



December 8, 2009

Mr. Dave Gibson, Executive Officer
State of California
Regional Water Quality Control Board
San Diego Region (9)
9174 Sky Park Court, Suite 100
San Diego, CA 92123

SUBJECT: Comments on "Additional Draft Updates & Errata to the August 12th,
2009 Public Release Draft of Tentative Order No. R9-2009-0002"

Dear Mr. Gibson & Board Members,

Thank you for the opportunity to provide comments on the draft NPDES Permit Errata Sheet regarding Now-Storm Water Action Levels or "NALs". The treatment of this issue in the draft permit was the most important concern for the City of Dana Point.

The City of Dana Point supports the comments that will be forwarded to you separately by the County of Orange as the lead permittee for the permit. That said, the City is also providing separate comment in an effort to communicate concerns towards the same end, but stated differently to try to explain our concerns in a way that is clear and convincing. So, here goes!

We asked for the opportunity to work with your staff to hammer out the NALs revision language in a way that would be agreeable to all parties. We were advised that this was not possible, first due to necessary time frames to meet a December 16th Board meeting deadline and then subsequently, because it may be inappropriate because the Board has closed public comment. We have also asked that if the timeframe is too short for December 16th, that the item be continued. Given the fact that NALs are the single most significant change to this permit; the potential for hundreds of millions of dollars in eventual compliance costs; the large number of issues raised with this provision; the fact that no other permit in the State has these standards; the Staff's significant rewording in a lengthy 29 page Errata document; and our desire to avoid litigation, we hope this request will be seriously considered. We have also offered to meet between now and the hearing. We are responding to the Errata sheet on 4 working days notice.

Frankly, we are frightened and dismayed with the comments from Board Staff after the public hearing closed, that give the impression that no progress has been made in improving water quality dry weather flow in 19 years (Finding C14), that BMPs are not working. When the outgoing executive officer completely surprised us all in stating that he believed none of us are serious about water quality if we haven't banned residential car washing and questions how our elected officials can purport to represent our

constituents, we see that as symptomatic of a frustration level that is unhealthy and counter productive. And, at the hearing, when the EPA representative, whom we have never seen, nor spoken with before, states to the Board that we must have the Baby Beach TMDL in the permit we have to ask why? Baby Beach is getting A & A+ ratings from Heal the Bay due to the many positive improvements that have been made. There is a great distance between San Diego and South Orange County and it appears it's not only in miles, but a great gap has developed in communication and trust.

We understand that the Board needs to have the ability to regulate and enforce action against recalcitrant programs – but we don't want careless language in the permit that allows third parties to make those determinations. We understand that Board Staff is concerned that there are new 303(d) list locations for newly tested constituents at new locations. But that's not because we aren't taking positive measures that are resulting in taking 303(d) listed locations off the list for previously identified exceedances, given time to address them, and reducing impacts at critical recreational areas. We have many great success stories that are going unrecognized.

We are not opposed to numeric performance indications, but we have shown you that not one in ten outlets could possibly pass the current proposed standards and pristine waters will fail more often than not as well, perhaps 90% of the time too. We understand that allowing the co-permittees to set the standards would be perceived as the "fox in the hen house" but, rather than set a standard that is flawed, lets go to an independent third party like Southern California Coastal Water Research Project (SCCWRP) to help set a scientifically-sound and reasonable standard for action during the first 18 months of the permit. Basin Plan Standards have to be reviewed as well.

The new NALs language now states that even a single exceedance triggers an action (Section C4) to not only investigate but to eliminate (Finding E12) the discharge. If not, are we in violation of the permit? Please recall, this is dry weather flow where, as we showed you, 1,000 possible sources could cause an exceedance for an average outlet.

Section C, Paragraph 2A states that natural resources exclusion only applies to exceedances that are natural in conveyance. MS4s are a conveyance and aren't natural. So, this language can be read to void the natural exclusion paragraph and Staff has indicated to us that any pollutant in our MS4 system becomes our problem, no matter how it gets there.

Another provision (Section C, Paragraph 2C) of the rewrite states that if we find an exceedance (single occurrence) of a federally exempted discharge category then that whole category must be addressed through prevention or prohibition. This appears to quickly put an end to all exempted discharge categories.

Put all of these various provisions together and the only available solution to co-permittees is to treat or divert all day weather flow outlets regardless of source or cost. Is that what was intended? Are these reasonably achievable given economic considerations?

We have attached a copy of our economic considerations and implementation concerns that were presented to the Board at the hearing on November 18th (Exhibit 1 of the attached legal comments) as they remain applicable to the revised NALs, with the exception of mandatory minimum penalties. Further, our legal concerns with the NALs are also attached for reference. Unfortunately, our legal concerns remain, with the proposed NALs language, as written. Unfortunately, although the acronym has changed from NELs to NALs, the basic legal issues remain the same and invite litigation.

Our fervent recommendation is to sit down together and jointly develop proposed language for NALs with you and your staff. The County's cover letter addresses the key points of concern that we believe are resolvable in fairly short order. Again, we can meet before the Board hearing to do this, if necessary.

As a follow on, we would like to partner with you to establish common goals for comprehensive watershed wide planning and implementation that achieves measurable results, across multiple pollutant loads, that uses our fiscal resources wisely for the most beneficial improvements. We can establish the best improvements possible, together for any region, working as partners.

Sincerely,



Lisa Bartlett
Mayor of the City of Dana Point

Enc: Attachment with Exhibit 1

CC: Jimmy Smith, SDRWQCB
Chris Crompton, Richard Boon, County of Orange
Doug Chothevys, Brad Fowler, Lisa Zawaski, City of Dana Point
Richard Montevideo, Rutan & Tucker

Dana Point Legal Comments on Additional Draft Updates and
Errata of December 2, 2009 to
Tentative Order No. R9-2009-0002

A. INTRODUCTION.

These comments are being offered on behalf of the City of Dana Point ("City") in response to the recent proposed substantive modifications to Tentative Order No. R9-2009-0002 (hereafter "Draft Permit" or "Tentative Order"), as set forth in that Additional Errata and Updates provided to the City by Staff of the California Regional Water Quality Control Board, San Diego Region ("Regional Board") on December 2, 2009 (hereafter "Errata"). These comments are being offered only on the substantive changes reflected in the Errata, namely those provisions of the Tentative Order involving the revision of the numeric effluent limitations ("NELs") for dry weather runoff, ostensibly revised by the Errata to instead be "Non-stormwater Action Levels" or "NALs," for dry-weather runoff. As described in the Executive Officer's Summary Report provided on December 2, the Errata concerns "revisions to the Tentative Order that replace numeric effluent limitations for dry weather, non-stormwater discharges with numeric actions levels for these same discharges and that accelerate the monitoring requirements associated with the numeric action levels." (See Executive Officer Summary Report, p. 1, under "Purpose.")

