Changes to Part 4 (A) ODA Agriculture Report

Comment: Need to create table of compliance/enforcement data for coastal counties for 97-03. (requester Louse Solliday)
ODA response: The ODA document contains a table of compliance data for the Agricultural Water Quality Management program but did not have one for the CAFO program. The following table has been inserted into the document.

Table 2. **Summary table of regulatory actions related to the Confined Animal Feeding Operations Program in the Coastal coho region (i.e. Clatsop, Coos, Curry, Douglas. Lincoln and Tillamook counties.**

Year	Routine inspection	Complaints	Notice of Noncompliance	NON/Plan of Correction	Civil Penalty
1999	122	3	11	30	1
2000	159	13	15	35	0
2001	178	6	12	9	0
2002	150	16	8	9	3
2003	156	18	9	15	1
2004	248	26	37	75	3

The substantial increase of NONs in 2004 reflects new regulations that went into effect in October 2003 and that required operations to submit an application to register by October 2004. The new regulations also established definitions of operations by size and those exceeding a certain size were required to submit an animal waste management plan by October 2004. The increase in NONs was primarily for the failure of permitted operations to submit the newly required application to register by October 2004 and for the larger operations for failure to submit an animal waste management plan by October 2004. The majority of these NONs have been resolved. Since these failures were primarily related to documentation procedures under the new regulations, the increased number of NONs does not reflect any new substantial impact on the resource.

A paragraph to this regard has been added to the report.

Comment: Need to identify how much of the Measure 66 and PCSRFs are spent on the coastal counties on Ag water quality, weed control, pest control, SWCDs. (requester Louse Solliday)
ODA response: The ODA document contains a table for the weed program documenting the dollars awarded to control weeds between 1999 to 2005 (an error stating that there were 41 weed projects in 99-01 was corrected to read 4 weed projects). Following is a table of an estimate of the Measure 66 and PCSRFs spent in the coastal counties on the Agricultural Water Quality, weed control and SWCD programs in the 2003-2005 biennium. No measure 66 or PCSRFs funds were received for pest control or for the pesticide program.

	Measure 66	PCSRFs
Agricultural Water Quality Management Program	$528,735	0
Weed Control	$147,710	0
SWCDs	$128,506	$1,060,182

As this was a request from GNRO, this information was not inserted into the document.

Comment: Synthesis comments by NOAA Fisheries Northwest Regional Office
P. 20-21, TMDL Implementation (Temperature): It is hard to evaluate the conservation contribution of the work listed on agricultural lands without having information on what proportion of impaired areas has been addressed, or information about effectiveness of these projects (*e.g.*, spot monitoring pre- and post-project).

ODA Response: TMDLs and SB 1010 plans and rules completed in the coastal coho ESU have only recently been finished and implementation is just getting started. As a result there has not been enough time to assess effectiveness. Where TMDLs and SB 1010 plans and rules have been implemented for a number of years, improvements in water quality have been documented. For example in the Tualatin Basin where a TMDL and a SB 1010 plan and rules have been in place since 1996 and data has been collected from 1994, the following trends have been documented:

Baker Creek Decrease in temperature trend from ~15 C to ~14 C (1994-2002). Not significant at a 95% confidence level. Increase in dissolved oxygen from 7.8 to 9 mg/l (1994-2002). Significant at a 95% confidence level.

Burris Creek: Decreasing temperature trend and increasing dissolved oxygen, though neither significant at 95%.

Carpenter Creek: Increase in 0.6 mg/l dissolved oxygen. Significant at 95%.

Christiansen Creek: Decreasing temperature trend and increasing dissolved oxygen. Significant increase of 1.3 mg/l dissolved oxygen at 95% confidence, temperature trend not significant.

McFee Creek: Upward trend in dissolved oxygen with a significant increase of 0.8 mg/l.

While some of these trends have not reached a 95% significant level, given the long term nature of improving riparian condition and addressing nutrient levels in the water, these when combined with the significant trends are positive indicators that these programs are achieving their purpose. By improving the conditions along agricultural coastal streams, where needed, comparable improvements are expected to occur.

A paragraph to this regard has been inserted into the document.

Monitoring
Concern: Assessment

Assessment of existing conditions associated with agricultural lands is inadequate, thus (reviewer was) unable to evaluate contribution of programs and work.

