

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergetic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 370 - STRESS IN WILDLIFE FROM NOISE.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Stress in Wildlife from Noise.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Stress in Wildlife from Noise.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 371 - TRANSPLANTATION.

"Salvaging and relocating plants has not shown to be successful and, therefore is not appropriate mitigation." US-FWS letter to Monterey County Dec 10 1997

The June 24, 1994 letter from California Department of Fish and Game Regional Manager Brian Hunter states "Transplantation and propagation have not been shown to be effective measures to mitigate the loss of rare plant species; success rates are typically very low."

"Rare plants are generally rare not just because there is a lack of individuals, but because of the lack of suitable habitat; and an increase in numbers of individuals is not usually effective in increasing overall population numbers (or replacing lost individuals) unless there is a concomitant increase in the available habitat."

\*\*\*\*\*[WARNING]: "While relocation of rare species has met with limited success in some species, it is generally successful only in areas where suitable habitat exists that, for whatever reason, is not currently occupied by the species of concern."

Is the Transplantation experimental?

Is the proposed site currently at carrying capacity?

Why are the species absent from that area now?

Is the proposed habitat unsuitable?

Is there a proven ability to persist through environmental extremes? What evidence is there that the alternative site can support a viable population over the range of environmental conditions that can be expected to occur through time?

Does listing agency accept transplantation as an alternative to protecting naturally occurring populations?

#### MITIGATION QUANTIFICATION

PRIMARY MITIGATION MEASURE: Transplantation.

This Mitigation Measure is of the wrong type, inadequate, not fully enforceable and causes its own potentially significant environmental impacts.

BACK-UP MITIGATION MEASURE:

A1. Please describe the "Back-up", Secondary or Reserve Mitigation measure in case the primary mitigation measure fails:

A2. If there is no Back-up Mitigation Measure please state that clearly.

#### MITIGATION IMPACT REDUCTION

B1. Please state the Absolute Amount of impact reduction contributed by the Primary mitigation measure: Transplantation, using the same units of measure used to determine the impact.

B2. Please state the Absolute Amount of impact reduction contributed by the Secondary mitigation measure using the same units of measure used to determine the impact.

B3. Please state the impact reduction, in Percent, contributed by the primary mitigation measure: Transplantation, using the same units of measure used to determine the impact.

B4. Please state the impact reduction, in Percent, contributed by the secondary mitigation measure using the same units of measure used to determine the impact.

TRACK RECORD EXAMPLE C1. Please cite at least one real world example of successful implementation of an identical or reasonably identical example for the primary mitigation measure: Transplantation.

C2. Please cite at least one real world example of successful implementation of an identical or reasonably identical example for the back-up mitigation measure.

This would be an example that is in place and has been self-sustaining for a minimum of 5 years; include clear descriptions of mitigation measures, how long the mitigation measure has been operating, where in the process the mitigation is now, and what percentage of mitigation has been successful, and how successful is defined.

C3. If there are no successful examples for the primary measure - please identify the proposed mitigation measure as speculative or experimental.

C4. If there are no successful examples for the secondary measure - please identify the proposed mitigation measure as speculative or experimental.

D1. TRACK RECORD STUDY Please provide a survey reporting the number of times this primary mitigation measure has been attempted, and the ratio of successful vs unsuccessful implementations. If no such study is available - please identify as speculative or experimental the proposed mitigation measure: Transplantation.

D2. Please provide a survey reporting the number of times this secondary mitigation measure has been attempted, and the ratio of successful vs unsuccessful implementations. If no such study is available - please identify as speculative or experimental the proposed mitigation measure: Transplantation.

NEW LEVEL IF SUCCESSFUL E1. Please state the new total number if the proposed primary mitigation measure is successful.

E2. Please state the new total number if the proposed secondary mitigation measure is successful.

E3. Please state the total change, in PERCENT, to which the primary mitigation measure would raise or lower the maximum impact amounts.

E4. Please state whether this total maximum change percent is an average amount, a worst case expected or a best case expected.

E5. Please state the total change, in PERCENT, to which the secondary mitigation measure would raise or lower the maximum impact amounts.

E6. Please state whether this total maximum change percent is an average amount, a worst case expected or a best case expected.

E7. Please state the degree, in ABSOLUTE AMOUNT, to which the primary mitigation measure would raise or lower the maximum impact amounts.

E8. Please state whether this total maximum change amount is an average amount, a worst case expected or a best case expected.

E9. Please state the degree, in ABSOLUTE AMOUNT, to which the secondary mitigation measure would raise or lower the maximum impact amounts.

E10. Please state whether this total maximum change amount is an average amount, a worst case expected or a best case expected.

F1. Please state the deadline when this primary Mitigation Measure must be completed.

F2. Please state the deadline when this secondary Mitigation Measure must be completed.

G. MONITORING Unfortunately most mitigation measures are inadequate or fail or both. "The U.S. EPA studied 1200 Environmental Assessments and FONSI's and estimated that 70% of them contained either inadequate mitigation measures or no mitigation measures.

So the public can determine the probability of the ability of the Agency to enforce the mitigation measures -

G1. Please explain clearly how the primary mitigation measure will be monitored.

G2. Please explain clearly how the secondary mitigation measure will be monitored.

G3. Please explain clearly what date-certain deadlines will be used to determine whether this primary mitigation measure has failed.

G4. Please explain clearly what specific performance criteria will be used to determine whether this primary mitigation measure has failed by the deadlines listed above.

G5. Please explain clearly what date-certain deadlines will be used to determine whether this secondary mitigation measure has failed.

G6. Please explain clearly what specific performance criteria will be used to determine whether this secondary mitigation measure has failed by the deadlines listed above.

G7. Please explain clearly which other specific criteria will be used to determine whether the primary mitigation measure has failed.

G8. Please explain clearly which other specific criteria will be used to determine whether the secondary mitigation measure has failed.

G9. Please explain clearly how much money will be needed to adequately monitor these mitigations.

G10. Please explain the source and the quantify the certainty of the money needed to adequately monitor these mitigations.

H1. Please explain clearly how this primary mitigation measure will be protected from impacts of future projects and all non-discretionary activities.

H2. Please explain clearly how this secondary mitigation measure will be protected from impacts of future projects and all non-discretionary activities.

MONITORING FREQUENCY I1. Please describe carefully how often this primary mitigation measure will be monitored.

I2. Please describe carefully how often this secondary mitigation measure will be monitored.

J1. Please describe clearly how long the primary mitigation should last.

J2. Please describe clearly how long the secondary mitigation should last.

AGENCY ENFORCEMENT K1. Please list all agencies who will enforce the primary mitigation measure.

K2. Please list all agencies who will enforce the secondary mitigation measure.

One of California's few examples of a fully enforceable legal violation is a parking ticket. If the ticket is not paid, ultimately a vehicle's registration will not be renewed.

L1. Please explain clearly how the primary mitigation measure will be fully enforced.

L2. Please explain clearly how the secondary mitigation measure will be fully enforced.

M1. Please explain clearly how long it takes each agency listed above to issue a stop order after a valid complaint is filed.

M2. Please give a specific example of a real complaint that resulted in a stop work order for failure to comply with a mitigation measure for each agency.

MITIGATION LOCATION N1. Please describe the exact physical location(s) for the proposed primary mitigation.

N2. Please describe the exact physical location(s) for the proposed secondary mitigation.

MITIGATION IMPACTS Mitigation measures normally create their own impacts.

O1. Please list all potential impacts from the primary mitigation measure

O2. Please quantify all potential environmental impacts from the primary mitigation measure.

O3. Please qualify all potential impacts from the primary mitigation measure.

P1. Please list all potential impacts from the secondary mitigation measure

P2. Please quantify all potential environmental impacts from the secondary mitigation measure.

P3. Please qualify all potential impacts from the secondary mitigation measure.

EXPERT QUALIFICATIONS Q1. Please name each expert who prepared and reviewed the primary mitigation measure.

Q2. Please name each expert who prepared and reviewed the secondary mitigation measure.

Q3. Please cite each expert's training, competence and experience specific to the primary mitigation measure.

Q4. Please cite each expert's training, competence and experience specific to the secondary mitigation measure.

R. What will it cost, in time and money, to replace the loss from the impact?

#### \* 372 - PROPOGATION.

The June 24, 1994 letter from California Department of Fish and Game Regional Manager Brian Hunter states "Transplantation and propagation have not been shown to be effective measures to mitigate the loss of rare plant species; success rates are typically very low."

"Rare plants are generally rare not just because there is a lack of individuals, but because of the lack of suitable habitat; and an increase in numbers of individuals is not usually effective in increasing overall population numbers (or replacing lost

individuals) unless there is a concomitant increase in the available habitat."

#### MITIGATION QUANTIFICATION

PRIMARY MITIGATION MEASURE: Propagation.

This Mitigation Measure is of the wrong type, inadequate, not fully enforceable and causes its own potentially significant environmental impacts.

BACK-UP MITIGATION MEASURE:

A1. Please describe the "Back-up". Secondary or Reserve" Mitigation measure in case the primary mitigation measure fails.

A2. If there is no Back-up Mitigation Measure please state that clearly.

#### MITIGATION IMPACT REDUCTION

B1. Please state the Absolute Amount of impact reduction contributed by the Primary mitigation measure: Propagation, using the same units of measure used to determine the impact.

B2. Please state the Absolute Amount of impact reduction contributed by the Secondary mitigation measure using the same units of measure used to determine the impact.

B3. Please state the Impact reduction, in Percent, contributed by the primary mitigation measure: Propagation, using the same units of measure used to determine the impact.

B4. Please state the impact reduction, in Percent, contributed by the secondary mitigation measure using the same units of measure used to determine the impact.

TRACK RECORD EXAMPLE C1. Please cite at least one real world example of successful implementation of an identical or reasonably identical example for the primary mitigation measure: Propagation.

C2. Please cite at least one real world example of successful implementation of an identical or reasonably identical example for the back-up mitigation measure.

This would be an example that is in place and has been self-sustaining for a minimum of 5 years; include clear descriptions of mitigation measures, how long the mitigation measure has been operating, where in the process the mitigation is now, and what percentage of mitigation has been successful, and how successful is defined.

C3. If there are no successful examples for the primary measure - please identify the proposed mitigation measure as speculative or experimental.

C4. If there are no successful examples for the secondary measure - please identify the proposed mitigation measure as speculative or experimental.

D1. TRACK RECORD STUDY Please provide a survey reporting the number of times this primary mitigation measure has been attempted, and the ratio of successful vs unsuccessful implementations. If no such study is available - please identify as speculative or experimental the proposed mitigation measure: Propagation.

D2. Please provide a survey reporting the number of times this secondary mitigation measure has been attempted, and the ratio of successful vs unsuccessful implementations. If no such study is available - please identify as speculative or experimental the proposed mitigation measure: Propagation.

Founded in 1998, **H.O.P.E.** is a non-profit, tax deductible, public interest group protecting our Monterey Peninsula's natural land, air, and water ecosystems and public participation in government, using science, law, education, news alerts and advocacy.

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NEW LEVEL IF SUCCESSFUL E1. Please state the new total number if the proposed primary mitigation measure is successful.

E2. Please state the new total number if the proposed secondary mitigation measure is successful.

E3. Please state the total change, in PERCENT, to which the primary mitigation measure would raise or lower the maximum impact amounts.

E4. Please state whether this total maximum change percent is an average amount, a worst case expected or a best case expected.

E5. Please state the total change, in PERCENT, to which the secondary mitigation measure would raise or lower the maximum impact amounts.

E6. Please state whether this total maximum change percent is an average amount, a worst case expected or a best case expected.

E7. Please state the degree, in ABSOLUTE AMOUNT, to which the primary mitigation measure would raise or lower the maximum impact amounts.

E8. Please state whether this total maximum change amount is an average amount, a worst case expected or a best case expected.

E9. Please state the degree, in ABSOLUTE AMOUNT, to which the secondary mitigation measure would raise or lower the maximum impact amounts.

E10. Please state whether this total maximum change amount is an average amount, a worst case expected or a best case expected.

F1. Please state the deadline when this primary Mitigation Measure must be completed.

F2. Please state the deadline when this secondary Mitigation Measure must be completed.

G. MONITORING Unfortunately most mitigation measures are inadequate or fail or both. "The U.S. EPA studied 1200 Environmental Assessments and FONSI's and estimated that 70% of them contained either inadequate mitigation measures or no mitigation measures."

So the public can determine the probability of the ability of the Agency to enforce the mitigation measures -

G1. Please explain clearly how the primary mitigation measure will be monitored.

G2. Please explain clearly how the secondary mitigation measure will be monitored.

G3. Please explain clearly what date-certain deadlines will be used to determine whether this primary mitigation measure has failed.

G4. Please explain clearly what specific performance criteria will be used to determine whether this primary mitigation measure has failed by the deadlines listed above.

G5. Please explain clearly what date-certain deadlines will be used to determine whether this secondary mitigation measure has failed.

G6. Please explain clearly what specific performance criteria will be used to determine whether this secondary mitigation measure has failed by the deadlines listed above.

G7. Please explain clearly which other specific criteria will be used to determine whether the primary mitigation measure has failed.

G8. Please explain clearly which other specific criteria will be used to determine whether the secondary mitigation measure has failed.

G9. Please explain clearly how much money will be needed to adequately monitor these mitigations.

G10. Please explain the source and the quantify the certainty of the money needed to adequately monitor these mitigations.

H1. Please explain clearly how this primary mitigation measure will be protected from impacts of future projects and all non-discretionary activities.

H2. Please explain clearly how this secondary mitigation measure will be protected from impacts of future projects and all non-discretionary activities.

MONITORING FREQUENCY I1. Please describe carefully how often this primary mitigation measure will be monitored.

I2. Please describe carefully how often this secondary mitigation measure will be monitored.

J1. Please describe clearly how long the primary mitigation should last.

