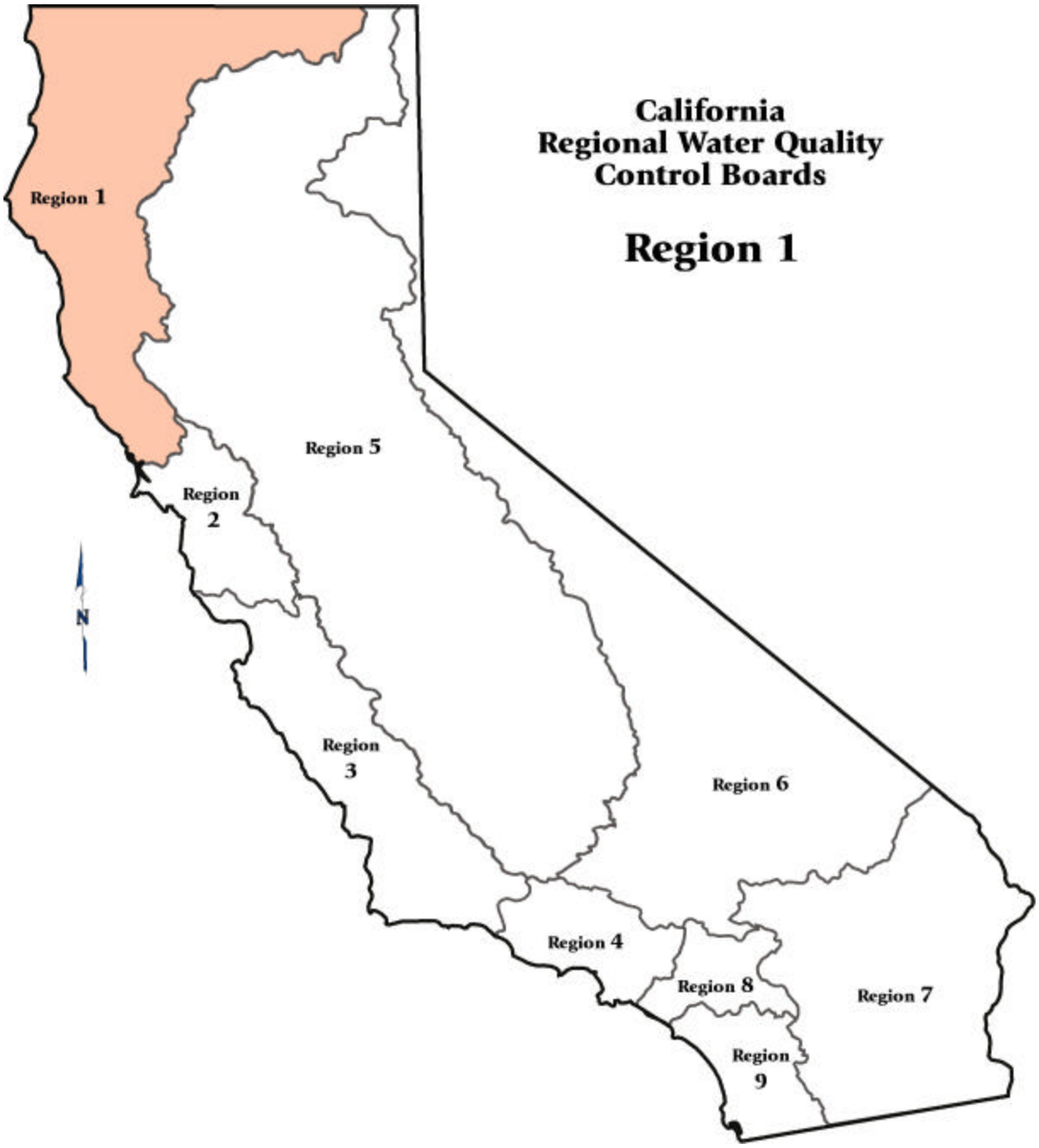
Fact Sheets Supporting
“Do Not List” Recommendations



September 2005

Region 1

Water Segment: Bodega HU, Salmon Creek HA

Pollutant: Oxygen, Dissolved

Decision: Do Not List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status.

Three lines of evidence are available in the administrative record to assess dissolved oxygen for Bodega HU, Salmon Creek HA. Information that was evaluated for the Salmon Creek HA was from Fay Creek, Thurston Creek and Tannery Creek respectively. There are also four lines of supporting evidence for phosphate for this dissolved oxygen decision. However, there is no appropriate interpretive evaluation guideline for phosphate with which to consider whether the phosphate information is exceeding water quality standards.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. Two of 10 samples in Fay Creek were below the dissolved oxygen objective. Two of 12 samples in Tannery Creek were below the dissolved oxygen objective. One of 11 samples in Thurston Creek was below the dissolved oxygen objective. The frequency of dissolved oxygen readings that exceed the objective for the three creeks respectively, and each creek considered separately, does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.
Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	The 12 samples from the Westwood Creek sampling site ranged from non-detect to 0.082 mg/l.
Spatial Representation:	Sampling was limited to Westwood Creek a tributary to Salmon Creek.
Temporal Representation:	Samples were taken monthly from January through December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Dissolved oxygen concentrations for waters not listed in Table 3-1, and where dissolved oxygen objectives are not prescribed the dissolved oxygen concentrations shall not be reduced below the following minimum levels at any time; Waters designated COLD - 6.0 mg/l.
Data Used to Assess Water Quality:	One of 11 samples taken, one of the samples June of 2003 was below the 6.0mg/l water quality objective with a value of 5.9 (Sandler, et al., 2004).
Spatial Representation:	All samples were taken in Thurston Creek a tributary to Salmon Creek at 16444 Joy Woods Way, Occidental.
Temporal Representation:	Sampling occurred once a month, January through December 2003, except in November 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.
Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	The 12 samples from the Tannery Creek sampling site ranged from non-detect to 0.130 mg/l (Sandler, et al., 2004).
Spatial Representation:	Sampling was taken on Tannery Creek (at Jennifer Lane and the bridge where the trail starts, Occidental), a tributary of Salmon Creek.
Temporal Representation:	Samples were taken once a month from January through December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Dissolved oxygen for waters not listed in Table 3-1 and where dissolved oxygen objectives are not prescribed the dissolved oxygen concentrations shall not be reduced below the following minimum levels at any time; Waters designated COLD - 6.0 mg/l.
Data Used to Assess Water Quality:	Of those 12 samples (Sandler, et al., 2004) taken 2 were below the 6.0 mg/l Objective. Samples in June and October had results of 5.5 mg/l and 4.6 mg/l respectively.
Spatial Representation:	All samples were taken in Tannery Creek a tributary to Salmon Creek at Jennifer Lane, at the bridge where the trail starts, Occidental.
Temporal Representation:	Sampling occurred once a month, January through December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.
Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	The 11 samples from the Salmon Creek at Occidental sampling site ranged from non-detect to 0.082 mg/l. The 6 samples from the Salmon Creek at Bodega Bay sampling site ranged from 0.016 to 0.130 mg/l (Sandler, et al., 2004).
Spatial Representation:	Sampling was along Salmon Creek only (two locations). One sampling site was in Occidental (SAL060), the other was at the Highway 1 bridge in the town of Bodega Bay (SAL010).
Temporal Representation:	Samples from the Occidental (SAL060) site were taken monthly, except for October, in 2003. Samples from the Bodega Bay (SAL010) were taken monthly between January and April, and in June and July 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.

Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	In Fay Creek, a tributary of Salmon Creek, orthophosphate concentrations ranged from non-detectable to 0.065.
Spatial Representation:	All samples were taken in Fay Creek a tributary to Salmon Creek at 17300 Taylor Rd., Occidental.
Temporal Representation:	Sampling occurred once a month from January through July, and from October through December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Dissolved oxygen concentrations for waters not listed in Table 3-1, and where dissolved oxygen objectives are not prescribed the dissolved oxygen concentrations shall not be reduced below the following minimum levels at any time; Waters designated COLD - 6.0 mg/l.
Data Used to Assess Water Quality:	Out of the 10 samples taken (Sandler et al., 2004), 2 were below the 6.0 mg/l objective. These were the samples for the month of October and November at 5.2 mg/l and 5.8 mg/l respectively.
Spatial Representation:	All samples were taken in Fay Creek a tributary to Salmon Creek at 17300 Taylor Rd., Occidental.
Temporal Representation:	Sampling occurred once a month from January through July, and from October through December in 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Bodega HU, Salmon Creek HA
Pollutant:	Specific Conductance
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. A specific conductance guideline is not available for this water segment that complies with the requirements of section 6.1.3 of the Policy. There is no guideline available and no water quality objective for specific conductance for this water segment. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a specific conductance water quality objective for waters within the Bodega HU, Salmon Creek HA.
Data Used to Assess Water Quality:	There were 17 samples collected (Sandler, et al., 2004). There is no specific conductance water quality objective to evaluate the data and information collected at these two sites.
Spatial Representation:	Sampling was along Salmon Creek only(two locations). One sampling site was in Occidental (SAL060), the other was at the Highway 1 bridge in the town of Bodega Bay (SAL010).
Temporal Representation:	Samples from the Occidental (SAL060) site were taken once a month, except for October, in 2003. Samples from the Bodega Bay (SAL010) were taken once a month between January and April, and in June and July 2003.

Region 1

Water Segment:	Bodega HU, Salmon Creek HA
Pollutant:	Turbidity
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. Four numerical lines of evidence are available in the administrative record to assess turbidity for Bodega HU, Salmon Creek HA. The information considered for Salmon Creek HA comes from Westwood Creek, Thurston Creek, Salmon Creek and Fay Creek respectively. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of 12 samples for Westwood Creek exceeded the turbidity evaluation guideline. None of the 11 samples for Thurston Creek exceeded the turbidity evaluation guideline. Two of 17 samples for Salmon Creek exceeded the evaluation guideline. None of the samples for Fay Creek exceeded the guideline. The turbidity exceedances of these creeks considered separately for Salmon Creek HA do not exceed the allowable frequency listed in Table 3.2 the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for

	specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.
Evaluation Guideline:	The evaluation guideline that has been used to determine turbidity exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984). The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."
Data Used to Assess Water Quality:	There were 12 samples taken , one of the samples was in exceedance of the evaluation guideline. This sample was taken in February at 42.4 NTU. The other samples were all well below the evaluation guideline (Sandler, et al., 2004)
Spatial Representation:	All samples were taken in Westwood Creek a tributary to Salmon Creek at Westwood Lane and Bittner Rd., Occidental.
Temporal Representation:	Sampling occurred once a month from January through December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses
Evaluation Guideline:	The evaluation guideline that has been used to determine turbidity exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984). The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."
Data Used to Assess Water Quality:	There were 11 samples taken and all of the samples were well below the evaluation guideline, none of the samples were in exceedance.
Spatial Representation:	Sampling was along Thurston Creek, a tributary of Salmon Creek. Samples were taken at 16444 Joy Woods Way, Occidental.
Temporal Representation:	Samples were taken monthly from January through December 2003, except in November 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Sediment
Beneficial Use:	CO - Cold Freshwater Habitat

Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.
Evaluation Guideline:	The evaluation guideline that has been used to determine turbidity exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984). The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."
Data Used to Assess Water Quality:	There were 6 turbidity samples taken from the Bodega Bay site and 11 samples taken at Occidental site. There was one sample in exceedance of the guideline at 38.4 NTU out of 6 samples from Bodega Bay site. There was one sample in exceedance of the guideline at the Occidental site out of 11 samples. Taken together there were 2 out of 17 samples that exceeded the water quality objective/criterion (Sandler, et al., 2004)
Spatial Representation:	Sampling was along Salmon Creek only. One sampling site was in Occidental (SAL060), the other was at the Highway 1 bridge in the town of Bodega Bay (SAL010).
Temporal Representation:	Samples from the Occidental (SAL060) site were taken once a month, except for October, in 2003. Samples from the Bodega Bay (SAL010) were taken once a month between January and April, and in June and July 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.
Evaluation Guideline:	The evaluation guideline that has been used to determine turbidity exceedance is from published-peer reviewed paper, "The Effects of Chronic Turbidity on Density and Growth of Steelheads and Coho Salmon", John W Sigler (1984). The guideline is "In our studies, as little as 25 NTUs of turbidity caused a reduction in fish growth."
Data Used to Assess Water Quality:	There were 10 samples taken and all of the samples were well below the evaluation guideline, none of the samples were in exceedance (Sandler, et al.,

	2004).
Spatial Representation:	All samples were taken in Fay Creek a tributary to Salmon Creek at 17300 Taylor Rd., Occidental.
Temporal Representation:	Sampling occurred once a month from January through July, and from October through December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Line of Evidence	Visual
Beneficial Use	CO - Cold Freshwater Habitat
Information Used to Assess Water Quality:	Pictures were submitted for Salmon Creek from USEPA solicitation of information. There were 6 photographs taken on January 11, 2004. This memo includes photo documentation of riparian conditions observed on Nolan Creek on January 11, 2004. Nolan Creek flows southward from Joy Ridge where it joins Thurston Creek before passing under the Bodega Hwy about 1000 feet west of Joy Road near the town of Bodega. Nolan Creek passes southward under the Bodega Hwy bridge where it joins Salmon Creek about 2000 feet south of the highway. The photographs below were taken from the Bodega Hwy at or near the Nolan Creek Bridge. Picture 1 below shows Nolan Creek flowing away to the south toward Salmon Creek. Picture 2 above looks upstream at the pastoral landscape north of Bodega Hwy at Joy Road. Picture 3 and Picture 4 below show examples of the cattle trails and trampled, denuded stream banks that appear to provide sources of fine sediment to the tributary streams and main stem of Salmon Creek. Pictures 5 and Picture 6 below illustrate fine sediment delivery to the creeks from trampled stream banks. (North Coast RWQCB, 2004b)
Non-Numeric Objective:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