"The Report briefly mentions efforts in agricultural lands and in urban areas designed to protect coho habitat, but there are no data to suggest that these efforts are sufficient to have any level of certainty that these efforts will be effective."

"The limited information on agricultural and urban lands makes it difficult to assess how effective the conservation strategies are going to be in those areas towards protecting coho. Based on current levels of protection in these areas, it would seem unlikely that any existing riparian conservation plans are going to be very effective."

ODA response: Maintaining or contributing to the restoration of water quality, fisheries and associated natural resources concerns will be achieved through the combination of existing state and federal programs, both regulatory and technical, that lead to protection or restoration of riparian vegetation for stream bank stability, shade, and physical habitat. This will lead to controlling degradation and improvement of conditions that affect water quality to meet state water quality standards in the future. The rate of improvement will be dependent on the watershed-specific impediments to meeting water quality standards and the mechanisms to reverse these impediments (growing large trees vs. forbs/shrubs, etc.). The completion of TMDL's for the coastal ESU will bring more specificity to recovery processes.

Since 1997, the department has established a solid framework for both the CAFO and AgWQM programs and has observed tremendous efforts by landowners to address issues associated with salmonids both because they felt it was the right thing to do and in response to the increased resources being applied to the SB 1010 and CAFO regulatory programs. As described in the ODA report, the department is pursuing a monitoring program at this time to quantify the effects of these programs.

SB 1010 plans and rules completed in the coastal coho ESU have only recently been finished and implementation is just getting started. As a result there has not been enough time to assess effectiveness. Where SB 1010 plans and rules and TMDLs have been implemented for a number of years (e.g. Tualatin), improvements in water quality have been documented. Additional information describing the changes in the Tualatin has been added to the report. Thus, we disagree with the comments that these programs are inadequate. As the ODA report indicates, the programs to address issues related to agricultural lands contain a structure and resources to conduct outreach to inform landowners of conservation and fish needs, to implement a regulatory compliance program for those instances where an enforceable backstop is needed, to establish a solid description of the conditions expected that is the foundation of the compliance program, and to provide for a review and monitoring program to determine program effectiveness and provide for modification in a timely manner when needed. Thus, even though it is not a practices base program, the framework and resources to effectively address issues is established and being implemented and described in the existing report. Establishing rules to insure riparian condition provides for streambank stability and shade is expected

to result in substantial benefits to fisheries where this riparian condition is not be met at this time.

ODA's goal is to have 100% compliance by landowners with the Agricultural Water Quality Management program rules. While this expectation is high, the reality is that compliance with water quality laws is good conservation and good for the resource. Since land ownership is in a constant flux, there will always be a need for an outreach and education and periodic compliance action to insure this goal is reached.

Comment: What statewide benchmarks do the agricultural programs operate under and what are the most recent results?

ODA response: Statewide benchmarks related to the Oregon Plan that the agricultural programs operate under are the ones related to fish and water quality. To most effectively use limited state resources, the state has directed specific agencies to be responsible for assessing conditions related to their area of responsibility, i.e. fish numbers by ODFW and water quality by DEQ. This minimizes duplication of effort while allowing state agencies to rely on those that are most qualified to pursue that information. Thus, ODA has not pursued separate benchmarks to document increase in fish numbers or establishing TMDLs related to agricultural lands. As indicated in our report we have instigated assessments that will lead to documentation on the condition of riparian areas associated with agricultural lands. This assessment is newly initiated but will be the basis for determining trends in riparian condition along agricultural lands.

Comment: The NMFS commends ODA for beginning a project in 2003 using remotely-sensed imagery to assess long-term trends in the condition of riparian areas at large scales. Although trends cannot be established until a second set of images is taken in 2008, what information about the status of riparian vegetation is available from the baseline imagery?

ODA Response: SB 1010 plans and rules completed in the coastal coho ESU have only recently been finished and implementation is just getting started. As a result there has not been enough time to assess effectiveness. Where SB 1010 plans and rules and TMDLs have been implemented for a number of years (e.g. Tualatin), improvements in water quality have been documented.

While remotely sensed imagery can be used to assess long-term trends in riparian condition, it has limited function by itself to identify the status of riparian vegetation in relation to site capability. Because site capability is variable across the state, the status expected for each stream reach will vary depending on soils, location in the state and other biophysical parameters. Thus, until site capability can be described on a landscape basis and captured in a GIS framework, the existing imagery can only be used for trend analysis. While a GIS site capability data layer based on biophysical determinants is presently not available, it is a task the water quality program is actively pursuing. We hope to have the ability to establish a GIS – based site capability data layer within the next three to five years.