J2. Please describe clearly how long the secondary mitigation should last.

AGENCY ENFORCEMENT K1. Please list all agencies who will enforce the primary mitigation measure.

K2. Please list all agencies who will enforce the secondary mitigation measure.

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L1. Please explain clearly how the primary mitigation measure will be fully enforced.

L2. Please explain clearly how the secondary mitigation measure will be fully enforced.

M1. Please explain clearly how long it takes each agency listed above to issue a stop order after a valid complaint is filed.

M2. Please give a specific example of a real complaint that resulted in a stop work order for failure to comply with a mitigation measure for each agency.

MITIGATION LOCATION N1. Please describe the exact physical location(s) for the proposed primary mitigation.

N2. Please describe the exact physical location(s) for the proposed secondary mitigation.

MITIGATION IMPACTS Mitigation measures normally create their own impacts.

O1. Please list all potential impacts from the primary mitigation measure

O2. Please quantify all potential environmental impacts from the primary mitigation measure.

O3. Please qualify all potential impacts from the primary mitigation measure.

P1. Please list all potential impacts from the secondary mitigation measure

P2. Please quantify all potential environmental impacts from the secondary mitigation measure.

P3. Please qualify all potential impacts from the secondary mitigation measure.

EXPERT QUALIFICATIONS Q1. Please name each expert who prepared and reviewed the primary mitigation measure.

Q2. Please name each expert who prepared and reviewed the secondary mitigation measure.

Q3. Please cite each expert's training, competence and experience specific to the primary mitigation measure.

Q4. Please cite each expert's training, competence and experience specific to the secondary mitigation measure.

R. What will it cost, in time and money, to replace the loss from the impact?

#### \* 373 - FIREBREAKS.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Firebreaks.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Creation of Firebreaks has caused extirpation of rare plant species including "Tecate cypress in the Gualay ML and Olay Mt. groves, another has eliminated several Cupressus abramsiana in the Bonnie Doon grove, and Knobcone pines have been destroyed in the Santa Ana Mts." Terrestrial Vegetation of California, 1988, Barbour & Major

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Firebreaks.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.  
12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

\* 374 - RINGTAIL (BASSARISCUS ASTUTUS).

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the project's potential Impacts on Ringtail (Bassariscus astutus).

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

The Ringtail (Bassariscus astutus) is a fully protected species which can inhabit the Monterey Pine native forest ecosystem. PB Lot Program-DEIR April 1994.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This Impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Ringtail (Bassariscus astutus).

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

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31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergetic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

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43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

We request that the Federal Register (or state equivalent) announcement of the listing of this species, and where the species is state listed the equivalent state public notice, be made a part of this review and considered.

**ENDANGERED SPECIES** This project site appears to meet all three US-FWS criteria indicating the potential to find the species or its habitat on the project site.

**SPECIES RANGE 1.** Please provide a map of this species geographic range. Please use Venn diagrams as used in the FWS & NMFS March 1998 ESA Consultation Handbook pg pgs 4-16/4-17.

**LOCAL OBSERVATIONS 2.** Please provide a map of this species' habitat, local to the project.

3. Please identify all recent observations of the species on the local habitat map.

4. Please describe whether the population(s) affected by this project is a source or a sink population.

**HABITAT TYPES AND RANGE 5.** Please provide a comprehensive description of all of the species' known habitats, including foraging and migration habitats.

6. Please provide a comprehensive description of the maximum distance the species has been observed from known nesting, breeding and foraging habitats.

**MINIMUM VIABLE POPULATION 7.** Please describe the size of land area needed to sustain a single breeding pair (or an asexual individual) of this species for 100 years.

8. Please describe the number of individual breeding pairs (or individuals) needed to sustain a minimum viable population for 100 years.

9. What margin of error do these numbers have?

10. Please describe the size of land area needed to sustain a minimum viable population for 10 generations of this species.

**VULNERABILITY AND THREATS 11.** Please describe all characteristics of this species which make it vulnerable to extinction (e.g. specialized feeding habits, limited or specialized distribution, occupies top trophic levels, low reproductive potential, or hunted for commercial products).

12. Please identify, quantify and describe all major, moderate and potential threats to the species, in order of priority, which can limit the carrying capacity and population productivity factors for this species (e.g. loss of habitat, pesticides).

**ONSITE HABITAT SIZE & QUALITY 13.** Please quantify and describe the species maximum potential onsite habitat size in acres.

14. Please quantify the size of the species habitat which could be potentially lost in acres both permanently and temporarily.

15. Please quantify the number of individuals of this species which could potentially be lost and which impacts could cause each loss.

16. Please describe the qualities of each area of the habitats which could be lost, and which specific impacts could cause each loss.

**FOOD CHAIN 17.** Please describe and quantify the food chain for this species.

18. Please discuss whether the listed species is a generalist or a specialist which only eats one species of food and if that food will be impacted by the activity.

19. Please describe and quantify the potential impacts, decrease and losses of the species' food chain due to the project.

**PREDATORS 20.** Please describe and quantify the potential impacts, declines and losses of the listed species from predators of the species which may be assisted by the project.

## BIODIVERSITY

21. Please quantify and describe the existing Genetic Biodiversity for this species. Please quantify the existing genetic breadth using the number of variants of this species' Microsatellite DNA. If such studies do not exist please state this clearly.

22. Please quantify the potential reduction in size of the genetic variants in this species' Microsatellite DNA.

23. Please analyze and quantify the potential genetic bottleneck impacts on this species from this project.

24. Please quantify the potential reduction in size of the Species' Genetic Biodiversity due to this project.

25. Please quantify the Species' existing non-genetic Biodiversity.

26. Please quantify and describe the existing Ecosystem Biodiversity this species inhabits.

27. Please quantify and describe the potential reduction in size of the Species' Biodiversity due to this project.

### \* 375 - RINGTAIL (BASSARISCUS ASTUTUS) HABITAT.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Ringtail (Bassariscus astutus) Habitat.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Ringtail (Bassariscus astutus) Habitat.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

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5a. Please state the METHOD of measurement used to determine the significance for each criteria.

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  19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.
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  - 20b. If no margin of error is used please state that clearly.
  21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.
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  46. Please provide the reverse of this impact as Mitigation.
  47. Please provide an ALTERNATIVE which avoids this impact.
  48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.
- \* 376 - BEARS.
- The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the potential impacts of Bears.
- If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.
- There are seven or eight species of bears, three in North America. Tremarctos reached North America some 10 million years ago.
- QUANTIFICATION OF BASELINES AND IMPACTS:
- This Impact appears to be potentially significant.
- 1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Bears.
  - 1b. If no objective criteria are used please state that clearly.
  2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.
- 3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.
  - 3b. Please quote the definition used.
  4. If no measurement units are used please state that clearly.
  - 5a. Please state the METHOD of measurement used to determine the significance for each criteria.
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36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

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The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the project's potential impacts on California Black Bear.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

California Department of Fish and Game biologist Bruce Elliot describes the Ventana Wilderness population of Black Bears as "casual and infrequent." "These are wild bears; rare and precious and in no way comparable to the black bears in popular Sierra camping areas." "They are not problem bears relocated from Yosemite" Sierra Club Ventana Newsletter, Nov 99 "Cubs have been spotted in the area of the north coast ridge road."

Black Bears occasionally walk into non-rural areas of Monterey County including Carmel (Killed May 24, 2001), Jeffer's Forest in Pebble Beach (May 24, 2001), Laguna Seca (May 20, 2001), Salinas (May 2001), Arroyo Seco, Hunter Liggett, Salinas Airport (1962), Soledad (1964), Fort Ord, Monterey (Aguajillo Rd 1986?), Jeffers Forest in Pebble Beach (2 bear cubs) In 1994, Tassajara (1997), Higgins Creek in Ventana Wilderness (1998), Fort Ord and Sand City (May 1999), Via la Gitana (East of Carmel Valley Village, Aug 99), Tassajara Rd (May 99).

"About one bear a year is killed on Cuesta Grade on Highway 101 and one bear a year is spotted making its way along the riparian corridor of the Salinas River."

"For all mammals, the acuity of the sense of smell depends primarily upon the size of the 'olfactory mucosa,' a specialized area of mucous membrane located in the nose. In humans the olfactory mucosa normally totals less than a square inch in area. In the average bear, it may be one hundred times that much. Bears have been known to detect the odor of rotting carrion from as far away as ten miles." Bears, Their Life and Behaviour, Ashworth & Wolfe, Crown, 1992

This indicates that to a bear, an offensive smell will be far less intense than to a human.

Bears hearing appears to range well up into ultrasonic frequencies. Id.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

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#### \* 378 - CALIFORNIA BLACK BEAR HABITAT.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on California Black Bear Habitat.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

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1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on California Black Bear Habitat.

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\* 379 - MOUNTAIN LIONS (FELIS CONCOLOR).

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Mountain Lions (felis concolor).

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

This is a Federally listed Threatened species. Monterey County is well within the range of this species. They often walk into Carmel Valley. They occasionally walk into non-rural areas including Hatton Canyon (1980's), Pebble Beach and Pacific Grove (late 1970's), Rio Road in Carmel Sept 99, Pescadero Canyon in Pebble Beach Sept 99, Pescadero Canyon in Pebble Beach Dec 16 1999, Ocean Ave (downtown) Carmel, 4am Dec 16 1999.

"If you have deer in your area, you probably have mountain lions." California Department of Fish and Game (CDF&G) Wildlife Biologist Terry Palmisano, Carmel Pine Cone Oct 1 1999.

Mountain Lions occasionally come through [Pescadero Canyon] while hunting. -Pebble Beach Forester, Paul Dubsky, Carmel Pine Cone 10/1/1999

"[Pebble Beach Forester Paul] Dubsky believes that there is still habitat available for the [mountain] lions in the Del Monte Forest, which allows them to stay a safe distance from people and residences." -Carmel Pine Cone, Dec 24, 1999 front page.

"Last month, [Carmel gallery owner Dino] Orlando spotted a [mountain] lion crossing Highway 1, 100 yards north of the Carpenter exit." "And in recent weeks, police received yet another report of a lion, chasing a raccoon by the Serra statue in Carmel Woods." -Carmel Pine Cone, Dec 24, 1999 front page.

The Carpenter exit and Serra statue are both immediately adjacent to the wild Pescadero Canyon in Pebble Beach.

Two Mountain Lions were seen at Carmel Middle School parking lot about 10:45 pm by an employee Mar 28, 2000. Herald Apr 1 2000, pg b2

QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Mountain Lions (felis concolor).

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

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30 Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergetic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

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40. Please state whether the margin of error is measured or assumed.

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42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

We request that the Federal Register (or state equivalent) announcement of the listing of this species, and where the species is state listed the equivalent state public notice, be made a part of this review and considered.

ENDANGERED SPECIES This project site appears to meet all three US-FWS criteria indicating the potential to find the species or its habitat on the project site.

SPECIES RANGE 1. Please provide a map of this species geographic range. Please use Venn diagrams as used in the FWS & NMFS March 1998 ESA Consultation Handbook pg pgs 4-16/4-17.

LOCAL OBSERVATIONS 2. Please provide a map of this species' habitat, local to the project.

3. Please identify all recent observations of the species on the local habitat map.

4. Please describe whether the population(s) affected by this project is a source or a sink population.

HABITAT TYPES AND RANGE 5. Please provide a comprehensive description of all of the species' known habitats, including foraging and migration habitats.

6. Please provide a comprehensive description of the maximum distance the species has been observed from known nesting, breeding and foraging habitats.

MINIMUM VIABLE POPULATION 7. Please describe the size of land area needed to sustain a single breeding pair (or an asexual individual) of this species for 100 years.

8. Please describe the number of individual breeding pairs (or individuals) needed to sustain a minimum viable population for 100 years.

9. What margin of error do these numbers have?

10. Please describe the size of land area needed to sustain a minimum viable population for 10 generations of this species.

VULNERABILITY AND THREATS 11. Please describe all characteristics of this species which make it vulnerable to extinction (e.g. specialized feeding habits, limited or specialized distribution, occupies top trophic levels, low reproductive potential, or hunted for commercial products).

12. Please identify, quantify and describe all major, moderate and potential threats to the species, in order of priority, which can limit the carrying capacity and population productivity factors for this species (e.g. loss of habitat, pesticides).

ONSITE HABITAT SIZE & QUALITY 13. Please quantify and describe the species maximum potential onsite habitat size in acres.

14. Please quantify the size of the species habitat which could be potentially lost in acres both permanently and temporarily.

15. Please quantify the number of individuals of this species which could potentially be lost and which impacts could cause each loss.

16. Please describe the qualities of each area of the habitats which could be lost, and which specific impacts could cause each loss.

FOOD CHAIN 17. Please describe and quantify the food chain for this species

18. Please discuss whether the listed species is a generalist or a specialist which only eats one species of food and if that food will be impacted by the activity.

19. Please describe and quantify the potential impacts, decrease and losses of the species' food chain due to the project.

PREDATORS 20. Please describe and quantify the potential impacts, declines and losses of the listed species from predators of the species which may be assisted by the project.

#### BIODIVERSITY

21. Please quantify and describe the existing Genetic Biodiversity for this species. Please quantify the existing genetic breadth using the number of variants of this species' Microsatellite DNA. If such studies do not exist please state this clearly.

22. Please quantify the potential reduction in size of the genetic variants in this species' Microsatellite DNA.

23. Please analyze and quantify the potential genetic bottleneck impacts on this species from this project.

24. Please quantify the potential reduction in size of the Species' Genetic Biodiversity due to this project.

25. Please quantify the Species' existing non-genetic Biodiversity.

26. Please quantify and describe the existing Ecosystem Biodiversity this species inhabits.

27. Please quantify and describe the potential reduction in size of the Species' Biodiversity due to this project.

#### \* 380 - MOUNTAIN LIONS (FELIS CONCOLOR) HABITAT.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Mountain Lions (felis concolor) Habitat.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Mountain Lions (felis concolor) Habitat.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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5a. Please state the METHOD of measurement used to determine the significance for each criteria.