The Executive Officer Summary Report also provides that written comments are to "be submitted by 5:00 P.M. on December 8th." As such, the Regional Board has only provided the Permittees four (4) business days in which to respond to a twenty-nine (29) page Errata, which documents proposed changes to a unique complex and highly controversial set of provisions in the Tentative Order. Sufficient time has thus not been provided to fully evaluate the changes in the 29-page Errata. In fact, sufficient time has not even been provided to obtain and review the hearing transcripts from the November 18, 2009 proceedings on the last draft of the Tentative Order. Accordingly, the City thus respectfully requests an additional thirty (30) days to review and evaluate the implications of these proposed changes, to fully comment on the same, and to work with Staff to develop reasonably achievable language to address dry weather runoff.

From the limited time the City has had to review and analyze the Errata, it is the City's position that the proposed NALs as drafted in the Errata, suffer from the same fundamental legal deficiencies as did the NELs. As such, all prior comments concerning the NELs, as set forth in the City's comment letter dated September 28, 2009 (to the August 12, 2009 Tentative Order), including all referenced exhibits therein, are incorporated herein by this reference and made a part hereof, as Comments on the now proposed NALs.. Moreover, the City maintains that the other provisions of the Tentative Order that have not been revised to address the deficiencies identified in prior Comments in the administrative record, must similarly be revised, and the City hereby reserves all of its rights and arguments as to such other deficiencies.

B. THE PROPOSED NALs CANNOT BE ADOPTED UNTIL THE REGIONAL BOARD HAS FIRST DEVELOPED THE EVIDENCE AND MADE REQUIRED FINDINGS SHOWING COMPLIANCE WITH STATE LAW.

At the November 18, 2009 Regional Board hearing on the Tentative Order, it is the City's belief that because of various legal, technical and practical concerns raised by the various Permittees with the proposed NEL terms in the Tentative Order (as reflected in the August 12, 2009 draft), that the Board had directed Staff to revise the Tentative Order to delete the NELs and to replace those NELs with non-stormwater action levels, i.e., NALs. It was the City's understanding that beyond the Board's concern with the Permittees being subject to unnecessary and inappropriate mandatory minimum penalties ("MMPs"), that in addition, the Board had concerns with whether the propriety of the NELs, namely whether the NELs were "reasonably achievable," as well as with the "economic" impacts of complying with the NELs, i.e., the 'dischargers' cost of compliance." Similarly, the City believes the Board was concerned with the need for a "cost/benefit" analysis to justify the investigation, monitoring and reporting requirements proposed to implement the NELs. The Board Staff's proposed modifications to the NELs with the Errata to transform the NELs into NALs, appear to *primarily* address the Board's desire to eliminate the threat of MMPs against the Permittees from exceedances of the NELs, and they do not adequately address the other legal, technical and practical concerns raised by the Permittees, namely whether compliance with the NAL terms is "reasonably achievable," whether the "economic" impacts of compliance on the discharges are appropriate, and whether the

anticipated benefits created by the investigation, reporting, considerable monitoring and elimination requirements imposed by the Errata to implement the NALs, outweigh the costs.

1. The Proposed NAL Requirements in the Errata.

In reviewing Modified Finding E.12, along with new Section C of the Tentative Order, both as reflected in the Errata, Board Staff appears to have reluctantly sought to reformulate the NELs into NALs, and seems to have done so largely in name only, so as to principally eliminate the threat of MMPs, but without addressing the lack of evidence and findings on whether the NAL terms “could reasonably be achieved,” or the “economic” impacts of attempted compliance with such terms. Nor is there any evidence or findings showing that a cost/benefit analysis was conducted as required by State law before the various investigation, monitoring and report requirements were imposed.

To start with, Staff included no findings or evidence to show that the proposed NALs, and the required BMPs needed to achieve the NALs, are both reasonably and economically achievable. For example, under new Section C.3 of the Permit, Staff revised the Tentative Order to read as follows:

“An exceedance of an NAL does not alone constitute a violation of the provisions of this Order, but an exceedance of an NAL may indicate lack of compliance with the requirements that Co-Permittees effectively prohibit all types of unauthorized non-stormwater discharges into the MS4 or other prohibitions set forth in Sections A and B of this Order. Failure to timely implement required actions specified in this Order following an exceedance of an NAL constitutes a violation of this Order. However, neither compliance with NALs nor compliance with required actions following observed exceedances, excuses any non-compliance with the requirement to effectively prohibit all types of unauthorized non-storm water discharges into the MS4s or any non-compliance with the prohibitions in Sections A and B of this Order. . . .” (Errata, p. 4, § C.3.)

First, beyond this operative language and other language throughout the Errata reflecting a similar position on violations created by exceedances of the NALs, few substantive changes were made to the required actions to be undertaken by the Permittees if a NAL is exceeded. That is, virtually the same source investigation and reporting requirements that existed with the NELs,

remain with the NALs, as well as the same consequences from an exceedance, namely, if the source is found to be an illicit discharge, eliminating the discharge, and with exceedances being used as evidence of violations of the Discharge Prohibition section of the Tentative Order.

Second, the actual numeric limits that make up the NALs are identical to the numeric limits that made up the NELs. No effort was made to develop action levels that are “reasonably achievable,” or to require further action only if the frequency and magnitude of the exceedance were sufficient to warrant the effort and significant expense of investigating the exceedance.