The above paragraph was added to the report.

Operation questions
Comment: (refers to p 29 of chap B 2) 'Is riparian fencing always non-regulatory?'

ODA Response: ODA's water quality programs are not practice based but condition based. Thus, landowners are not required to fence riparian areas. However, rules require landowners to provide conditions that result in streambank stability and shade, which is good for water quality and provides habitat for salmonids. Many landowners are voluntarily doing so as part of their management strategy or through programs such as the USDA Conservation Reserve Enhancement Program. If in pursuing a complaint observed by the department or received by any other means, the department documents a violation of existing riparian rules, then as part of the notice of non compliance riparian fencing may be identified as the solution. Thus, this solution would then be a regulatory requirement.

A paragraph to this regard was added to the report.

Comment: (refers to p 30-31, elements 2-5 chap B2) "To the extent possible, please describe for tide gates and livestock mitigation: incremental objectives and timelines, steps for implementing these measures, parameters and standards by which progress will be measured and identified, and provisions for monitoring and reporting on progress on implementation and effectiveness of these measures."

ODA Response: As described in ODA's report under the section describing the Agricultural Water Quality Program and the section describing the CAFO program, livestock measures through the permit process associated with the CAFO program and through the SB 1010 program rules are in place and being implemented by the department. The provisions for monitoring and reporting progress on these measures are also identified in the report.

Comment: Weed and Invasive Species Programs: The NMFS appreciates that ODA is coordinating a state-funded grant program, but the funding shown does not seem adequate to successfully battle the spread of invasive vegetation and animals in the ESU.

ODA Response: We agree that the funding provided for this grant program is insufficient, however, it is just one of a number of means by which weeds and invasive species are addressed. Noxious weeds are also being addressed by ODA working in cooperation with public and private land managers to help direct limited resources to the highest priority weed targets where we hope to have the most success in effective control. Early detection and rapid response is the highest priority for new invader weeds. For the widespread established infestations we are implementing biological control efforts for specific weeds and are getting significant control on some species. In addition, land managers are utilizing their own resources to address weeds and invasive species. In total, these resources are still not enough to address the magnitude of the problem,

however, they do provide a means to limit or slow the spread of undesirable species and in many cases achieve significant control that is a benefit to both our economy and our natural resources.

A paragraph to this regard was added to the report.

Oregon Department of Agriculture (ODA) Agriculture Report
Comment: If the same laws are being implemented the same way with the same resources as before the Oregon Plan, how does that translate into conservation of coho habitat?

"The Report briefly mentions efforts in agricultural lands and in urban areas designed to protect coho habitat, but there are no data to suggest that these efforts are sufficient to have any level of certainty that these efforts will be effective."

"The limited information on agricultural and urban lands makes it difficult to assess how effective the conservation strategies are going to be in those areas towards protecting coho. Based on current levels of protection in these areas, it would seem unlikely that any existing riparian conservation plans are going to be very effective."

ODA Response: These comments question the effectiveness of the laws and resources to address coho issues associated with agricultural lands. While it is correct that the agricultural water quality laws were established prior to the Oregon Plan, with the adoption of the Oregon Plan the resources available for implementation of these laws were greatly expanded. Furthermore, ODA's responsibilities through the SB 1010 and CAFO programs were relatively new and the department was still developing the structure and framework to insure effectiveness of the programs prior to 1997. Since 1997, the department has established a solid framework for both programs and has observed tremendous efforts by landowners to address issues associated with salmonids both because they felt it was the right thing to do and in response to the increased resources being applied to the SB 1010 and CAFO regulatory programs. As described in the ODA report, the department is pursuing a monitoring program at this time to quantify the effects of these programs.