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#### \* 381 - MONTEREY DUSKY-FOOTED WOODRATS.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Monterey Dusky-Footed Woodrats.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

They are a CDFG Species of Special Concern & a Federal Candidate 2. They occur in oak woodland and savanna habitats. They are closely tied to their nests for escape cover and thermal protection.

"Numerous midden locations were observed throughout woodland and chaparral habitats. (Thelander personal Communication)" Rancho San Carlos FEIR pg 11-47 1995

There was at least one residence in Pescadero Canyon in Pebble Beach Lot program EIR.

This species has been documented near the Arroyo Seco Campground. (Forest Service ltr to FHWA Aug 9 1994)

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Monterey Dusky-Footed Woodrats.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

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46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 382 - MONTEREY DUSKY-FOOTED WOODRATS HABITAT.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Monterey Dusky-Footed Woodrats Habitat.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

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#### \* 383 - MONTEREY ORNATE SHREWS.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Monterey Ornate Shrews.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Species of Special Concern & a Federal Candidate 2. This species is known to inhabit Monterey County.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Monterey Ornate Shrews.

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2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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- \* 384 - MONTEREY ORNATE SHREWS HABITAT.
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  11. If an average is used, please state which kind of average.
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  15. Please provide a graph of HISTORICAL measurements.
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  17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.
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  19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.
  - 20a. Please state whether this MARGIN of ERROR is measured or assumed.
  - 20b. If no margin of error is used please state that clearly.
  21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.
  22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.
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#### \* 385 - CALIFORNIA TIGER SALAMANDER (AMBYSTOMA CALIFORIENSE).

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on California Tiger Salamander (Ambystoma Californense).

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

"This species inhabits grassland and oak savanna habitats in the valleys and low hills of central and coastal California. It is currently listed as a Category 1 species following a ruling by US-FWS (USFWS 1994a), which found Endangered status 'warranted but precluded' by higher priority species."

They have been located at a Salinas Valley "Rancho San Juan project" pond site in 1990 and at a site just north of that project. They are known to aestivate up to one mile from breeding sites. They were found within the alternative 4 alignment for the Prunedale Bypass according to Cal-Trans. - Rancho San Juan project ADC Specific Plan Draft Program EIR pg 5-52

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on California Tiger Salamander (Ambystoma Californense).

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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#### \* 386 - CALIFORNIA TIGER SALAMANDER (AMBYSTOMA CALIFORIENSE) HABITAT.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on California Tiger Salamander (Ambystoma Californense) Habitat.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

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#### \* 387 - GRAY FOX.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Gray Fox.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

About 1000 grey foxes are killed by trappers each year. California Department of Fish and Game.



Monterey Peninsula Habitat "Other species likely to occur on the project site are the gray fox..." Macomber Estates Final EIR, 1992 p 71

I carried a dead gray fox out of the roadway on Holman Highway in 2002.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

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#### \* 388 - GRAY FOX HABITAT.

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#### \* 389 - WOLVERINE

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Wolverine.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

"Resembling a short-legged bear the wolverine is actually a member of the weasel family. It weighs 35-60 pounds and measures 35-45 inches long including its tail. It is very elusive and has a home range of several hundred square miles, making it difficult to study. Human disturbance and loss of habitat threaten its existence. It is California listed as threatened." California Department of Fish and Game

#### QUANTIFICATION OF BASELINES AND IMPACTS:

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\* 390 - WOLVERINE HABITAT.

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5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

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36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 391 - SOUTHERN SEA OTTER (ENHYDRA LUTRIS NEREIS).

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Southern Sea Otter (*enhydra lutris nereis*).

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

This species was federally protected under the Endangered Species Act as a Federally Listed Threatened species in 1977. Its population numbers have dropped for 5 of the last 6 years since 1996.

It is also protected under the Marine Mammal Protection Act. The Marine Mammal Protection Act 1972, USC 16 establishes a moratorium on the taking ("harass, hunt, capture or kill") and importation of marine mammals and marine mammal products, with exceptions for scientific research, allowable incidental taking, exemptions for subsistence activities by Alaskan natives and hardship exemptions (16 U.S.C. 1371). It requires all private or public actions that intentionally take marine mammals to get a permit.

MMPA is administered by US-FWS to protect sea otters.

Monterey County is not only well within the range of this species, it contains almost the entire population. Monterey County coastal waters contain the largest concentration of the Southern Sea Otter. It lives in nearshore kelp beds out to the 100 meter depth contour and occurs from Ano Nuevo in Santa Cruz County to the north to approximately Pt. Conception in the south. There is a small (17 - 25 individuals) relocated to San Nicholas Island. It is a keystone species (Miller 98) that keeps sea urchins from depleting kelp beds. In May 99 the Sea otter population has dropped from 2377 to only 1937.

"As one of the few marine representatives of the order Carnivora, the sea otter evolved to inhabit a narrow ecological zone adapting to the near shore community and preferring a rocky shoreline with kelp beds." FWS, Draft Southern Sea Otter Recovery Plan June 1996

"Otters feed in both rocky and soft sediment nearshore areas, as well as in the kelp understory and canopy." US-Fish & Wildlife Service, "The Southern Sea Otter. Its Biology, Life Habits and History"

"Otters live in waters with temperatures between 35 and 60 degrees F." Ibid

Sea Otters use kelp beds for protection from predators including the great white shark.

Pesticide, fertilizer and non-point pollution runoff can harm the imperiled sea otter and its fragile habitat.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Southern Sea Otter (*enhydra lutris nereis*).

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

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36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

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41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

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44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.
45. Please provide AVOIDANCE MITIGATION for this impact.
46. Please provide the reverse of this impact as Mitigation.
47. Please provide an ALTERNATIVE which avoids this impact.
48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

We request that the Federal Register (or state equivalent) announcement of the listing of this species, and where the species is state listed the equivalent state public notice, be made a part of this review and considered.

**ENDANGERED SPECIES** This project site appears to meet all three US-FWS criteria indicating the potential to find the species or its habitat on the project site.

**SPECIES RANGE** 1. Please provide a map of this species geographic range. Please use Venn diagrams as used in the FWS & NMFS March 1998 ESA Consultation Handbook pg pgs 4-16/4-17.

**LOCAL OBSERVATIONS** 2. Please provide a map of this species' habitat, local to the project.

3. Please identify all recent observations of the species on the local habitat map.

4. Please describe whether the population(s) affected by this project is a source or a sink population.

**HABITAT TYPES AND RANGE** 5. Please provide a comprehensive description of all of the species' known habitats, including foraging and migration habitats.

6. Please provide a comprehensive description of the maximum distance the species has been observed from known nesting, breeding and foraging habitats.

**MINIMUM VIABLE POPULATION** 7. Please describe the size of land area needed to sustain a single breeding pair (or an asexual individual) of this species for 100 years.

8. Please describe the number of individual breeding pairs (or individuals) needed to sustain a minimum viable population for 100 years.

9. What margin of error do these numbers have?

10. Please describe the size of land area needed to sustain a minimum viable population for 10 generations of this species.

**VULNERABILITY AND THREATS** 11. Please describe all characteristics of this species which make it vulnerable to extinction (e.g. specialized feeding habits, limited or specialized distribution, occupies top trophic levels, low reproductive potential, or hunted for commercial products).

12. Please identify, quantify and describe all major, moderate and potential threats to the species, in order of priority, which can limit the carrying capacity and population productivity factors for this species (e.g. loss of habitat, pesticides).

**ONSITE HABITAT SIZE & QUALITY** 13. Please quantify and describe the species maximum potential onsite habitat size in acres.

14. Please quantify the size of the species habitat which could be potentially lost in acres both permanently and temporarily.

15. Please quantify the number of individuals of this species which could potentially be lost and which impacts could cause each loss.

16. Please describe the qualities of each area of the habitats which could be lost, and which specific impacts could cause each loss.

**FOOD CHAIN** 17. Please describe and quantify the food chain for this species

18. Please discuss whether the listed species is a generalist or a specialist which only eats one species of food and if that food will be impacted by the activity.

19. Please describe and quantify the potential impacts, decrease and losses of the species' food chain due to the project.

**PREDATORS** 20. Please describe and quantify the potential impacts, declines and losses of the listed species from predators of the species which may be assisted by the project.

#### BIODIVERSITY

21. Please quantify and describe the existing Genetic Biodiversity for this species. Please quantify the existing genetic breadth using the number of variants of this species' Microsatellite DNA. If such studies do not exist please state this clearly.

22. Please quantify the potential reduction in size of the genetic variants in this species' Microsatellite DNA.

23. Please analyze and quantify the potential genetic bottleneck impacts on this species from this project.

24. Please quantify the potential reduction in size of the Species' Genetic Biodiversity due to this project.

25. Please quantify the Species' existing non-genetic Biodiversity.

26. Please quantify and describe the existing Ecosystem Biodiversity this species inhabits.

27. Please quantify and describe the potential reduction in size of the Species' Biodiversity due to this project.

#### \* 392 - SOUTHERN SEA OTTER (ENHYDRA LUTRIS NEREIS) HABITAT.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the project's potential impacts on Southern Sea Otter (enhydra lutris nereis) Habitat.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Southern Sea Otter (enhydra lutris nereis) Habitat.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

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10. Please state whether this MARGIN of ERROR is measured or assumed.

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43. Please name each EXPERT who prepared and reviewed this impact.

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46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

\* 393 - GOLF COURSE WATER CUTBACK.

This Alternative does not require any non-off-the shelf technology.

#### ALTERNATIVE FACTUAL ANALYSIS

There is little or no factual evidence in the document showing why this alternative is infeasible.

A. Please clearly identify by name and describe each of the objective (non-subjective) criteria used to determine this Alternative's benefits.

A1. If no objective criteria are used please state that clearly.

A2. If the criteria are different than those used to evaluate the benefits of the proposed project, please explain as it is not generally acceptable to compare apples and oranges.

B. Please state the name of the measurement units (numbers) used to determine the value for Each criteria.

B1. If no measurement units are used please state that clearly.

C. Please state the method of measurement used to determine the value for each criteria.

C1. If no measurement units are used please state that clearly for each criteria.

C2. If no objective criteria are used please clearly describe how the method of measuring value is scientifically credible and defensible.

D. Please state the existing or current baseline measurement (level) for each criteria.

E. Please state the normal variance or fluctuation, assumed or expected for each of the criteria listed above.

E1. If an average is used, please state which kind of average.

E2. Please state the extreme conditions which will be encountered.

F. Please provide a graph of historical measurement.

G. Please state the measured, assumed or expected margin of error for each measurement, calculation, and conclusion and whether it is measured or assumed.

H. Please state the total maximum change, in Percent, to which the Alternative would raise or lower the baseline number.

H1. Please state whether this total maximum change percent is an average amount, a worst case expected or a best case expected.

H2. Please state the degree, in Absolute Amount, to which this Alternative would raise or lower the baseline number;

H3. Please state whether this total maximum change amount is an average amount, a best case expected or other.

I. Please state the threshold number at which the value changes from a significant impact to a less-than-significant impact and the clear rationale for that number.

I1. Please provide the margin of error used (in percent and absolute amount) to insure the Significance Threshold Level for this Alternative is not somehow exceeded.

I2. If no margin of error is used please state that clearly.

J. ALTERNATIVE VALUE PROOF Please cite and provide relevant studies that clearly show that the project purposes could not be achieved with this alternative or with this alternative in combination with other alternatives.

J1. Please discuss the limitations of those studies.

BENEFIT DURATION K. Please clearly describe how the benefits vary over the time during the studies.

K1. Please graph the benefits for this alternative versus time in the studies. It is important to know the duration of an Alternative's benefits compared with the benefits from the proposed project.

COSTS L. Please cite the costs for the Alternatives studied.

L1. It is important to know the cost to benefit ratio, please explain that ratio.

M. EXPERT QUALIFICATIONS Please name each expert who prepared and reviewed this Alternative analysis.

M1. Please cite each expert's training, competence and experience specific to this Alternative analysis.

#### \* 394 - STORMWATER CAPTURE

This Water supply mitigation does not require any non-off-the shelf technology.

#### ALTERNATIVE FACTUAL ANALYSIS

There is little or no factual evidence in the document showing why this alternative is infeasible.

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M. EXPERT QUALIFICATIONS Please name each expert who prepared and reviewed this Alternative analysis.

M1. Please cite each expert's training, competence and experience specific to this Alternative analysis.

#### \* 395 - CISTERN PROGRAM.

Cisterns are water storage tanks generally ranging in size from 50 gallons (about \$110) to 1500 gallons (about \$500 to \$750). Cisterns typically collect and store rain runoff from a single house so it can be used for domestic purposes including toilet flushing, gardening, lawns, and emergency water supplies.

This Water supply mitigation does not require any non-off-the shelf technology.

#### ALTERNATIVE FACTUAL ANALYSIS

There is little or no factual evidence in the document showing why this alternative is infeasible.

A. Please clearly identify by name and describe each of the objective (non-subjective) criteria used to determine this Alternative's benefits.

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A2. If the criteria are different than those used to evaluate the benefits of the proposed project, please explain as it is not generally acceptable to compare apples and oranges.

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M1. Please cite each expert's training, competence and experience specific to this Alternative analysis.

#### \* 396 - DUAL PLUMBING FOR NEW CONSTRUCTION.

This Water supply mitigation does not require any non-off-the shelf technology

#### ALTERNATIVE FACTUAL ANALYSIS

There is little or no factual evidence in the document showing why this alternative is infeasible.

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J1. Please discuss the limitations of those studies.

**BENEFIT DURATION K.** Please clearly describe how the benefits vary over the time during the studies.

**K1.** Please graph the benefits for this alternative versus time in the studies. It is important to know the duration of an Alternative's benefits compared with the benefits from the proposed project.