Line of Evidence	Visual
Beneficial Use	CO - Cold Freshwater Habitat
Information Used to Assess Water Quality:	Pictures were submitted for Salmon Creek from USEPA solicitation of information. There were 8 photographs taken on January 11, 2004. The photographs presented show streambank conditions in the Salmon Creek watershed observed on January 11, 2004. Pictures #1 through #6 show the Salmon Creek as viewed from the Bodega Hwy at the bridge over Salmon Creek, just west of the Valley Ford Cut-off Road. Pictures #1 through #4 show stream banks and upland pastureland on the north side of the road where the

	stream flows westward (from right to left in this picture) from the town of Freestone. Pictures #7 and #8 show the view of Salmon Creek as it flows from the Bodega Hwy Bridge westward to the town of Bodega (North Coast RWQCB, 2004b)
Non-Numeric Objective:	Basin Plan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof. Water shall not contain substances in concentrations that result in deposition of material that causes nuisance or adversely affect beneficial uses.

Region 1

Water Segment:	Bodega HU, Salmon Creek HA
Pollutant:	pH
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the eleven samples exceed the pH water quality objective for the Occidental Site. Two of the six samples from the Bodega site exceeded the pH objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Two of the six samples exceeded the pH water quality objective at the Bodega site for Salmon Creek HA, this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: pH shall not be depressed below 6.5 nor raised above 8.5, and that changes in the normal ambient pH shall not exceed 0.5 units within the above range in freshwaters designated COLD or WARM.
Data Used to Assess Water Quality:	Eleven of 11 samples from the Occidental sampling site were within the 6.5-8.5 range. The samples from the other site, Salmon Creek at Bodega Bay, 2 of the 6 samples exceeded the objective. The two samples at this site that exceeded the objective were at 8.6 and 9.1 (Sandler, et al., 2004)
Spatial Representation:	Sampling was along Salmon Creek only (two locations). One sampling site was

	in Occidental (SAL060), the other was at the Highway 1 bridge in the town of Bodega Bay (SAL010).
Temporal Representation:	Eleven samples from the Occidental site (SAL060) site were taken monthly, except for October, in 2003. Six samples from the Bodega Bay site (SAL010) were taken monthly between January and April, and in June and July 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Klamath River HU, Salmon River HA
Pollutant:	Total Coliform
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. The data collected for the month of July show that the WQO is not exceeded. There was also in formation collected at the 5 sampling locations for the month of October the data reports "detect" only for all measurements taken. These samples do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	R1 - Water Contact Recreation
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: (Total Coliform included) The bacteriological quality of waters of the North Coast Region shall not be degraded beyond natural background levels. In no case shall coliform concentrations in waters of the North Coast Region exceed the following: In waters designated for contact recreation (REC-1), the median fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed 50/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400/100 ml (State Department of Health Services).

Data Used to Assess Water Quality:	The grab samples were analyzed for total coliform in addition to pH, dissolved oxygen, temperatures and specific conductance. The measurements taken for the month of July 2002 at the 5 sample locations resulted in a median total coliform value of 40/100ml. The WQO is that the median fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed 50/100 ml, nor shall more than ten percent of total samples during any 30-day period exceed 400/100 ml. The data collected for the month of July appear to show that the WQO is not exceeded. There was also in formation collected at the 5 sampling locations for the month of October the data reports "detect" only for all measurements taken (North Coast RWQCB, 2004c)
Spatial Representation:	There were 5 sampling locations. The sampling locations included the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness area.
Temporal Representation:	The Salmon River was added to the list for nutrients in 1992. In the summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located immediately downstream of community centers within the watershed.
Data Quality Assessment:	NCRWQCB QA. Data were collected compliant with a quality assurance plan. Blind duplicate samples were collected as a data quality control measure with acceptable results.

Region 1

Water Segment:	Klamath River HU, Salmon River HA
Pollutant:	Total Dissolved Solids
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. None of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. None of the samples exceed the objective. The range of values were between 12 and 150 well below the Secondary MCL Criteria for TDS of recommended 500 and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	MU - Municipal & Domestic
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	There is no NCRWQCB Basin Plan Water Quality Objective for TDS applicable to Salmon River HA listed in Table 3-1. There is a Municipal Beneficial Use for the Salmon River HA.
Evaluation Guideline:	With regard to the Municipal Beneficial Use, Title 22: Table 64449-B Secondary Maximum Criteria Levels--Ranges are applicable MCL criteria to compare the TDS data with. The Secondary MCL Criteria are listed for Total Dissolved Solids as: recommended at 500, upper at 1000 and short term at 1500.
Data Used to Assess Water Quality:	The grab samples were analyzed for TDS in addition to pH, dissolved oxygen, temperatures and specific conductance. There were 55 TDS measurements in

	total with an average of 61. The range of values was between 12 and 150, well below the Secondary MCL Criteria for TDS of recommended 500. The values measured indicate there is no exceedance of the applicable MCL criteria (North Coast RWQCB, 2004c)
Spatial Representation:	There were 5 sampling locations. The sampling locations included the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness area.
Temporal Representation:	The Salmon River was added to the list for nutrients in 1992. In the summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River HA located immediately downstream of community centers within the watershed.
Data Quality Assessment:	NCRWQCB QA. Data were collected compliant with a quality assurance plan. Blind duplicate samples were collected as a data quality control measure with acceptable results.

Region 1

Water Segment:	Klamath River HU, Salmon River HA
Pollutant:	Total Suspended Solids (TSS)
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There were 55 TSS measurements in total, there were 3 measurements at values of 17, 24 and 27 at different stations, all of the other 53 samples collected were non-detect. The water quality objective is not exceeded and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	There is no NCRWQCB Basin Plan Water Quality Objective for TSS for Salmon River HA listed in Table 3-1. However there is a Suspended Material narrative objective in the Basin Plan: Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
Data Used to Assess Water Quality:	The grab samples were analyzed for TSS in addition to pH, dissolved oxygen, temperatures and specific conductance. There were 55 TSS measurements in total. With all non-detect values at the Mainstem Salmon River at USGS Gage Station; With non-detects and one value of 24 on 6/10/2002 at Wooley Creek Station; With all non-detects at Mainstem Salmon River at Forks of Salmon Station; With non-detects and a value of 17 on 6/10/2002 at North Fork Salmon at Sawyers Bar Station; and non-detect values and one value of 27 on 6/10/2002

	at South Fork Salmon at Cecilville (North Coast RWQCB, 2004c)
Spatial Representation:	There were 5 sampling locations. The sampling locations included the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness area.
Temporal Representation:	The Salmon River was added to the list for nutrients in 1992. In the summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located immediately downstream of community centers within the watershed.
Data Quality Assessment:	NCRWQCB QA. Data were collected compliant with a quality assurance plan. Blind duplicate samples were collected as a data quality control measure with acceptable results.