Third, no substantive changes were made to the monitoring and reporting requirements in the Tentative Order for the NALs versus the NELs, with the exception of moving up the date when monitoring would need to commence (from three years from Permit adoption to one year).

Boards Staff appears to have made compliance with the terms of the Tentative Order concerning NALs potentially even more difficult than compliance would have been with the previous terms of the Tentative Order concerning NELs. Specifically, only one exceedance of any magnitude of any NAL constituent, as written, would trigger significant action on the part of a Permittee or Permittees, i.e., a single exceedance of a single pollutant (Section C4), regardless of the level or magnitude of the exceedance, triggers action not only for NAL compliance, but also for prevention or evaluation of entire federally exempted categories (C2c). Moreover, discretionary penalties for exceedances of NALs may still be imposed to the extent the Board finds a violation of the Permit is evidenced by any exceedance of an NAL. Similarly, a substantial threat of needless third party litigation under the citizen suit provisions to the Clean Water Act remains with the NAL proposed language.

Further, there is no evidence and there are no findings in the record to show that the Board Staff has complied with the requirements of CWC sections 13241 and 13000, and considered the factors required thereunder, including specifically whether NALs are appropriate in light of the “environmental characteristics” of the water body in issue, and whether such NAL “could reasonably be achieved,” along with the propriety of including NELs in light of the “economic” impacts that are created by the inclusion of such terms, i.e., the “dischargers cost of compliance.” (*City of Burbank v. State Board* (2005) 35 Cal.4th 613, 618.)

There is similarly no evidence and no findings within the Tentative Order to show that any form of a cost/benefit analysis has been conducted, as required before any monitoring, reporting and/or technical investigation obligation may be imposed on the Permittees, as required by CWA sections 13225(c) and 13267(b) for all of the investigation, monitoring and reporting requirements established in the Errata for the proposed NALs.

Finally, no funding has been provided to the Permittees, either to conduct the requisite investigation, reporting, monitoring, and/or elimination obligations, nor to take the various actions necessary to eliminate an exceedance of an NAL, as required under the California Constitution, Article XIII B, Section 6, before such terms may be imposed upon local governments. For all of these reasons, the proposed terms of the Tentative Order involving the NALs cannot be adopted at this time.

2. The Errata Contains No New Findings or Evidence to Show That The Required Analysis Under CWC Sections 13241/13000 Has Been Conducted to Support the Inclusion of the NALs.

As discussed in previous comment letters submitted in connection with prior versions of the Tentative Order, CWC section 13000 of the California Porter-Cologne Act requires the State to “attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.” (CWC § 13000.) Most of the region wide 480 major dry weather flow outlets empty to flood control channels and the flows do not reach the Pacific Ocean or other recreational areas.

Similarly, under CWC section 13263, the Regional Board is required, when issuing an NPDES Permit such as the Tentative Order, “to take into account various factors including those set forth in Section 13241.” (*City of Burbank v. State Board, supra*, 35 Cal.App.4th 613, 625.) The factors required to be considered under CWC section 13241 when an NPDES Permit such as the Tentative Order is being adopted by the Regional Board, include the following:

- (a) Past, present, and probable future beneficial uses of water.**

(b) **Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.**

(c) **Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.**

(d) **Economic considerations.**

(e) **The need for developing housing in the region.**

(f) **The need to develop and use recycled water.**

(CWC § 13241, emphasis added.) In *City of Burbank v. State Board*, the Supreme Court found that to the extent the numeric effluent limits in that case were not compelled by federal law, compliance with Section 13241 was required, with the Court expressly finding that a consideration of the “*discharger’s costs of compliance*” was required. (*Id.*, at 618.) The Court interpreted the need to consider “economics” as requiring the consideration of the “cost of compliance” on the cities involved in that case. (*Id.* at 625 [“The plain language of *Sections 13263 and 13241* indicates the Legislature’s intent in 1969, when these statutes were enacted, that a regional board consider *the costs of compliance* when setting effluent limitations in a waste water discharge permit.”].)

Because, as was the case with NELs, NALs are not required under federal law to be included in an MS4 Permit, any attempt to include the NALs in place of the NELs within the Tentative Order in issue still, therefore, requires compliance with the requirements of State law, namely compliance with the factors and considerations set forth under CWA Sections 13241 and 13000 before imposing such NALs.

At the hearing before the Board on November 18, 2008, a significant amount of evidence was submitted showing that the NELs proposed at that time were not “reasonably achievable,” and that the “economic” burdens of attempting to comply with such NELs, including specifically the need to investigate and determine the source of any exceedances of an NEL, would be

excessive. Evidence was also submitted to show that the monitoring obligations imposed in connection with the NELs were similarly excessive, and that the cost of carrying out the investigation, reporting, monitoring obligations, and the required controlling or controls on elimination through diversion on treatment. As such, the evidence presented at the hearing on November 18, 2009, showed that the NELs were not “reasonably achievable,” were not cost effective, and that the economic impacts, i.e., the “dischargers cost of compliance,” were excessive. It further showed that a cost/benefit analysis was needed to prioritize actions and to develop appropriate investigation, monitoring, reporting and control terms for the Tentative Order. (A copy of the PowerPoint Presentation collectively presented by various South Orange County Cities is hereby included herewith and marked as Exhibit “1” hereto.)

Because the same numeric limits used for the NELs are also being proposed for the NELs, and further, because the same actions are required of the Permittees under the revised Tentative Order if a NAL is exceeded, just as if a NEL had been exceeded, with the same investigation, monitoring, reporting and now elimination requirements, and because no additional evidence, nor findings, have been generated by Board Staff, with no new findings being included in the Errata to show that the Board has conducted the requisite 13241/13000 analysis, the revisions proposed by Staff to include the NALs, in place of the NELs, suffer from largely the same legal, technical and practical defects that existed with the NEL terms contained in the prior version of the Tentative Order.

The City thus respectfully requests that the Tentative Order be further revised to include NALs that are reasonably and economically achievable, as well as a consideration of the other factors set forth under CWC sections 13241/13000, and further only after a cost/benefit analysis has been conducted for the investigation, monitoring and reporting requirements. Evidence will need to be generated and appropriate reasonably and economically achievable NALs developed.