**COSTS L.** Please cite the costs for the Alternatives studied.

**L1.** It is important to know the cost to benefit ratio, please explain that ratio.

**M. EXPERT QUALIFICATIONS** Please name each expert who prepared and reviewed this Alternative analysis.

**M1.** Please cite each expert's training, competence and experience specific to this Alternative analysis.

#### \* 397 - ENFORCE LANDSCAPING WATER CUTBACK RULES.

This Water supply mitigation does not require any non-off-the shelf technology.

#### ALTERNATIVE FACTUAL ANALYSIS

There is little or no factual evidence in the document showing why this alternative is infeasible.

**A.** Please clearly identify by name and describe each of the objective (non-subjective) criteria used to determine this Alternative's benefits.

**A1.** If no objective criteria are used please state that clearly.

**A2.** If the criteria are different than those used to evaluate the benefits of the proposed project, please explain as it is not generally acceptable to compare apples and oranges.

**B.** Please state the name of the measurement units (numbers) used to determine the value for Each criteria.

**B1.** If no measurement units are used please state that clearly.

**C.** Please state the method of measurement used to determine the value for each criteria.

**C1.** If no measurement units are used please state that clearly for each criteria.

**C2.** If no objective criteria are used please clearly describe how the method of measuring value is scientifically credible and defensible.

**D.** Please state the existing or current baseline measurement (level) for each criteria.

**E.** Please state the normal variance or fluctuation, assumed or expected for each of the criteria listed above.

**E1.** If an average is used, please state which kind of average.

**E2.** Please state the extreme conditions which will be encountered.

**F.** Please provide a graph of historical measurement.

**G.** Please state the measured, assumed or expected margin of error for each measurement, calculation, and conclusion and whether it is measured or assumed.

**H.** Please state the total maximum change, in Percent, to which the Alternative would raise or lower the baseline number.

**H1.** Please state whether this total maximum change percent is an average amount, a worst case expected or a best case expected.

**H2.** Please state the degree, in Absolute Amount, to which this Alternative would raise or lower the baseline number;

**H3.** Please state whether this total maximum change amount is an average amount, a best case expected or other.

**I.** Please state the threshold number at which the value changes from a significant impact to a less-than-significant impact and the clear rationale for that number.

**I1.** Please provide the margin of error used (in percent and absolute amount) to insure the Significance Threshold Level for this Alternative is not somehow exceeded.

**I2.** If no margin of error is used please state that clearly.

**J. ALTERNATIVE VALUE PROOF** Please cite and provide relevant studies that clearly show that the project purposes could not be achieved with this alternative or with this alternative in combination with other alternatives.

**J1.** Please discuss the limitations of those studies.

**BENEFIT DURATION K.** Please clearly describe how the benefits vary over the time during the studies.

**K1.** Please graph the benefits for this alternative versus time in the studies. It is important to know the duration of an Alternative's benefits compared with the benefits from the proposed project.

**COSTS L.** Please cite the costs for the Alternatives studied.

**L1.** It is important to know the cost to benefit ratio, please explain that ratio.

**M. EXPERT QUALIFICATIONS** Please name each expert who prepared and reviewed this Alternative analysis.

**M1.** Please cite each expert's training, competence and experience specific to this Alternative analysis.

#### \* 398 - GENERAL WATER POLLUTION.

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the potential Impacts of General Water Pollution.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Worldwide at least 25,000 people die every day from their normal use of water. (WWF Atlas of Environment, 1990) (Between 5 and 12 million per year.)

"States report that about 40 percent of the waters they assessed do not meet water quality goals. About half of the nation's over 2,000 major watersheds have serious or moderate water quality problems." - EPA Administrator, Carol Browner and Secretary, Dept. of Agriculture Dan Glickman Feb. 14th 1998 in letter to Vice President Al Gore. The report "Clean Water Action Plan" continues "Despite tremendous progress, 40 percent of our nation's waterways assessed by states are still unsafe for fishing and swimming."

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

**1a.** Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of General Water Pollution.

**1b.** If no objective criteria are used please state that clearly.

**2.** If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

**3a.** Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

**3b.** Please quote the definition used.

**4.** If no measurement units are used please state that clearly.

**5a.** Please state the METHOD of measurement used to determine the significance for each criteria.

**5b.** If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

**6.** Please quantify the existing or current BASELINE measurement (level) for each criteria.

**7.** Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

**8.** Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

**9.** Please state the variance's MARGINS of ERROR or confidence level.

**10.** Please state whether this MARGIN of ERROR is measured or assumed.

**11.** If an average is used, please state which kind of average.

**12.** Please state the most extreme values which could be encountered.

**13.** Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

**14.** Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

**15.** Please provide a graph of HISTORICAL measurements.

**16.** Please quantify the length of time this impact would last.

**17.** Please quantify how this Impact would vary over that time period. Please use a graph for clarity.

**18.** Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

**19.** Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

**20s.** Please state whether this MARGIN of ERROR is measured or assumed.

**20b.** If no margin of error is used please state that clearly.

**21.** Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

**22.** Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.



23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect Impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 399 - NON-POINT SOURCE WATER POLLUTION.

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the potential impacts of Non-Point Source Water Pollution.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

"Runoff washes large quantities of pollutants from rooftops, streets, and parking lots. Stormwater pollutants include nutrients, salt, oil, oxygen-consuming materials, and toxics such as copper, lead and zinc. These contaminants come to rest on impervious surfaces by settling from the atmosphere; from car and truck operation; from fertilizers and pesticides applied to lawns; from corrosion of metal downspouts and gutters; and a host of other sources." The Cumulative Effects of Land Development on Streams, Rivers, Lakes, Tidal Waters & Wetlands, by Richard Klein 1979

The Exxon Valdez spilled 11 million gallons of crude oil into Alaska's Prince William Sound. Bilge Cleaning and other ship operations releases more than 12 times that amount.

Used engine oil from road runoff and oil changes is 33 times that - every year. "The amount of oil from an average oil change could kill fish in a million gallons of water." Sierra Magazine Mar/Apr 1999 pg 17 citing a National Research Council report.

"[D]ue to increased motor vehicle and pedestrian traffic and parking associated with project operation, increased quantities of urban pollutants such as heavy metals from exhaust, motor oil, grease and litter would enter the Bay through the outfall as stormwater contaminants creating potential biological disturbances in the intertidal and subtidal areas. Other urban pollutants generated at the site could include pesticides and fertilizers applied to project landscaping." DEIR, Cannery Row, Rohr Hotel, 1983

Please state all materials used in rooftops, streets, and parking lots which could potentially pollute runoff water.

"Oil is composed of thousands of compounds, including polynuclear aromatic hydrocarbons, or PAHs. PAHs are not regulated in the aggregate nor for their impact on aquatic life. The EPA issues water-quality recommendations only for human consumption of specific PAHs such as naphthalene and chrysene although states can devise their own regulations."

"... Heinz (US-National Marine Fisheries Service biologist in Juneau) and his colleagues have determined that PAH levels as low as 1 ppb harm both pink salmon and Pacific herring. In their most recent studies which appear in this month's Environmental Toxicology and Chemistry, the scientists found that mortality increased for both species of fish exposed to 1 ppb. And they discovered that the effects of very weathered oil were the same as those of fresh oil..." Scientific American March 1999 pg 38

Hazardous waste is increasingly expensive to dispose of and in some cases is illegal to manufacture. Some unscrupulous people drive trucks in rainstorms and let the hazardous and prohibited waste leak undetected onto highways.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Non-Point Source Water Pollution.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

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12. Please state the most extreme values which could be encountered.

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14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a UNEAR RELATIONSHIP with increasing input, other impacts have complex non-linear

relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

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34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

\* 400 - WATER POLLUTION CAUSING WATER QUANTITY LOSS.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Pollution Causing Water Quantity loss.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

"Lake Tahoe's South shore has lost some 20 percent of its drinking water supply to MTBE." Associated Press April 11 1999

The water supply for Chualar, California was so polluted with nitrates water trucks were needed to supply the community with all potable water for at least 3 years.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Pollution Causing Water Quantity loss.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

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36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 401 - PUBLIC TRUST WATER QUALITY LOSS.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Public Trust Water Quality Loss.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

For example: Acidity "In lakes and waterways all life ceases when the pH value falls below about 4. Many lakes in Scandinavia are already devoid of all organic life." Earth Book Atlas 1987, pg 24 ISBN 0-87746-100-7

The mortality level for Rainbow trout (genetically identical to the ESA listed West Coast Steelhead (*Oncorhynchus mykiss*)) is a pH of 6.56. The mortality level for Brown trout is a pH of 6.27. The mortality level for Yellow Perch a pH of 4.43.

Janice, Harvey, Acid Rain in the East: The Problem and the Polluters (Frederickton, New Brunswick: New Brunswick Conservation Council 1988)

Grease Traps "State of the art oil and grease traps, if properly maintained, only reduce pollution by 80%." Department of Fish & Game letter May 21, 1997 to City of Capitola on Capitola Crossing Project. How many Grease Traps will be used? What is the volume of kitchen/cooking grease generated per year?

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Public Trust Water Quality Loss.

Founded in 1998, H.O.P.E. is a non-profit, tax deductible, public interest group protecting our Monterey Peninsula's natural land, air, and water ecosystems and public participation in government, using science, law, education, news alerts and advocacy.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

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12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

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46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

**\* 402 - NON-POINT SOURCE WATER POLLUTION IMPACTS ON EACH LISTED SPECIES.**

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the potential impacts of Non-Point Source Water Pollution impacts on each listed species.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

**QUANTIFICATION OF BASELINES AND IMPACTS:**

This Impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Non-Point Source Water Pollution impacts on each listed species.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

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8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

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10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

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14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

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26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this Impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

**\* 403 - NON-POINT SOURCE WATER POLLUTION IMPACTS ON STEELHEAD.**

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the potential impacts of Non-Point Source Water Pollution impacts on Steelhead.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

**QUANTIFICATION OF BASELINES AND IMPACTS:**

This Impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Non-Point Source Water Pollution impacts on Steelhead.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.
  9. Please state the variance's MARGINS of ERROR or confidence level.
  10. Please state whether this MARGIN of ERROR is measured or assumed.
  11. If an average is used, please state which kind of average.
  12. Please state the most extreme values which could be encountered.
  13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.
  14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.
  15. Please provide a graph of HISTORICAL measurements.
  16. Please quantify the length of time this impact would last.
  17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.
  18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.
  19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.
  - 20a. Please state whether this MARGIN of ERROR is measured or assumed.
  - 20b. If no margin of error is used please state that clearly.
  21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.
  22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.
  23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.
  24. Please state whether the MARGIN of ERROR is measured or assumed.
  25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.
  26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.
  27. Please state whether the MARGIN of ERROR is measured or assumed.
  28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.
  29. Please list all potential CUMULATIVE impacts related to this one.
  30. Please describe all potential CUMULATIVE impacts related to this one.
  31. Please quantify all potential CUMULATIVE impacts related to this one.
  32. Please list, describe and quantify all potential compound and synergistic impacts.
  33. Please list, describe and quantify all Construction impacts related to this one.
  34. Please list, describe and quantify all Growth impacts related to this one.
  35. Please list, describe and quantify all Indirect impacts related to this one.
  36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.
  37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.
  38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.
  39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.
  40. Please state whether the margin of error is measured or assumed.
  41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.
  42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.
  43. Please name each EXPERT who prepared and reviewed this impact.
  44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.
  45. Please provide AVOIDANCE MITIGATION for this impact.
  46. Please provide the reverse of this impact as Mitigation.
  47. Please provide an ALTERNATIVE which avoids this impact.
  48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.
- \* 404 - NON-POINT SOURCE WATER POLLUTION IMPACTS ON THE RED-LEGGED FROG.
- The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Non-Point Source Water Pollution impacts on the Red-legged Frog.
- If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.
- QUANTIFICATION OF BASELINES AND IMPACTS:
- This impact appears to be potentially significant.
- 1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Non-Point Source Water Pollution impacts on the Red-legged Frog.
  - 1b. If no objective criteria are used please state that clearly.
2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.
  - 3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.
  - 3b. Please quote the definition used.
  4. If no measurement units are used please state that clearly.
  - 5a. Please state the METHOD of measurement used to determine the significance for each criteria.
  - 5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.
  6. Please quantify the existing or current BASELINE measurement (level) for each criteria.
  7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.
  8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.
  9. Please state the variance's MARGINS of ERROR or confidence level.
  10. Please state whether this MARGIN of ERROR is measured or assumed.
  11. If an average is used, please state which kind of average.
  12. Please state the most extreme values which could be encountered.
  13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.
  14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.
  15. Please provide a graph of HISTORICAL measurements.
  16. Please quantify the length of time this impact would last.
  17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.
  18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.
  19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.
  - 20a. Please state whether this MARGIN of ERROR is measured or assumed.
  - 20b. If no margin of error is used please state that clearly.
  21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.
  22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.
  24. Please state whether the MARGIN of ERROR is measured or assumed.
  25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.
  26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.
  27. Please state whether the MARGIN of ERROR is measured or assumed.
  28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.
  29. Please list all potential CUMULATIVE impacts related to this one.
  30. Please describe all potential CUMULATIVE impacts related to this one.
  31. Please quantify all potential CUMULATIVE impacts related to this one.
  32. Please list, describe and quantify all potential compound and synergistic impacts.
  33. Please list, describe and quantify all Construction impacts related to this one.
  34. Please list, describe and quantify all Growth Impacts related to this one.
  35. Please list, describe and quantify all Indirect impacts related to this one.
  36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.
  37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.
  38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.
  39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.
  40. Please state whether the margin of error is measured or assumed.
  41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.
  42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.
  43. Please name each EXPERT who prepared and reviewed this impact.
  44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.
  45. Please provide AVOIDANCE MITIGATION for this impact.
  46. Please provide the reverse of this impact as Mitigation.
  47. Please provide an ALTERNATIVE which avoids this impact.
  48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.
- \* 405 - INCREASED AQUATIC GROWTH CAUSING WATER ANOXIA.
- The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of increased aquatic growth causing water anoxia.
- If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.
- QUANTIFICATION OF BASELINES AND IMPACTS:
- This impact appears to be potentially significant.
- 1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of increased aquatic growth causing water anoxia.
  - 1b. If no objective criteria are used please state that clearly.
  2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.
  - 3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.
  - 3b. Please quote the definition used.
  4. If no measurement units are used please state that clearly.
  - 5a. Please state the METHOD of measurement used to determine the significance for each criteria.
  - 5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.
  6. Please quantify the existing or current BASELINE measurement (level) for each criteria.
  7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.
  8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.
  9. Please state the variance's MARGINS of ERROR or confidence level.
  10. Please state whether this MARGIN of ERROR is measured or assumed.
  11. If an average is used, please state which kind of average.
  12. Please state the most extreme values which could be encountered.
  13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.
  14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.
  15. Please provide a graph of HISTORICAL measurements.
  16. Please quantify the length of time this impact would last.
  17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.
  18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.
  19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.
  - 20s. Please state whether this MARGIN of ERROR is measured or assumed.
  - 20b. If no margin of error is used please state that clearly.
  21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.
  22. Some impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.
  23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.
  24. Please state whether the MARGIN of ERROR is measured or assumed.
  25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.
  26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.
  27. Please state whether the MARGIN of ERROR is measured or assumed.
  28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.
  29. Please list all potential CUMULATIVE impacts related to this one.
  30. Please describe all potential CUMULATIVE impacts related to this one.
  31. Please quantify all potential CUMULATIVE impacts related to this one.
  32. Please list, describe and quantify all potential compound and synergistic impacts.
  33. Please list, describe and quantify all Construction impacts related to this one.
  34. Please list, describe and quantify all Growth Impacts related to this one.
  35. Please list, describe and quantify all Indirect impacts related to this one.
  36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.
  37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.
  38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.
  39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 406 - WATER POLLUTION CONCENTRATION DURING SUMMER AND DROUGHTS.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Pollution Concentration during Summer and Droughts.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Dissolved pollutants (as opposed to suspended pollutants) concentrate as water flow decreases during rain free summer months and drought conditions.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Pollution Concentration during Summer and Droughts.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts Increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergetic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 407 - SWIMMING POOL WATER DUMPING POLLUTION.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Swimming Pool Water Dumping Pollution.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Swimming Pool Chlorine, when drained, can pollute sewer systems or groundwater. Chlorine is toxic to aquatic life and can create a sterile environment.