Region 1

Water Segment:	Klamath River HU, Salmon River HA
Pollutant:	pH
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. The WQO for Salmon River is attained by all 25 samples except for one measurement taken on 6/11/02 that was below the 7.0 WQO at 6.97. One of the samples exceed the water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. One of the 25 samples exceeded the pH water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Nuisance
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: The pH shall conform to those limits listed in Table 3-1. For waters not listed in Table 3-1 and where pH objectives are not prescribed, the pH shall not be depressed below 6.5 nor raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR) or saline (SAL) beneficial uses nor 0.5 units within the range specified above in fresh waters with designated COLD or WARM beneficial uses.
Evaluation Guideline:	Table 3-1 in the NCRWQCB Basin Plan lists the Salmon River HA (All streams) WQO for pH as a minimum at 7.0 and the maximum at 8.5.

Data Used to Assess Water Quality:	The grab samples were analyzed for pH in addition to dissolved oxygen, temperatures and specific conductance. They were measured using an YSI 600XL Datasonde when grab samples were collected. There were 25 pH measurements in total with an average pH of 7.55. The WQO for Salmon River is attained by all samples except for one measurement taken on 6/11/02 that was below the 7.0 WQO at 6.97 (North Coast RWQCB, 2004c).
Spatial Representation:	There were 5 sampling locations. The sampling locations included the North Fork downstream of Sawyers Bar, the South Fork downstream of Cecilville, the Salmon River downstream of Forks of Salmon and Salmon River near the mouth. In addition, grab samples were collected near the mouth of Wooley Creek; this site was considered a control site, as the sub-watershed is a wilderness area.
Temporal Representation:	The Salmon River was added to the list for nutrients in 1992. In the summer of 2002 NCRWQCB Staff conducted a water quality monitoring effort to evaluate impairment of the Salmon River by nutrients. The monitoring plan involved collecting grab samples on three consecutive days once per month in June through October 2002 at locations in the Salmon River watershed located immediately downstream of community centers within the watershed.
Data Quality Assessment:	NCRWQCB QA. Data were collected compliant with a quality assurance plan. Blind duplicate samples were collected as a data quality control measure with acceptable results.

Region 1

Water Segment:	Mendocino Coast HU, Albion River HA, Big Salmon Creek
Pollutant:	Sediment
Decision:	Do Not List
Weight of Evidence:	Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. 1. The documents submitted do not contain substantial information for listing, more data is needed to determine if the water quality objective is exceeded. 2. Pursuant to Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Line of Evidence	Pollutant-Water
Beneficial Use	CO - Cold Freshwater Habitat
Information Used to Assess Water Quality:	Information submitted for identifying potential sediment impairment in Big Salmon Creek in the form of a NCRWQCB memorandum from Cherie Blatt to Bruce Gwynne (June 2004) which includes: Initial Study Negative Declaration for CEQA review (Permit No. 1600-2002-0765-3) from Campbell Timberland Management L.L.C.; parts of Timberland Harvesting Plan (THP) 1-04-061 SON comprised of results of hill-slope hazard analysis, stream condition tables (2), and stream inventory report; habitat inventory report; THP 1-02-014 MEN; letters (2 ea.) of additional information for THP 1-93-394 MEN; interoffice communication (2 ea.) within the NCRWQCB; A 1993 Department of Forestry and Fire Protection interoffice field memorandum and; a memorandum stating the RWQCB authority under water code section 13267(b) on Timber Harvest Lands. Most of the information demonstrates that there is a salmonid habitat issue in the water body. Potential cause to habitat degradation has been attributed to the lack of adequate large woody debris in the channel and sedimentation Even though the information submitted does not contain substantial information for listing, it does contain enough evidence to warrant

	further investigation of habitat degradation in the water body.
Non-Numeric Objective:	The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

Region 1

Water Segment:	Mendocino Coast HU, Albion River HA, Big Salmon Creek
Pollutant:	Temperature, water
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. Data was collected instream from 8 sampling locations along Big Salmon Creek. These location were distributed along the mainstem of Big Salmon Creek, along Hazel Creek, and Donnelly Gulch. When compared to the 14.8 °C threshold, there were 248 exceedances out of 5,205 samples taken over all of the sampling years. When compared to the 17°C threshold there were no exceedances found for any of the data. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There were 238 of 5,205 samples that exceeded the 14.8°C temperature evaluation guideline and this does not exceed the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat

Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperature.
Evaluation Guideline:	The guideline used was from Sullivan et al (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day Mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al (2000) suggests that an upper threshold for the for the 7-day average of 14.8°C for coho and 17.0°C for steelhead will reduce average growth 10% from optimum.
Data Used to Assess Water Quality:	When the data was compared to the 14.8 °C coho threshold, there were 238 exceedances out of 5,205 samples taken over all of the sampling years at the locations on Salmon Creek. When compared to the 17°C threshold there were no exceedances found for any of the data (Hawthorne Timber Co., 2003)
Spatial Representation:	Data was collected instream from 8 sampling locations along Big Salmon Creek. These location were distributed along the mainstem of Big Salmon Creek, along Hazel Creek, and Donnelly Gulch. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. In stream and riparian measurements were taken at all monitoring locations.
Temporal Representation:	Data was recorded for 10 years from 1994 through 2003. Water temperature data were recorded at ninety-minute intervals, generally from June until Mid-October Stream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2004. Hobo-temps allowed uninterrupted data collection to occur throughout the critical summer period.
Data Quality Assessment:	QA/QC Information Summary was submitted. Installation of the temperature data logger (Onset Computer Corp. model HOBO-Temp and OST temperature loggers in Class 1 streams throughout the property devices occurred one day before the first day logged on the continuous temperature monitoring figures. This was done to allow the data loggers to reach equilibrium with the instream temperature regimes and to capture complete daily cycles. No information on equipment calibration, standard operating procedures or data protocols were included with the submittal.

Region 1

Water Segment: Mendocino Coast HU, Big River HA, Berry Gulch

Pollutant: Temperature, water

Decision: Do Not List

Weight of Evidence: This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status.

One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. Although the Big River is currently listed on the 303(d) list for temperature, the specific section of Berry Gulch will not be listed. When compared to the 14.8 °C threshold, were 358 exceedances out of 2,881 samples taken over all of the sampling years at this location. When compared to the 17°C threshold there were no exceedances found for any of the data.

Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category.

This conclusion is based on the staff findings that:
1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy.
2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy.
3. There were 358 of 2,881 samples that exceeded the 14.8 degree evaluation guideline used to interpret the water quality objective and this does not exceed the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy.
4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.

SWRCB Staff Recommendation: After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.

