

Discontinuation of Discussions Regarding a Statewide Approach to Addressing Water Quality Impacts from Livestock Grazing

Summary of Prevailing Public Comments and Staff Response

September 11, 2015

- **General Comments**

- *Target/prioritize Actions where there is a problem*
 - Resolve 3 of the proposed resolution directs the Regional Water Boards to “consider prioritizing actions to address livestock grazing operations that cause impairment, or have the likelihood to do so based on unique hydrology, topography, climate, and land use of that specific region.” Staff believes this approach is consistent with the approach recommended by the commenter.
- *Boards should not unreasonably burden Ranchers*
 - Resolve 2 of the proposed resolution directs the Regional Water Boards to “work collaboratively with individual property owners, livestock grazing operators, and other interested stakeholders to determine which actions, including regulatory actions and effective non-regulatory efforts for Best Management Practice (BMP) implementation, are best suited to protect water quality and the beneficial uses of waters from pollution.” This approach directs the Regional Water Boards to engage in a public process aimed at identifying the best approaches, including non-regulatory BMP efforts.

Resolve 3 of the proposed resolution directs the Regional Water Boards to “consider prioritizing actions to address livestock grazing operations that cause impairment, or have the likelihood to do so based on unique hydrology, topography, climate, and land use of that specific region.” In these instances, the Water Boards have a legal mandate to take actions to protect water quality and the beneficial uses of waters from pollution. This approach would focus action in waterbodies/watersheds with existing or likely impairments, and would not trigger actions in watersheds where grazing impacts are not occurring or are unlikely to occur.

Resolve 4 of the proposed resolution, directs the Regional Water Boards to consider, “the unique hydrology, water quality impacts and **cost of compliance** [emphasis added]” in considering whether BMPs might be the best approach to address impacts from grazing. This approach also directs action based on the circumstances within a specific watershed, including the cost of compliance.

Staff believes these approaches recognizes a project goal of avoiding unreasonable burden on ranchers while fulfilling the Water Boards' legal mandate to protect water quality and the beneficial uses of waters from pollution.

- *Resolution does not compile information gathered during listening sessions*
 - Detailed notes compiled during the Focused Listening Sessions are available on the Water Boards website at:
http://www.waterboards.ca.gov/water_issues/programs/nps/grap.shtml
- *Support Voluntary Actions*
 - Resolves 2, 4, 5, and 6 of the proposed resolution direct the Regional Water Boards to consider non-regulatory efforts with regard to:
 - ❖ evaluating which actions are best suited to protect water quality and the beneficial uses of waters from pollution;
 - ❖ determining whether BMPs are appropriate to protect water quality and the beneficial uses of waters from pollution;
 - ❖ assessing the effectiveness of those BMPs; and,
 - ❖ determining which actions should ultimately be taken to protect water quality and the beneficial uses of water.

Non-regulatory BMPs are voluntary actions, thus, voluntary actions are recognized and supported by the proposed resolution.

- **State vs. Regional Approach**

- *Should Continue Statewide Process*
 - Staff believes issues associated with impacts to water quality from grazing operations are best addressed by the Regional Water Boards at the regional level, in part due to regional differences. Based on the GRAP goals and stakeholder input, staff recommends that the statewide discussions be discontinued and that the Regional Boards take actions they determine to be necessary, consistent with the proposed resolution and State and federal law.
- *Require Regions to Develop Grazing Program*
 - Based on the GRAP goals and stakeholder input, staff recommends that the statewide discussions be discontinued and that the Regional Boards take actions they determine to be necessary, consistent with the proposed resolution and State and federal law. Because of regional differences in water quality concerns and priorities, Staff does not recommend that the State Water Board take an action that would require the Regional Water Boards to develop grazing programs.

- *Regional Water Boards should develop regional approaches, including BMPs that take into account current science, specific, localized water quality impairments, and local environmental conditions.*
 - Resolves 2, 3, and 4 direct the Regional Water Boards to:
 - ❖ work collaboratively with individual property owners, livestock grazing operators, and other interested stakeholders to determine which actions, including regulatory actions and effective non-regulatory efforts for BMP implementation, are best suited to protect water quality and the beneficial uses of waters from pollution;
 - ❖ consider prioritizing actions to address livestock grazing operations that cause impairment, or have the likelihood to do so based on unique hydrology, topography, climate, and land use of that specific region; and,
 - ❖ consider the unique hydrology, water quality impacts and cost of compliance, BMPs should be considered for use, where appropriate.