Chlorine was detected in Monterey at 0.2 ppm in a Del Monte Center drainage by the Urban Watch program in 2000 administered by the Monterey Bay National Marine Sanctuary.

Chlorine was detected in Pacific Grove at Lover's Point, Asilomar, Greenwood Park, at up to 2 ppm by the Urban

Watch program in 2000 administered by the Monterey Bay National Marine Sanctuary.

Level of concern for Endangered Species Act listed species is - Aquatic Invertebrates = 0.85 ppBillion Freshwater Fish = 2.3 ppB Estuarine Invertebrates = 1.3 ppB

Level of concern for unlisted species is - Aquatic Invertebrates = 0.009 ppm Freshwater Fish = .023 ppm

EPA's Office of Drinking water established an MRDL of 4 mg / Liter as an enforceable standard.

Chlorine's odor threshold is 0.01 ppm NIOSH sets a maximum air pollution threshold of 0.5 ppm for 15 mins maximum. Chlorine gas at 1000 ppm is normally fatal even if only for a few moments.

Chlorine can be inexpensively tested with an DPD Octa-Slide Comparator against color standard. Accuracy is +/- 10 percent. (LaMotte Company monitoring kit)

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Swimming Pool Water Dumping Pollution.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

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12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed:

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

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30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

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44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 408 - PESTICIDES IN RUNOFF.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Pesticides in Runoff.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

"DDT is being preserved in soils all over California." DDT in the Salinas Valley, 1986, California Water Resources Control Board Report # 86-2-WQ.

The lower fifty (50) miles of the Salinas River (Hydro Unit # 309.100) is on the US EPA's CWA 303(d) list for Pesticide contamination exceeding TMDL limits. The pesticides come from Agriculture, Irrigated Crop production, Agriculture-storm runoff, Agriculture-Irrigation tailwater, Agriculture Return flows, and non-point source pollution.

"DDT has been found in moderate to high concentrations in the Salinas River and lower Moss Landing watershed for many years." DDT in the Salinas Valley, 1986, California Water Resources Control Board Report # 86-2-WQ.

"The 3,800 ppb measurement at the 'pump station east' (draining into the Salinas River) is the highest ever found in a shellfish by the State Mussel Watch. As DDT and its by-products are lipid soluble, the lipid-based measure of 754,000 ppb is even more noteworthy." Id.

Monterey County used over 10 million pounds of pesticides in 1995 according to the Calif. Dept. of Pesticide Regulation. Some 428 cases of pesticide poisoning were reported to public officials in Monterey County during a six year period. 50 cases of pesticide poisoning were reported in Monterey County in 1996.

"The term 'safety factor' suggests perhaps inadvertently, the notion of absolute safety (i.e. absence of risk). While there is



a conceptual basis for believing in the existence of a threshold and 'absolute safety' associated with certain chemicals, in the majority of cases a firm experimental basis for this notion does not exist." US-EPA, Reference Doses: Description and use in Health Risk Assessments March 15 1993

This means that "in a majority of cases" no chemical use can be considered either "hazard of risk free" or "absolutely safe." For a majority of chemicals there is a health hazard & risk in using them.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Pesticides in Runoff.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts Increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 409 - EUTROPHICATION.

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the potential impacts of Eutrophication.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

Eutrophication is the excessive growth of aquatic plants.

Eutrophication leads to oxygen deficiency which has killed significant numbers of fin fish and shellfish in the Chesapeake Bay, Long Island Sound, the Black Sea, the Baltic Sea, and elsewhere.

Nitrogen fixation means making nitrogen biologically consumable by plants as food. Until 1940, human commercial activities fixed almost zero nitrogen. A study in 1990 found that half of all the nitrogen ever fixed by industrial processes occurred after 1980.

Nitrogen entering the oceans is causing fertilization and eutrophication of estuaries and coastal seas: "...it represents perhaps the greatest threat to the integrity of coastal ecosystems," RACHEL'S ENVIRONMENT & HEALTH WEEKLY #557, July 31, 1997

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Eutrophication.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergetic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 410 - WATER BODY LOSS DUE TO POLLUTION.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Body Loss Due to Pollution.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Body Loss Due to Pollution.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear

relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 411 - OZONE SEWAGE TREATMENT.

The Document appears to have ignored this potentially feasible Alternative. Please carefully analyze and disclose the potential benefits of Ozone Sewage Treatment.

Pacifica, Ca opened its \$50 million UV sewage treatment plant Sept 10, 2000 It uses no chlorine.

#### ALTERNATIVE FACTUAL ANALYSIS

There is little or no factual evidence in the document showing why this alternative is infeasible.

A. Please clearly identify by name and describe each of the objective (non-subjective) criteria used to determine this Alternative's benefits.

A1. If no objective criteria are used please state that clearly.

A2. If the criteria are different than those used to evaluate the benefits of the proposed project, please explain as it is not generally acceptable to compare apples and oranges.

B. Please state the name of the measurement units (numbers) used to determine the value for Each criteria.

B1. If no measurement units are used please state that clearly.

C. Please state the method of measurement used to determine the value for each criteria.

C1. If no measurement units are used please state that clearly for each criteria.

C2. If no objective criteria are used please clearly describe how the method of measuring value is scientifically credible and defensible.

D. Please state the existing or current baseline measurement (level) for each criteria.

E. Please state the normal variance or fluctuation, assumed or expected for each of the criteria listed above.

E1. If an average is used, please state which kind of average.

E2. Please state the extreme conditions which will be encountered.

F. Please provide a graph of historical measurement.

G. Please state the measured, assumed or expected margin of error for each measurement, calculation, and conclusion and whether it is measured or assumed.

H. Please state the total maximum change, in Percent, to which the Alternative would raise or lower the baseline number.

H1. Please state whether this total maximum change percent is an average amount, a worst case expected or a best case expected.

H2. Please state the degree, in Absolute Amount, to which this Alternative would raise or lower the baseline number;

H3. Please state whether this total maximum change amount is an average amount, a best case expected or other.

I. Please state the threshold number at which the value changes from a significant impact to a less-than-significant impact and the clear rationale for that number.

I1. Please provide the margin of error used (in percent and absolute amount) to insure the Significance Threshold Level for this Alternative is not somehow exceeded.

I2. If no margin of error is used please state that clearly.

J. ALTERNATIVE VALUE PROOF Please cite and provide relevant studies that clearly show that the project purposes could not be achieved with this alternative or with this alternative in combination with other alternatives.

J1. Please discuss the limitations of those studies.

BENEFIT DURATION K. Please clearly describe how the benefits vary over the time during the studies.

K1. Please graph the benefits for this alternative versus time in the studies. It is important to know the duration of an Alternative's benefits compared with the benefits from the proposed project.

COSTS L. Please cite the costs for the Alternatives studied.

L1. It is important to know the cost to benefit ratio, please explain that ratio.

M. EXPERT QUALIFICATIONS Please name each expert who prepared and reviewed this Alternative analysis.

M1. Please cite each expert's training, competence and experience specific to this Alternative analysis.

#### \* 412 - EXCESSIVE NUTRIENT LOADINGS.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Excessive Nutrient Loadings.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Nitrogen and Phosphorus are the biggest overall sources of our nation's rivers impairment.

Nitrogen fixation means making nitrogen biologically consumable by plants as food. Until 1940, human commercial activities fixed almost zero nitrogen. A study in 1990 found that half of all the nitrogen ever fixed by industrial processes occurred after 1980.

Nitrogen entering the oceans is causing fertilization and eutrophication of estuaries and coastal seas: "...it represents perhaps the greatest threat to the integrity of coastal ecosystems." RACHEL'S ENVIRONMENT & HEALTH WEEKLY #557, July 31, 1997

"Excessive Nutrient loadings will result in excessive growth of macrophytes or phytoplankton and potentially harmful algal blooms (HAB), leading to oxygen declines, imbalance of aquatic species, public health risks, and a general decline of the aquatic resource." -EPA Administrator, Carol Browner and Secretary, Dept of Agriculture Dan Glickman Feb 14th 1998 in Report called the "Clean Water Action Plan" to Vice President Al Gore.

The lower fifty (50) miles of the Salinas River (Hydro Unit # 309.100) is in the US EPA's CWA 303(d) list for Nutrient contamination exceeding TMDL limits.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Excessive Nutrient Loadings.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear

relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 413 - NITRITE (NOT NITRATE) CONTAMINATION OF DRINKING WATER.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Nitrite (not Nitrate) Contamination of Drinking Water.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Oregon State University researchers "have named the nitrogen based compounds found in fertilizers as likely suspects in the rapid decline of at least one frog species in the Pacific Northwest."

The maximum recommended nitrite limit for drinking water, 1 milligram per liter, was sufficient to kill well over half of the Oregon spotted frog tadpoles and about half of the northwestern salamander tadpoles.

Nitrate compounds can be readily converted to nitrites through a number of environmental processes including bacteria.

Nitrogen fixation means making nitrogen biologically consumable by plants as food. Until 1940, human commercial activities fixed almost zero nitrogen. A study in 1990 found that half of all the nitrogen ever fixed by industrial processes occurred after 1980.

Nitrogen entering the oceans is causing fertilization and eutrophication of estuaries and coastal seas: "...it represents perhaps the greatest threat to the integrity of coastal ecosystems." RACHEL'S ENVIRONMENT & HEALTH WEEKLY #557, July 31, 1997

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Nitrite (not Nitrate) Contamination of Drinking Water.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the Impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30 Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergetic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth Impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 414 - NITRATE CONTAMINATION OF SURFACE WATER.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Nitrate Contamination of Surface Water.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

Excessive Nitrate levels can cause abundant algal growths and can threaten human health at a concentration of 10 mg/l N or greater. -Richard D. Klein, Protecting the Aquatic Environment from the Effects of Golf Courses. Oct 1993

Nitrogen fixation means making nitrogen biologically consumable by plants as food. Until 1940, human commercial activities fixed almost zero nitrogen. A study in 1990 found that half of all the nitrogen ever fixed by industrial processes occurred after

1980.

Nitrogen entering the oceans is causing fertilization and eutrophication of estuaries and coastal seas: "...it represents perhaps the greatest threat to the integrity of coastal ecosystems." RACHEL'S ENVIRONMENT & HEALTH WEEKLY #557, July 31, 1997

The lower fifty (50) miles of the Salinas River (Hydro Unit # 309.100) is in the US EPA's CWA 303(d) list for Nutrient contamination exceeding TMDL limits.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Nitrate Contamination of Surface Water.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

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8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

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12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

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Printed On 35% Post-Consumer Recovered Fiber.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

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21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

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46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 415 - AMMONIA CONTAMINATION OF SURFACE WATER

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Ammonia Contamination of Surface Water.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

"Ammonia is extremely toxic to aquatic life. Generally ammonia will pose the greatest threat to aquatic life when transported by stormwater to surface waterways." -Richard D. Klein, Protecting the Aquatic Environment from the Effects of Golf Courses. Oct 1993

Labware Direct (1 800 356 0783) sells Ammonia detection systems measuring concentrations as low as 0.01 ppm.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This Impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Ammonia Contamination of Surface Water.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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#### \* 416 - NITRATE CONTAMINATION OF GROUND WATER.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Nitrate Contamination of Ground Water.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

Fertilizer Nitrates are polluting groundwater aquifers.

