter by Dennis Jackson, Hydrologist
8. March 17, 2004 letter California Farm Bureau Federation, Governmental Affairs Division, Smelt-Locatelli THP1-04-008 SCR.
9. April 13, 2004 letter “Lower Little Creek Harvest Plan (THP 1-04-053)”, Brian C. Dieterick, Ph.D.
10. April 27, 2004 letter representing The Ocean Conservancy, Citizens for Responsible Forest Management, Sierra Club – Santa Cruz Group and the Lompico Watershed Conservancy
11. April 30, 2004 letter from Lompico Watershed Conservancy, May 4, 2004 letter from Redwood Empire, Pryce Fork THP 1-03-173SCR, Redtree Properties 1-03-042SCR, and Estrada NTMP 1-98NTMP-022SCR.
12. May 3, 2004 letter from Citizens for Responsible Forest Management, Pryce Fork THP 1-03-173SCR.
13. May 4, 2004 letter from Redwood Empire, Pryce Fork THP 1-03-173SCR.
14. May 12, 2004 letter representing Citizens for Responsible Forest Management, Sierra Club – Santa Cruz Group, the Lompico Watershed Conservancy, and The Ocean Conservancy
15. July 5, 2004 Feedback on the June 28th Timber Harvest Workshop, Richard R. Harris, Ph.D.
16. July 7, 2004 Feedback on the June 28th Timber Harvest Workshop, Betsy Herbert, Ph.D.
17. July 19, 2004 letter, “Recommendation on Timber Harvest Monitoring”, Redwood Empire
18. July 19, 2004 letter, Waste Discharge Waiver Concerns, Big Creek Lumber Company
19. August 30, 2004 letter regarding monitoring conditions, representing the Ocean Conservancy, Citizens for Responsible Forest Management, Sierra Club – Santa Cruz Group and the Lompico Watershed Conservancy.
20. September 7, 2004 Feedback on the June 28th Timber Harvest Workshop, CDF

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