For example, in State Board Order No. WQ2009-08, the State Board addressed the propriety of future municipal storm water permits containing numeric limits to implement waste load allocations under a Total Maximum Daily Load (“TMDL”), and commented on the importance of Regional Board findings to support the inclusion of either numeric or non-numeric effluent limits. The State Board stated as follows:

“Whether a future municipal storm water permit requirement appropriately implements a storm water waste load allocation will need to be decided based on the regional water quality control board’s findings supporting either the numeric or non-numeric effluent limitations contained in the permit.” (State Board Order No. WQ2009-08, p. 10-11.)

State Board Order No. WQ2009-08 thus confirms the need for the Regional Board to adopt permit terms, whether they are NELs or NALs, only after making appropriate “findings” that support such requirements. In this case, there are no findings to show compliance with the requirements of CWC sections 13241/13000, and nor is there any evidence in the record to support such findings.

3. There is No Evidence and No Findings to Show that the Required Cost/Benefit Analysis Has Been Conducted in Connection with the NAL Investigation, Monitoring and Reporting Obligations.

The investigation, monitoring and reporting obligations imposed on the Permittees with the new NAL terms, as set forth in the Errata, are virtually identical to the investigation, monitoring and reporting obligations that had been imposed upon the Permittees for the NELs as set forth in the previous Tentative Order. Yet, as discussed in prior comments in connection with the NELs, before such investigation, monitoring and reporting obligations may lawfully be imposed upon the Permittees, a cost/benefit analysis must be conducted in accordance with the requirements of CWC sections 13225(c) and 13267(b).

CWC section 13225(c) provides as follows:

Each Regional Board, with respect to its region, shall, do all of the following:

* * *

(c) Require as necessary any state or local government to investigate and report on any technical factors involved in water quality control or to obtain and submit analyses of water; provided that the burden, including costs, of such reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained therefrom. (CWC § 13225(c); emphasis added.)

Similarly, CWC section 13267(b) provides, in relevant part, as follows:

* * *

(b)(1). In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged . . . or who proposes to discharge, waste within its region . . . shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports. (CWC § 13267(b); emphasis added.)

As existed with the prior Tentative Order, the Errata contains no new findings and provides no new evidence showing that the Regional Board conducted the required cost/benefit analysis described for the investigation, monitoring and/or reporting obligations required in connection with the NALs, and nor is there any indication that the Board has prepared a “written explanation with regard to the need for the reports,” or that it has identified “the evidence that supports requiring the person who provided the reports.” No such evidence or analysis is contained within the Errata, and no findings have been included to show compliance with the cost/benefit requirements under CWC sections 13225 and 13267.

Moreover, as reflected in Exhibit “1” hereto, which is a copy of the PowerPoint Presentation provided by various Cities at the November 18, 2009 hearing on the prior Tentative Order, the anticipated monitoring, reporting and, investigation requirements, when added to the necessary control and elimination requirements, will be in the hundreds of millions of dollars of costs to comply with the NELs and now the NALs.. In fact, the monitoring obligations have been accelerated to commence starting after one year from the date of adoption of the Tentative Order, versus three years from the date of adoption of the previous Tentative Order.

Accordingly, the NAL provisions as set forth in the Errata should not be adopted until such time as the requisite cost/benefit analysis has been performed, and until such time as appropriate findings have been included in the Tentative Order.

4. The Various Obligations Imposed Upon The Permittees in Connection with the NALs are all Unfunded Mandates in Violation of the California Constitution.

As discussed above and in previous Comments in connection with the NELs, nothing under federal law requires the Regional Board to adopt NALs as a part of this Tentative Order. In fact, the City is aware of no other MS4 Permit in the State of California that has included such provisions. As such, the inclusion of NALs within the proposed Tentative Order is clearly not a federal mandate, and the inclusion of all of the various requirements associated therewith are all new State mandates which cannot become effective until the Regional Board has first provided appropriate funding to the local government Permittees to carry out such NAL mandates.

Article XIII B, Section 6 of the California Constitution prohibits the Legislature or any State agency from shifting the financial responsibility of carrying out governmental functions to local governmental entities. Article XIII B, Section 6 provides, in relevant part, as follows:

Whenever the Legislature or any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse such local governments for the cost of such program or increased level of service. . . .

This reimbursement requirement provides permanent protection for taxpayers from excessive taxation and requires discipline in tax spending at both state and local levels. (*County of Fresno v. State* (1991) 53 Cal.3d 482, 487.) Enacted as a part of Proposition 4 in 1979, it “*was intended to preclude the state from shifting financial responsibility to local entities that were ill equipped to handle the task.*” (*Id.*) The incorporation of new permit requirements that are not mandated by federal law, and that go unfunded by the State, plainly violate Article XIII B, Section 6 of the California Constitution. (*See County of Los Angeles v. Commission on State*

Mandates (2007) 150 Cal.App.4th 898, 914 [“We are not convinced that the obligations imposed by a permit issued by a Regional Water Board necessarily constitute federal mandates under all circumstances.”].)

In this case because none of the new requirements associated with the NALs are mandated by federal law, and because such NAL terms are new State mandates that compel the Permittees to carry out “a new program or higher level of service,” no such terms can become effective until appropriate funding has first been provided to the local government Permittees.

C. LEGAL CONCLUSION.

The NAL provisions cannot lawfully be adopted at this time unless and until the requirements of CWC sections 13241, 13000, 13225(c) and 13267(b) have been met, and until such time as the mandates imposed upon the municipalities by such terms have first been funded as required by the California Constitution. The City maintains all of its prior comments to the previous Tentative Orders, and reasserts all such Comments to the extent the Tentative Order has not been modified to correct these previously identified deficiencies.

EXHIBIT "1"

To Dana Point Legal Comments (12/8/2009)

NELs –

**What's the
Problem?**

NELs Are Not Reasonably Achievable Because:

- Natural Background sources
- Investigations may be inconclusive
- Discharges only controllable to MEP
- Limitations of structural treatment
- Costs for monitoring, investigating, controlling and penalties

There are smarter ways!