In a EPA survey reported in the July 29 1991 US News and World Report nitrate showed up in more than half the drinking water wells tested across the country.

\* A 1984 survey carried out by the US-EPA showed that, out of 124,000 wells sampled, 24,000 had elevated levels of nitrates

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and 8,000 were polluted above natural health limits." WWF, 1990

It can take decades for nitrates to percolate down into groundwater, so the problem will worsen as the increased amounts of fertilizer applied today reaches groundwater.

Nitrogen fixation means making nitrogen biologically consumable by plants as food. Until 1940, human commercial activities fixed almost zero nitrogen. A study in 1990 found that half of all the nitrogen ever fixed by industrial processes occurred after 1980.

Nitrogen entering the oceans is causing fertilization and eutrophication of estuaries and coastal seas: "...it represents perhaps the greatest threat to the integrity of coastal ecosystems." RACHEL'S ENVIRONMENT & HEALTH WEEKLY #557, July 31, 1997

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46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 417 - PHOSPHORUS CONTAMINATION OF SURFACE WATER.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Phosphorus Contamination of Surface Water.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

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#### \* 418 - PHOSPHORUS CONTAMINATION OF GROUND WATER.

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#### \* 419 - PHOSPHORUS CONTAMINATION OF DRINKING WATER.

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If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

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37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this Impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this Impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 420 - ALUMINUM SULFATE.

The Document appears to have ignored this potentially feasible Mitigation. Please carefully analyze and disclose the potential benefits of Aluminum Sulfate.

Aluminum Sulfate is sometimes added to surface waters to reduce Phosphorus pollution and prevent algae growth.

#### \* 421 - PESTICIDES IN SURFACE WATER.

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the potential impacts of Pesticides in Surface Water.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

The 1998 U.S. National Water Quality Assessment (NWQA) Program found pesticide contamination in all of its river and stream samples. "Fatal Harvest" pg 232

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This Impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Pesticides in Surface Water.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

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30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

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45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 422 - PESTICIDES IN GROUNDWATER.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Pesticides in Groundwater.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

\*Some pesticides readily infiltrate soils, particularly sandy soils, and eventually accumulate in the groundwater. In 1989, the [US] EPA detected pesticides in the groundwater of

twenty-six states." Environmental Science; Morgan, Moran & Weirsmay; W.C. Brown Pub. 1993 p 179

"The U.S. spends \$1,300,000,000.00 annually to monitor groundwater for pesticides." Ibid

Once contaminated groundwater is extremely difficult to clean up. "Groundwater Contamination in the U.S.", R. Patrick et al 1987, U of Pennsylvania

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Pesticides in Groundwater.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

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8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

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31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

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39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

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41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

Founded in 1998, H.O.P.E. is a non-profit, tax deductible, public interest group protecting our Monterey Peninsula's natural land, air, and water ecosystems and public participation in government, using science, law, education, news alerts and advocacy.  
Printed On 35% Post-Consumer Recovered Fiber.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

**\* 423 - TRICHLOROETHYLENE IN DRINKING WATER (TCE).**

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Trichloroethylene in Drinking Water (TCE).

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

On April 13th 1999, Monterey County Board of Supervisors voted unanimously for an emergency ban on new water wells for the Northern Fort Ord area near Marina because of the Trichloroethylene pollution.

Federal and California water standards mandate no more than 15 ppBillion.

The US Public Health Service estimated that "between 9 and 34% of water supply sources in the US may be contaminated with Trichloroethylene." Trichloroethylene in Drinking Water causes myelocytic leukemia. Trichloroethylene is used to degrease metal parts. Symptoms include; dizziness, nausea, vomiting, fatigue, skin rashes and cardiac arrhythmia. It impairs short term memory, attention span and ability to think sequentially. It causes permanent neurological deficit after a single exposure.

**QUANTIFICATION OF BASELINES AND IMPACTS:**

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Trichloroethylene in Drinking Water (TCE).

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

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21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

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46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

**\* 424 - ORGANOPHOSPHORUS PESTICIDE COMPOUNDS IN DRINKING WATER.**

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Organophosphorus Pesticide Compounds in Drinking Water.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Organophosphorus pesticide compounds include Diazinon and Malathion and are nerve agents originally developed in Nazi Germany in the 1930s. Because Organophosphorus pesticides are now widely used on food crops they were the first family of compounds to be evaluated under the 1996 FQPA.

According to Mark Miller, M.D. MPH a member of the Environmental Health Committee of the American Academy of Pediatrics (quoted in Coast Weekly April 22 1999) - even low level exposure to Organophosphorus pesticide compounds (e.g. diazinon, cypermethrin, Chlorpyrifos, hydramethylnon, propetamphos and Malathion) may cause symptoms. "The effects of organophosphates are cumulative so that if the chemical used in the home and in food is added to those used on school grounds, something may tip the bucket."

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Organophosphorus Pesticide Compounds in Drinking Water.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

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12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

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21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

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46. Please provide the reverse of this Impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 425 - WATER POLLUTION-BASE.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Pollution-Base.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Pollution-Base.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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#### \* 426 - WATER POLLUTION-ACIDITY.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Pollution-Acidity.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

When water becomes too acidic it interferes with fish and aquatic life.

"In lakes and waterways all life ceases when the pH value falls below about 4. Many lakes in Scandinavia are already devoid of all organic life." Earth Book Atlas 1987, pg 24 ISBN 0-87746-100-7

The mortality level for Rainbow trout (genetically identical to the ESA listed West Coast Steelhead (*Oncorhynchus mykiss*) is a pH of 6.55. The mortality level for Brown trout is a pH of 6.27. The mortality level for Yellow Perch a pH of 4.43. Janice, Harvey, Acid Rain in the East: The Problem and the Polluters (Fredericton, New Brunswick: New Brunswick Conservation Council 1988)

Water pH can be changed by and are an indication to look for sewer overflows, pesticides, fertilizers, dust in the air, and mineral substances.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Pollution-Acidity.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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5a. Please state the METHOD of measurement used to determine the significance for each criteria.

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12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.
  22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.
  23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.
  24. Please state whether the MARGIN of ERROR is measured or assumed.
  25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.
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  30. Please describe all potential CUMULATIVE impacts related to this one.
  31. Please quantify all potential CUMULATIVE impacts related to this one.
  32. Please list, describe and quantify all potential compound and synergistic impacts.
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  35. Please list, describe and quantify all Indirect impacts related to this one.
  36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.
  37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.
  38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.
  39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.
  40. Please state whether the margin of error is measured or assumed.
  41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.
  42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.
  43. Please name each EXPERT who prepared and reviewed this impact.
  44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.
  45. Please provide AVOIDANCE MITIGATION for this impact.
  46. Please provide the reverse of this impact as Mitigation.
  47. Please provide an ALTERNATIVE which avoids this impact.
  48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.
- \* 427 - WATER POLLUTION-CHLORDANE.
- The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Pollution-Chlordane.
- If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.
- In 1996 2,193 fish consumption advisories were issued in 48 states. Mercury, PCBs, chlordane, dioxin and DDT were responsible for almost all fish consumption advisories in 1996. -EPA Administrator, Carol Browner and Secretary, Dept of Agriculture Dan Glickman Feb 14th 1998 in Report called the "Clean Water Action Plan" to Vice President Al Gore.
- QUANTIFICATION OF BASELINES AND IMPACTS:
- This impact appears to be potentially significant.
- 1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Pollution-Chlordane.
  - 1b. If no objective criteria are used please state that clearly.
  2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.
  - 3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.
  - 3b. Please quote the definition used.
  4. If no measurement units are used please state that clearly.
  - 5a. Please state the METHOD of measurement used to determine the significance for each criteria.
  - 5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.
  6. Please quantify the existing or current BASELINE measurement (level) for each criteria.
  7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.
  8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.
  9. Please state the variance's MARGINS of ERROR or confidence level.
  10. Please state whether this MARGIN of ERROR is measured or assumed.
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  13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.
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  15. Please provide a graph of HISTORICAL measurements.
  16. Please quantify the length of time this impact would last.
  17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.
  18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.
  19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.
  - 20a. Please state whether this MARGIN of ERROR is measured or assumed.
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  21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.
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  31. Please quantify all potential CUMULATIVE impacts related to this one.
  32. Please list, describe and quantify all potential compound and synergistic impacts.
  33. Please list, describe and quantify all Construction impacts related to this one.
  34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect Impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

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41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

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44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 428 - WATER POLLUTION-DDT.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Pollution-DDT.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

"Recently the US-EPA found DDT in 99% of the freshwater fish it tested." (Living in the Environment, 1998, pg 625)

In 1996 2,193 fish consumption advisories were issued in 48 states. Mercury, PCBs, chlordane, dioxin and DDT were responsible for almost all fish consumption advisories in 1996. -EPA Administrator, Carol Browner and Secretary, Dept of Agriculture Dan Glickman Feb 14th 1998 in Report called the "Clean Water Action Plan" to Vice President Al Gore. Up to 15% of a pesticide can be DDT which is still allowed by EPA and FIFRA as an "impurity" in insecticides including chlorobenzilate and dicofol. (Living in the Environment pg 627)

Some 1 billion kilograms of DDT were spread into the natural environment prior to 1972.

"DDT is being preserved in soils all over California." DDT in the Salinas Valley, 1986, California Water Resources Control Board Report # 86-2-WQ.

The lower fifty (50) miles of the Salinas River (Hydro Unit # 309.100) is on the US EPA's CWA 303(d) list for Pesticide contamination exceeding TMDL limits. The pesticides come

Founded in 1998, H.O.P.E. is a non-profit, tax deductible, public interest group protecting our Monterey Peninsula's natural land, air, and water ecosystems and public participation in government, using science, law, education, news alerts and advocacy.  
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from Agriculture, Irrigated Crop production, Agriculture-storm runoff, Agriculture-irrigation tailwater, Agriculture Return flows, and non-point source pollution.

"DDT has been found in moderate to high concentrations in the Salinas River and lower Moss Landing watershed for many years." DDT in the Salinas Valley, 1986, California Water Resources Control Board Report # 86-2-WQ.

DDT is a chlorinated hydrocarbon. Above 1000 ppm a chlorinated hydrocarbon fluid is a hazardous waste (EPA 40 CFR 261 regs)

Labware Direct (1 800 356 0783) sells chlorinated hydrocarbon detection systems measuring concentrations as low as 200 ppm.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Pollution-DDT.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

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46. Please provide the reverse of this impact as Mitigation.

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#### \* 429 - WATER POLLUTION-THE OTHER TOP 20 HAZARDOUS SUBSTANCES.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Pollution-the Other Top 20 Hazardous Substances.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

From ATSDR - ATSDR/EPA Top 20 Hazardous Substances 1995 Agency for Toxic Substances and Disease Registry This annual evaluation activity fulfills the conditions of CERCLA section 104 (f), as amended, which requires ATSDR and EPA to revise the priority list of hazardous substances (N=275) periodically to include additional hazardous substances.

Each chemical is identified with a Rank Number and includes an ATSDR Public Health Statement.

The Public Health Statements were prepared by the ATSDR Division of Toxicology. They provide general information on the properties of the chemical and answer many health concerns that are voiced by community groups. A full list of the ATSDR Toxicologic Profiles and Public Health Statements can be accessed through the ATSDR HazDat.

The full priority list of hazardous substances (N=275) for 1995 can be accessed HERE! Top 20 Hazardous Substances:  
Lead Arsenic Mercury, Metallic Vinyl Chloride Benzene Polychlorinated Biphenyls (PCBs) Cadmium Benzo(a)pyrene Chloroform Benzo(b)fluoranthene DDT, P,P'- Aroclor 1260 Trichloroethylene Aroclor 1254 Chromium(+6) Chlordane Dibenzo(a,h)anthracene Hexachlorobutadiene DDD, P,P'- Dieldrin

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Pollution-the Other Top 20 Hazardous Substances.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 430 - WATER POLLUTION-OIL IN GENERAL

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Pollution-Oil In General.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

"Human activity puts ten times as much oil in the oceans as comes from natural seeps." Beytrayal of Science and Reason, Erlich, 1996

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Pollution-Oil in General.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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#### \* 431 - LAND BASED OIL LEAKAGE

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Land Based Oil Leakage.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

"Since the Exxon Valdez spill, at least 10,000 spills have occurred in the United States, dumping 15 to 20 million gallons of oil. Victims are tens of thousands of birds, mollusks, aquatic vegetation, as well as salt marshes, swamps, and coastal ecosystems. Oil spills occur on land when pipelines leak or break. Oil is difficult to remove from soil, and it leaches into nearby creeks and lakes. Oil contaminated water is unfit for use." Audubon's 1994 Almanac on the Environment

The town of Avila Beach California was essentially abandoned due to millions of gallons of oil leaking into the groundwater aquifer over many decades.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Land Based Oil Leakage.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

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28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 432 - LAND BASED OIL SPILLS.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Land Based Oil Spills.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

"A tanker truck plunged off a mountain road, killing the driver and spewing as much as 4,000 gallons of crude oil into a Ventura County creek." Monterey Herald March 1, 2000

"A tanker truck carrying 7,500 gallons of diesel fuel overturned Wednesday near Chualar, spilling 1,800 gallons onto the highway and shoulder and slowing southbound traffic for hours." Herald B2, Jun 1, 00

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Land Based Oil Spills.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

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44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 433 - USED ENGINE OIL FROM ROAD RUNOFF AND OIL CHANGES.