SB 1010 plans and rules completed in the coastal coho ESU have only recently been finished and implementation is just getting started. As a result there has not been enough time to assess effectiveness. Where SB 1010 plans and rules and TMDLs have been implemented for a number of years (e.g. Tualatin), improvements in water quality have been documented. Additional information describing the changes in the Tualatin has been added to the report. Thus, we disagree with the comments that these programs are inadequate. As the ODA report indicates, the programs to address issues related to agricultural lands contain a structure and resources to conduct outreach to inform landowners of conservation and fish needs, to implement a regulatory compliance program for those instances where an enforceable backstop is needed, to establish a solid description of the conditions expected that is the foundation of the compliance program, and to provide for a review and monitoring program to determine program effectiveness

and provide for modification in a timely manner when needed. Thus, even though it is not a practices base program, which these commentors may be used to dealing with, the framework and resources to effectively address issues is established and being implemented and described in the existing report. Establishing rules to insure riparian condition provides for streambank stability and shade is expected to result in substantial benefits to fisheries where this riparian condition is not be met at this time.

Comment: Agricultural Water Quality Management Program: In the description of water quality and riparian rules, the chapter needs to delineate which rules are in effect and which are going into effect at a later date (going to the ODA we site did not resolve the confusion). The NMFS appreciates that the rules seem to go beyond water quality to require natural regeneration and maintenance of native vegetation if possible. However, the rules do not address the width and other important characteristics of riparian areas, nor were most comments included that were made by NMFS to improve protection for salmon habitat in the draft agricultural water quality management plans for the North Coast, Coos/Coquille Rivers, or Lower Deschutes/Umpqua/Yamhill Rivers incorporated into the final plans.

ODA Response: The first paragraph in the discussion section of the ODA Agricultural report (page 10) states:
"The plans and rules for these areas were adopted between 1999 and June 2004 (Curry). All of these areas are subject to a waste management rule reflecting existing statute (Oregon Revised Statute 468B.025) that went into effect upon adoption and a riparian rule that is presently in effect for the Umpqua and North Coast planning areas, and will go into effect in 2005 for the Coos/Coquille and Mid Coast planning areas, and in 2007 for the Curry planning area."
We are not sure how much clearer we can be then this in describing when the rules related to 468B.025 and the riparian rules go into effect.

The reviewer is correct in noting that ODA regulatory authorities are related to water quality and not fish. However, the Board of Agriculture has provided the department the following policy direction on fish and the AgWQM program: "Address fish habitat concerns related to water quality so as to provide the broadest possible protection for farmers and ranchers relative to both water quality and fish regulatory programs". Thus, we see that establishing rules for riparian condition for streambank stability and shade provide substantial benefits to fisheries. In addition, the outreach and technical assistance programs by SWCDs include fisheries needs. Comments provided to ODA during SB 1010 plan and rule development that were outside the department's authorities were not included in revisions to plans and rules.

Pesticide Management
Comments: This section does not describe any required or prohibited conditions, nor are there are there any guidelines or regulations (other than label restrictions) for reducing harm to aquatic life. Are there aspects of pesticide user licensing or other ODA programs that reduce the risks to aquatic species? Which applicators are required to be licensed?

Another gap is the lack of a pesticide application reporting program. The continued failure to fund the Pesticide Reporting System should be considered evidence of uncertainty in implementation, and uncertainty in achieving regulatory effectiveness under the PECE program.

"It is not clear who is responsible for monitoring pesticide concentrations in water, particularly in agricultural areas. Is monitoring of pesticides part of any program? Do we know the risks of pesticides in water to coho salmon? Where are the data?"

ODA response: EPA is responsible for working with NOAA Fisheries regarding the adequacy of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The following paragraphs will be added to the ODA report to further emphasize ODA's relationship with EPA.

"The pesticide program is achieving the expectations of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as it pertain to pesticide through the oversight of EPA (as laid out in an MOA between the two agencies). The label contains the guidelines and regulations as they relate to aquatic species and is the means by which this program addresses violations.

ODA is the EPA –designated agency to enforce FIFRA in Oregon. The State has had a Pesticide Control Act since 1973, which in part, allows ODA to further regulate pesticide use, across the entire state or within a specific area. The Oregon Department of Forestry (ODF) also administers the Forest Practices Chemical Rules, which are designed to protect water quality and other natural resources on forestland. These rules establish further requirements to ensure that forest use of pesticides, and petroleum and other chemical products, are not '…injurious to water quality or to the overall maintenance or terrestrial wildlife or aquatic life…"

As described in ODA's report, the pesticide use reporting system was established in 1999 but insufficient funding and spending authority have been provided during the 2003-2005 biennium. Until the legislature determines that this is an essential data collection program the state is willing to support, the department will utilize drinking water data, USGS data, and other existing resources to assess pesticide issues in water.