Lines of Evidence:

Numeric Line of Evidence Pollutant-Water

Beneficial Use: CO - Cold Freshwater Habitat

Matrix: Water

Water Quality Objective/ Water Quality Criterion:	Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5°F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5°F above natural receiving water temperature.
Evaluation Guideline:	The guideline used was from Sullivan et al (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day Mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al (2000) suggests that an upper threshold for the for the 7-day average of 14.8°C for coho and 17.0°C for steelhead will reduce average growth 10% from optimum.
Data Used to Assess Water Quality:	When the data was compared to the 14.8 °C threshold, there were 358 exceedances out of 2,881 samples taken over the all of the sampling years at this location. When compared to the 17°C threshold there were no exceedances found for any of the data (Hawthorne Timber Co., 2003)
Spatial Representation:	There were 3 sampling locations. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. In stream and riparian measurements were taken at all monitoring locations.
Temporal Representation:	Data was recorded for 1994, 1995, 1996, 1998, 1999, 2000, 2001, 2002 and 2003. Water temperature data were recorded at ninety-minute intervals, generally from June until Mid-October. Stream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2003. Hobo-temps allowed uninterrupted data collection to occur throughout the critical over summer period.
Environmental Conditions:	The Mendocino Coast HU, Big River HA, Big River segment was listed on the 2002 section 303(d)List, the Mendocino Coast HU, Big River HA, Berry Gulch segment was not included in this listing at that time.
Data Quality Assessment:	QA/QC Information Summary was submitted. Installation of the temperature data logger (Onset Computer Corp. model HOBO-Temp and OST temperature loggers in Class 1 streams throughout the property devices occurred one day before the first day logged on the continuous temperature monitoring figures. This was done to allow the data loggers to reach equilibrium with the instream temperature regimes and to capture complete daily cycles. No information on equipment calibration, standard operating procedures or data protocols were included with the submittal.

Region 1

Water Segment:	Mendocino Coast HU, Rockport HA, Usal Creek HSA
Pollutant:	Temperature, water
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. When compared to the 14.8 °C coho threshold, there were 240 exceedances out of 4,473 total samples taken over all the sampling years at this location. When compared to the 17°C steelhead threshold there were no exceedances found for any of the data. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There were 240 of 4,473 samples that exceeded the 14.8 °C temperature evaluation guideline and this does not exceed the allowable frequency calculated from equation in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence Pollutant-Water

Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5 F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5 F above natural receiving water temperature.
Evaluation Guideline:	The guideline used was from Sullivan et al (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day Mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al (2000) suggests that an upper threshold for the for the 7-day average of 14.8°C for coho and 17.0°C for steelhead will reduce average growth 10% from optimum, and that thresholds for the 7-day average of 19.0°C for both coho and steelhead will reduce average growth 20% from optimum.
Data Used to Assess Water Quality:	When the data was compared to the 14.8 °C coho threshold, there were 240 exceedances out of 4,473 total samples taken over all the sampling years at this location. When compared to the 17°C steelhead threshold there were no exceedances found for any of the data (Hawthorne Timber Co., 2003)
Spatial Representation:	There were 6 sampling locations: along the mainstem of Usal Creek and the South Fork of Usal Creek; and on its tributaries: Julias Creek, Soldier Creek, Little Bear Creek and Bear Creek. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. Instream and riparian measurements were taken at all monitoring locations.
Temporal Representation:	Data was recorded for 9 years between 1994 and 1999 and also from 2001 through 2003. Water temperature data were recorded at ninety-minute intervals, generally from June until Mid-October. Stream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2003. Hobo-temps allowed uninterrupted data collection to occur throughout the critical summer period.
Environmental Conditions:	
Data Quality Assessment:	QA/QC Information Summary was submitted. Installation of the temperature data logger (Onset Computer Corp. model HOBO-Temp and OST temperature loggers in Class 1 streams throughout the property devices occurred one day before the first day logged on the continuous temperature monitoring figures. This was done to allow the data loggers to reach equilibrium with the instream temperature regimes and to capture complete daily cycles. No information on

equipment calibration, standard operating procedures or data protocols were included with the submittal.

Region 1

Water Segment:	Mendocino Coast HU, Rockport HA, Wages Creek HSA, Wages Creek
Pollutant:	Temperature, water
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. When compared to the 14.8 °C coho threshold, there were 12 exceedances out of 1,214 total samples taken over all the sampling years at this location. When compared to the 17°C steelhead threshold there were no exceedances found for any of the data. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There were 12 of 1,214 total samples that exceeded the Sullivan 14.8 °C evaluation guideline used to interpret the water quality objective and this does not exceed the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered

	unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5 F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5 F above natural receiving water temperature.
Evaluation Guideline:	The guideline used was from Sullivan et al (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day Mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al (2000) suggests that an upper threshold for the 7-day average of 14.8°C for coho and 17.0°C for steelhead will reduce average growth 10% from optimum.
Data Used to Assess Water Quality:	When the data was compared to the 14.8 °C coho threshold, there were 12 exceedances out of 1,214 total samples taken over all the sampling years at this location. When compared to the 17°C steelhead threshold there were no exceedances found for any of the data (Hawthorne Timber Co., 2003)
Spatial Representation:	There was one sampling location along the mainstem of the Wages Creek, with 10 years of sampling information. Maps of the sampling locations were provided including Lat-Long Coordinates. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. In stream and riparian measurements were taken at all monitoring locations.
Temporal Representation:	Data was recorded for 10 years, from 1994 to 2003. Water temperature data was recorded at 90-minute intervals, generally from June until Mid-October. Stream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2003. Hobo-temps allowed uninterrupted data collection to occur throughout the critical summer period.
Data Quality Assessment:	QA/QC Information Summary was submitted. Installation of the temperature data logger (Onset Computer Corp. model HOBO-Temp and OST temperature loggers in Class 1 streams throughout the property) devices occurred one day before the first day logged on the continuous temperature monitoring figures. This was done to allow the data loggers to reach equilibrium with the instream temperature regimes and to capture complete daily cycles. No information on equipment calibration, standard operating procedures or data protocols were included with the submittal.

Region 1

Water Segment:	Mendocino Coast HU, Ten Mile River HSA, coastal tributaries
Pollutant:	Temperature, water
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. The main stem of the Ten Mile River is currently listed on the 303(d) list for temperature, however this listing decision is applicable to the coastal tributaries of the Ten Mile River: Little North Fork of the Ten Mile River, Buckhorn Creek, Bald Hill Creek, Patsy Creek, Bearhaven Creek, Little Bearhaven Creek, Booth Gulch, Mill Creek, Smith Creek, Campbell Creek, Churchman Creek, and Redwood Creek. When compared to the 14.8°C coho threshold, were 10 exceedances out of 1,040 total samples taken over all the sampling years at this location. When compared to the 17.0°C steelhead threshold there were no exceedances found for any of the data. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There were 10 of 1,040 samples that exceeded the 14.8°C coho evaluation guideline and this does not exceed the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence Pollutant-Water

Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5 F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5 F above natural receiving water temperature.
Evaluation Guideline:	The guideline used was from Sullivan et al (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day Mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al (2000) suggests that an upper threshold for the for the 7-day average of 14.8°C for coho and 17.0°C for steelhead will reduce average growth 10% from optimum.
Data Used to Assess Water Quality:	When the data was compared to the 14.8°C coho threshold, there were 10 exceedances in 1997 out of 1,040 total samples taken over all the sampling years at this location. When compared to the 17.0°C steelhead threshold there were no exceedances found for any of the data (Hawthorne Timber Co., 2003)
Spatial Representation:	Data was collected from multiple tributaries of the Ten Mile River: Little North Fork of the Ten Mile River, Buckhorn Creek, Bald Hill Creek, Patsy Creek, Bearhaven Creek, Little Bearhaven Creek, Booth Gulch, Mill Creek, Smith Creek, Campbell Creek, Churchman Creek, and Redwood Creek. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. In stream and riparian measurements were taken at all monitoring locations.
Temporal Representation:	Data was recorded for 1994,1995,1997,1998, 2000,2001,2002,and 2003. Water temperature data were recorded at 90-minute intervals, generally from June to Mid-October. Stream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2003. Hobo-temps allowed uninterrupted data collection to occur throughout the critical summer period.
Data Quality Assessment:	QA/QC Information Summary was submitted. Installation of the temperature data logger (Onset Computer Corp. model HOBO-Temp and OST temperature loggers in Class 1 streams throughout the property devices occurred one day before the first day logged on the continuous temperature monitoring figures. This was done to allow the data loggers to reach equilibrium with the instream temperature regimes and to capture complete daily cycles. No information on equipment calibration, standard operating procedures or data protocols were included with the submittal.

Region 1

Water Segment:	Russian River HU, Lower Russian River HA, Austin Creek HSA
Pollutant:	Phosphate
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. A Phosphate guideline is not available for this water segment that complies with the requirements of section 6.1.3 of the Policy. There is no guideline available and no water quality objective for orthophosphate for this water segment. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.
Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	Samples were taken at sampling stations AUS010, AUS020 and AUS030. Sample phosphate concentrations ranged from 0.016 to 0.098 mg/L. (Sandler, 2004)
Spatial Representation:	There are three sampling locations. AUS010 is located downstream of Laguna de Santa Rosa, at the first bridge, confluence with Russian River. AUS020 is located at 1180 Austin Creek Road. AUS030 is located near the Cazadero Bakery, just upstream of large culvert
Temporal Representation:	Samples were taken at AUS010 one time, once a month during May, July and

	October 2003. Samples were taken at AUS020 one time, once a month during March, May, July and October 2003. Samples were taken at AUS030 one time, once a month during March, May, July and October 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Russian River HU, Lower Russian River HA, Austin Creek HSA
Pollutant:	Specific Conductance
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. Three months of 5 months samples exceeded the specific conductance water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Specific conductivity for Russian River (Downstream)- 50% upper and lower limits of 285 micromhos represent the 50 percentile values of the monthly means for a calendar year. 50% or more of the monthly means must be less than or equal to an upper limit and greater than or equal to a lower limit. 90% upper and lower limits of 375 micromhos represent the 90 percentile values for a calendar year. 90% or more of the values must be less than or equal to an upper limit and greater than or equal to a lower limit.
Data Used to Assess Water Quality:	On 3/27/2003 none of the values are in exceedance. On 5/19/2003 none of the values are in exceedance. On 7/8/2003 two of three stations have values in exceedance of the objective. On 9/9/2003 two of the three stations have values in exceedance of the objective. On 10/28/2003 two of the three stations have values in exceedance of the objective. For Austin Creek 3 months out of the 5 months of samples are in exceedance of the objective (Sandler, 2004)

Spatial Representation:	Sampling station AUS010 is located downstream of Laguna de Santa Rosa at the First bridge at the confluence with Russian River. Sampling station AUS020 is located at 1180 Austin Creek Road. Sampling station AUS030 is located near the Cazadero Bakery, just upstream of large culvert.
Temporal Representation:	There are 5 months of sampling, with one day of samples for each month at each station. Samples were taken on the same days at each location in March, May, July, September and October 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Russian River HU, Lower Russian River HA, Guerneville HSA
Pollutant:	Oxygen, Dissolved
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. Three lines of evidence are available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There were 2 of 6 samples for Lancel Creek below the dissolved oxygen objective. There were 3 of 30 samples for Dutch Bill Creek were below the dissolved oxygen objective. There were 4 out of 27 samples for Pocket Creek below the dissolved oxygen objective. These samples taken from the Guerneville HSA including Pocket Creek, Lancel Creek, and Dutch Bill Creek respectively do not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Dissolved oxygen- 7.0 mg/L as a minimum; and the water must meet the 50% Upper Limit of 10 mg/L and 90% Upper Limit of 7.5 mg/L.
Data Used to Assess Water Quality:	Three out of 30 samples were below the minimum objective. Samples below the minimum were taken from sampling station DBC030 at 5.2 mg/L and at station DBC060 at 4.6 and 2.1 mg/L. The three other sampling stations did not have any values below the minimum of the objective (Sandler, 2004)
Spatial Representation:	There were 5 sampling locations and all samples were taken within Dutch Bill Creek. DBC010 is located near the fish ladder at Occidental. DBC020 is located

	at Westminister, downstream from Bohemian Ranch, Occidental. DBC030 is located at Camp Meeker dam. DBC050 is located 75 yards downstream from pump station, Occidental. DBC060 is located at Graton Rd. and Main St., at bridge, Occidental.
Temporal Representation:	Samples were taken at DBC010 and DBC020 once a month, with a single measurement on one day during April, May, June, September and October 2003. Samples were taken at DBC030 and DBC050 once a month, with a single measurement on one day during April, May, June, September, October and December 2003. Samples were taken at DBC060 once a month, with a single measurement on one day during April, May, June, September and December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Dissolved oxygen- is 7.0mg/L as a minimum; and the water must meet the 50% Upper Limit of 10 mg/L and 90% Upper Limit of 7.5 mg/L.
Data Used to Assess Water Quality:	Two out of 6 samples exceeded the minimum objectives. D.O. was measured at 6.1 on September 6, 2003 and at 5.2 on October 10, 2003 (Sandler, 2004)
Spatial Representation:	All samples were taken Lancel Creek a tributary to Dutch Bill Creek which is tributary to the Russian River. There was one sampling location, LAN010 is located at Occidental.
Temporal Representation:	Samples were taken once a month, with a single measurement on one day during April, May, June, September, October and December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Dissolved oxygen- is 7.0mg/L as a minimum; and the water must meet the 50% Upper Limit of 10 mg/L and 90% Upper Limit of 7.5 mg/L.
Data Used to Assess Water Quality:	Four out of 27 samples exceeded the minimum objective of 7.0 mg/L. Stations were below the objective at station PCC020 with 6.9 mg/L and 5.9 mg/L. Stations were below the objective at 4.2 mg/L and 4 mg/L at station PCC030 (Sandler, 2004)
Spatial Representation:	Sampling was limited to Pocket (Canyon) Creek a tributary to the lower Russian River within the greater Guerneville HSA. PCC020 is located in Guerneville, at 12170 Hwy 116, downstream of Inn and the tank in the creek. PCC030 is located in Guerneville, at 11900 Hwy 116, in the backyard. PCC040 is located in