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the potential impacts of Used Engine Oil from Road Runoff and Oil Changes.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

The Exxon Valdez spilled 11 million gallons of crude oil into Alaska's Prince William Sound. Used engine oil from road runoff and oil changes is 33 times that - every year. "The amount of oil from an average oil change could kill fish in a million gallons of water." Sierra Magazine Mar/Apr 1999 pg 17 citing a National Research Council report.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Used Engine Oil from Road Runoff and Oil Changes.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

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8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

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46. Please provide the reverse of this impact as Mitigation.
47. Please provide an ALTERNATIVE which avoids this impact.
48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

\* 434 - OIL IN ASPHALT PAVEMENT CAUSING WATER AND AIR POLLUTION.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Oil in Asphalt Pavement Causing Water and Air Pollution.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Oil from asphalt pavement causes continuous long term air and water pollution. This is distinct from the air and water pollution caused by construction or paving. (Pavement vs Paving)

Crude oil is the second largest component of asphalt, composing at least 5 percent and up to 7 percent of the mass of the pavement (\*1). Thus every ton of new paving asphalt contains at least 100 pounds, and possibly 140 pounds, of crude oil. Since the oil is not sealed in, it evaporates and becomes air pollution, or it is washed off in rains and fog to become water pollution.

Founded in 1998, H.O.P.E. is a non-profit, tax deductible, public interest group protecting our Monterey Peninsula's natural land, air, and water ecosystems and public participation in government, using science, law, education, news alerts and advocacy.

Even in relatively tiny amounts, these forms of oil (hydrocarbon) water and air pollution can sicken and kill plants and animals.

"Oil is composed of thousands of compounds, including polynuclear aromatic hydrocarbons, or PAHs. PAHs are not regulated in the aggregate nor for their impact on aquatic life. The EPA issues water-quality recommendations only for human consumption of specific PAHs such as naphthalene and chrysene although states can devise their own regulations."

\*... Heinz (US-National Marine Fisheries Service biologist in Juneau) and his colleagues have determined that PAH levels as low as 1 ppb harm both pink salmon and Pacific herring. In their most recent studies which appear in this month's Environmental Toxicology and Chemistry, the scientists found that mortality increased for both species of fish exposed to 1 ppb. And they discovered that the effects of very weathered oil were the same as those of fresh oil..." Scientific American March 1999 pg 38

The hydrocarbons in asphalt can cause direct harm to many species of aquatic and terrestrial life including killing salmonid eggs and alevins. See \*2, \*3.

Asphalt hydrocarbons could potentially be a hazardous waste under California's Hazardous Waste regulations as the threshold is an LC50 of 500 mg/liter. California Department of Fish and Game found significant mortality (up to 60%) at only 1000 mg/liter after only 96 hours. No margin of error was determined. See \*3.

It is possible that asphalt's toxin release could increase to cause the LC50 to drop under 500 mg/liter with small variances in testing duration, asphalt age, sunlight exposure, stream temperature, stream water flow, stream acidity, and surface area of asphalt exposed to the surface water. See \*3.

California Fish & Game Code 5650 Prohibits Polluting waters with any substance or material deleterious to fish, plant life, or bird life. Prohibits placement of any petroleum product into a place where the product can pass into the waters of the state.

The US blacktops some 1.3 million acres every year. This is equal in area to the state of Delaware. (David Pimental, panelist, "Carrying Capacity Network" conference, Washington DC, 1993)

According to the California Integrated Waste Management Board one lane mile 4 inches thick of conventional asphalt concrete needs 1,584 tons of material. The components include about 3 million pounds of crushed rock and 175 thousand pounds of asphalt cement.

1) Please identify the total number of lane miles the project will create or maintain both directly and indirectly.

1a) Please identify the total number of acres (include parking lots) of asphalt the project will create both directly and indirectly.

2) Please identify the percentage of oil, by mass, the asphalt will contain.

3) Please identify the number of tons of asphalt used per lane-mile for the project.

3a) Please identify the number of tons of asphalt used per acre.

4) Please identify the total amount of asphalt (in tons) the project will require.

5) Please identify the total mass amount of oil contained in the asphalt proposed for all paving related to the project including for all mitigations.

6) Please analyze the amount and form of oil that will evaporate and become air pollution per year - and for the cumulative lifespan of the asphalt.

7) Please analyze the amount and form of oil that will evaporate hourly and become air pollution during typical hot summer days.

8) Please analyze the amount and form of oil that will runoff and become water pollution per year for the cumulative lifespan of the asphalt.

9) Please analyze the yearly environmental impacts due to the oil's evaporation - and for the cumulative lifespan of the asphalt.

10) Please analyze the yearly environmental impacts due to the oil's runoff into surface waters - and for the lifespan of the asphalt.

11) Please analyze the runoff oil's impacts (and cumulative impacts) on the rare and endangered species - especially reproductive harm to fish, amphibians, birds, trees and plants.

12) Please analyze the runoff oil's impacts when combined with pesticides on the rare and endangered species - especially the fish, amphibians, birds, trees and plants.

13) Please analyze using concrete to mitigate the impacts of the asphalt.

\*1 California Integrated Waste Management Board - Asphalt Pavement Recycling Fact Sheet. Confirmed by call to Engineer at Granite Rock of Watsonville, CA Feb 25 1998.

\*2 Harrington, JM and JT King. 1996. Toxicity of reclaimed asphalt pavement with particular emphasis on its use in or near irrigation canal systems. Environmental Services Division Administrative Report #96-2

\*3 King, JT, JM Harrington, and KR Wagter. 1996. The toxicity of milled asphalt pavement to aquatic organisms and its effects on stream substrates in Deep Creek, San Bernardino County. Environmental Services Division Administrative Report #96-3

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Oil in Asphalt Pavement Causing Water and Air Pollution.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

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7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.
8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.
9. Please state the variance's MARGINS of ERROR or confidence level.
10. Please state whether this MARGIN of ERROR is measured or assumed.
11. If an average is used, please state which kind of average.
12. Please state the most extreme values which could be encountered.
13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.
14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.
15. Please provide a graph of HISTORICAL measurements.
16. Please quantify the length of time this impact would last.
17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.
18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.
19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.
- 20a. Please state whether this MARGIN of ERROR is measured or assumed.
- 20b. If no margin of error is used please state that clearly.
21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.
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36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.
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47. Please provide an ALTERNATIVE which avoids this impact.
48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 435 - RUBBERIZED ASPHALT CONCRETE.

The Document appears to have ignored this potentially feasible Alternative. Please carefully analyze and disclose the potential benefits of Rubberized Asphalt Concrete.

Rubberized Asphalt Concrete has greater strength and durability than conventional asphalt concrete even when only applied half as thick.

According to the California Integrated Waste Management Board one lane mile 4 inches thick of Rubberized asphalt concrete needs only 7,504 tons of material. The components include about 1.4 million pounds of crushed rock, 100 thousand pounds of asphalt cement and 25 thousand pounds of crumb rubber from shredded tires.

#### ALTERNATIVE FACTUAL ANALYSIS

There is little or no factual evidence in the document showing why this alternative is infeasible.

A. Please clearly identify by name and describe each of the objective (non-subjective) criteria used to determine this Alternative's benefits.

A1. If no objective criteria are used please state that clearly.

A2. If the criteria are different than those used to evaluate the benefits of the proposed project, please explain as it is not generally acceptable to compare apples and oranges.

B. Please state the name of the measurement units (numbers) used to determine the value for Each criteria.

B1. If no measurement units are used please state that clearly.

C. Please state the method of measurement used to determine the value for each criteria.

C1. If no measurement units are used please state that clearly for each criteria.

C2. If no objective criteria are used please clearly describe how the method of measuring value is scientifically credible and defensible.

D. Please state the existing or current baseline measurement (level) for each criteria.

E. Please state the normal variance or fluctuation, assumed or expected for each of the criteria listed above.

E1. If an average is used, please state which kind of average.

E2. Please state the extreme conditions which will be encountered.

F. Please provide a graph of historical measurement.

G. Please state the measured, assumed or expected margin of error for each measurement, calculation, and conclusion and whether it is measured or assumed.

H. Please state the total maximum change, in Percent, to which the Alternative would raise or lower the baseline number.

H1. Please state whether this total maximum change percent is an average amount, a worst case expected or a best case expected.

H2. Please state the degree, in Absolute Amount, to which this Alternative would raise or lower the baseline number.

H3. Please state whether this total maximum change amount is an average amount, a best case expected or other.

I. Please state the threshold number at which the value changes from a significant impact to a less-than-significant impact and the clear rationale for that number.

I1. Please provide the margin of error used (in percent and absolute amount) to insure the Significance Threshold Level for this Alternative is not somehow exceeded.

I2. If no margin of error is used please state that clearly.

J. ALTERNATIVE VALUE PROOF Please cite and provide relevant studies that clearly show that the project purposes could not be achieved with this alternative or with this alternative in combination with other alternatives.

J1. Please discuss the limitations of those studies.

**BENEFIT DURATION K.** Please clearly describe how the benefits vary over the time during the studies.

**K1.** Please graph the benefits for this alternative versus time in the studies. It is important to know the duration of an Alternative's benefits compared with the benefits from the proposed project.

**COSTS L.** Please cite the costs for the Alternatives studied.

**L1.** It is important to know the cost to benefit ratio, please explain that ratio.

**M. EXPERT QUALIFICATIONS** Please name each expert who prepared and reviewed this Alternative analysis.

**M1.** Please cite each expert's training, competence and experience specific to this Alternative analysis.

#### \* 436 - CONCRETE ROADWAYS.

The Document appears to have ignored this potentially feasible Alternative. Please carefully analyze and disclose the potential benefits of Concrete Roadways.

Concrete as hard surface does not contain or release oil pollution, but it still increases the impervious surface area.

This Alternative does not require any non-off-the shelf technology.

#### ALTERNATIVE FACTUAL ANALYSIS

There is little or no factual evidence in the document showing why this alternative is infeasible.

**A.** Please clearly identify by name and describe each of the objective (non-subjective) criteria used to determine this Alternative's benefits.

**A1.** If no objective criteria are used please state that clearly.

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**B.** Please state the name of the measurement units (numbers) used to determine the value for Each criteria.

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**D.** Please state the existing or current baseline measurement (level) for each criteria.

**E.** Please state the normal variance or fluctuation, assumed or expected for each of the criteria listed above.

**E1.** If an average is used, please state which kind of average.

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**J1.** Please discuss the limitations of those studies.

**BENEFIT DURATION K.** Please clearly describe how the benefits vary over the time during the studies.

**K1.** Please graph the benefits for this alternative versus time in the studies. It is important to know the duration of an Alternative's benefits compared with the benefits from the proposed project.

**COSTS L.** Please cite the costs for the Alternatives studied.

**L1.** It is important to know the cost to benefit ratio, please explain that ratio.

**M. EXPERT QUALIFICATIONS** Please name each expert who prepared and reviewed this Alternative analysis.

**M1.** Please cite each expert's training, competence and experience specific to this Alternative analysis.

#### \* 437 - DIRT ROADWAY.

The Document appears to have ignored this potentially feasible Alternative. Please carefully analyze and disclose the potential benefits of Dirt Roadway.

Dirt Roadways do not contain petroleum containing asphalts and thus do not contaminate streamways with oils. Dirt Roadways do not crack and heave as do asphalt roads.

#### ALTERNATIVE FACTUAL ANALYSIS

There is little or no factual evidence in the document showing why this alternative is infeasible.

**A.** Please clearly identify by name and describe each of the objective (non-subjective) criteria used to determine this Alternative's benefits.

**A1.** If no objective criteria are used please state that clearly.

**A2.** If the criteria are different than those used to evaluate the benefits of the proposed project, please explain as it is not generally acceptable to compare apples and oranges.

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**H2.** Please state the degree, in Absolute Amount, to which this Alternative would raise or lower the baseline number.

**H3.** Please state whether this total maximum change amount is an average amount, a best case expected or other.

**I.** Please state the threshold number at which the value changes from a significant impact to a less-than-significant impact and the clear rationale for that number.

**I1.** Please provide the margin of error used (in percent and absolute amount) to insure the Significance Threshold Level for this Alternative is not somehow exceeded.

**I2.** If no margin of error is used please state that clearly.

**J. ALTERNATIVE VALUE PROOF** Please cite and provide relevant studies that clearly show that the project purposes could not be achieved with this alternative or with this alternative in combination with other alternatives.

**J1.** Please discuss the limitations of those studies.

**BENEFIT DURATION K.** Please clearly describe how the benefits vary over the time during the studies.

**K1.** Please graph the benefits for this alternative versus time in the studies. It is important to know the duration of an Alternative's benefits compared with the benefits from the proposed project.

**COSTS L.** Please cite the costs for the Alternatives studied.

**L1.** It is important to know the cost to benefit ratio, please explain that ratio.

**M. EXPERT QUALIFICATIONS** Please name each expert who prepared and reviewed this Alternative analysis.

**M1.** Please cite each expert's training, competence and experience specific to this Alternative analysis.

\* 438 - CHEMICAL SPILLS FROM TRUCKS.

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the potential impacts of Chemical Spills from Trucks.

If you claim the document contains proof of no-significant-Impact for this impact please explicitly state the page number and paragraph.

"A tanker truck plunged off a mountain road, killing the driver and spewing as much as 4,000 gallons of crude oil into a Ventura County creek." Monterey Herald March 1 2000

This kind of spill can just as easily happen to trucks carrying hazardous chemicals.

QUANTIFICATION OF BASELINES AND IMPACTS:

This Impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Chemical Spills from Trucks.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

\* 439 - CHEMICAL ACCIDENTS.

The Document appears to have ignored this potentially significant Impact. Please carefully analyze and disclose the project's potential impacts on Chemical Accidents.

If you claim the document contains proof of no-significant-Impact for this impact please explicitly state the page number and paragraph.

"Chemical accidents with severe environmental and human impacts occur regularly - an average of 20 times per day - in the US." "At least 41 million Americans live in a zip code that contains manufacturing companies whose vulnerable zone - the geographic area affected by the worst possible accident at the facility - extends more than three miles from the site." California is among the top ten states for worst-case accident disaster potential. National Environmental Law Center Report Spring 1999

"No complete record exists of chemical accidents, but the EPA's Emergency Response Notification System logged almost 40,000 accident reports in 1994, or more than 100 calls each day. Some 1,000 of these reports involved deaths or injuries. Many accidents contaminate water or land. An estimated 15 U.S. accidents in the 1980s exceeded in volume and toxicity the Methyl Isocyanate chemicals released from Union Carbide at Bhopal, India, in the world's worst chemical accident, which killed 4,007 people immediately and injured some 200,000."