Staff believes this approach is consistent with the approach recommended by the commenter.

- *Regional Water Boards should work with stakeholders to identify areas where improvements are necessary*
 - Resolve 3 of the proposed resolution directs the Regional Water Boards to consider prioritizing actions to address livestock grazing operations that cause impairment, or have the likelihood to do so based on unique hydrology, topography, climate, and land use of that specific region.

Staff believes this approach is consistent with the approach recommended by the commenter.

- **Policy Considerations**

- *Grazing program should mandate minimum requirements*
 - The State Water Board sometimes takes the opportunity for leadership in certain areas where it finds that doing so can provide necessary consistency and efficiencies to the regions. Examples have included policies, such as the Enforcement and Supplemental Environmental Project policies, and permitting, such as the construction and industrial stormwater, composting, and aquatic pesticides permits. In other areas the State Board has not directed the regions through policy or statewide permitting, but has left the Regional Water Boards wide discretion as to how to regulate activities within the confines of legal requirements. Such examples include not only grazing, but also irrigated lands programs and timber harvesting. Sometimes the determination to allow the Regional Water Boards wide discretion is based on recognition that differences in the unique hydrology, topography, climate,

and land use in each region limit the need for statewide consistency, and that there are few efficiencies in prescribing a statewide policy or program. Other times it is based on the limited resources of the State Water Board, and its need to prioritize its activities. In the case of the grazing program, there have been good strides made by some of the regions, especially where there have been serious water quality concerns, such as in Tomales Bay, where the San Francisco Regional Water Board now has a comprehensive waiver program in place. While the State Water Board is directing the Regional Water Boards to work collaboratively with property owners, livestock grazing operators and other interested stakeholders, including the environmental community, to determine which BMPs are best suited to protect water quality, it may, at a later time, decide to provide more guidance to the regions, particularly if the State Water Board subsequently determines that the regions were not able to sufficiently address water quality impacts from grazing activities.

- *Grazing Program should/Should Not prohibit direct access to waterways*
 - The current resolution leaves up to the regions how to address grazing impacts in their regions. In part, this decision was based upon the fact that regions have unique hydrology, topography, climate, and land use, and the recognition that those differences merit different regulatory responses. While good science exists for keeping cattle out of streams, there may be exceptions where the unique circumstances of that grazing area make it unnecessary to do so. The resolution allows the regional boards to work collaboratively with the different interested parties to determine which BMPs are best suited to protect water quality and beneficial uses of water, and requires that they consider not only the unique hydrology and water quality impacts, but also the cost of compliance with the BMPs. Given those considerations, it may be that a regional board determines that other BMPs, such as off-site watering, may be more cost effective than fencing in certain areas.

- **Legal Issues**

- *State Water Board doesn't have the authority to regulate Grazing*
 - The Water Boards have a mandate to address all discharges of “waste” that could affect the quality of the waters of the State. The definition of waste includes sewage and all other waste substances associated with human habitation, or of human or animal origin, or from producing, manufacturing, or processing operations. The broad mandate to regulate waste applies not only to discharges piped directly to water bodies, but also to “non-point source” discharges that reach the water bodies indirectly. Thus, a number of grazing-related impacts, such as deposition of manure that may run off to surface water

or percolate to groundwater through precipitation or irrigation and trampling near a water body that may lead to sediment discharges, are within the water boards' broad mandate to regulate waste. Under State Water Board policy, all nonpoint source pollution discharges must be regulated.