NEL Standard is Flawed & Guarantees Failure

Constituent	Failure Rate with proposed NELs		
	Current DWM	OC Coastal Ref. Stream	SCCWRP Ref.
Total Phosphorus	94%	42%	
Nitrate + Nitrite	94%	67%	
Fecal coliform	90%	32%	
Enterococcus	97%	91%	48%
<i>E. coli</i>			14%
Turbidity		12%	

THESE ALL HAVE UNCONTROLLABLE, NATURAL SOURCE COMPONENTS

- Soils are high in phosphorus
- Nitrogen abundant from air, geology & decaying vegetation
- We are all too familiar with the complexities of bacteria and its ubiquitous nature

➔ **Even pristine reference streams exceed NELs!**

"INVESTIGATION" OUTCOME a. IS FUTILE

- Page 22 C. 1. a. "determine that it is natural (non-anthropogenically influenced) in origin *and conveyance*."

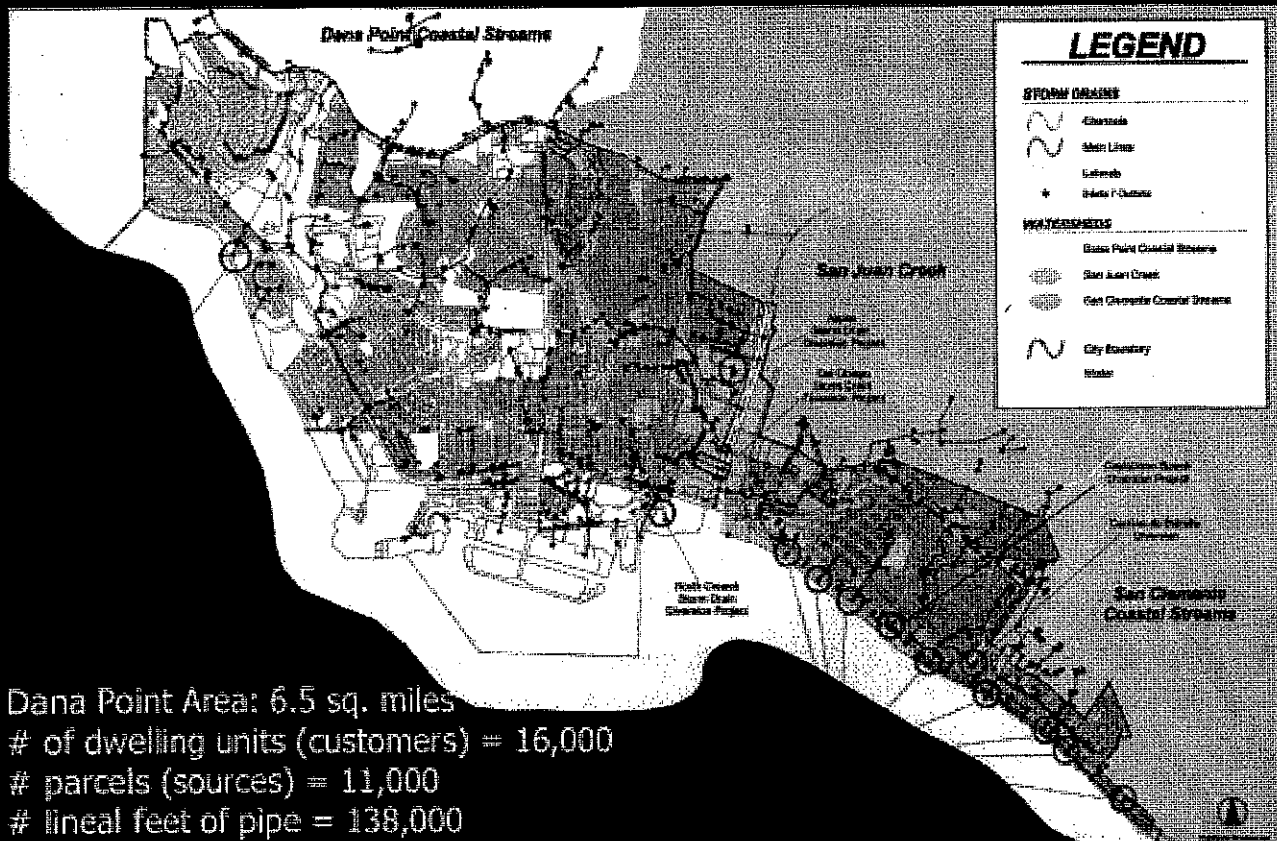
THIS IS IMPOSSIBLE & SETS US UP FOR FAILURE & UNINTENDED CONSEQUENCES SUCH AS MANDATORY MINIMUM PENALTIES & THIRD PARTY LAWSUITS.

Per discussions with RWQCB staff, the storm drain system (conveyance) is anthropogenically influenced (i.e man-made) and therefore anything that discharges from it is considered anthropogenically influenced.... Therefore nothing can effectively be determined to be natural or uncontrollable, with the language as written.

CONCENTRATION BASED LIMITS ARE FLAWED!

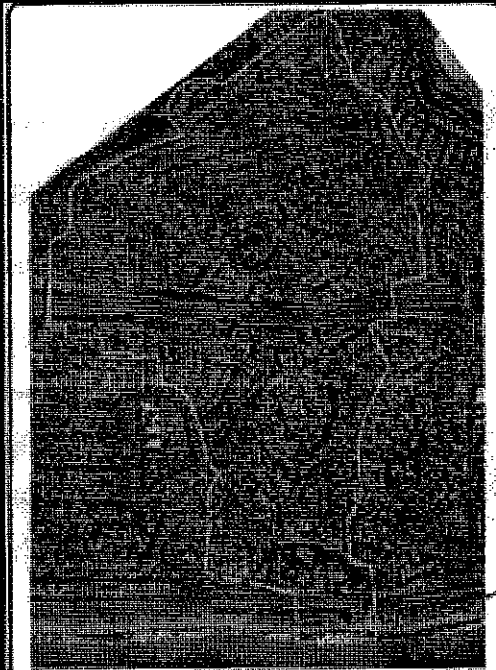
- Load/magnitude not considered
 - 1/10th gal/min = 100 gal/min
- No recognition of frequency of exceedance
- No recognition of outfall location/impact
- No recognition of number of constituents exceeded
- One size does not fit all and no ability to prioritize