	Guerneville, 50 feet upstream from bridge along Hwy 116 at May's Canyon Road.
Temporal Representation:	Samples were taken at all 3 sites once a month, a single measurement on the same day at each station during January through March, May, and August through December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Russian River HU, Lower Russian River HA, Guerneville HSA
Pollutant:	Phosphate
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. There are three lines of evidence in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. A Phosphate guideline is not available for this water segment that complies with the requirements of section 6.1.3 of the Policy. There is no guideline available and no water quality objective for orthophosphate for this water segment. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.
Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	Twenty-eight samples were taken. Concentrations of orthophosphate-P ranged from non-detectable to 1.14 mg/L (Sandler, 2004).
Spatial Representation:	There were 5 sampling locations, all samples were taken along Dutch Bill Creek. DBC010 is located near the fish ladder at Occidental. DBC020 is located at Westminister, downstream from Bohemian Ranch, Occidental. DBC030 is located at Camp Meeker dam. DBC050 is located 75 yards downstream from pump station, Occidental. DBC060 is located at Graton Rd. and Main St., at bridge, Occidental.

Temporal Representation:	Samples were taken at DBC010, DBC020, and DBC050 on one day, one time during April, May, June, September, October and December 2003. Samples were taken at DBC030 and DBC060 on one day, one time during April, May, June, September and December 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.
Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	Out of 13 samples taken, orthophosphate-P concentrations ranged from non-detectable to 0.147 mg/L (Sandler, 2004).
Spatial Representation:	There were two sampling locations and all samples were along Jenner Creek, a tributary to the lower Russian River. JEN020 is located by fish ladder, Jenner. RUS010 is located near a boat house, Jenner.
Temporal Representation:	Samples were taken at JEN020 and at RUS010 once a month, on one day for a single measurement during January, February, April, May, August and November 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.
Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	Twenty-one samples were taken for orthophosphate-P. Sample values ranged from non-detectable to 0.424 mg/L (Sandler, 2004).
Spatial Representation:	Sampling was limited to Pocket Creek a tributary to the lower Russian River within the greater Guerneville HSA. PCC020 is located in Guerneville, at 12170 Hwy 116, downstream of Inn and the tank in the creek. PCC030 is located in Guerneville, at 11900 Hwy 116, in the backyard. PCC040 is located in Guerneville, 50 feet upstream from bridge along Hwy 116 at May's Canyon Road.
Temporal Representation:	Samples were taken at all 3 sites once a month on the same single day at each station during January through March, May, and August through October 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Russian River HU, Middle Russian River HA, Big Sulphur Creek HSA
Pollutant:	Phosphate
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. There is one line of evidence available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. A phosphate guideline is not available for this water segment that complies with the requirements of section 6.1.3 of the Policy. There is no guideline available for orthophosphate for this water segment. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Water shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
Evaluation Guideline:	Phosphorus is considered in the narrative objective for biostimulatory substances. However, there is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	The data values ranged from 0.0ss to 0.130 mg/L P (Sandler, 2004).
Spatial Representation:	There was one sampling station, BSC010 that is located upstream of Laguna de Santa Rosa, 20 feet below River Rd. bridge.

Temporal Representation:	Samples were taken in April, May and July 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Russian River HU, Middle Russian River HA, Big Sulphur Creek HSA
Pollutant:	pH
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. There were 2 out of 7 samples that exceeded a pH water quality objective. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There are 2 of the 7 samples that exceeded the pH water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: pH for Russian River (Table 3.1) shall not be depressed below 6.5 nor raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR) or saline (SAL) beneficial uses nor 0.5 units within the range specified above in fresh waters with designated COLD or WARM beneficial uses.
Data Used to Assess Water Quality:	At sampling station BSC010, 2 out of 7 samples exceeded a pH of 8.5. The exceedances were 8.8 and 8.6 (Sandler, 2004).
Spatial Representation:	There was sampling location, BSC010 that is located upstream of Laguna de Santa Rosa, 20 feet below River Road bridge.
Temporal Representation:	Samples were taken once a month January through August 2003, no samples

	were taken in June.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Russian River HU, Middle Russian River HA, Geyserville HSA
Pollutant:	Phosphate
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. A Phosphate guideline is not available for this water segment that complies with the requirements of section 6.1.3 of the Policy. There is no guideline available and no water quality objective for orthophosphate for this water segment. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.
Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	Of the total 8 samples from the three sites values ranged from non-detectable to 0.163 mg/L (Sandler, 2004).
Spatial Representation:	Sampling was limited to three locations along the Russian River, one at Healdsburg, and two at Cloverdale. Sample site RUS070 is located at the Healdsburg Veteran's beach, Healdsburg. Sample site RUS080 is located at the Cloverdale 1st St. bridge, Cloverdale. Sample site RUS090 is located at the Cloverdale River Park, Cloverdale.
Temporal Representation:	RUS070 was sampled once in April 2003.

	RUS080 was sampled once a month April through August 2003. RUS090 was sampled once in May, once in July and once in August 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Russian River HU, Middle Russian River HA, Santa Rosa Creek
Pollutant:	Phosphate
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. There is one line of evidence available in the administrative record to assess this pollutant. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. A Phosphate guideline is not available for this water segment that complies with the requirements of section 6.1.3 of the Policy. There is no guideline available and no water quality objective for orthophosphate for this water segment. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.

Lines of Evidence:

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Water shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
Evaluation Guideline:	Phosphorus is considered in the narrative objective for biostimulatory substances. The Basin Plan does not set water quality objectives specifically for orthophosphate. There is no applicable guideline for orthophosphate.
Data Used to Assess Water Quality:	At sampling site SRC040 six samples were collected. Values ranged from 0.049 to 0.261 mg/L P (Sandler, 2004).
Spatial Representation:	Sampling site SRC040 was located at 3rd St., behind Vineyard Hotel, west of Highway 101 along the Prince George Greenway, Santa Rosa.

Temporal Representation:	Samples were taken once a month from February through August 2003, except in May.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Russian River HU, Middle Russian River HA, Santa Rosa Creek
Pollutant:	pH
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess this pollutant. Of the 6 samples taken, 3 exceeded the pH water quality objective upper limit of 8.5. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There were 3 out of 6 samples that exceeded the pH water quality objective and this does not exceed the allowable frequency listed in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: pH for Russian River (Table 3.1) shall not be depressed below 6.5 nor raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.2 units in waters with designated marine (MAR) or saline (SAL) beneficial uses nor 0.5 units within the range specified above in fresh waters with designated COLD or WARM beneficial uses.
Data Used to Assess Water Quality:	Samples were taken at one location (Site SRC040) for Santa Rosa Creek. Of the 6 samples taken, 3 exceeded the upper pH limit of 8.5. With values at 8.8, 8.8 and 9.0 (Sandler, 2004).
Spatial Representation:	Sampling site was located at 3rd St., behind Vineyard Hotel, west of Highway 101 along the Prince George Greenway, Santa Rosa.