- The Water Boards are able to regulate not only actual discharges to waters of the state, but also discharges of waste that could affect the quality of the waters of the state, whether those activities take place on public or private lands, and may issue requirements to landowners or operators or both. Over the years, the water boards have regulated a number of activities because of their potential to affect water quality, including irrigated agriculture, building construction, timber harvesting, road management, onsite septic systems, and grazing.
- Where water quality monitoring data for surface waters indicates that pollutant levels exceed protective water quality standards, it is added to the US EPA's 303(d) list. There are currently over 120 grazing-related impairments (including for fecal bacteria, temperature, sediments, and nutrients) on the 303(d) list. In lieu of developing a TMDL, where appropriate, the Water Boards may address impairments through appropriate findings and requirements in waste discharge requirements or waivers of waste discharge requirements; accordingly in developing and prioritizing waste discharge requirements or waivers, the water boards will consider the 303(d) list. Where appropriate, a regulatory program for grazing may take the place of the development of TMDLs for individual impairments related to grazing.
- In addition to addressing water quality impairments, the Water Boards are required to protect high quality waters. Under state and federal "anti-degradation" requirements, the Water Boards must generally maintain the quality of water bodies where the quality exceeds that required to protect the beneficial uses, unless they can show that degradation is justified. There are numerous high-quality streams within public lands, including federally managed wilderness areas, which must be protected from water quality degradation caused by livestock grazing. Many of these high-quality streams are the headwaters for the streams and rivers that provide California's drinking water.
- One commenter notes that there may be areas where, because of unique hydrology, and topography, grazing activities cannot be linked to impacts to waters of the state. Although the GRAP program did not develop far enough for any regulatory mechanism to be proposed, a regulatory program may be structured to exempt a rancher from requirements upon a showing that there is no potential for the rancher's grazing activities to impact waters of the state. Similarly, regulatory programs may be structured to give credit where actions have already been taken voluntarily to address potential impacts. This is similar to the approach the State Water Board recently took in its general waste discharge requirements for composting operations. For those facilities that

could not have an effect on water quality, the provisions do not apply, and where composting operations are already covered by another program, they are exempt. Further, any resulting regulatory action would likely not have displaced existing programs that were already in place and working. The State and Regional Boards often co-regulate with each other, along with local and federal partners, and make efforts not to replicate one another's requirements.

○ *Definition of Nuisance in the context of grazing*

- “Nuisance” is defined in section 13050 (m) of the Water Code as “anything that meets all of following requirements:
 - (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - (3) Occurs during, or as a result of, the treatment or disposal of wastes.”
- The discharges of waste from grazing include sediment loading and the introduction of bacteria and nutrients to streams and wetlands. Such discharges can also physically alter the land and harm habitat and wildlife in and around streams and wetlands. Examples include:
 - ❖ Livestock grazing near a stream can break down the stream banks and trample the natural vegetation along the banks, causing erosion and loss of shade. This may slow down flow, make the waterway shallower, and increase light hitting the water, with the result of increased water temperature that causes algae growth. The algae growth in turn can harm fish and wildlife.
 - ❖ Livestock waste entering streams either directly or indirectly by irrigation or storm water runoff can cause bacteria problems and nutrient buildup, which in turn promotes algae growth, threatens aquatic life, and makes recreational water contact a public health concern.
- When these impacts affect an area, a number of people can be affected, including the downstream water user whose water source may be affected and the recreational water user whose use and enjoyment of a stream may be affected. If the severities of the impacts rise to the level of resulting in public health concerns or interfering with the use of property or the comfortable enjoyment of life or property, they would constitute a nuisance.

- **Scientific Basis**

- *Policies must reflect best Science*

- The Staff agrees that all of the State and Regional Board actions must be based soundly in science but recognize that it is often difficult to judge what is “best” science, as science is constantly evolving. While the state and regional boards endeavor to recognize and stay up-to-date on changes in the scientific world, it is also important that policies and decisions are not based upon ideas that have not yet had the opportunity to be thoroughly tested and peer reviewed. As is clear from the comments that we received during the comment period on the resolution and during the focused listening sessions, not everyone is in agreement on the science of rangeland management and the effects of grazing on water quality. Staff believes that the requirements of the resolution direct the regional boards to continue to work with interested stakeholders to collect data, test hypothesis, learn from our partners in the universities and in the fields, and listen to new ideas and concepts that are based in supportable science and fact.

- *Water Boards have not demonstrated impairment or link to grazing*

- The water boards are able to regulate not only actual discharges to waters of the state, but also discharges of waste that could affect the quality of the waters of the state. Over the years, the water boards have regulated a number of activities because of their potential to affect water quality, including irrigated agriculture, building construction, timber harvesting, road management, onsite septic systems, and grazing.