INVESTIGATING EXCEEDANCES IS A DAUNTING TASK



Dana Point Area: 6.5 sq. miles
 # of dwelling units (customers) = 16,000
 # parcels (sources) = 11,000
 # lineal feet of pipe = 138,000
 # municipal storm drain inlets = 480
 # approx. private (HOA) inlets = 145 Total inlets = 625

Challenges of Pinpointing a Nonpoint Source

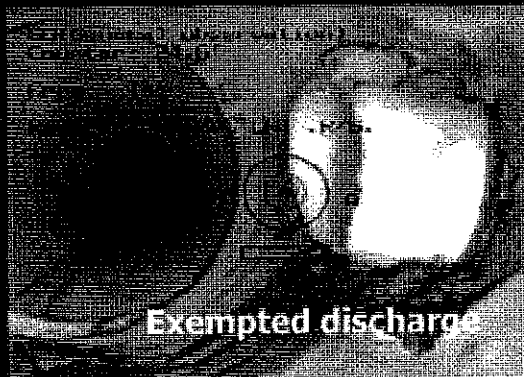


City of
Black River
Public Works
Department

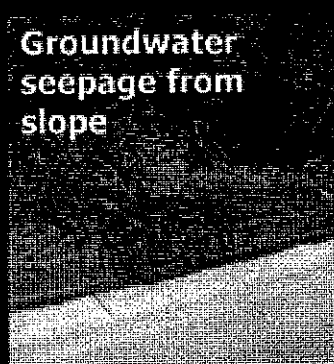
August 2002
City of Black River
Capistrano Beach Drainage Area

Map 12

Multitude of Variable & Hidden Sources



Exempted discharge



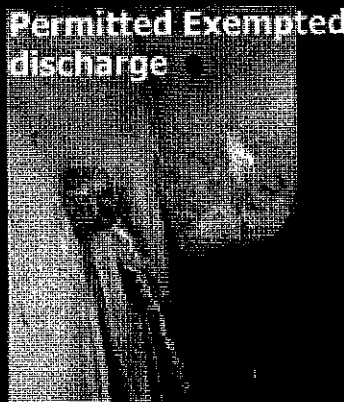
Groundwater seepage from slope



Groundwater or over-irrigation?



Groundwater seepage through pavement

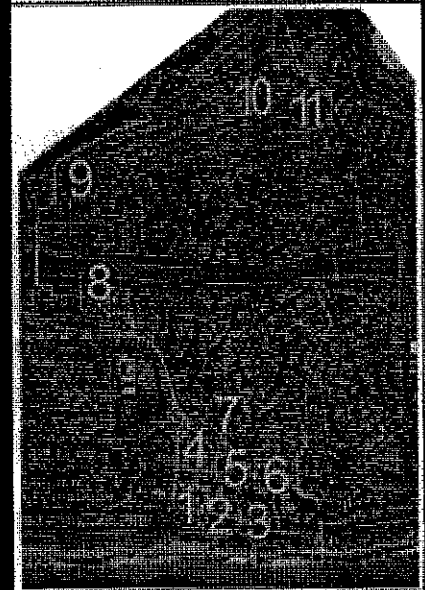
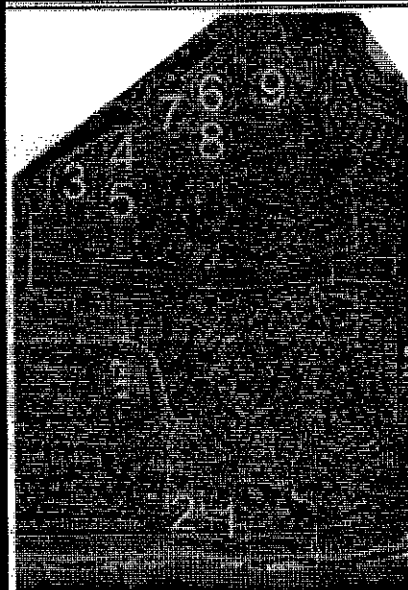
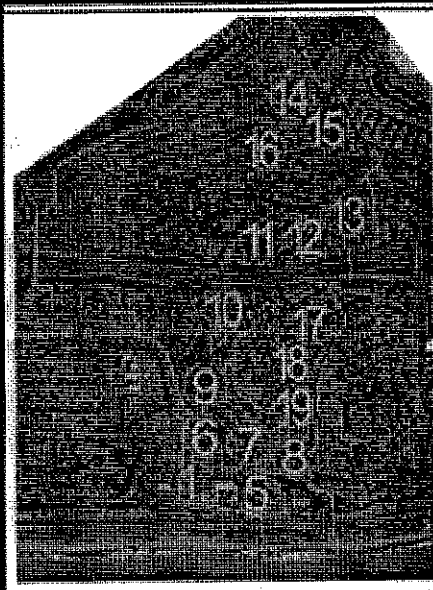


Permitted Exempted discharge

Residential car washing - exempted



Eliminating All Sources is Unachievable



Even if we could eliminate all surface runoff (which is not feasible), we would still have dry weather flows from groundwater, exempted discharges, permitted discharges, etc. The pollutants will be concentrated in lower flows too.