Temporal Representation:	Samples were taken once a month from February through August 2003, except in May.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community Clean Water Institute.

Region 1

Water Segment:	Russian River HU, Middle Russian River HA, Warm Springs HAS
Pollutant:	Phosphate
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. Based on the readily available data and information, the weight of evidence indicates that there is not sufficient justification in favor of placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. A Phosphate guideline is not available for this water segment that complies with the requirements of section 6.1.3 of the Policy. There is no guideline available and no water quality objective for orthophosphate for this water segment. 2. The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 3. The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because it cannot be determined if applicable water quality standards are exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	The Basin Plan does not have a water quality objective for orthophosphate.
Evaluation Guideline:	There is no appropriate interpretive evaluation guideline for orthophosphate.
Data Used to Assess Water Quality:	Two samples were taken and their concentrations were 0.033 and 0.064 mg P/L (Sandler, 2004).
Spatial Representation:	Sampling was limited to Mill Creek, a tributary to the Russian River. Samples were taken at 2563 Mill Creek Rd., Healdsburg.
Temporal Representation:	Samples were taken in January and March 2003.
Data Quality Assessment:	Draft QAPP for Volunteer Water Quality Monitoring Project for the Community

Clean Water Institute.

Region 1

Water Segment:	Wages Creek HSA, Dehaven Creek
Pollutant:	Temperature, water
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. One line of evidence is available in the administrative record to assess temperature consistent with Listing Policy section 6.1.5.9. When compared to the 14.8 °C coho threshold, there were 19 exceedances out of 1,164 total samples taken over all the sampling years at this location. When compared to the 17°C steelhead threshold there were no exceedances found for any of the data. Based on the readily available data and information, the weight of evidence indicates that there is sufficient justification against placing this water segment-pollutant combination on the section 303(d) list in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1.The data used satisfies the data quality requirements of section 6.1.4 of the Policy. 2.The data used satisfies the data quantity requirements of section 6.1.5 of the Policy. 3. There were 19 of 1,164 total samples that exceeded the 14.8 °C temperature evaluation guideline and this does not exceed the allowable frequency calculated from the equation in Table 3.2 of the Listing Policy. 4. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Numeric Line of Evidence	Pollutant-Water
Beneficial Use:	CO - Cold Freshwater Habitat
Matrix:	Water
Water Quality Objective/ Water Quality Criterion:	Basin Plan: Temperature objectives for COLD interstate waters, WARM interstate waters, and Enclosed Bays and Estuaries are as specified in the "Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays of California" including any revisions thereto. A copy of this plan is included verbatim in the Appendix Section of this Plan. In addition, the following temperature objectives apply to surface waters: The natural receiving water temperature of intrastate waters shall not be altered

	unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall the temperature of any COLD water be increased by more than 5 F above natural receiving water temperature. At no time or place shall the temperature of WARM intrastate waters be increased more than 5 F above natural receiving water temperature.
Evaluation Guideline:	The guideline used was from Sullivan et al (2000) Published Temperature Thresholds-Peer Reviewed Literature which includes reviewed sub-lethal and acute temperature thresholds from a wide range of studies, incorporating information from laboratory-based research, field observations, and risk assessment approaches. This report calculated the 7-day Mean (maximum value of the 7-day moving average of the daily mean temperature) upper threshold criterion for coho salmon as 14.8°C and for steelhead trout as 17.0°C. The risk assessment approach used by Sullivan et al (2000) suggests that an upper threshold for the for the 7-day average of 14.8°C for coho and 17.0°C for steelhead will reduce average growth 10% from optimum.
Data Used to Assess Water Quality:	When the data was compared to the 14.8 °C coho threshold, there were 19 exceedances out of 1,164 total samples taken over all the sampling years at this location. When compared to the 17°C steelhead threshold there were no exceedances found for any of the data (Hawthorne Timber Company, 2003).
Spatial Representation:	There was 1 sampling location with 9 years of sampling measurements. Hobo-Temps were placed in the pools near the bottom and towards the deepest portion to record the in-stream temperatures. Instream and riparian measurements were taken at all monitoring locations.
Temporal Representation:	Data was recorded for 9 years, from 1994 to 2002. Water temperature data were recorded at 90-minute intervals, generally from June to Mid-October. Stream temperatures were measured continuously with temperature data loggers (Onset Computer Corp. model HOBO-Temp and OST temperature loggers) in Class 1 streams throughout the property from 1994 to 2004. Hobo-temps allowed uninterrupted data collection to occur throughout the critical summer period.
Data Quality Assessment:	Campbell Timberland Management submitted a QA/QC Information Summary. Installation of the temperature data logger (Onset Computer Corp. model HOBO-Temp and OST temperature loggers in Class 1 streams throughout the property devices occurred one day before the first day logged on the continuous temperature monitoring figures. This was done to allow the data loggers to reach equilibrium with the instream temperature regimes and to capture complete daily cycles. No information on equipment calibration, standard operating procedures or data protocols were included with the submittal.

Region 1

Water Segment:	Winchuck River HU, Winchuck River
Pollutant:	Sediment
Decision:	Do Not List
Weight of Evidence:	This pollutant is being considered for placement on the section 303(d) list under section 3 of the Listing Policy. Under section 3 a single line of evidence is necessary to assess listing status. Based on the readily available data and information, the weight of evidence indicates that there is insufficient justification in favor of placing this water segment-pollutant combination on the Section 303(d) List in the Water Quality Limited Segments category. This conclusion is based on the staff findings that: 1. The documents submitted do not contain substantial information for listing, more data is needed to determine if the water quality objective is exceeded. 2. Pursuant to section 3.11 of the Listing Policy, no additional data and information are available indicating that standards are not met.
SWRCB Staff Recommendation:	After review of the available data and information, SWRCB staff concludes that the water body-pollutant combination should not be placed on the section 303(d) list because applicable water quality standards for the pollutant are not exceeded.
Lines of Evidence:	

Line of Evidence	Pollutant-Water
Beneficial Use	CO - Cold Freshwater Habitat, SP - Fish Spawning
Information Used to Assess Water Quality:	The reports and plans were submitted for potential sedimentation impairments include: Winchuck River Watershed Action Plan, Curry Action Plan, and Winchuck River Watershed Assessment. Most of information in these documents contain historical documentation of degradation of the watershed, narrative evaluation of roads, crossing, and watercourses within these areas while conducting preharvest inspections for proposed timber harvest plans. Also, Coho has been listed as Threatened, according to the Endangered Species Act, since May of 1997. Even though the information submitted does not contain substantial information for listing, there does appears to be enough evidence that

	warrants further investigation of habitat degradation in watershed (Maguire, 2001; Massingill, 2001; Massingill, 2002).
Non-Numeric Objective:	The suspended sediment load and suspended sediment discharge rate of surface water shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

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