The resolution acknowledges that well managed livestock grazing operations can provide benefits to the environment, but that poorly managed livestock grazing operation can cause water pollution and nuisance and impair beneficial uses of water. The potential impacts to water quality from grazing include sediment loading and the introduction of bacteria and nutrients to streams and wetlands, and physical alteration of the land that can harm habitat and wildlife in and around streams and wetlands. Examples include:

- Livestock grazing near a stream can break down the stream banks and trample the natural vegetation along the banks, causing erosion and loss of shade. This may slow down flow, make the waterway shallower, and increase light hitting the water, with the result of increased water temperature that causes algae growth. The algae growth in turn can harm fish and wildlife.

- Livestock waste entering streams either directly or indirectly by irrigation or storm water runoff can cause bacteria problems and nutrient buildup, which in turn promotes algae growth, threatens aquatic life, and makes recreational water contact a public health concern.
 - Water quality monitoring data for surface waters indicates there are currently over 120 impairments related to pollutants that are closely linked to grazing, including for fecal bacteria, temperature, sediments, and nutrients. Although there is some uncertainty as to whether all of these impairments are caused by grazing, and are not caused or contributed to by other natural sources, such as wildlife, that determination would be made as part of the TMDL process, where the water body is assessed to determine the pollution sources and amounts. However, because of the cost and time commitment involved in developing a TMDL, it is often appropriate to address a potential source through appropriate findings and requirements in waste discharge requirements or waivers of waste discharge requirements, as opposed to going through the TMDL process.
 - The resolution suggests that boards prioritize their actions to address livestock grazing operations that cause impairment, or are likely to do so based on the unique hydrology, topography, climate and land use of that specific region. It also recommends establishing monitoring requirements to gather data as to where impacts are actually occurring. The resolution thus acknowledges that further work is required to fully understand and establish water quality impacts from grazing.
- **303d List**
 - *Linkage between water quality impairments on the 303(d) list and grazing as a potential pollutant source is not sufficiently established.*
 - Many commenters identified a need to update the process used to identify waters as impaired (referred to as 303(d) list of impaired waters). The listing process is conducted through the preparation of the integrated report. Information on the integrated report is available on the Water Boards website at:

http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml

The proposed resolution does not relate to the listing process and the specific recommendation for the integrated report are not germane to the resolution

before the board. However, commenters generally identified three issues with the listing process: (1) a perceived lack of scientific evidence connecting an identified impairment to grazing as a potential source and a need to consider other potential sources (e.g. marijuana cultivation), (2) a perceived need to re-evaluate the data used to make listing decisions, and (3) the desire for greater transparency in the data used in making the listing decision and collaboration with stakeholders on how to address impairments.

With regards to the adequacy of the link between impairments and potential sources, as part of the 2012 Integrated Report Staff Report¹, the Water Board has revised the listing procedure such that potential sources are only identified in fact sheets when a specific source analysis has been performed as part of a TMDL or other regulatory process. Otherwise, the potential source was marked "Source Unknown". This approach allows for a transparent and consistent source characterization for impairments. The 2012 California Integrated Report covers waters within the Regional Water Quality Control Boards for the North Coast (Region 1), Lahontan (Region 6), and Colorado River (Region 7) regions. As the integrated report process moves into additional regions, similar updates will be made.

With regard to needing to reevaluate the data used to make listing decisions, the state already systematically reviews all available data to update listing decisions. This is done periodically (three of the nine regions are done every two years). In addition, if a waterway is impaired, the Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options (Impaired Waters Policy), directs that impairments should be verified as part of the TMDL process. Furthermore, Section 4 of the Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List (Listing Policy) states "Any interested party may request an existing listing be reassessed under the delisting factors of this Policy. In requesting the reevaluation, the interested party must use the delisting factors; state the reason(s) the listing is inappropriate and the Policy would lead to a different outcome; and provide the data and information necessary to enable the Regional Water Board and the State Water Board to conduct the review."