NEL MONITORING EXPENSES INCREASE DRAMATICALLY

- Current testing = \$428 / site
- New testing = \$1,023 / site (with additional constituents)

↑ + 140%

Not Cost Neutral

MORE THINGS TO TEST

16 constituents for outfalls to inland surface water

that exceed NLEs must be tested. Discharges that exceed an NEL for 3

consecutive days during normal water dry weather shall be tested as follows:

Discharges from the MS4 shall be tested in the absence of the following effluent limitations:

Table 4.a.1: General Constituents

Parameter	Units	AMEL	MOEL	Instantaneous Maximum	Basis
Fecal Coliform	MPN/100 ml	200 ^A	400 ^B		BPO
Enterococci	MPN/100 ml	33		104 ^C	BPO/OP
Turbidity	NTU	20			BPO
pH	Units	Within limit of 8.0 to 9.0 at all times			BPO
Dissolved Oxygen	mg/L	Not less than 5.0 in WARM waters and not less than 6.0 in COLD waters			BPO
Total Nitrogen	mg/L	1.0		See MOEL	BPO
Total Phosphorus	mg/L	0.3		See MOEL	BPO
Methylene Blue Active Substances	mg/L	0.5		See MOEL	BPO

A - Based on a maximum of not less than 100 samples for any 30-day period
B - During any 30 day period
C - This value has been set to Ocean Plan Criteria for Designated Beach Areas
BPO - Beach Plan Objective OP - Ocean Plan
AMEL - Average Monthly Effluent Limitation MOEL - Maximum Daily Effluent Limitation

Table 4.a.2: Priority Pollutants

Parameter	Units	Freshwater (CTR)		Saltwater (CTR)	
		AMEL	MOEL	AMEL	MOEL
Cadmium	ug/L	-	-	16	8
Copper	ug/L	-	-	5.8	2.8
Chromium (III)	ug/L	-	-	-	-
Chromium VI (hexavalent)	ug/L	16	8.1	63	41
Lead	ug/L	-	-	14	2.0
Nickel	ug/L	-	-	14	6.8
Silver	ug/L	-	-	2.2	1.1
Zinc	ug/L	-	-	95	47

CTR - California Toxic Rule
Effluent limitations developed on a case-by-case basis (see below)

The Effluent Limitations for Cadmium, Copper, Chromium (III), Lead, Nickel, Silver and Zinc will be developed on a case-by-case basis because the freshwater criteria are based on site-specific water quality data (receiving water hardness). For these priority pollutants, the following equations (40 CFR 131.38.b.2) will be required:

Cadmium (Total Recoverable) = $\exp(0.7852 \ln(\text{hardness})) - 2.715$
Chromium III (Total Recoverable) = $\exp(0.8193 \ln(\text{hardness})) + .6848$
Copper (Total Recoverable) = $\exp(0.8545 \ln(\text{hardness})) - 1.702$
Lead (Total Recoverable) = $\exp(1.2745 \ln(\text{hardness})) - 4.705$
Nickel (Total Recoverable) = $\exp(1.8460 \ln(\text{hardness})) + 0.0584$
Silver (Total Recoverable) = $\exp(1.72 \ln(\text{hardness})) - 6.52$
Zinc (Total Recoverable) = $\exp(0.8473 \ln(\text{hardness})) + 0.884$

b. Discharges to bays, harbors and lagoons/estuaries: Non-storm water discharges from the MS4 to Dana Point Harbor and to saline lagoons/estuaries shall not contain pollutants in excess of the following effluent limitations:

Table 4.b: General Constituents

Parameter	Units	AMEL	MOEL	Instantaneous Maximum	Basis
Total Coliform	MPN/100 ml	1,000		10,000	BPO
Fecal Coliform	MPN/100 ml	200 ^A	400 ^B		BPO
Enterococci	MPN/100 ml	33		104 ^C	OP
Turbidity	NTU	75		225	OP
pH	Units	Within limit of 8.0 to 9.0 at all times			OP
Priority Pollutants	ug/L	See limitations in Table 4.a.2			

A - Based on a maximum of not less than 100 samples for any 30-day period
B - During any 30 day period
C - Designated Beach Areas
OP - California Ocean Plan 2005
MOEL - Maximum Daily Effluent Limitation

c. Discharges to the surf zone shall not contain pollutants in excess of the following effluent limitations:

Table 4.c: General Constituents

Parameter	Units	AMEL	MOEL	Instantaneous Maximum	Basis
Total Coliform	MPN/100 ml	1,000		10,000	OP
Fecal Coliform	MPN/100 ml	200 ^A		400	OP
Enterococci	MPN/100 ml	33		104 ^C	OP

A - Total coliform density shall not exceed 1,000 per 100 ml when the ratio of fecal coliform exceeds 0.1
B - During any 30 day period
C - Designated Beach Areas
OP - California Ocean Plan 2005

5 constituents for outfalls to harbor, lagoons, etc.

3 constituents for outfalls to surf zone

AND THAT'S NOT ALL THE TESTING...

2. Each Copermitttee, beginning no later than the 3rd year following adoption of this Order, shall begin the non-storm water dry weather numeric effluent monitoring as described in Attachment E of this Order. Ref: Page 22 of 92

Ref: Page 13 of Att. E

(3) Effluent samples shall undergo analytical laboratory analysis for constituents in Table 1. Analytical Testing for Mass Loading, Urban Stream Bioassessment, and Ambient Coastal Receiving Waters Stations and for those constituents with effluent limitations under Section C of this Order. Effluent samples must also under analysis for Chloride, Sulfate and Total Dissolved

Actually **38** constituents need to be tested at NEL outfalls

These extra 22 tests are informational, not NELs

Table 1. Analytical Testing for Mass Loading, Urban Stream Bioassessment, and Ambient Coastal Receiving Waters Stations

Conventional, Nutrients, Hydrocarbons	Pesticides	Metals (Total and Dissolved)	Bacteriological
<ul style="list-style-type: none"> • Total Dissolved Solids • Total Suspended Solids • Turbidity • Total Hardness • pH • Specific Conductance • Temperature • Dissolved Oxygen • Total Phosphorus • Dissolved Phosphorus • Nitrite • Nitrate • Total Kjeldahl Nitrogen • Ammonia 	<ul style="list-style-type: none"> Diazinon Chlorpyrifos Malathion Carbamates* Pyrethroids* 	<ul style="list-style-type: none"> Arsenic Cadmium Chromium Copper Lead Nickel Selenium Zinc 	<ul style="list-style-type: none"> Total Coliform Fecal Coliform Enterococcus
<ul style="list-style-type: none"> • Biological Oxygen Demand, 5-day • Chemical Oxygen Demand • Total Organic Carbon • Dissolved Organic Carbon • Methylene Blue Active Substances • Oil and Grease 			

Nitrate and nitrite may be combined and reported as nitrate + nitrite.
 * Carbamate and Pyrethroid pesticides must initially be monitored in Prima Deshecha and Segunda Deshecha watersheds. If carbamate and/or pyrethroid pesticides are found to correlate with observed acute or chronic toxicity, then that pesticide must be added to all stations displaying toxicity.