"Du Pont stores immense amounts of chemicals - reaching millions of pounds. By comparison, in 1988, a release of just 30,000 pounds of hydrofluoric acid from Marathon Oil in Texas City, Texas, defoliated trees, caused evacuation, and led 1,000 people to seek medical help. Only luck saved Texas City from a larger release. In 1993, just 8,000 pounds of sulfur trioxide from General Chemical in Richmond, Calif., sent a 15-mile ground level plume through the community and caused some 20,000 concerned people to contact local hospitals."

"The analysis of Du Pont's hazards addresses three chemicals commonly associated with chemical accidents - chlorine, ammonia, and hydrofluoric acid - at ten facilities."



The following are available upon request or from  
<http://www.rtk.net/wcs>.

1) Accidental Release Vulnerability Zones for Ten Du Pont Facilities 2) Top 50 U.S. Manufacturing Facilities in Worst-case Disaster Potential 3) Chemical Hazards and Danger Levels for Three Common Chemicals 4) Fact Sheet: Ten Reasons for a National, Public Data System for Risk Management Plans 5) Open Letter: 150 Organizations Support Right-to-Know 6) Fact Sheet: Seven Federal Databases Track Chemical Accidents

RACHEL'S ENVIRONMENT & HEALTH WEEKLY #557,  
July 31, 1997

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance on Chemical Accidents.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20a. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

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31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 440 - COLIFORM BACTERIA.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Coliform Bacteria.

If you claim the document contains proof of no-significant-impact for this impact please explicitly state the page number and paragraph.

While Coliform bacteria (Enterotoxigenic E. coli O157) can be a pathogen on its own, normally it is used as an indicator of contamination by untreated feces of humans or other animals since it is normally present in intestinal tracts of humans and animals.

In 1994-1995 over 24 million (24,719,235) Americans were supplied with tap water that failed to meet basic health standards. Some 12,246 water delivery systems reported violations of federal Chronic Coliform Bacteria standards.

The National Technical Advisory Committee on Water Quality Criteria set a bacteriological limit for primary water contact recreation waters during which ingestion occurs: Swimming, surfing and wading. The limit set is in terms of fecal coliforms. In a minimum of 5 samples in 30 days, the fecal coliforms shall not exceed a logarithmic mean of 200/100 ml (for recreational waters), nor shall more than 10 percent of those total samples in 30 days exceed 400/100 ml. (Environmental Protection, McGraw-Hill, 1979)

In 1993 four people died and 700 were sickened in Washington state after eating at Jack in the Box restaurants. In Sept. 99 two people died and 600 were sickened by E. Coli in New York state while attending a county fair; also in Sept. 99 in Petersburg Illinois 18 people were hospitalized of a total of 140 people sickened with E. Coli after partying in a cow pasture.

In 2000 in Walkerton Ontario five people died from an E. Coli outbreak in the drinking water system. More are expected to die. Up to 56 people per day were visiting hospitals complaining of e. coli symptoms. AP May 29, 00

Monterey County Health Dept Director Mellon said "most Californians realize the shouldn't drink from any surface water in rivers or lakes because of widespread contamination by Salmonella, E-coli bacteria (from leaking septic tanks) and the parasite

called Giardia, which comes from the droppings of coyotes, foxes, marmots and beavers." -Carmel Pine Cone Sept 19 1997

Cal-Am measured three times the allowed number of exceedances of Coliform Bacteria in 1998 (1.75 measured v. 0.5 allowed).

What coliform standards and limits are used to determine this impact?

Moss Landing's water supply had health risking levels of coliform in Sept 2000.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Coliform Bacteria.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.

19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.

20s. Please state whether this MARGIN of ERROR is measured or assumed.

20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

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29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

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41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

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43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 441 - WATER BORNE HEPATITIS & POLIO VIRUSES.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Water Borne Hepatitis & Polio Viruses.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

The Southern California Coastal Water Research Project states in January 1999 that "measurements for viruses found in the human digestive system have been taken, primarily at storm drain sites, along a 300 mile stretch of the California Coastline. Those viruses have been detected more than 50 percent of the time after heavy rains and are even detected in summer when only a trickle of water is coming through the storm drain."

During every Carmel River flood in the 1990's Monterey County Dept. of Environmental Health has issued a "No-Contact" warning due to excessive nitrate contamination of the river due to Carmel Valley septic systems.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Water Borne Hepatitis & Polio Viruses.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

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8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.
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10. Please state whether this MARGIN of ERROR is measured or assumed.
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12. Please state the most extreme values which could be encountered.
13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.
14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.
15. Please provide a graph of HISTORICAL measurements.
16. Please quantify the length of time this impact would last.
17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.
18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.
19. Please provide the MARGIN of ERROR used (in percent and absolute amount) for measuring the Significance THRESHOLD Level.
- 20a. Please state whether this MARGIN of ERROR is measured or assumed.
- 20b. If no margin of error is used please state that clearly.
21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.
22. Some Impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.
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27. Please state whether the MARGIN of ERROR is measured or assumed.
28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.
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31. Please quantify all potential CUMULATIVE impacts related to this one.
32. Please list, describe and quantify all potential compound and synergetic impacts.
33. Please list, describe and quantify all Construction impacts related to this one.
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35. Please list, describe and quantify all Indirect impacts related to this one.
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41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.
42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.
43. Please name each EXPERT who prepared and reviewed this impact.
44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.
45. Please provide AVOIDANCE MITIGATION for this impact.
46. Please provide the reverse of this impact as Mitigation.
47. Please provide an ALTERNATIVE which avoids this impact.
48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 442 - ALGAL BLOOMS INCLUDING PFISTERIA.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Algal Blooms including Pfisteria.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

"Excessive Nutrient loadings will result in excessive growth of macrophytes or phytoplankton and potentially harmful algal blooms (HAB), leading to oxygen declines, imbalance of aquatic species, public health risks, and a general decline of the aquatic resource." EPA Administrator, Carol Browner and Secretary, Dept of Agriculture Dan Glickman Feb 14th 1998 in Report

called the "Clean Water Action Plan" to Vice President Al Gore.

"Nitrogen-fed algae blooms have been identified as the source of a major outbreak of cholera in South America in 1991. The algae harbor the cholera-causing bacterium. In 1991, 500,000 people fell ill and 5000 died when cholera erupted along the coastline of Peru and quickly spread to 18 other countries.[8]"

"The nitrogen content of the Mississippi River has more than doubled since 1965, and nitrate concentrations in the major rivers of the northeastern U.S. have increased 3-to 10-fold since 1900, according to the ESA report. The same is true of European rivers. Nitrogen from rivers is now reaching the Atlantic Ocean at rates 2 to 20 times as great as during pre-industrial times. Around the North Sea, the increase has been 6-to 20-fold."

Nitrogen fixation means making nitrogen biologically consumable by plants as food. Until 1940, human commercial activities fixed almost zero nitrogen. A study in 1990 found that half of all the nitrogen ever fixed by industrial processes occurred after 1980.

Nitrogen entering the oceans is causing fertilization and eutrophication of estuaries and coastal seas: "...it represents perhaps the greatest threat to the integrity of coastal ecosystems."

"Nitrogen entering the oceans is causing fertilization and eutrophication of estuaries and coastal seas: "...it represents perhaps the greatest threat to the integrity of coastal ecosystems," says the ESA report. Eutrophication is the excessive growth of plants, leading to oxygen deficiency which has killed significant numbers of fin fish and shellfish in the Chesapeake Bay, Long Island Sound, the Black Sea, the Baltic Sea, and elsewhere." RACHEL'S ENVIRONMENT & HEALTH WEEKLY #557, July 31, 1997.

"Mystery Poison found in Carmel River" Health Dept warns that children, pets should stay away." -Carmel Pine Cone Headlines Sept 19 1997 At least three dogs died from Oct 1996 to September 1997 immediately after drinking from the standing pools in the Carmel River. One attending veterinarian suspected a blue-green algae (also known as cyanobacteria), but there was no investigation. "I've been here 35 years and never seen anything like this before," said Carmel Valley veterinarian Gerald Pelkus. County Health Dept Director Mellon said two other dogs died after drinking water in 1996. No water samples were taken. According to Mellon the algae is "very toxic to any animal" (this presumably includes humans).

Overpumping the Carmel River increases this risk.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Algal Blooms including Pfisteria.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

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Founded in 1998, H.O.P.E. is a non-profit, tax deductible, public interest group protecting our Monterey Peninsula's natural land, air, and water ecosystems and public participation in government, using science, law, education, news alerts and advocacy.  
Printed On 35% Post-Consumer Recovered Fiber.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

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20b. If no margin of error is used please state that clearly.

21. Please disclose all threshold numbers at which the impact changes from LEGAL to ILLEGAL for ALL related and potentially relevant local, state and federal laws.

22. Some impacts increase in a LINEAR RELATIONSHIP with increasing input, other impacts have complex non-linear relationships. Please provide a graph that shows whether the relationship is linear or otherwise - when at and near the significance threshold values.

23. Please quantify the total PERCENT MAXIMUM CHANGE, to which the IMPACT could raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

24. Please state whether the MARGIN of ERROR is measured or assumed.

25. Please state whether this total PERCENT maximum change is an AVERAGE amount, a worst case expected or a best case expected.

26. Please quantify the ABSOLUTE MAXIMUM AMOUNT, to which the impact would raise or lower the baseline number and its MARGIN of ERROR or confidence levels.

27. Please state whether the MARGIN of ERROR is measured or assumed.

28. Please state whether this total maximum change amount is an AVERAGE amount, a worst case expected or a best case expected.

29. Please list all potential CUMULATIVE impacts related to this one.

30. Please describe all potential CUMULATIVE impacts related to this one.

31. Please quantify all potential CUMULATIVE impacts related to this one.

32. Please list, describe and quantify all potential compound and synergistic impacts.

33. Please list, describe and quantify all Construction impacts related to this one.

34. Please list, describe and quantify all Growth Impacts related to this one.

35. Please list, describe and quantify all Indirect impacts related to this one.

36. Please list and quantify every OTHER IMPACT - this impact or mitigation could increase.

37. Please describe the EXISTING USABLE limit of the RESOURCE this impact affects.

38. Please state the METHOD of measurement used to determine the limit of the RESOURCE this impact affects.

39. Please describe the MARGIN of ERROR or confidence level used to measure how much of this resource is left.

40. Please state whether the margin of error is measured or assumed.

41. Please quantify what is the maximum amount (in AMOUNT of existing) of this resource that can be lost and still be restored.

42. Please quantify what is the MAXIMUM amount (in PERCENTAGE of existing) of this resource that can be LOST and still be restored.

43. Please name each EXPERT who prepared and reviewed this impact.

44. Please cite each expert's training, and peer reviewed, validly published articles specific to this impact.

45. Please provide AVOIDANCE MITIGATION for this impact.

46. Please provide the reverse of this impact as Mitigation.

47. Please provide an ALTERNATIVE which avoids this impact.

48. Please list all other studies initiated by the applicant related to this impact, including subject matter breadth, author's names and dates and where they can be examined.

#### \* 443 - OTHER WATER BORNE PATHOGENS.

The Document appears to have ignored this potentially significant impact. Please carefully analyze and disclose the potential impacts of Other Water Borne Pathogens.

If you claim the document contains proof of no-significant impact for this impact please explicitly state the page number and paragraph.

Monterey County Health Dept Director Melton said "most Californians realize they shouldn't drink from any surface water in rivers or lakes because of widespread contamination by Salmonella, E-coli bacteria (from leaking septic tanks) and the parasite called Giardia, which comes from the droppings of coyotes, foxes, marmots and beavers." -Carmel Pine Cone Sept 19 1997

Overpumping the Carmel River increases this risk.

#### QUANTIFICATION OF BASELINES AND IMPACTS:

This impact appears to be potentially significant.

1a. Please clearly identify by NAME and describe each of the objective (non-subjective) CRITERIA used to determine the impact significance of Other Water Borne Pathogens.

1b. If no objective criteria are used please state that clearly.

2. If no objective criteria are used please clearly describe how the threshold of significance chosen is scientifically testable, repeatable, falsifiable, credible and defensible.

3a. Please state the NAME of the MEASUREMENT UNITS (numbers) used to determine the significance for EACH criteria.

3b. Please quote the definition used.

4. If no measurement units are used please state that clearly.

5a. Please state the METHOD of measurement used to determine the significance for each criteria.

5b. If no method of measurement was used please state that clearly for each criteria and explain thoroughly how the data was obtained.

6. Please quantify the existing or current BASELINE measurement (level) for each criteria.

7. Please state its MARGIN of ERROR or a confidence level and whether the MARGIN of ERROR is measured or assumed.

8. Please state the VARIANCE or fluctuation, assumed or expected for each of the criteria listed above.

9. Please state the variance's MARGINS of ERROR or confidence level.

10. Please state whether this MARGIN of ERROR is measured or assumed.

11. If an average is used, please state which kind of average.

12. Please state the most extreme values which could be encountered.

13. Please describe and quantify which criteria and ASSUMPTIONS the Impact Significance predictions are most SENSITIVE.

14. Please analyze and quantify how sensitive those predictions are to reasonably foreseeable varying criteria and assumptions.

15. Please provide a graph of HISTORICAL measurements.

16. Please quantify the length of time this impact would last.

17. Please quantify how this impact would vary over that time period. Please use a graph for clarity.

18. Please state the THRESHOLD number at which the impact changes from significant to less-than-significant and the clear criteria and rationale for that number.