With regards to data transparency and stakeholder collaboration, all data used for the most recent (2012) California Integrated Report is publically available on the Water Boards website at:

http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml

¹ Available at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/docs/ir_staffreport_final.pdf

More specifically, the raw data submitted is available at:

http://www.waterboards.ca.gov/water_issues/programs/tmdl/ref_menu.shtml

The lines of evidence that were developed based on the raw data is available at:

http://www.waterboards.ca.gov/water_issues/programs/tmdl/2012state_ir_reports/table_of_contents.shtml.

Opportunities for stakeholder collaboration and public input in the listing process are provided at several steps. First, periodic data solicitations are noticed to provide interested parties opportunities to submit new data. Second, public hearings with advance notice and opportunity for public comment are held at each of the Regional Water Boards to provide input on changes, additions and deletions to the Clean Water Act section 303(d) List portion of the Regional Integrated Report. Additional notice and opportunity for public comment is provided through a State Water Board approval process that ultimately leads to adoption of the California Clean Water Act section 303(d) List portion of the Integrated Report through a public process. Finally, there is opportunity to comment directly to U.S. EPA who has the final approval authority of the section 303(d) List portion of the Integrated Report. Following U.S. EPA approval, 303(d) listings are prioritized for TMDL development. TMDL development includes a re-evaluation of potential sources of impairment and collaborative development of potential control mechanisms through the public Basin Plan Amendment process or through alternative processes such as a single regulatory action or certification of a third party action.

- *State Should Systematically review waterways on the 303d list*
 - As part of the integrated report process the state already systematically reviews all available data to update listing decisions. In addition, if a waterway is impaired the State Water Boards Impaired Waters Guidance directs that impairments should be verified as part of the TMDL process.

- *State should make listing data available*
 - All data used for the most recent (2012) integrated report is already publically available on the Water Boards website at:
http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml
 - More specifically, the raw data submitted is available at:
http://www.waterboards.ca.gov/water_issues/programs/tmdl/ref_menu.shtml

- The lines of evidence that were developed based on the raw data is available at: http://www.waterboards.ca.gov/water_issues/programs/tmdl/2012state_ir_reports/table_of_contents.shtml

- **Monitoring**

- *The Water Boards should ensure sampling protocols are accurate and objective*

- Quality assurance and quality control are components of a quality system. A quality system is a structured system that describes the policies and procedures for ensuring that work processes, products, or services satisfy the user's specifications and expectations. A quality system is the means by which an organization manages its quality aspects. These aspects are Project Management, Data Generation and Acquisition, and Assessment and Oversight.

The State Water Resources Control Board has prepared documents that are used in its Quality System. They consist of the Quality Management Plan (QMP) which is the overall Quality Assurance (QA) plan for the entire State Water Resources Control Board; Quality Assurance Program Plans (QAPrP), e.g. the Surface Water Ambient Monitoring Program's QA Program Plan; and numerous Quality Assurance Project Plans (QAPP).

http://www.waterboards.ca.gov/water_issues/programs/quality_assurance/index.shtml

- *Irrigated Lands Regulatory Program Monitoring Should be considered*

- Resolve 3 of the proposed resolution directs the Regional Water Boards to “consider prioritizing actions to address livestock grazing operations that cause impairment, or have the likelihood to do so based on unique hydrology, topography, climate, and land use of that specific region.” Resolve 4 directs the Regional Water Boards to consider, “the unique hydrology, water quality impacts and cost of compliance” in considering whether BMPs might be the best approach to address impacts from grazing. Staff believes this would include consideration of data available from the irrigated lands program and is therefore consistent with the approach recommended by the commenter.
- Irrigated lands monitoring data is incorporated into the statewide data network (CEDEN) and considered through the listing program.
- Relying solely on the monitoring for one industrial sector to meet the water quality issues from another industrial sector is inequitable.