Ref: Pages 4 & 5 of Att. E

NEL DRY WEATHER TESTING PERIOD EXPANDED

- Current period: 6 months May – Oct.
 - New period: 12 months All Year
(absent rain for 3 days)
- new tests Nov.- April
- overall # tests increase 50+%

NEL MONITORING TEST COST + \$260,000
CURRENT DWM TESTS COST \$100,580

Test cost increase = 140%

Test # increase = 50%

Total Cost = \$360,000 (+260%)

(excludes investigation costs)

NELs are only 1
of 9 elements
of the required
monitoring
program

I. PURPOSE	2
II. MONITORING PROGRAM	2
A. Receiving Waters Monitoring Program	2
1. Mass Loading Station (MLS) Monitoring	3
2. Urban Stream Bioassessment (BA) Monitoring	6
3. Follow-up Analysis and Actions	8
4. Ambient Coastal Receiving Waters Monitoring (ACRW)	9
5. Regional Monitoring Programs	10
B. Wet Weather MS4 Discharge Monitoring	11
C. Dry Weather Non-Storm Water Effluent Limitations	12
D. Special Studies	15
E. Monitoring Provisions	17
III. REPORTING PROGRAM	20
A. Monitoring Reporting	20
B. Interim Reporting Requirements	23

COST EFFECTIVE MONITORING

RECOMMENDATION:

- Make extra informational testing optional
- Confine testing to high recreational use periods consistent with other regions (i.e. May-Oct)

EXCEEDANCE DRIVEN INVESTIGATION IS TOO EXPENSIVE FOR ALL SITES

EXAMPLE: Aliso Creek JO3PO2 outfall (CAO 99-211)

- \$320K, 4.5 years; proved no sewage leak but could not identify and eliminate bacteria source; \$1M treatment and still does not attain NEL

EXAMPLE: L01S02 outfall Nickel/Cadmium geology study

- \$30,100, 1+ years; diagnose & validate the natural geochemical origin of the metal concerns

EXCEEDENCE DRIVEN INVESTIGATION IS TOO EXPENSIVE FOR ALL SITES

- Typical outfall has more than 1000 potential variable & sometimes hidden sources, occurring 24/7
- 480 NEL Outfalls identified to date
- $480 \times \$175,000$ (average) = **\$84,000,000**

RECOMMENDATION: Phased approach to gather data, revise standards and attack priority sites this Permit cycle.

COSTS OF REDUCING DISCHARGES

EXAMPLE: IRRIGATION RUNOFF

- Need to hire "water cops"
 - Day, night and graveyard shifts, 7 days/week
 - 3 shifts x 12 permittees = \$2,800,000/year
- Irrigation system retrofits:
 - Smartimers - \$300-500/SFR, \$3000/business
 - Old spray systems need refurbishing
 - 435,000 systems (1/parcel) x \$500/each = \$21,700,000
- Drainage retrofits to existing developments needed

COSTS OF STRUCTURAL TREATMENT RETROFITS

DANA POINT EXAMPLES:

- New Baby Beach East 24" Media Filter/Diversion = \$762,000
- Selva Parking Lot Media Filter/Diversion = \$1,049,000

480 outlets x \$900K = **\$432,000,000** Potential Capital Costs

Average Annual O&M Costs = \$22,000/each

480 systems x \$22,000 = **\$10,560,000** annually

RECOMMENDATION: Change NELs to Dry Weather
Action Levels & work with staff on prioritization

MANDATORY MINIMUM PENALTY COSTS

Current fine \$2/gal per State Water Quality Enforcement Policy

EXAMPLE:

Salt Creek – 600,000 gal/day for about a dozen dry weather flow outlets & groundwater

$600,000 \text{ gal/day} \times \$2/\text{gal} = \$1.2\text{M/day}$

Region wide: 480 sites @ average 50,000 gal/day:

$480 \times 50,000 \times \$2/\text{gal/day} = \mathbf{\$48,000,000/day}$

MANDATORY MINIMUM PENALTY EXAMPLE

South Coast Water District & South Orange County
Wastewater Authority, July 2009

- fined \$204K for intermediate groundwater plant test location even though ocean discharge satisfactory
- Staff advised Board there was no discretion & fines must be issued
- Leaves no flexibility with Board to be fair & reasonable

MANDATORY MINIMUM PENALTY PROBLEMS

- ~~T~~MDL compliance period is typically 10 years
- NEL compliance is several months
- Fines do not solve the problem
- Eliminates RWQCB discretion

POTENTIAL COSTS of NELs

New NEL Monitoring Costs:	\$ 360,000/year
Potential Investigation Costs:	\$84,000,000
Potential Costs to reduce discharges	\$21,000,000
Water cops	\$ 2,800,000/year
Potential Structural Treatment Retrofits	\$432,000,000
Annual O&M for Treatment Costs	\$10,560,000/year
Potential MMP Costs:	\$48,000,000 /day

Funding is not reasonably achievable.

WHAT'S A SMARTER SOLUTION?

- Implement Non-Storm Water Action Levels and Receiving Water Monitoring to Prioritize Actions
- For bacteria, let TMDL process and the Natural Source Exclusion Approach Basin Plan Amendment work as planned; they establish enforceable numeric waste load allocations & compliance schedules
- Require permittees to find more effective ways to measure progress in reducing irrigation runoff
- Adopt recommended County Errata

NSALS IS THE SMARTER SOLUTION

- Better more reasonable use of resources & avoids diverting resources from other important programs
- Takes into account unique local conditions (geology, topography, man-made conveyance)
- Provide flexibility to prioritize issues
- Can focus \$ on solving solvable problems
- Can consider variability of individual sites