To address the issue of pesticide monitoring the following paragraphs will be added:

"Currently there is not a statewide monitoring program related to all pesticides for all surface and ground water. However, DEQ monitors identified areas of concern such as ground water management areas. This involves both surface and groundwater monitoring for contaminants including pesticides. In addition, where indicators of potential problems exist, monitoring programs are put in place.

Two good examples of such specific monitoring for pesticides are the aerial pesticides application study completed in 2000 and the study on fish deformities in the Newberg Pool of the Willamette River in 2002.

In the first study, ODF contractors monitored aerial pesticide applications during the fall of 1997 and the spring of 1999. The final report found that the Forest Practice Rules, as currently written, are appropriate for protecting water quality, fish and wildlife habitat, and riparian vegetation.

The second example is a study funded by a $500,000 appropriation by the 2001 legislature. The study, by the Molecular and environmental Toxicology Department, Oregon State University, was a toxicological investigation to determine the cause of deformed fish in one section of the Willamette River. The investigation began with highly detailed analyses for pesticides in the water and ruled them out as the cause, finding no levels of harm to fish. The cause was eventually determined to be parasites. Studies such as these had verified results obtained by other agency monitoring.

Specific comments:

Page 2 and 3, #1 Ag. Water quality management program -- What is meant by "goal-oriented approaches, not prescriptive approaches"? The statement "provide the broadest possible protection for farmers and ranchers relative to both water quality and fish regulatory programs" sounds like the Dept. of Agricultural is going to protect farmers/ranchers interest at the expense of fish.

ODA Response: The following paragraph has been inserted after the bulleted list describing the Board of Agriculture policy direction.
"Goal-orientated approach, which is also referred to as an outcome based approach, refers to identifying conditions on the land that are needed for prevention and control of water pollution. This is in contrast to a practices based approach, in which the program identifies specific practices that must be used by landowners. The state chose a goal oriented approach because it believed that a prescriptive approach would not be effective in light of Oregon's diversity of geography and crop production. One important advantage of a goal-oriented approach is that landowners often voluntarily go above and beyond the minimum requirements of a practices-based approach. In a practices-based approach, landowners often feel that traditional regulatory language does not allow them much opportunity to respond to requirements, whereas an outcome-based approach can encourage individual initiative and creativity."

Page 4-5, Confined animal feeding operations -- How many sites are inspected in a year? Are they surprise visits? Are sites selected randomly? What is defined as an "unusually high rainfall event"

ODA Response: A table summarizing inspections and compliance actions since 1999 has been inserted in the ODA report.

As indicated in the report ODA has implemented a program to inspect all permitted operations once annually. ODA does not conduct surprise visits of CAFOs but arranges annual inspections prior to the visit. The nature of the CAFOs does not provide for the opportunity to hide issues of concern prior to an annual inspection and prearranged visits

provides for a more productive and positive working relationship with permitted operations.

An unusually high rainfall event is defined as a 25-year, 24-hour storm, which is defined by EPA as a mean precipitation event with a probably recurrence interval of once in 25 years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May 1961, or equivalent regional or state rainfall probability information developed from this source[40 CFR 412.2(i))].

A paragraph to this regard was added to the report.

Page 7-8, Invasive species--Is the Dept. of Agriculture responsible for invasive species? If so, do they have monitoring efforts to track invasive species? Appears that they rely on reporting from citizens and other agencies.
ODA Response: As indicated in the report, Oregon's Invasive Species Council came into existence on January 1, 2002, with ODA providing the administrative assistance. The statute (ORS 561.685) creating the Council identifies four main functions for the body. First, the Council is directed to create and publicize a system for reporting sightings of invasive species and referring those reports to the appropriate agency. Second, the Council is directed to undertake educational activities to increase awareness of invasive species issues. Third, the statute directs the Council to develop a statewide plan for dealing with invasive species. Finally, the Council is authorized to administer a trust account for funding eradication and education projects.

The Council consists of twelve members. There are four *ex officio* members representing the agencies with a lead role in invasive species management: Oregon Department of Agriculture, Portland State University, Oregon Department of Fish & Wildlife, and the Sea Grant College of Oregon State University. The *ex officio* members appoint eight at large members for 2-year terms. The members may represent federal, state, and local governments, universities, industry and other groups having an interest in invasive species.