- **Bacteria and other sources**
 - *Recognize Natural Sources of Bacteria*
 - The State Water Board is developing a statewide control program to protect recreational users from the effects of pathogens in California water bodies. The program would be adopted as amendments to the Inland Surface Water, Enclosed Bays and Estuaries Plan, and the California Ocean Plan. The proposed program would include consideration of statewide standards for bacteria and possibly a natural source policy that could be used in conjunction with a TMDL. For more information, please see the program webpage at: <http://www.waterboards.ca.gov/bacterialobjectives/>
 - *State should reconsider e-coli as sole Standard*
 - See above
 - *Consistent and Reasonable Standards*
 - See above
 - *State should account for other sources of impairment, including illegal marijuana crops and associated runoff*
 - See above
- **Stewardship**
 - *Acknowledge Stewardship of Ranchers and success of earlier efforts*
 - The State Water Board recognizes the stewardship of ranchers and success of earlier efforts. This is reflected in findings 2 and 5 of the proposed resolution.
 - Finding 2 states, “Well-managed livestock grazing operations can provide benefits to the economy, California consumers, and the environment.”
 - Finding 5 states, “Existing non-regulatory efforts for implementation of best management practices (BMPs) were recognized as benefiting water quality [. . .]”
 - *Grazing is good/bad for the environment*
 - The GRAP is not intended to determine whether or not grazing is good or bad for the environment. Instead, the GRAP is intended to evaluate existing regional regulatory strategies to determine whether a statewide regulatory approach

could offer additional benefits relative to the existing regional approaches. The proposed resolution presents the staff recommendation that the existing regional approaches are more appropriate than a statewide approach and that discussions regarding a statewide approach should be discontinued.

- *We all have same goal of clean water*
 - The State Water Board recognizes that numerous commenters expressed a desire to support the State Water Boards goal of protecting water quality and the beneficial uses of water from impacts associated with grazing operations.
- **Non-point source Policy**
 - *Grazing Programs should meet NPS Policy*
 - Resolves 2 through 6 direct the Regional Water Boards to take actions necessary actions to protect water quality and the beneficial uses of waters from pollution consistent with state and federal laws. As a potential non-point source, any grazing control program would need to be consistent with the NPS Implementation and Enforcement Policy. This would be the case regardless of the resolution.
- **Private vs. Federal Lands**
 - *Consider grazing on private lands separately from grazing on Federal Lands*
 - Resolves 2 through 6 of the proposed resolution direct the Regional Water Boards to consider the many dynamics when addressing impacts to water quality from grazing operations. The Regional Water Boards may considering grazing on federal lands separately grazing on private lands as the impacts, challenges, and stakeholders associated with each can be unique.
- **Academia as a resource and voluntary actions**
 - *Utilize education by UC Extension and voluntary actions*
 - Resolve 2 of the proposed resolution directs the Regional Water Boards to work collaboratively with stakeholders to determine which action are best suited to protect water quality and the beneficial uses of waters from pollution. This work should include engaging with the University of California Cooperative Extension and other academia. Academia and other stakeholder groups provide relevant information that should be considered in any effort to address water quality. Input and guidance from all stakeholders can be shared through technical advisory groups or other forums.

- Funding for updating educational tools for grazing could be identified and/or provided by the Water Boards. Natural Resource Conservation Service and other stakeholder groups could be involved in approving plans and practices, as they have in the past.
- Should the Regional Water Boards rely on voluntary actions as part of any nonpoint source grazing program, then the program would have to be consistent with the key elements of the State Water Board's NPS Implementation and Enforcement Policy.
http://www.waterboards.ca.gov/water_issues/programs/nps/docs/plans_policies/nps_iefs.pdf
 - ❖ **Key Element 1:** A NPS control implementation program's ultimate purpose must be explicitly stated and at a minimum address NPS pollution control in a manner that achieves and maintains water quality objectives.
 - ❖ **Key Element 2:** The NPS pollution control implementation program shall include a description of the management practices (MPs) and other program elements expected to be implemented, along with an evaluation program that ensures proper implementation and verification.
 - ❖ **Key Element 3:** The implementation program shall include a time schedule and quantifiable milestones, should the RWQCB so require.
 - ❖ **Key Element 4:** The implementation program shall include sufficient feedback mechanisms so that the RWQCB, dischargers, and the public can determine if the implementation program is achieving its stated purpose(s), or whether additional or different MPs or other actions are required.
 - ❖ **Key Element 5:** Each RWQCB shall make clear, in advance, the potential consequences for failure to achieve an NPS implementation program's objectives, emphasizing that it is the responsibility of individual dischargers to take all necessary implementation actions to meet water quality requirements.
 - ❖ Individual dischargers, including both landowners and operators, continue to bear ultimate responsibility for complying with a Regional Water Boards' water quality requirements and orders.