ODA plant division staff track invasive exotic plants, insects and animals through a number of detection programs including reporting from citizens and other agencies. These efforts have been successful in controlling species such as the European gypsy moth and other insects that hitch rides on vehicles and other material transported to Oregon. Clearly this is a challenge that Oregon will continue to face and for which there is no single means to track invasive species.

A paragraph to this regard was added to the ODA report.

Page 23, A, #5--What proportion of the landowners participate in the conservation efforts?

ODA response: As indicated in the report there is no means at this time to determine the proportion of landowners participating in the conservation effort. As indicated in the

report, many landowners implement conservation actions with no funding or technical support from state or federal entities. As such there is no means to document these actions. ODA's efforts to establish a monitoring program (as described in the report) will be the most effective way to determine degree to which conservation efforts are leading to achieving the desired conditions. ODA's goal is to have 100% compliance by landowners with the Agricultural Water Quality Management program rules. While this expectation is high, the reality is that compliance with water quality laws is good conservation and good for the resource. Since land ownership is in a constant flux, there will always be a need for an outreach and education and periodic compliance action.

A paragraph to this regard was added to the report.

Page 24, B. #5--we did not see that monitoring was part of the 5 programs run by the Dept. of Agriculture. How does the department monitor the effectiveness of the different programs? How often? How is effectiveness defined?

ODA response: In the ODA report discussing each of the programs, the monitoring component of the programs are discussed. Thus, these were not repeated in the PECE response other than to respond affirmatively that monitoring programs exist.

Comments from Katheryne McKenzie – Salmon Drift Creek Watershed Council
Agriculture: (Ms. McKenzie) enclose a photo of fresh manure being dumped into Rock Creek Feb. 16, 2005. Please notice the steam coming off the manure. Our volunteers were across the field doing restoration work on the creek at the same time the manure was being dumped into the creek. This particular horse farm has been reported numerous times for violations. ODA allowed dumping of "hog fuel" into Rock Creek last year with not even a reprimand. Rock Creek is the major tributary to Devils Lake which already has nutrient issues. Rock Creek, in the area of the manure dumping and wetland fills, is an important rearing area for juvenile Salmonids. This is only one case out of many in North Lincoln County. SB1010 appears to do little or nothing to improve water quality.

ODA response: ODA thanks Ms. McKenzie for bringing these concerns to the attention of the department. As indicated below, based on the complaints received from Ms. McKenzie, the department became aware of the situation and conducted an investigation. The first time ODA's response time was delayed but since then we have pursued complaints in a prompt manner.

The CAFO program responded to at 2 complaints of manure dumping into Rock Creek at Green Acres Equestrian Cntr. LLC located at 2915 SE Hill Road, Otis, OR. The first complaint filed 1-26-2001 and investigated on 10-1-2001 resulted in an NON/POC with the required actions being: 1. removing a manure pile from a location where it may drain into surface waters, 2. Developing a suitable long term manure storage system, and 3. Having all manure exported from the facility. These required actions were completed by 12-12-01 and a due date for constructing long term manure storage(CDSF) was set for 12-2003. CAFO staff conducted 3 follow up inspections to review POC compliance. The CDSF construction date was extended and the facility was completed in early 2004.

The second complaint was received on 1-28-04 and investigated on 2-4-04 (a much faster response time then C#1). This was a complaint of manure dumping into Rock Creek. Staff found that the material was wood and plant chips and not manure and that it was not dumped in the creek. Photo documentation shows the material was located ~25-35 feet from the creek, not in the creek. The material was from road clearing by a road maintenance crew and was not related to the Equestrian Centers operation. The manure stored on the facility was covered with a tarp and not discharging. No violations were noted.

The 2-16-05 alleged manure dumping (photos) was not reported to ODA's CAFO program.

We have not heard of any complaints from this individual (or groups) in this area that would fall under SB 1010. Outreach and technical assistance continue in this area and while there is no measured water quality improvements due to these activities, the long term returns of these activities are expected to show dividends over time. Thus, the allegation that 'SB1010 appears to do little or nothing to improve water quality.' can not be soundly refuted at this time. Ongoing activities in this area suggest that SB 1010 is leading to a shift in landowner philosophies that will lead to a long term shift in conditions that will be beneficial to water quality and salmonids. Expectations as implied in this comment are unrealistic given the long term requirements to achieve vegetation change, establishment of trees, and overcoming the effect of channelizing streams under past government supported programs.